



LUND UNIVERSITY

Affordances and Limitations of Translanguaging and Writing Tools

A Study of Emergent Multilingual Students' Writing in EFL

Gunnarsson, Tina

2025

Document Version:

Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Gunnarsson, T. (2025). *Affordances and Limitations of Translanguaging and Writing Tools: A Study of Emergent Multilingual Students' Writing in EFL*. [Doctoral Thesis (monograph), Educational Sciences]. Department of Educational Sciences, Lund University.

Total number of authors:

1

Creative Commons License:

CC BY

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

A Study of Emergent Multilingual Students' Writing in EFL

EDUCATIONAL SCIENCES | LUND UNIVERSITY



This thesis is about the teaching of writing in English in school year 9. It focuses on affordances and limitations of translanguaging and writing tools experienced by emergent multilingual students writing an essay as part of the national exam in English. Taking a sociocultural approach to learning, the study employs an intervention in which students were prepared for the writing task by introducing translanguaging and writing tools that have been shown to have beneficial effects on students' writing in previous research.

Data include audio-recorded classroom interaction, focus-group discussions, a questionnaire and an interview with the teacher. Student focus groups reveal the mediated actions of writing tools and the impact these tools have on students' writing. Mediation factors include, for example, idea generation, metalinguistic awareness, lexical access, and affirmation, which, in turn, impacts the content, problem solving, lexical variation and accuracy as well as students' self-efficacy beliefs.

Interaction data show how students translanguage using several named languages in the classroom, such as the high-status languages Swedish and English, but also low-status languages such as Albanian, Bosnian and Russian. When students translanguage in the classroom, the status between different languages is leveraged, with students treating all languages as valuable tools for interacting and learning. Results also show that translanguaging has cognitive, linguistic as well as affective affordances. The amount of off-task talk, i.e., talk that centers on matters other than the task at hand, is low, showing that students engage with and complete the task through translanguaging. Classroom recordings reveal that students employ exploratory talk when interacting, a type of talk that has been shown to be conducive to learning in prior research.

Focus-group discussions further reveal that students feel less stressed and more capable as a result of having access to tools and knowing the topic of the essay in advance. Tina Gunnarsson, therefore, proposes that assessment tasks focusing on writing in English should allow students the use of tools in order to better align with the syllabus for English and with authentic writing tasks that students are likely to encounter in the future.

AFFORDANCES AND LIMITATIONS OF
TRANSLANGUAGING AND WRITING TOOLS:

A Study of Emergent Multilingual Students' Writing in EFL

Affordances and Limitations of Translanguaging and Writing Tools:

A Study of Emergent Multilingual Students' Writing in EFL

Tina Gunnarsson



LUNDS
UNIVERSITET

LUND STUDIES IN EDUCATIONAL SCIENCES NR 23

Lund Studies in Educational Sciences kan beställas via Lunds universitet:
www.ht.lu.se/serie/lses
e-post: skriftserier@ht.lu.se

Copyright CC BY 4.0, Tina Gunnarsson

The terms of the CC license apply to the original material. For material from other sources, such as illustrations and photographs, other conditions may apply and require further permission from the respective copyright holder.

Joint Faculties of Humanities and Theology
Educational Sciences

Lund Studies in Educational Sciences
ISBN 978-91-89874-86-2 (tryckt publikation)
ISBN 978-91-89874-87-9 (elektronisk publikation)
ISSN 2002-6323

Omslag: Ellie Gunnarsson och Agnes Gunnarsson

Tryckt i Sverige av Media-Tryck, Lunds universitet, Lund 2025



Media-Tryck is a Nordic Swan Ecolabel
certified provider of printed material.
Read more about our environmental
work at www.mediatryck.lu.se

MADE IN SWEDEN 

PREFACE

Imagine two children about to start school. [...] Imagine that each brings with them to school a virtual schoolbag full of things they have already learned at home, with their friends, and in and from the world in which they live (Thomson, 2002).

The cover of this book is a picture drawn by my two beautiful daughters, Ellie and Agnes, aged 9 and 6 at the time of my defense. It symbolizes a student backpack filled with tools and was inspired by Pat Thomson's (2002) quote above in which she refers to the concept of students' virtual schoolbags. In this thesis I think of this virtual schoolbag as representing students' accumulated knowledge so far, acquired both inside and outside of the school context. I see the tools students bring with them. Tools students already possess and know how to use, but also tools they already possess but may be unaware of how to use, yet.

Lund in February 2025

ACKNOWLEDGEMENTS

This project would not have been possible without the many people who have supported me these past years. To my colleagues at the department of Educational Sciences in Lund, I would like to extend a warm thank you. Senior staff members who have contributed with comments on drafts or who have been particularly supportive during these past years include Sinikka Neuhaus, Åsa Lindberg-Sand, Katarina Mårtensson, Maria Larsson, Steven Curtis, Ellen Giljam, Eva Brodin, Helena Hörvin-Billsten, Gisela Ferré Aramburu and Karin Hjalmarsson. Many thanks to Helén Persson for reading and commenting on the Swedish summary of this thesis. I especially like to thank Ingrid Bosseldal and Katarina Blennow for always keeping the door open, for being such great examples and for all the heartfelt conversations. A special thank you to Mona Holmqvist, for all the time you have dedicated to perfecting this thesis. Your advice has been truly invaluable. Thank you to Susanne Pelger for all the writing support throughout these past years. I am also grateful to Helena Berglund, for introducing me to some of the helpful strategies in excel and for endless discussions about my thesis as a whole (and roses). Thank you for your support and for always being there for a chat, whether it was about good things or bad things. I hope I can return the favor.

A special thank you to Anders Jakobsson, who introduced me to sociocultural theory and who helped me recognize the *silent translanguaging* present in my data. My deepest gratitude to Anders and Jenny Rosén for extensive comments on an earlier draft for my 90-per cent seminar.

To my current and former doctoral colleagues at the department, including Fatemeh Yazdani, Catarina Wästerlid, Christian Thifors, Manuel Ahlqvist, Maria Gedoz Tieppo, Paul Strand and Lee Hildebrand who have provided great support in our seminars, in the office corridor and at the coffee table, thank you. A special thank you to Bodil Merkel, for the unrelenting work on coding 100 functions and then talking about the coding for more than two hours straight. I owe you. Just say the word. Thank you Ylva Hamnell-Pamment, for being my guide in all things Vygotskian and for listening and supporting me when I needed it the most. On tough days your "it has to be a little bit uncomfortable" resounded in my head. My gratitude to Emil Berglund, for sitting on my right shoulder throughout saying "80% is enough" and "don't get it done, get it written". It was also you who gave me constant comparison and endless offers to read and comment on my drafts, fantastic offers considering your skills as a writer. My appreciation goes to Jonatan Nästesjö, for always being supportive and for sitting on my left shoulder throughout saying "you have to write that first shitty draft" and "just do it" (I cleaned it up a bit). To Colin Loughlin, thanks for the laughs and the company

during these past years and especially during this past summer, when we were both working hard to get across the finish line. I have enjoyed our talks. A warm thank you to Elna Sivhed for thinking of me and for sending me encouraging texts and checking in when I was having a hard time or just to have a friendly chat. You have a tendency to take care of everyone around you. I hope I can return the favor in the years to come. Many thanks to Sara Andersson for being practical about things but also sharing heart-felt issues when these were in abundance. Having kids and raising them while trying to complete a doctorate is not a simple thing, as we both know, but you make it look easy every day. I am also thankful to Linnea Khodiar, for sending me all the quirky texts and always turning up at the office with a sunny smile on your face. You light up your surroundings.

Thank you to my colleagues from the research project FRAM (De Främmande språkens didaktik): Linda Smidfelt, Linda Borger, Celine Rocher-Hallin, Maria Frisch, Lisa Källermark-Haya, Helena Reierstam, Karina Pålsson Gröndahl, Maria Håkansson Ramberg for cheering me on. A special thank you to Kent Fredholm, for the extensive work on all Russian words on the word wall in this thesis, even calling out mistakes and potential meanings. Your language skills are amazing and I value your friendship.

I would like to extend my sincere thanks to Sara, my lead teacher, for being such a fantastic teacher and for being game to enter into a learning adventure with me. You are a true inspiration for all your colleagues, past and present. I have felt your support throughout this project, in the planning phase, in the execution, in the way you've read and commented on chapter drafts and in answering all questions big and small. I hope we can find new projects to work on in the future.

My deepest gratitude goes to the students who agreed to participate in this project. Your willingness to go into uncharted territories is what made this all possible. My hope is that what you learnt in the intervention continues to be useful to you.

To my supervisor Roger Johansson, thank you for taking care of the emotional aspects of completing a PhD and for commenting on earlier drafts. Your “family first” made things easier throughout this journey.

To my supervisor Marie Källkvist, thank you for everything you have done for me in the past and continue to do for me in the present. Your critical, but friendly eye, has made this thesis so much better. I thank you for giving me so much of your time and for never accepting anything less but the best from me.

To my closest friend Isabel Liljeblad, thank you for always being there to listen to my chaos, for all the conversations we have had so far and for the ones to come. Your support has meant and continue to mean everything to me.

Thank you to my family, my mother Gunnel and father Pierre for encouraging me to pursue this doctorate and for supporting me along the way.

To my husband, Martin, for taking on a heavier load these past years and especially this past year when I needed to finish, for being my best friend and confidant in life, for being the greatest father to our kids and for telling me that rewarding myself with a saffron bun and hot chocolate was exactly the way to go after 400-something words. You have always been and continue to be my rock and I love you more than words can say.

To my two beautiful daughters, Ellie and Agnes, you are my world. Without you my life would be dull and way too quiet (and my temper much too even). I love you with all my heart and dedicate this thesis to you.

Dedicated to my amazing daughters, Ellie and Agnes.

TABLE OF CONTENTS

PREFACE

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	17
Aim and research questions	21
Conceptual background	22
Intended contributions	24
Outline of the thesis	25
CHAPTER 2: ENGLISH AND OTHER LANGUAGES IN SWEDISH SCHOOLS	27
The school didactic model	27
The context on a collective level	29
Planning on a collective level (P1)	30
The teacher's planning in relation to planning on a collective level (P2a)	31
Evaluation on a collective level (E1)	33
The teacher's evaluation in relation to evaluation on the collective level (E2a)	34
Summary	34
CHAPTER 3: LITERATURE REVIEW	37
Previous research on writing using translanguaging or multilingual pedagogies	37
Previous research on writing and the use of tools	40
Previous research on pre-writing tools	44
Previous research on student interaction in the language classroom	45
Previous research on foreign language anxiety and writing anxiety	48
Previous research in a Swedish context	50
The research gap	52
CHAPTER 4: THEORETICAL PERSPECTIVES	55
Sociocultural theory and learning as a social practice	55
Translanguaging theory	64

CHAPTER 5: METHODOLOGY	67
Sampling and access	67
Participants	68
Positionality	70
Research design	71
Data collection methods	71
Data analysis methods	79
Technical equipment	85
Informed consent and confidentiality	85
Ethical considerations	86
Reliability and validity	86
CHAPTER 6: THE DESIGN INTERVENTION	89
The premise of the intervention	89
The curriculum cycle	92
CHAPTER 7: THE AFFORDANCES AND LIMITATIONS OF TRANSLANGUAGING	105
Participants	105
Data collection	106
Data analysis procedure	107
Students' use of translanguaging constellations	107
The affordances of translanguaging	111
The typology of talk	128
Summarizing the results	135
CHAPTER 8: ARTEFACTS AND MEDIATED ACTION	137
Participants	137
Data collection	138
Data analysis procedure	138
The mediation of secondary artefacts	139
The mediation of tertiary artefacts	147
The impact on students' writing	155
Summarizing the results	164
CHAPTER 9. AFFORDANCES AND LIMITATIONS: STUDENT PERCEPTIONS	165
Participants and data	165
Analysis procedure	166
Student perceptions of translanguaging and other writing tools	169
Summarizing the results	179

CHAPTER 10. AFFORDANCES AND LIMITATIONS: THE TEACHER'S PERCEPTIONS	181
Participants, data and data analysis procedure	181
Scaffolding	182
Artefacts	183
Participation	187
Time	187
Effort	188
Self-efficacy	191
Summarizing the results	192
CHAPTER 11: DISCUSSION	195
Translanguaging in the English classroom: quantity of use	195
Students' use of writing tools: affordances and limitations	200
Teaching implications	207
Future research	208
SAMMANFATTNING PÅ SVENSKA	211
Syfte och forskningsfrågor	212
Teori	213
Metod	214
Resultat och diskussion	215
Implikationer	218
Framtida forskning	219
APPENDIX A-I	221
A: Student consent form	221
B: Pre-intervention questionnaire	223
C: Post-intervention questionnaire	229
D: pre-intervention interview guide for sara	235
E: post-intervention interview guide for sara	237
F: Interview guide for focus-group discussions	238
G: Lesson plan for the intervention	240
H: Student results on essays	247
I: Timeline of data collection	249
REFERENCES	251

CHAPTER 1: INTRODUCTION

Fifth intervention lesson. A student, Bella, raises her hand.

Tina: Bella?

Bella: I have a question.

Tina: Yes.

Bella: The last text we wrote we did without any help or stuff like that, but this one we have all these helping things, and isn't it pretty obvious that we will, most of us, will perform better?

Tina: I hope so.

*The above dialogue features Bella, a high-achieving student at Southview secondary school¹. The conversation is held in front of the whole class the day before students are to write their essays on the topic *A Good Life*, a national exam used in the past. During the last three weeks students have been preparing for this exam by working with different tools to support their writing. The dialogue demonstrates the prevailing policy in the Swedish context of forbidding the use of tools when students are writing in English, especially for assessment purposes. My response to Bella's question further illustrates the intent that most teachers have with their teaching, that the instruction will in some shape or form support students' development. As we can see, Bella is confused about the purpose of writing an exam with the use of tools as she seems to think her essay will be improved by the access to tools. The classroom is very quiet and I have the sense that other students have been thinking the same thing as Bella. Why are we, the teacher-researcher and the teacher, allowing the use of tools for an assessment task in English?*

One of my first teaching positions was at Southview, a secondary school with a heterogeneous student population in terms of language and socioeconomic background. As a new teacher, being on a first name basis with my students, I got to know them very well. While some students came from families with high income and parents with university degrees, others came from families with low education levels who could not afford winter coats. It was not unusual to see the latter students filling their plates with extra food on Friday afternoon, preparing for a weekend under sparse conditions. The diversity in the classroom was difficult to handle, encompassing everything from language background to knowledge experiences outside the classroom. While almost all

¹ The school's name is a pseudonym.

students spoke Swedish, roughly one third spoke a language other than Swedish in the home. At the time, research looking into multilingualism and language-minoritized students in a Swedish context providing support for teachers in this area was scarce. Hence, an interest was sparked.

The students at Southview secondary school are representative of the student population in Sweden, which is heterogenous in terms of both language and socio-economic background (Skolverket 2023b). Both national and international studies suggest that students with a migrant background do not fare as well in our schools (OECD, 2015; Swedish Schools Inspectorate, 2010). In Sweden and the US, reports suggest that these students tend to fall behind (Pacheco et al., 2015) and that in the Swedish context there was (Swedish Schools Inspectorate, 2010), and still is (Skolverket, 2023b) a difference in grade average after 9 years of compulsory schooling.

Reports further suggest that schools teaching students speaking a language at home other than the majority language tend to overlook the linguistic resources these children bring to school (Pacheco et al., 2015; Swedish Schools Inspectorate, 2010). In the US, studies show that whereas these students and their home languages tend to be seen as a problem in the classroom (Gitlin et al., 2003), the inclusion of their languages as a tool to enhance learning can change their status in the classroom (Pacheco, 2016).

In Sweden we have had a tendency to rely on the majority language, Swedish, in the instruction of English (Tholin, 2012). This may present a disadvantage to students who do not speak Swedish in the home, which according to statistics comprises almost a third of our student population (28.9%) (Skolverket, 2023a). According to García and Wei (2014), these students are forced to conform to using only part of their linguistic repertoire for learning and communicating if a bilingual or monolingual² norm prevails. García and Wei (2014) suggest that a translanguaging pedagogy could be seen as a possible remedy. It is further an approach that has the potential to benefit all students in the classroom and not just those with a minority language background (Carbonara et al., 2023; García & Wei, 2014).

The problem of not including students' complete language repertoires in English language learning becomes even more salient when they are asked to sit the written part of the national exam in year 9. The exam is one out of nine national exams³ (Skolverket,

² Sweden has a strong tradition of using English only in the instruction of English, advocating a monolingual norm. However, many teachers allow the use of the majority language Swedish in their English lessons, adhering to a bilingual norm instead (Källkvist et al., 2017; Källkvist et al., 2024).

³ There are two national exams in Swedish or Swedish as a second language, one in biology, chemistry or physics, two in geography, history or social sciences, two in mathematics and two in English. The natural and social science subjects are clustered and the subject that is tested varies from year to year (Skolverket, 2024c). There is further a possibility that their second foreign language teachers will use national exams (usually French, German or Spanish), testing each of the four skills (listening, reading, writing and

2024c) students are required to write in the span of approximately eight weeks during the spring semester⁴, making this an intense assessment period in students' lives. For the written part of the English national exam students are asked to write without the use of tools, such as dictionaries, to support their writing⁵. Just like many other high-stake exams around the world, it measures students' independent writing ability in English in its purest form, without the support of tools (Oh, 2020). Moreover, the topic of the exam is kept secret and presented to students as they sit down to take the exam, leaving no time for students to ponder the topic in advance.

The purpose of the national exam is to support “an equal and fair assessment and grading of a student’s knowledge” (my translation) (Skolverket, 2024b). This means students are assessed and graded as a result of the national exam and teachers are supported in the assessment and grading of their students. According to the classification of national large-scale assessments by Verger, Parcerisa and Fontdevila (2019), the comparison of results on the exam between students at different schools serves a monitoring and evaluation purpose to hold individual schools, and ultimately teachers, accountable for adhering to national educational policy. Moreover, the national exam has gate-keeping purposes that prohibit or grant students access to higher education levels (Verger et al., 2019). Students need to pass the exam to gain entry into upper secondary school, which makes it a gate-keeping and high-stakes test⁶ for students to take. Although the quote above about equal and fair assessment is the purpose listed for the national exams on the Swedish National Board of Education website (Skolverket, 2024b), following Verger et al's (2019) classification there are four purposes for the administration of the national exam: to measure students' knowledge and proficiency without the use of tools, to support teachers in their grading, to hold teachers accountable for their grading and for adhering to educational policy, and to enable gate-keeping between lower secondary and upper secondary school.

speaking) at the end of year 9. Although the exams in second foreign languages are not mandatory and are used at the teacher's discretion, the Swedish National Board of Education strongly recommend the application of these exams (Göteborgs universitet, 2023).

⁴ An example can be seen in the national exams scheduled for the spring 2025 which start the last week of March and end in the middle of May, leaving eight weeks for students to sit the nine exams in year 9 (Skolverket, 2024c).

⁵ No tools are allowed on the English exams, which includes the use of spelling- and grammar checkers, dictionaries, thesaurus and word predictor software, while spelling checker and dictionary are allowed for the Swedish national exam (Skolverket, 2024c).

⁶ The national exam is gate-keeping as students must pass this exam in order to gain access to upper secondary school. Even though it is the subject teacher who is responsible for grading the individual students, the results of the national test should be given “particular consideration” and have “greater importance than other individual assessment documents” (Skolverket, 2024d).

In my experience, and concurring with both national (Hirsh, 2016) and international research (Horwitz et al., 1986; Küçük, 2023), this type of exam tends to cause some students anxiety. During the last decade there has been a decrease in compulsory students' self-reported psychological well-being in Sweden, connecting school factors such as tests and grading with feelings of stress and anxiety (Klapp et al., 2023). Given the link between increased student stress levels and high-stakes testing (Högberg & Horn, 2022) and the fact that these types of tests have doubled for the OECD countries since the 1990s (Verger et al., 2019) there is good reason to seek out alternative assessment solutions to see whether they can support student well-being. Since previous research has shown that allowing students the use of tools for assessment purposes, especially for writing exams, can boost students' confidence (Oh, 2020), this is an avenue worth exploring.

A study focusing on the application of tools in the writing process is further motivated, as writing practices have changed dramatically in recent years and technology has had a great impact on the way students write (Oh, 2020). The tools that are now made available for students to use are abundant in the out-of-school context. In order for a writing exam to be authentic it “must be representative of the type of writing that examinees will need in the world beyond the test” (Weigle, 2002, p. 51). In the future when these students are asked to write essays for academic purposes they will most likely know the topic well in advance (Weigle, 2002). Giving students access to the topic beforehand makes it easier for them to have something to say in their texts (Weigle, 2002) and using writing tools would “more closely simulate authentic writing behaviors in the real world” (Oh, 2020, p. 61). The national exam, therefore, does little to bridge students' authentic writing practices outside of school with their in-school practices. Allowing students the use of tools and to know the topic in advance is in line with a more equitable approach to teaching, offering all students the possibility to use their experiences and strengths when stakes are high.

Teaching students about tools, referred to as *strategies*, is an educational policy requirement stipulated in both the former and the current syllabi for English (Skolverket, 2022a). In the commentary provided with the syllabus from 2011, using dictionaries and computer programs is referred to as one type of strategy use (Skolverket, 2011a), while the use of digital tools is referred to as a strategy in the current syllabus (Skolverket, 2022b). If we teach students to use tools during lessons only to remove the use of tools for assessment tasks, it becomes questionable whether students are able to show what they know in terms of overall writing ability. For this project, an intervention was therefore created in order to explore the written part of a national exam used in the past, and to allow students to bridge their writing experiences and language competences gained both inside and outside the school context. By offering the use of tools and the knowledge of the topic in advance for the written part of a national exam, an

authentic writing situation is created that is more consistent with the writing these students will do in their future academic and professional lives (Oh, 2020). The specific aim and research questions are presented next.

Aim and research questions

Focusing on student writing, the overarching aim is to add to the research basis and proven experience in the school subject of English. According to the Swedish Education Act (2010:800) all education should be based on research and proven experience (SFS 2010:800). Not only is research needed, but proven experience (*beprövad erfarenhet*) also needs to be developed and documented. In doing so, it is important to let teachers with ample experience be heard.

Specifically, this study examines the teaching of writing, aiming to uncover affordances and limitations of allowing students' access to and use of tools, including their complete language repertoires, for the purpose of writing an essay in English.

I operationalize this aim by addressing three research questions:

- a) What named languages do students employ and what are the affordances and limitations of their translanguaging?
- b) What are the affordances and limitations of writing tools, other than translanguaging, and knowing the essay topic in advance?
- c) What are the mediational properties of the writing tools introduced and how does this mediation shape students' writing experiences?

The thesis addresses the research questions by the planned introduction of tools that have empirical support to assist students' writing processes in the language classroom (see for instance Kang & Pyun, 2013; Lei, 2008; Oh, 2020; Simeon, 2016; Velasco & García, 2014; Zhang, 2018). The rationale behind the decision to implement these tools is that in authentic writing tasks outside the school context, students have access to tools when writing (East, 2008; Oh, 2020; Weigle, 2002).

The tools also have theoretical support in sociocultural theory through the merging of everyday concepts with scientific concepts, helping students to organize and make sense (Daniels, 2008) by bridging experiences and knowledge from outside of school with experiences and knowledge from the English classroom. This bridging between students' homes and school is equally supported by the translanguaging approach to teaching and learning by "offering not just a navigational space that crosses discursive

boundaries, but a space in which competing language practices, as well as knowledge and doing, emerging from both home and school are *brought together*” (original emphasis)(García & Wei, 2014, p. 68).

When examining affordances and limitations, the study attends to the different dimensions of foreign language classrooms: cognitive and socio-affective factors (van Lier, 2008). In addition, to contribute to ‘proven experience’, the study attends to a lead teacher’s (*en förstelärare*) perceptions of the affordances of translanguaging and writing tools.

Conceptual background

Main concepts in the thesis include *translanguaging*, *tools* and *language*, including a few subordinate concepts explained below. Though translanguaging and tools will be explained in more detail in chapter 4, they are presented here to give the reader a clear idea of what this thesis will include.

In previous research the concept of tools has been referred to using different terminology, such as *mediational means*, *resources*, *strategies* or *artefacts* (Lei, 2008; Oh, 2020; Velasco & García, 2014). In this thesis *tools* will be used as an umbrella term.

Tools help us carry out actions, i.e. they mediate our actions. There is a difference between what a person can do with the use of tools as opposed to without. Though we may assume that tools facilitate our actions, this may not always be the case, as the same tool can work to empower one student while hampering another (Wertsch, 1998).

Whereas this thesis includes artificial intelligence (AI) for word prediction software, which uses algorithms to suggest the next word in a text, it does not include other AI tools such as Chat GPT, which were not in use when data collection began in 2021. AI tools that generate text through the use of a textual prompt present issues with copyright infringement, a problem which is actualized by the many legal proceedings presently taking place against companies supplying AI software (BBC, 2023). The tools introduced in this thesis are limited to those which inherently support students with lexical access rather than complete texts.

Translanguaging encompasses a theory of bi- or multilingual communication (García, 2012) and the act of using multiple linguistic elements belonging to several named languages to communicate and understand (García & Wei, 2014, p. 22). It can be used pedagogically as a tool (Velasco & García, 2014) to promote students’ use of their complete language repertoires when writing, giving them access to knowledge that may support their writing in one language. In this thesis all three aspects of translanguaging are used, including theory, communicative act and tool.

Translanguaging is further connected to aspects of *social justice* and *equity* in education (García & Baetens Beardsmore, 2009).

The categorization of languages used for this thesis includes the use of named languages for the sake of clarity and simplicity. Languages are labelled sequentially in terms of the order of acquisition (L1(s) for the first language(s) acquired, L2 for the second language acquired, etc.). These labels highlight the chronology of different languages learnt and, as such, help to define the language backgrounds of the participants. The concept L1, however, can be misleading as it suggests that any individual has only one L1 and that this L1 remains the strongest language in all domains throughout life. This goes against multilingualism research. An example of this can be found in the present study, in which a number of participants have two L1s, having spoken two languages in the home since birth⁷ (McLaughlin, 1984). Nevertheless, the sequential language labels are used in this study to allow comparability with previous research in which these labels have been used.

All students taking part in this study are *multilinguals*, characterized by them “speaking three or more languages” (Baker & Wright, 2021, p. 104). They are further *emergent multilinguals* (EM), as this term allows us to see students “for their potential to become bilingual or even multilingual” and for their multilingualism “to be recognized as a cognitive, social, and educational resource to be leveraged” (García et al., 2018, p. 5). In using the term EM, students’ knowledge of languages is acknowledged as a resource rather than a problem in our schools.

A minority of student participants of this study are speakers of a language other than Swedish (LOTS) at home, speaking languages such as Albanian, Arabic, Bosnian and Russian with their family. These languages, spoken in the home, with family and relatives are referred to as LOTS in the present study. By using the LOTS daily in the home, students have a right to receive mother-tongue tuition in school. In this thesis these students are identified as *minoritized emergent multilinguals* (MEM), who may be at a disadvantage in our schools in terms of grade average after nine years of compulsory schooling (Swedish Schools Inspectorate, 2010). Home languages also include Swedish, which is sometimes used and learnt simultaneously with a LOTS. Swedish is moreover a school subject, the school language and majority language in Sweden.

English is a subject taught from year 2 in this particular context and can be students’ L2, L3 or L4. Other languages that are taught in school include the second foreign languages, in this context consisting of French, German and Spanish.

The languages mentioned above can all be part of students’ *complete language repertoires*. This concept refers to the accumulated language knowledge that each student possesses. Students draw on their complete language repertoires to translanguage,

⁷ A language is considered an L1 if it has been acquired before the age of three (McLaughlin, 1984).

which results in different *translanguaging constellations*, i.e. different languages being used in conjunction. If interlocutors do not share the same language repertoire, only the parts of the repertoires that overlap will be used (García & Wei, 2014).

The last concept of particular use to this study is *noticing*, which is a concept advanced by Schmidt (1990). Used in the field of second language learning, it is defined as “the basic sense in which we commonly say that we are aware of something” (Schmidt, 1990, p. 132). This concept is useful when comparing the environment in the classroom before and after an event as “Having noticed some aspect of the environment, we can analyze it and compare it to what we have noticed on other occasions” (Schmidt, 1990, p. 132).

Intended contributions

The thesis contributes to the field of translanguaging research which views translanguaging as both a tool and a theory of multilingual communication. It adds to the field by exploring students’ translanguaging practices in a Swedish context as they occur in the English classroom, a cognitive, affective and social space. Translanguaging posits that in order for students to learn new language practices they have to “engage and interact socially and cognitively in the learning process in ways that produce and extend the students’ languaging and meaning-making” (García & Wei, 2014, p. 79).

Moreover, the thesis introduces the concept of *silent translanguaging*, defined as a mental process wherein students use their complete language repertoires flexibly to think while engaging in a complex task on their own. This is linked to the concept of *inner speech* within sociocultural theory, defined as “thinking in pure meanings”, which “appears disconnected and incomplete” (Vygotskij, 2012, p. 139).

With its focus on tools and interaction, this thesis employs sociocultural theory, which sees learning as happening during and through interaction. The thesis adds a holistic perspective on the use of tools, including psychological and physical tools, as well as translanguaging as a tool in classroom interaction, and the typology of talk that emerges as a result.

Previous studies allowing students the use of tools have had a limited scope, for instance focusing on digital tools (Oh, 2020) or physical tools such as dictionaries (East, 2008). Although there have been studies in Sweden focusing on students’ use of tools when writing (Fredholm, 2021), to the best of my knowledge none have included a wider scope of tools, including both physical and psychological tools, and none have done so in the subject of English in year 9.

To the best of my knowledge, there are two studies that have investigated students’ translanguaging in the English classroom in a Swedish context, focusing on vocabulary

learning in year 8 (Källkvist et al., 2022b) and English-medium instruction for learners in years 4 to 6 (Toth, 2018), both interested in students' wellbeing. While this thesis equally has students' wellbeing at heart, it offers new empirical data and insights into students' use of physical and psychological tools, including translanguageing, to support their writing in English.

Below, an outline of the thesis is presented detailing each individual chapter.

Outline of the thesis

Chapter 1 has provided a brief background to the study, the problems that are addressed and the aim of the study. Further, the research questions concerning the affordances and limitations of translanguageing and writing tools have been presented.

Chapter 2 presents the context of the study in terms of the Swedish education system, the subject of English and the sociolinguistic perspective of language(s) in Sweden. Uljens' (1997) Model of School Didactics is used to demonstrate the complexity in terms of context, planning, realization and evaluation of teaching in the pursuit of students' learning development.

Chapter 3 provides a literature review of previous studies providing insight into students' translanguageing practices, writing processes and use of tools.

Chapter 4 offers an overview of the two theories that provide the theoretical basis of this study and in understanding and explaining the results, sociocultural theory and translanguageing.

Chapter 5 presents data-collection and data-analysis methodology as well as ethical considerations.

Chapter 6 focuses on the intervention and the planning that went into the six lessons and the individual lesson activities. The teaching is presented using the four phases of the curriculum cycle, a model used to teach genre-based writing, which was employed for the intervention lessons. The different tools introduced during the lessons are presented and motivated by results in previous research.

Chapter 7 presents the results pertaining to research question a). Special attention is paid to the type of talk students engaged in and whether this type of talk is conducive to learning.

Chapter 8 attends to research question c), presenting the results of tool mediation and the impact on students writing experiences.

Chapter 9 relates to research question a) and b), presenting students' perceptions of writing tools and translanguageing.

Chapter 10 presents results pertaining to research question a) and b), i.e., the teacher's perceptions of writing tools and translanguageing.

Finally, in Chapter 11, I discuss results in light of previous research and of theory. The chapter concludes with implications for teaching and suggestions for future research.

CHAPTER 2: ENGLISH AND OTHER LANGUAGES IN SWEDISH SCHOOLS

In the following chapter, the context of the study and the sociolinguistic perspective of language(s) in Sweden and at the school in the present study will be described through the use of the Model of School Didactics created by Michael Uljens (1997). The aim of the model “is to provide a conceptual language by which we may talk about educational reality in the institutionalized school” (1997, p. 91). The model relates well to sociocultural theory in that all actors in the classroom, both the teacher and the students, carry with them their own sociocultural history influenced by the home environment and the local community in which they reside. This sociocultural history includes previous experiences and preexisting knowledge that are brought into the classroom in the shape of everyday concepts. As in sociocultural theory, the pedagogical process in the model is seen as interactive, acknowledging the interplay between teacher and student in order for learning to occur.

The school didactic model

Uljens’ (1997) model was developed in line with a sociocultural perspective focusing on the planning, interaction and evaluation of a teaching activity in the classroom setting in institutionalized schools. The three concepts of *intention*, *action* and *reflection* create the foundation of the Model of School Didactics, as all teaching activity is intentional (Uljens, 1997). However, despite the intentionality of teaching, there is no guarantee that learning has occurred, which is why reflection on the practice is required in order to influence future outcomes.

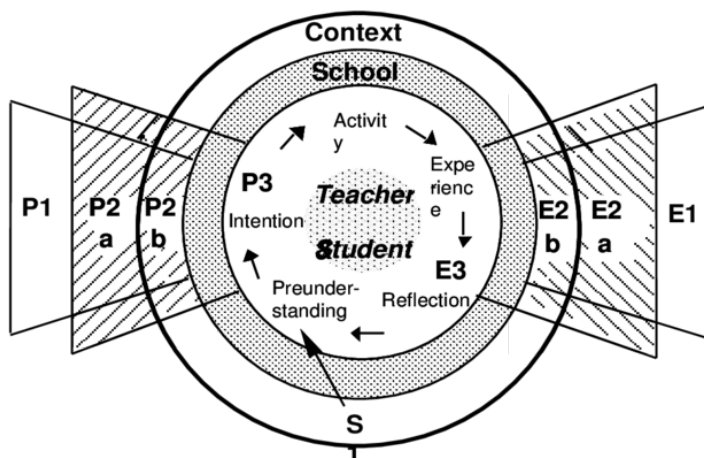


Figure 1. The Model of School Didactics as depicted in Uljens (1997, p. 45).

In the model, the four main components consist of *planning* (P1, P2a, P2b), *realization* (Preunderstanding, P3, Activity, Experience and E3) and *evaluation* (E1, E2a and E2b) of the pedagogical activity in a certain *context*. These four components are divided into four levels: a collective level, an individual teacher level, an interactional level, and a student level.

This chapter will center on the context, planning (P1) and evaluation (E1) on the collective level and the teacher's relation to both (P2a and E2a). It should, however, be noted that some of these levels, particularly the teacher's planning in relation to the collective level (P2a) and the teacher's planning in relation to the individual, local culture (P2b), tend to bleed into one another. The realization component of the model and the planning in relation to the individual, local culture and the school in question (P2b) will be the focus of chapter six, which will illuminate the process of the intervention.

The realization part of the model can be found in the center circles. This is where the pedagogical activity takes place, taking the dynamic classroom into account with the teacher and student intentions, multiple pre-understandings of the content and an agenda that may change as the teacher and students reflect on their ongoing experience. The interaction that occurs between teacher and student, and between the students themselves, is fundamental to everything that happens in the classroom, including what is being learnt and where the pedagogical activity leads. This interaction can be related to the *Zone of Proximal* development within sociocultural theory, which places the interaction between an expert and non-expert in the foreground.

The pedagogical activity is influenced by the intentionality of both teacher and student, their beliefs and attitudes towards learning and towards the goals of the teaching. Uljens (1997) explains how the pedagogical intentionality is influenced by: 1) the teacher's type of purposiveness and 2) degree of awareness. The type of purposiveness relates to the choices a teacher makes while planning, teaching and evaluating their practice, while the degree of awareness relates to the teacher's understanding and motives behind their pedagogical practice. The third element of influence consist of 3) the goals the teacher has in mind, how these goals will be reached and what specific activities are deemed necessary in order to do so.

In the pedagogical activity, the teacher and student are surrounded by the school context, which is the local school in question and the classroom where teaching and learning occurs. The school context resides within the non-formal cultural context of education that is part of the local community surrounding the school. Since the students are also part of the local community surrounding the school, they bring the local context with them when they step into the classroom. The context is in turn influenced from within the school by the local school culture, the school traditions and the collective teachers' beliefs when it comes to education and learning (Uljens, 1997).

The lefthand side of the model accounts for the planning that takes place before a pedagogical activity, while the righthand side accounts for the evaluation of the same. However, as a teacher constantly needs to think on their feet and adapt the pedagogical activity according to the classroom dynamics (Collie & Martin, 2016), some of the planning (P3) and evaluation (E3) is situated and occurs while the pedagogical activity is in progress. Outside of the pedagogical activity, planning is divided into P1, on the collective level, and P2, on the teacher level. P2 is further divided into P2a, the teacher's planning based on the interpretation of the collective level, such as national policy documents, and P2b, the teacher's planning with the individual, local culture and school context in mind. Included in the planning are the teacher's choice of goals, content, method and forms of representation in the classroom. The evaluation of the teaching mirrors the planning in that E1 is the evaluation that is done on a collective level, while E2 is the teacher's evaluation with regard to the collective level (E2a) and with regard to the individual, local culture and school context (E2b). Although much more can be said about the Model of School Didactics, the focus now turns to the present study, starting with the context on a collective level.

The context on a collective level

Education in Sweden is free and the Swedish Education Act (2010:800) requires all education to be based on research and proven experience (SFS 2010:800). Children

normally start school at the age of six. Including the first year of pre-school class, the first ten years of school are obligatory. After there is an option to attend upper secondary school for three additional years before starting university. This thesis centers on students attending year 9, the tenth obligatory year of schooling, and the subject of English.

The subject of English has been compulsory in our schools since 1962 and a core subject since the curriculum of 1969 (Cabau, 2009). Depending on the municipality, the subject is introduced between year one and year four, although all students are allotted the same number of hours to be completed in the subject by the end of year 9. A second foreign language is chosen in year 6 (usually French, German or Spanish).

Languages have different status in our society and in our schools, with the majority language Swedish and the lingua franca English being high-status languages (Hult, 2012). The second foreign languages, which consist of the major European languages French, German and Spanish, are below Swedish and English in status. At the bottom of the language status hierarchy are national minority languages⁸ and migrant languages, such as LOTS (Hult, 2012). These languages are low-status languages, generally not invited to be used in school outside of mother tongue tuition (Haglund, 2004).

Planning on a collective level (P1)

The Common European Framework of Reference for Languages

The Swedish national syllabus for the subjects of English, Swedish and second foreign languages are linked to The Common European Framework of Reference for Languages (Skolverket, 2024a) created by the Council of Europe (2001). The purpose of the framework is to describe what language learners need to learn in order to be able to communicate effectively and pragmatically. The framework provides detailed levels of proficiency (starting with level A1 as the beginner level and ending with C2, a mastery level). These proficiency levels are directly linked to the grading criteria (E to A) in the Swedish national syllabus for the subject of English (Skolverket, 2024a).

The framework recognizes multilingualism as a resource, which is clearly stipulated in the aim for learners “to develop a linguistic repertory, in which all linguistic ability have a place” (2001, p. 5). The framework even goes beyond the concept of multilingualism, defined as “knowledge of a number of languages, or the co-existence of different languages in a given society” to promoting the education of plurilingual European citizens.

⁸ The national minority languages include Finnish, Meänkieli, Romani, Sámi, and Yiddish.

As The Common European Framework of Reference for Languages lays the foundation for the Swedish national syllabus for the subject of English, the aspects presented above are taken into account indirectly by language teachers in Sweden when planning on a collective level (P1).

The national curriculum

In Sweden, the national curriculum is decided on the national level, in the case of this study in 2011 (Skolverket, 2011b). A new curriculum came into effect in the fall of 2022 (Lgr22).

The content of the 2011 curriculum (Lgr11) consists of three parts: 1) the values that should be incorporated in teaching and the duty to inform and uphold democratic rights, 2) the overall goals and guidelines for education and 3) the syllabuses and knowledge requirements for each subject (Skolverket, 2011b). As a complement to the syllabus, a commentary is provided by the Swedish National Agency for Education, containing advice on how to interpret the knowledge requirements in the syllabus (Skolverket, 2011a).

The teacher's planning in relation to planning on a collective level (P2a)

As illustrated in Uljens' (1997) model, teachers prepare a pedagogical activity taking planning on a collective level into account, such as the curriculum and the syllabus for English.

The curriculum and the syllabus for English

One of the overarching goals in Lgr11 is to "be able to communicate in speech and in writing in English and to be given opportunities to communicate in an additional foreign language in a functional way"(my translation)(Skolverket, 2011b, p. 13). Another overarching goal is to "be able to interact in meetings with other people based on knowledge of similarities and differences in living conditions, culture, language, religion and history" (my translation)(Skolverket, 2011b, p. 14). Since these are educational policy documents, these goals must be adhered to in the teaching of English.

The knowledge requirements for the grades E to A by the end of year 9 includes different value words that are used to different degrees. The knowledge requirement for writing is fused with the knowledge requirement for oral production. To illustrate the

difference between the grades E, C and A regarding the skill of writing, the knowledge requirements relevant to this study are listed in bullets below:

For the grade E:

- In oral and written interaction in different contexts, the student can express themselves **simply** and **understandably** as well as **somewhat adjusted** to aim, recipient and situation. In addition, the student can choose and use **mainly functioning** strategies that **to some extent solves problems** and improves the interaction.

For the grade C:

- In oral and written interaction in different contexts, the student can express themselves **clearly** and **with certain flow** as well as **with certain adjustment** to aim, recipient and situation. In addition, the student can choose and use **functioning** strategies that **solves problems** and improves the interaction.

For the grade A:

- In oral and written interaction in different contexts, the student can express themselves **clearly** and **with flow** as well as **with some adjustment** to aim, recipient and situation. In addition, the student can choose and use **well-functioning** strategies that **solves problems** and improves the interaction and **moves it forward in a constructive way** (Skolverket, 2011b, pp. 36-37).

As can be seen in the knowledge requirements above, there is an increase in demand between grades E and C with regards to the so-called value words indicated in bold. The meaning of *functioning strategies*, listed in the knowledge requirements in the syllabus above is discussed next.

The use of *functioning strategies* in the subject of English

Having been a part of the teaching staff when Lgr11 was introduced, the word *strategy* was the subject of much debate. Long discussions were held with other language teachers concerning the definition of the word ‘strategy’ and how to include strategies in teaching. The commentary material provided by the National Board of Education is intended to clarify what is encapsulated in the word (my translation in bold underneath):

Strategi är ett samlingsbegrepp för olika metoder eller handlingsätt vid kommunikation och i elevernas lärande. Strategier kan vara medvetna eller delvis

omedvetna, de kan vara planerade eller spontana. De kan också vara mer eller mindre effektiva. Även att använda hjälpmedel som till exempel lexikon och datorprogram är en typ av strategi (Skolverket, 2011a, p. 15).

Strategy is a collective term for different methods or actions in communication and in student's learning. Strategies can be conscious or partially unconscious, they can be planned or spontaneous. They can also be more or less effective. Using aids such as dictionaries and computer programs is also a type of strategy.

In the above quotation, The Swedish National Board of Education gives concrete examples of what a strategy might be, such as using a dictionary or a computer program. However, they also state that strategies can be “conscious or partially unconscious”, which goes against empirical evidence suggesting that strategy use is purposeful (see Oxford, 2017 for an overview on the definition of 'strategy' in language research). According to Oxford (2017), “if a strategy has been used so often it has been lost to consciousness, it is no longer a strategy” but “a habit, which no longer reflects the learner’s attention, awareness, intention, or cognitive effort” (p. 40). The objective of the intervention in this study was to introduce students to purposeful strategies, or tools, which they could apply consciously and judiciously.

Evaluation on a collective level (E1)

The national exam of English

The national exam for English is constructed by a group of experts from Gothenburg university, which also supply teachers with material for practice in the shape of past national exams that have been released for public use (Göteborgs universitet, 2022). The exam is divided up into three parts representing the four skills; one listening and reading comprehension, one oral exam, which is usually assessed in student pairs or in a group of students, and one written exam. The students sit these exams on three separate occasions starting with the oral exam during the fall semester and ending with the written exam during the spring semester.

In the written exam the student is normally given a choice of either different subjects to write about, or different ways of approaching the same subject. The different approaches tend to be either a personal experience or the birds-eye-view of a topic in order to facilitate for students who have an easier time writing from experience and for students who do not. Usually, the instruction provided with the written exam is quite extensive with several options for what could be included in the text to help stimulate creativity. The topic of the exam is kept secret, even from teachers, until the students

receive their instructions and are asked to write their text. For every exam a teacher's guide is provided with instructions on how to correct. The guide is accompanied by student example texts that have been graded followed by lengthy explanations providing reasons for the grade.

The teacher's evaluation in relation to evaluation on the collective level (E2a)

The national exams are marked in different ways depending on local decisions made at the school. At the particular school in question, the teachers were used to all English teachers coming together to mark and grade the listening and reading comprehensions in groups and the written exams in pairs. According to the Swedish National Agency for Education, the national exam is meant to support the teacher's assessment overall (Skolverket, 2024b). The exam, as such, should not be the only assessment creating the basis of the final grade in year 9, but rather should be considered one of the main assessment points to be included (Skolverket, 2024e).

Summary

In this chapter the present study has been situated using Uljen's Model of School Didactics to illustrate the complexity involved in planning, realizing and evaluating teaching in a Swedish context. First, the context has been described from a societal-national collective level. Second, planning has been portrayed both from the societal-national level in terms of the curriculum and the syllabus for English (P1), but also in terms of the teacher's planning in relation to planning on the collective level (P2a), which singles out the overarching goals, central content and knowledge requirements pertinent to this study. Third, evaluation has been depicted both from a societal-national collective level (E1) considering the national exams and the teacher's evaluation in relation to evaluation on the collective level (E2a) concerning how the national exam should be included in the overall assessment in year 9.

As mentioned in the second paragraph of this chapter, Uljen's model is used "to provide a conceptual language by which we may talk about educational reality in the institutionalized school" (1997, p. 91). The reality is that there are several factors contributing to the complexity in teaching, such as the pre-existing knowledge of the students, the teacher and student attitudes towards learning a particular content and the dynamic interaction in the classroom which may lead the pedagogical activity in any number of directions.

The complexity is increased by the high demands on both student and teacher. For both parties the high demand is reflected in the educational policy documents and in the collective evaluation of English which has been presented here. The pressure is added as the teacher also needs to attend to individual student needs and experiences, while the student needs to pass the subject in order to gain entry into upper secondary school. The reality of our schools is that we have a diverse multilingual student population that need to learn how to write in English, a core subject containing a gate-keeping test.

Uljens' (1997) model will be used further to describe our planning (P2b) and realization of the teaching activities in Chapter 6 and the situated planning and evaluation (P3 and E3) that took place during the lessons described in Chapter 10. In the next chapter, I will give an overview of the previous research that laid the groundwork and inspired the present study.

CHAPTER 3: LITERATURE REVIEW

The chapter starts with a review of studies that have sought to support students' writing process by using a translanguaging- or a multilingual pedagogy. The second section reviews studies focusing more specifically on the use of tools, sometimes referred to as strategies or resources in the literature. The third section considers studies highlighting multilingual students' interaction. To find relevant research, studies dealing with the writing process and students' interaction in this review includes students of all ages from different multilingual contexts.

Language classrooms represent a specific context in which cognitive, affective and social aspects merge (van Lier, 2008). While cognitive aspects center on students' capacity to learn, affective aspects become particularly evident as students have to perform in a language that they are simultaneously learning (Dörnyei, 2001). Having to perform in a language that is not their strongest causes many students to feel anxious. The fourth section therefore deals with foreign language classroom anxiety and writing anxiety in language learning. The chapter ends with a look at the studies that have been conducted in a Swedish setting so far and brings to the fore the research gap this thesis addresses.

Previous research on writing using translanguaging or multilingual pedagogies

During the last decade, studies focusing on multilingual students' writing processes have shown how pedagogies focusing on leveraging students' complete linguistic repertoires can improve students' metacognitive awareness, writing proficiency and, in turn, overall academic development (Bauer et al., 2016; Carbonara et al., 2023; García & Kano, 2014; Karabulut & Dollar, 2022; Velasco & García, 2014). In addition, research has found that translanguaging is used by both proficient and less proficient students of English to make meaning specifically when writing (García & Kano, 2014). The use of students' complete linguistic repertoires has been revealed to facilitate students' understanding of lesson content and to achieve higher standards of thinking (Karabulut & Dollar, 2022) and creativity in their writing (Velasco & García, 2014).

Karabulut and Dollar's (2022) comparative study of university EFL students in Turkey (no age mentioned) demonstrates how groups exposed to a translanguaging pedagogy including students' complete language repertoire to prepare them for individual writing assignments, outperform control groups in which a translanguaging pedagogy was either restricted (eliminating the use of the mother tongue) or not applied (using

English only) (Karabulut & Dollar, 2022). Moreover, their study shows how un-restricted translanguaging university students completed their assignments faster than the other groups (Karabulut & Dollar, 2022).

When looking into individual named languages in 15-year-old students' repertoires, findings from Sweden show students' preference for thinking in the target language English while producing words on computer or on paper (Gunnarsson, 2015). However, other studies highlight how students perceive a risk in using too much of a majority or home language inducing a hybridization of written language (García & Kano, 2014; Prilutskaya & Knoph, 2020), such as the Chinglish (a combination of Chinese and English) found in Lei's (2008) study.

Using the entire linguistic repertoire can assist students in solving problems in their writing such as lexical gaps, which has been found for university graduates (aged 23 to 24) writing in English as an L2 (Murphy & de Larios, 2010) and university students (no age mentioned) writing in English as an L3 (Jessner, 2006) and secondary school students (aged 16 to 17) writing in English as an L4 (Tullock & Fernández-Villanueva, 2013).

Classrooms that have introduced a translanguaging pedagogy for the purpose of assisting students' writing have shown fourth and fifth grade students (mean age 10;04) in Italy developing an increased metalinguistic awareness (Carbonara et al., 2023), middle-school and high-school students (aged 12 to 16) in the US understanding how and for what purpose their different languages can be used (García & Kano, 2014) as well as Kindergarten to fourth grade students (no age mentioned) in the US providing a richer content and language use in their texts simply by not being denied access to their complete linguistic repertoires (Velasco & García, 2014).

A positive side-effect in some of these studies has been the favorable atmosphere that has resulted from students' home languages being legitimized in the classroom (Ollerhead, 2018) and being perceived as valuable tools for writing (Bauer et al., 2016; Neokleous, 2017). Studies focusing on students' perceptions (aged 11 to 25) in the Netherlands (Ticheloven et al., 2021) and in Cyprus for secondary school students (aged 15 to 18) (Tsagari & Diakou, 2015), have found that they often prefer the teacher to use more target language than L1, but that the invitation to use the L1 makes them feel more confident and helps to promote learning (Tsagari & Diakou, 2015). Moreover, the secondary students in Tsagari and Diakou's (2015) study believe that the L1 should be resorted to for more challenging lesson content, for instance when the teacher needs to explain difficult concepts, such as grammar or new vocabulary.

Ofelia García's (2012) work has played a deciding factor in developing translanguaging from a concept into a theory of bilingual communication. García and Kano's (2014) study of 10 Japanese students aged 12 to 16 attending a private class to prepare them for the SAT (Scholastic Achievement Test) in America, sheds light on students

speaking a language other than the majority language in the home (which for students between the ages of 5 and 17 was 22% in 2011 according to the US Census Bureau, a number that has likely increased). The students in García and Kano's (2014) study demonstrated their metalinguistic awareness by employing different parts of their repertoire for different aspects of their writing. Findings show students becoming more aware of their language practices due to the translanguaging pedagogy, reducing anxiety about writing in English as a result. Even though translanguaging was found to be used by both experienced and emergent bilinguals, their use differed, with the emergent bilinguals relying more on translanguaging for support, while experienced bilinguals used translanguaging to enhance their writing performance (García & Kano, 2014).

Another study of particular importance to this thesis is that of Velasco and García (2014). Their study focuses on bilingual students' (one kindergartner, one second-grader, one third-grader, one fourth grader and one fifth grader) writing process in an American context. Although the students were younger than the students in this thesis, Velasco and García (2014) were able to show how translanguaging provides significant support for bilingual writers with regards to their self-regulation in the writing process when planning, drafting and producing written text.

While translanguaging generally is referred to as a theory of bilingual communication (García, 2012), Velasco and García (2014) also refer to translanguaging as a strategy. They posit that "Skilled writers are able to use powerful strategies to support them in accomplishing specific writing goals. In emergent bilinguals, translanguaging is one such strategy." (Velasco & García, 2014, p. 13). Their research demonstrates how translanguaging can be used strategically to improve the written production in the target language English. The authors additionally relate how translanguaging supports students' use of problem-solving strategies, such as *back-translating*, *rehearsing* and *post-poning* which they propose are specifically connected to the bilingual writing process. Briefly, to back-translate means to "translate words and phrases that they're using in one language into the 'other' language", which is a strategy "often used to verify the intended meaning or use" (Velasco & García, 2014, p. 10). This strategy has similarly been found to be used by adult students (aged 26 to 28) with lower proficiency in English (Wolfersberger, 2003). The second strategy, rehearsing, is when students try out different words and phrases until they find the wording that fits their intended meaning the best. Finally, postponing as a writing strategy means to mark a word, phrase or passage in the text in some shape or form, sometimes by putting down words in a language other than the target language, only to come back to the spot later on in the process (Velasco & García, 2014).

The next section continues the review of studies applying tools to support students' writing in English.

Previous research on writing and the use of tools

Studies that have looked into students' use of tools have found students using their L1 as a tool to strategically brainstorm and organize their text (Wolfersberger, 2003), to generate ideas for writing (Gunnarsson, 2015; Prilutskaya & Knoph, 2020; Simeon, 2016), to revise already produced text (Simeon, 2016), and to solve lexical gaps (Gunnarsson, 2019; Murphy & de Larios, 2010), as mentioned above. According to Wolfersberger (2003), strategies developed in the L1 may be transferred into the L2, with the added note that less proficient writers may struggle to implement these strategies due to language limitations.

One study, including students of a similar age to this thesis, looked into students' use of tools, referring to them as strategies, examining a collaborative writing task in an ESL class in their second year of secondary school in the Seychelles (Simeon, 2016). Using sociocultural theory, Simeon (2016) analyzed audio recordings of students (aged 13 to 14) working in groups on a joint writing task during five lessons. In her analysis of student interaction, she found five categories of writing strategies used. These categories included *brainstorming*, using *background knowledge*, using the *mother tongue*, *peer-scaffolding* and *humor*. While working together, students were observed using the L1 for a variety of different reasons “including search [*sic*] for contents, going back over the already written task, and generating ideas/lexical units” (p. 10). The importance of background knowledge is shown as students' past experiences are drawn on for inspiration for the content of their text.

The study reveals students taking on an expert role to guide students who are less able or unfamiliar with writing strategies such as *brainstorming*, showing evidence of the Zone of Proximal Development at work between peers. Simeon concludes that “an implication that L2 teachers may draw from this study is that if students' awareness of the mediation resources in the writing process is raised, they will be able to make use of multiple resources, hence become better writers” (2016, p. 10). Thus, this study suggests that teaching students about different tools and how they can be used for a variety of purposes will benefit students' writing process, empowering them with knowledge of how to solve problems in their writing.

As this study looks to go beyond the use of the writing strategies mentioned above, incorporating other types of tools for writing, some of which may be found in students' out-of-school contexts, it is prudent to examine previous research that has similarly allowed students to use a range of different tools. One such study is that of Kang and Pyun's (2013), a case study of two L2 Korean university students (fourth-year level, no age stipulated). The authors focused on the kinds of tools and strategies the students employed, what the tools mediated in their action and how this mediation helped the

students to process and produce their writing. Think-aloud protocols were used to identify the mediation process and stimulated recall interviews were used to identify the effects of the different mediational tools on students' writing process. Overall, the authors found four major mediated actions while the students wrote their texts: *computer-mediated strategies*, *community-mediated strategy*, *L2-mediated strategy*, and *a self-mediated monitoring strategy* (including sub-actions for each).

For one student in Kang and Pyun's (2013) study, Robert, the use of computer-mediated strategies included the use of online dictionaries to check meaning, spelling, explore new words, evaluate chosen words and to learn additional meanings of new words. He also used the word processor to check spelling, and writing on a computer made it easier to change the text in different ways by moving text around. Robert's use of L2-mediated strategies meant that he wrote his text directly in the L2, avoiding the use of his L1, as using the L1 resulted in the L2 "sounding awkward" (Kang & Pyun, 2013, p. 59). He reported having an inner dialogue with himself to confirm his actions or to solve problems in the text by asking himself questions or giving himself statements, such as "this doesn't sound quite right" (2013, p. 59).

The second student in Kang and Pyun's (2013) study, Jinwook, approached his writing somewhat differently. Speaking both Korean and English at home, he employed one of his L1s, English, to code-switch and formulate ideas. In the stimulated recall interview, he revealed that his use of mediating language depended on the task and his ideas for the content. If his ideas to complete the task included memories and experiences he had made in a specific language, then that language tended to mediate his thinking to provide the content (Kang & Pyun, 2013, p. 61). This is similar to the context-specific idea generation observed in Gunnarsson (2019) in which Bosnian, a language spoken at home, was used to generate ideas about a wedding taking place in Bosnia.

Kang and Pyun's (2013) results can similarly be related to Wang and Wen's (2002) study, which revealed proficient L2 learners using less of their L1 in the writing of texts in L2 compared to less proficient learners. Kang and Pyun's (2013) study shows how powerful the L1 can be as a mediating tool for students when the L2 is used for communicative purposes, as has been demonstrated in other studies in the past (Antón & DiCamilla, 1998; Swain & Lapkin, 1998).

Similarly to Kang and Pyun's (2013) research, there are other studies which have incorporated students' use of digital tools. These studies, conducted in the US (Oh, 2020), China (Lei, 2008) and Sweden (Fredholm, 2015) found students' use of Google Translate, or machine translations, to involve double-checking meaning, spelling as well as looking up new words (Fredholm, 2015; Lei, 2008; Oh, 2020) and that the use of these tools was preferred in out-of-school contexts (Oh, 2020). Interestingly, Fredholm's (2015) study of upper secondary students (aged 17 to 18) writing in

Spanish, found that students were aware that machine translations could be faulty, but used them nonetheless.

However, in assessment contexts, digital tools, such as machine translations or Google Translate, are often prohibited, which is the case for the national test of English in Sweden. The prohibited tools extend to the spelling and grammar checker embedded in students' devices, which according to O'Regan, Mompean and Desmet (2010) is perhaps the most "desirable tool for both native and non-native writers" (p. 67). The tool does, however, come with the catch of having been found more effective for native speakers than for non-native speakers, suggesting that it is only when learners reach a minimum of a B1-level that it starts to become effective in writing (O'Regan et al., 2010). The benefits of allowing students to use tools, such as the spelling and grammar checker, is that it has been shown to boost students' confidence (Oh, 2020), with one study showing how being trained in its use improve both writing skills and writing quality over time (Li & Cumming, 2001).

The embedded spelling and grammar checker was found to be used by all students (39 adult English L2 learners, divided into groups of beginners (N=15), intermediate (N=12) and advanced (N=12)) of Oh's (2020) study, perhaps because it was the most accessible tool according to the author herself. The majority of these students were in their 20s (N=17) and 30s (N=17), and the majority had spent a year or less in an English-speaking country (Oh, 2020). However, despite Oh's (2020) students having access to the embedded spelling and grammar checker, they still used other writing resources to look up the spelling of words, choosing not to rely on their device's spelling checker alone.

One benefit of using this particular tool was demonstrated in Fredholm (2015), where one student was alerted by the spelling and grammar checker regarding adjective congruence errors and, as a result, learnt how to correct these types of errors on her own without using the tool. Fredholm (2015) similarly showed how students used the internet for online searches to gather information and see examples of texts, which is consistent with other studies (Kang & Pyun, 2013; Lei, 2008; Oh, 2020).

Another study, offering students the use of multiple tools for writing, including online dictionaries, is Lei's (2008) study of two English majors (aged 23 and 24) from a Chinese university. As the students wrote a 400-word text on the impact of technology on life and society, numerous tools were used, referred to as artefacts. These artefacts included searches on the web, dictionaries, literary works, textbooks and the named languages Chinese and English. The author found that the most important artefacts could be divided into two subcategories: *Internet-mediated* and *literary work-mediated*, while the *sign-mediated strategies* could be divided into *L1-* and *L2 mediated strategies*. The students used online dictionaries "to pinpoint vague words in their minds, to check the spelling and usage of some words they knew, to explore new words

or new meanings of old words, to refine their thoughts, and to capture accurate meanings” (Lei, 2008, p. 224). Both students reported extensive use of their L1 in the stimulated recall interview, one of the students saying that “Chinese was an easier and more sophisticated tool for her to gather information, to organize ideas, to express thoughts, and to think profoundly” (page 225). The same student expressed a resistance in using Chinese too much as this would then lead to an increase in errors. She exemplified this by stating “If I rely too much on Chinese and translation, my essay will always look Chinglish” (Lei, 2008, p. 225). The author concludes by stating that “Henry and Jenny used cultural artifacts (e.g., the Internet, L1, L2 and English literary works); applied rules acquired from schools, the university, and society; socialized with people from different communities; and fulfilled their social roles. All these mediated actions were components of their writing processes that finally yielded good essays.” (Lei, 2008, p. 230). The fact that the essays were determined to be of good quality suggests that students may need to use a range of different tools to obtain good results.

Two classes of freshmen at a university in Taiwan were the focus of Chen’s (2022) intervention study, on how writing strategy instruction can affect EFL (English as a foreign language) learners’ writing development. While one class belonged to an experimental group subjected to a 14-week-long intervention, the other group was used as a control group, being subjected to the standard writing pedagogy at the university. In the study, Chen (2022) used the writing strategies from Oxford (2017), which are divided into *metacognitive strategies*, *cognitive strategies* and *social/affective strategies*, which are all divided into further sub-strategies. In the metacognitive strategies, planning, monitoring and evaluating are included, while in cognitive strategies generating ideas, revising, elaborating, clarification, retrieval and summarizing are included. The last writing strategy, social/affective strategies, included resourcing, getting feedback and confidence building.

Chen (2022) had students write one essay before the intervention and another essay after. The essays were comparable as they were around 300 words long and the students had 40 minutes in which to write them. Although the students in Chen’s (2022) study were university students, their English proficiency level ranged between low-intermediate to intermediate level as they had had English as a subject in school for at least 6 years. The questionnaire employed after the second essay was written showed significant differences between the two classes in all three types of strategy usage (Chen, 2022). The students were positive towards the strategy instruction they had received and reported changes for the better in their writing process. The study concluded that writing scores significantly improved between the first and the second essay and that students felt empowered by the new skills they had been taught (Chen, 2022). This is in line with Lin’s (2023) study, which showed tool-mediated knowledge, such as using

online dictionaries and writing websites, improved students' holistic scores significantly for both a collaborative text and an individual text.

Next, the focus of the review will shift to studies that have examined the use of tools before the individual writing begins.

Previous research on pre-writing tools

Previous research on writing tools include brainstorming to promote the generation of ideas for content (Hyland, 2003). One such tool, used in order to spark brainstorming and the generation of ideas, is the *mind map*, also known as *concept map* (Zhang, 2018). The mind map is defined as “a visual representation tool for the abstract thoughts and information stored in one’s mind, which facilitates human being’s thinking and learning process” (Zhang, 2018, p. 94). Previous research has found that pre-university students' (aged 18 to 19) in Malaysia (Yunus & Chien, 2016) and college students (aged 18 to 20) in China (Zhang, 2018) view mind mapping as a useful tool to prepare for writing tasks, that it facilitates the activation of prior knowledge (Zhang, 2018), and that it assists university students (no age mentioned) in the US in the generation of ideas and content (Lee, 2013). Although research has indicated that there are students not in favor of mind mapping, finding the tool difficult and time-consuming to use (Yunus & Chien, 2016), studies involving control groups have shown significantly higher scores for experimental groups using the tool for writing tasks (Lee, 2013; Zhang, 2018).

Another pre-writing tool is APE (*alone, pairs, everyone*) also known as *think, pair, share*, a tool first developed in Maryland, USA, in the 1970s (Lyman, 2022). The tool aims to empower students' thinking, while giving time for personal reflection as well as the support of collaborative thought. In Swedish classrooms it is often referred to as EPA (a direct translation of ‘alone, pairs, everyone’ into Swedish: *enskilt, par, alla*), a concept that was introduced at the beginning of the 21st century to deal with language development in teaching Swedish as a second language. In later years it has been a defining tool used for in-service training within the subject of Mathematics (Matematiklyftet)(Hagström & Wetterstrand, 2018). The tool has since spread and is used extensively in different subjects targeting different skillsets (Andréasson, 2022). Research findings include year-6 students (aged 10 to 11) in New Zealand improving their understanding of lesson content and more students actively participating in conversations in the classroom (Carss, 2007).

One study, particularly important for this thesis despite participants being younger, is that of Bauer, Presiado and Colomer (2016), which applied APE under a different name, referring to it instead as 'turn and talk'. The study is relevant as it observes

students interacting about writing to generate ideas collaboratively. The two 5-year-old kindergarten students participating in the study were enrolled in a dual-language program in the US. The students were *buddy pairs*, i.e., assigned to work together to support each other's writing during the academic year. They had different language backgrounds with Manuel speaking Spanish as a home language and Elizabeth speaking English. The dual program entailed students being exposed to Spanish for 90 % of the day and English for 10 % of the day in kindergarten. The Spanish exposure decreased by 10 % for each of the subsequent years in school until a 50-50 exposure was reached. The pair was observed and videorecorded during their interaction about writing throughout the year. The recordings revealed the students taking on different roles of 'teacher' and 'learner' depending on what language was used at the time. The teacher implemented 'turn and talk' so that students would discuss ideas for writing with their buddy before discussing their ideas with the whole class. During 'turn and talk' the buddy pair would fill out graphic organizers, much like a mind map, where their ideas could be organized. The authors conclude that each student benefitted from the mutual exchange in buddy pairs, developing their language skills in both languages and increasing their metalinguistic awareness. Some of these beneficial results contributed to "a classroom environment in which their home language was valued and translanguaging encouraged" (Bauer et al., 2016, p. 10). The authors concluded that the students "grew in ways that may not have occurred without their ongoing interactions" (Bauer et al., 2016, p. 32), highlighting the foundation of sociocultural theory, that learning takes place through interaction (Vygotskij, 2012).

Student interaction in the language classroom is the focus of the next part of this review.

Previous research on student interaction in the language classroom

Studies focusing on student interaction in the classroom have found that translanguaging facilitates a deeper understanding of lesson content (Lasagabaster & García 2014), develops and increases the status of a weaker language (Leonet et al 2017) and expands students' meaning-making resources (Ollerhead 2018) and learning opportunities (Martin-Beltrán 2014). These studies have included students of different ages and derive from a range of different contexts, such as secondary school students in Australia (Ollerhead 2018), students from 5th and 6th grade in the Basque country (Leonet et al 2017), 4th grade students in Belgium (Rosiers 2018), high school students in China (Zhou 2023), third-year senior high school students in Japan (Aoyama 2020), pre-college students in Rwanda (Kwihangana 2021) and high school students in The United

States (Lasagabaster & García 2014; Martin-Beltrán 2014). Besides the facilitative effects found in the classrooms, students in these studies highlight how translanguaging can serve specific functions, such as to clarify, negotiate, affirm or reject information (Kwihangana 2021), to solve linguistic problems and co-construct knowledge with peers (Martin-Beltrán 2014) to ask for help and to metalanguage (Aoyama 2020).

Rosiers (2018) examined students' interaction involving translanguaging practices and the amount of talk reserved for on-task versus off-task talk. Rosiers' (2018) study involved two Belgian primary classrooms with students aged 9-10. Both multilingual classrooms contained students with home languages other than the language of instruction (LOI), Dutch. One of the classrooms in Ghent had a more open policy towards using languages other than Dutch, and another classroom in Brussels had a stricter policy on language use, prohibiting the home languages from being used outside the context of the playground. Besides the difference in language policy, the communities surrounding the schools had different majority languages. In Ghent both the school language and the majority language was Dutch. In Brussels the majority language outside of school was French whereas the language of instruction in school was Dutch (Rosiers, 2018).

By using video, Rosiers was able to capture sequences of translanguaging in the two different classrooms. What she concluded was that translanguaging was used for a range of different purposes in the classroom, such as the teacher translating individual words at a student's request, to students translating and explaining the task in a home language to another student, to students using translanguaging to facilitate understanding, to keep the task moving forward and to gain a deeper understanding of the subject at hand. The study further showed students generally using different languages for on-task and off-task interactions. While they would use the LOI (language of instruction) for on-task conversations, they tended to use the home language for off-task conversations, although occasionally the home language could also be used on-task. This use of language Rosiers (2018) posited to different aspects of their identities as students used the LOI when wanting to identify themselves as good students and used the home language when wanting to identify themselves as a friend of another classmate. The overall conclusion of the study was that students valued the use of their different languages and used them dynamically by drawing on their complete language repertoires in a way that suited their communicative needs.

Whereas Duarte's (2019) study similarly to Rosiers (2018) investigated student interaction in terms of on-task and off-task talk, she ventured further by examining students' type of talk and the relationship to learning. Duarte's (2019) study used a sociocultural approach to examine secondary school students' (age average 15.6 in Hamburg, Germany) peer-to-peer interactions by applying the framework of Mercer, Wegerif and Dawes (1999), which divides the interaction into different types of talk.

Although this framework will be described in more detail in chapter 5, the typology contains three types of talk called *disputational*, *cumulative* and *exploratory* talk (Mercer 2004). Briefly, disputational talk is distinguished by disagreement and students completing a group task independently without taking stock with their peers. Cumulative talk is characterized by students building uncritically on each other's suggestions without having the goal of the task in mind. Finally, exploratory talk is defined by students seeking each other's opinions, explaining and rationalizing their suggestions to work collaboratively towards the common goal (Mercer 2004).

Duarte's (2019) study merits detailed attention here, since she examined both on-task and off-task talk as well as the typology of talk in peer-to-peer interaction in mathematics and social science. The study used sociocultural discourse analysis focusing on the speech act as the unit of analysis. Looking at language constellations present in the 5% of data which included spontaneous translanguaging sequences, German was the most prevalent language used (62.6% of the total 1561 speech acts) in student interactions. This was followed by Russian (19.4%) and mixed language use (12.3%). The results showed students spending 75% on-task and 25% off-task, but the author concludes that "no pattern was found in the sense that some languages were predominantly used for off-task talk while others were more used for engaging with the task" (p.156). However, the example segments of students' interaction clearly show that students "switch between languages but also move flexibly between private and class-related talk" (p.162). Conversation analysis revealed that students spent 16.9% of the speech acts stating or claiming, 14.9% asking, 12.6% informing and 11.8% confirming, which the author attributes to exploratory talk. Adding the speech acts of these different functions together results in 56.2% exploratory talk. Duarte (2019) posits that "translanguaging is used to scaffold meaning through interaction and contribute to jointly solving school tasks" and "to reinforce the creative process of knowledge building" (p. 162). Duarte's (2019) findings support the notion that translanguaging enables exploratory talk to take place in the classroom.

Rajendram's (2019) thesis likewise focused on multilingual students' interaction in the English classroom in a Malaysian context. In her study of year 5 students (aged 10 to 11) social discourse analysis was employed to categorize the different affordances of translanguaging in students' interactions, creating a framework consisting of *affective-social*, *cognitive-conceptual*, *linguistic-discursive* and *planning-organizational* affordances. Similarly to Duarte's (2019) study, Rajendram analyzed the student interactions involving spontaneous translanguaging in two classrooms with different language policies, one in which the teacher adhered to an English-only policy, and another in which the teacher had a more favorable view of students using their complete linguistic repertoires. One of her conclusions is that translanguaging afforded students the ability to engage in cognitively demanding exploratory talk, which in turn allowed for a joint

construction of knowledge to take place (Rajendram 2019). Although the amount of exploratory talk was not specified, Rajendram (2019) posits that “most speech events were exploratory in nature” (page 102) creating a ‘third space’ where students could combine their linguistic resources to learn collectively.

In the Swedish context, Uddling and Reath Warren (2023) examined the student interaction between two secondary school students (aged 14 to 15) in year-8 physics with different language backgrounds, one of whom had arrived in Sweden at age 13. Even though the amount of exploratory talk was not provided, the authors highlighted how exploratory talk was used to “share knowledge, challenge ideas, consider options and evaluate evidence in an equitable way” leading to “increased opportunities for learning (2023, p. 280). One conclusion of the study was that while students were engaged in this type of talk, their capacity to solve problems was enhanced, meaning the students “solved problems that they could not have solved on their own” (2023, p. 281). According to the authors of this study, exploratory talk is what facilitated the use of students complete linguistic repertoires, which afforded students enhanced learning opportunities (Uddling & Reath Warren, 2023).

The findings from studies looking into student interactions in multilingual contexts using the Mercer, Wegerif and Dawes (1999) typology, suggest that translanguaging and exploratory talk dynamically support one another in boosting students’ learning (Duarte 2019; Rajendram 2019; Uddling & Reath Warren 2023).

In the following section, research dealing with student anxiety, both in the foreign language classroom in general and in terms of writing in a foreign language specifically, will be reviewed.

Previous research on foreign language anxiety and writing anxiety

The foreign language classroom presents a unique context in which students are prompted to engage in lesson activities and communicate in a target language that is not their strongest while simultaneously trying to learn the same language (Wörde 2003). Participating as a student in these lessons means exposing what you know and what you have yet to learn not only to the teacher, but to everyone else in the classroom (Wörde 2003) making it “an inherently face-threatening environment” (Dörnyei 2001, page 91). It is not only the fear of making mistakes that causes students anxiety, there are several potential causes reviewed below, coupled with the fact that students have to use language that is “often well below the level of their intellectual maturity” (Dörnyei, 2001, p. 91), mentioned at the beginning of this chapter.

Students' foreign language anxiety has been considered a relevant avenue of research ever since the late 1970s (see Horwitz et al 1986 for an overview of earlier studies) and continues to be a field of importance to this day (see for instance Küçük 2023). Horwitz, Horwitz and Cope (1986) define foreign language anxiety as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (page 128). The symptoms range from students sweating (Küçük 2023; von Wörde 2003), trembling, twitching (Oxford, 2017), blushing (Lin & Ho 2009), and feeling low self-confidence (Cheng et al., 1999) to having difficulty in both speaking and understanding the target language (Horwitz et al 1986). Studies in the past have shown that students affected by foreign language anxiety range from one third of research participants (Horwitz et al 1986) to over 70% (von Wörde 2003). Dewaele and MacIntyre (2014) found that female students are more susceptible to foreign language classroom anxiety (FLCA) than male students and that FLCA tend to be reduced over time, with older learners experiencing less anxiety. Factors that have been found to reduce FLCA include the creation of a relaxed atmosphere (Dörnyei 2001; von Wörde 2003), intrinsically linked to teacher conduct, and using topics relevant to students' experiences and interests (von Wörde 2003).

Cheng, Horwitz and Schallert (1999) suggested the need to look into anxieties specifically related to the four skills (speaking, writing, listening and reading) in order to better understand and address each type of anxiety. Gkonou's (2012) study confirms that FLCA and writing anxiety (WA), although related constructs, indeed are distinct from one another. An interesting finding presented by Cheng (2002) was that female students similarly to the findings in Dewaele and MacIntyre (2014) experience more WA, but that L2 WA tends to increase over time, meaning older students become more anxious about their writing. This means that the two anxiety constructs have different trajectories, with FLCA tending to decrease over time and WA instead increasing with student age.

A study by Lin and Ho (2009) of 16 junior university students in Taiwan warrants detailed attention, as five factors influencing students' WA were found. These were *time limitation*, *teacher evaluation*, *peer competition*, *the writing topic* and *the writing format* (Lin & Ho 2009). Students in their study found working with both time and word limits anxiety provoking, two of whom explained that these factors made their mind go blank, which was similarly found in Horwitz et al's (1986) study. Consistent with previous research (Dörnyei 2001; Horwitz et al 1986) the students related that if the teacher evaluation was negative, students' anxiety would increase causing them to perform worse, creating a downward spiral (Lin & Ho, 2009). Four of the students in Lin and Ho's (2009) study expressed feeling anxious due to their peers and the competition they invoked, leaving them feeling apprehensive about the writing they produced, a

finding supported in Dörnyei (2001) and Horwitz et al (1986). Further, Lin and Ho's (2009) results echo those of von Wörde's (2003) and Küçük's (2023) studies with students feeling anxious about writing topics for which they had no real-life experience to lean on and that were of little interest to them. Last, but not least, Lin and Ho (2009) found students reacting to the writing format, expressing increased anxiety for new writing formats that were unfamiliar to them.

The number of students affected by FLCA and WA mentioned above indicate that this is a widespread issue, affecting students in several different ways, the most detrimental of which is impeding their language learning (Horwitz et al 1986). However, findings taking students' perceptions and suggestions of remedies into account have concluded that there are ways to minimize anxiety (Küçük, 2023; Lin & Ho, 2009; Von Worde, 2003), turning the classroom into a less threatening environment.

In Sweden, studies have found that students' psychological well-being is declining while feelings of stress and anxiety are increasing (Klapp et al., 2023). Anxiety and stress have been found to be linked to grading and testing in schools (Klapp et al., 2023) and national exams specifically (Hirsh, 2016). Hirsh's (2016) study further showed that students who tend to worry about the national exam tend to underperform and achieve lower results, which is a problem if the exam is meant to test students' true ability.

Because educational practices tend to be context-sensitive, below I focus on relevant studies carried out in Sweden.

Previous research in a Swedish context

Schools in Sweden constitute a particular educational context, with premises that include calling the teacher by their first name, all students receiving free meals and access to a personal computer at an early age⁹ (Winman et al., 2018). Teachers are trained through our national teacher education and licensed by the Swedish National Board of Education, and once active, are expected to adhere to national educational policy, such as curricula.

Besides the Swedish studies mentioned in the review above, such as Fredholm (2015) and Uddling and Reath Warren (2023), there are additional studies that have examined students' interaction from a translanguaging perspective in other subjects than English

⁹ Generally, schools have invested in the so-called one-to-one solution, with every student getting access to a personal learning device. Usually, students start by using school devices until they are old enough to be responsible for their own. However, there remains a difference between schools and between school stages with roughly one quarter of the student population in compulsory schools, including years 1 through 9, having access to a personal device, while three quarters have access in upper secondary school (Winman et al. 2018). In this thesis all participating students had access to a ChromeBook.

(Karlsson et al., 2019; Nordman, 2024) and in the English classroom (Källkvist et al 2024) in Sweden. While Karlsson, Larsson and Jakobsson (2019) investigated 20 students' use of translanguaging in the classroom, their participants were younger (attending years 4 to 6 in primary school), the subject was natural sciences, the focus was on subject-specific language and students had received bilingual education in Arabic and Swedish since year 1. The subject, age, background and focus of their study therefore set itself apart from the current thesis.

Nordman (2024), on the other hand, looked into affordances and limitations of pedagogical translanguaging in the subjects of geography and Swedish as a second language in years 6 and 7. Results show that when students' complete language repertoires were offered space in the classroom the status of individual named languages, such as Arabic, was increased and was recognized as a possible resource to learn. This, in turn, had a positive effect on students' self-esteem and sense of pride of being multilingual (Nordman, 2024). Although Norman's (2024) thesis shares the objective of social equity with this study, the school subjects and age of the participating students differ.

An interesting study, because it included the dual perceptions of both teachers and students, is that of Toth (2018), which looked into English medium instruction (EMI) in all content subjects in grades 4 to 6, including 13 members of staff and 22 students (aged 10 to 13). Although the study did not look into students' interaction or use of translanguaging, the findings illustrated how teachers' best intentions sometimes fail. Whereas the teachers considered the use of English in the classroom to boost students' proficiency in the language, some of the students struggled to the extent that they found leaving the school to be the only option available. Since some of the teachers were native speakers of English, the support available in Swedish was limited. Languages other than English and Swedish, spoken in the homes of 13 of the participating students "were generally not permitted due to concerns that students would then make inappropriate comments" (Toth, 2018, p. 49). Although these findings are interesting, the setting (an EMI school), age of the participants and focus on EMI in all content subjects, distinguishes the study from this thesis.

The study that is closest to the current thesis in focus and context is the study completed by researchers in the project entitled MultiLingual Spaces (Källkvist et al., 2017, 2022a; Källkvist et al., 2024). Their study of teachers' and students' language practices and use of translanguaging in the year-8 and year-9 English classrooms involves a setting and participants that are similar in age to those in the current thesis. The project focuses on language use in the classroom, the purposes behind participants' language use and the ideologies that guide them. In addition, the project takes a closer look at students' vocabulary learning and how this is affected by the language policy of the classroom (Gyllstad et al., 2023). Some of the questions posed include whether or not English-only should be the medium of instruction, if Swedish should be used to

support students with difficult lesson content such as grammar and vocabulary, or if students should be able to rely on their previously learnt languages other than Swedish both to learn and to communicate. The project, although similar in terms of the heterogeneous setting with students' language background, has a different focus by highlighting which language policy is most beneficial in terms of students' learning outcomes. Even though MultiLingual Spaces includes an equity and social justice perspective, the project does not deal specifically with the writing process or the use of tools to prepare for a high-stakes task in English, as in the current thesis.

In the above text, I have reviewed studies that have highlighted issues pertinent to multilingual students' language learning and writing development. Below, I justify this study and the gap it fills both within the Swedish context and in the context of equitable education for students with different language backgrounds in the subject of English internationally.

The research gap

Taking heed of the research presented in the above literature review, the current study has sought to incorporate factors that have been found to be beneficial for students' writing process. This includes the use of a translanguaging pedagogy to promote students' thinking and creativity and to support their metalinguistic awareness. Moreover, opening up space for students translanguaging, as shown in the text above, was taken into account to help students with problem solving and provide them with richer content and language use in their writing. Inviting prior languages to be used in the classroom, appreciating students' language knowledge and valuing all languages as tools, have had positive effects on the classroom atmosphere in the past, and has been equally strived for when designing the present study.

The past thirty years, since the term translanguaging was coined by Cen Williams (1994), have seen a lot of research focusing on students translanguaging in the language classroom, and in other subject classrooms as well. A few of these studies go above and beyond by examining the amount of on-task and off-task talk as well as the typology of talk that is used as a result of students translanguaging. These studies are particularly influential as their findings can determine whether translanguaging improves students' chances of learning. This thesis contributes to this line of research by looking at two classes of secondary school students (N=54) with heterogeneous language backgrounds, who may or may not have interlocutors with the same language background to interact with in the English classroom.

Although tools have been referred to by many names in past research, such as *strategies*, *resources* and *artifacts*, positive outcomes on students' writing have been established

by their application. Therefore, the current project has sought to include a combination of tools, both physical and psychological, stemming from different previous studies in an effort to investigate the affordances and limitations they present in the Swedish context. Hence, this study goes beyond some of the previous research where students were allowed the use of a few of these tools when writing, offering a more holistic perspective on students' use of tools when writing in English.

Ultimately, what sets this study apart from the research reviewed in this chapter is the dual focus of year-9 multilingual students' translanguaging and the same students' use of tools, including translanguaging, when writing an essay in English. While few studies have included high-stakes or gate-keeping writing tasks in which students are allowed to use writing tools (García & Kano 2014; Oh 2020), to the best of my knowledge, none have done so in a Swedish setting.

In the next chapter, I bring in sociocultural theory and translanguaging theory since concepts developed in these have been used to understand the mediational properties of tools.

CHAPTER 4: THEORETICAL PERSPECTIVES

The theoretical framework included in this thesis consist of *sociocultural theory* and the theory of *translanguaging*. Sociocultural theory is included as it provides concepts that relate to tools and interaction. Translanguaging theory is included because it focuses on language-minoritized students. Though the scope of these theories prevents me from going into too much detail, the following chapter aims to explain the most fundamental aspects and to show how the theories complement each other for the purpose of explaining the results. The chapter begins with sociocultural theory as the main overarching theory.

Sociocultural theory and learning as a social practice

Most would consider Lev Vygotsky (1978) to be the founding father of sociocultural theory, an academic interested in fields as varied as psychology, philosophy, neurology, education, literature, theatre and linguistics (see for instance Swain et al., 2015). Since Vygotsky's death the theory has been developed by a number of researchers from different fields (for an overview see Daniels, 2008). Fundamental is the idea that learning is an inherently social activity and that our developmental process is dependent on social interaction (Mercer & Littleton, 2007).

However, our students are not blank canvases when they walk through our classroom door. They come equipped with their own unique experiences and ways of seeing and interacting with the world. Their experiences shape the classroom communication and ultimately the actions they take as students. Central to the classroom environment is how new concepts are learned. In the next paragraph the key terms of *scientific* and *everyday* (or *spontaneous*) *concepts* (Vygotsky, 1978) will be explained.

Scientific and everyday concepts

Concepts and conceptual systems are part of our daily discourses and are often taken for granted in the way we use them to communicate with others. According to Säljö (2013), the scientific conceptual systems can be as varied as “grammar, geometry, Freudian psychology and thousands, if not tens of thousands of others” (p. 148, my translation). The concepts and conceptual systems mediate our understanding of the

world by revealing patterns. These typological patterns can be connected to understand larger patterns topologically. An example of this kind of discourse can be found in the language classroom, in which the conceptual system of grammar is employed to talk about correct language use. In such a discourse, words such as subject-verb agreement, tense and genitive-*s* would have a mediating function for students and teachers alike. Once these concepts have been appropriated by the students, they become a resource and a tool mediating their actions in talking about and producing correct language (Säljö, 2013). Once a part of the conceptual system of grammar of one language has been appropriated, this part can be topologically linked and compared to the conceptual system of grammar of another language.

While *everyday*, or *spontaneous concepts*, are constructed through experience in context, scientific concepts are abstract, systematic and without context. According to Vygotsky, everyday concepts are acquired implicitly through experiences outside of school, while scientific concepts are acquired explicitly in instructional settings (Daniels, 2008, p. 15). These two varieties of concepts work together to complement each other. Scientific concepts are contextualized when students experience/notice them outside the classroom. Likewise everyday concepts can be linked to scientific concepts as experiences receive a scientific definition (see Daniels, 2008). Vygotsky (1987) explained this as "the weakness of the everyday concept lies in its incapacity for abstraction, in the child's incapacity to operate on it in a voluntary manner ... the weakness of the scientific concept lies in its verbalism, in its insufficient saturation with the concrete" (p. 169). When the two different types of concepts meet, the student can begin to establish connections and to develop systems connecting the abstract with the concrete.

To merge the concepts, a dialogue is needed, as explained by Daniels (2008), "Scientific concepts are developed through different levels of dialogue: in the social space between teacher and taught; and in the conceptual space between the everyday and the scientific. The result is the production of webs of patterns of conceptual connection." (p. 17). Vygotsky (1987) uses the example of a 'flower' as a concept. At first all types of flowers are labelled as 'flower' in the child's mind. Then, as the child starts to learn the names of individual flowers, the concept of 'flower' is still equal to the concept of 'rose'. It is not until the student learns to generalize the concept 'flower', that 'rose' and other individual types of flowers will become subordinate to the concept 'flower' and a system will have evolved. The merging of the scientific and abstract with the everyday and concrete is what helps the student organize and make sense of the world.

Linguistic concepts and languages other than those spoken in the English language classroom are also subject to the notion of scientific and everyday concepts. As Swain, Kinnear and Steinman (2015) explain, "In second language education, the L1 has often been understood in terms of its interference with rather than its possible contributions

to L2 learning. Instead, we could ask what everyday L1 concepts a student might bring as resources to mediate L2 concepts.” (p. 67). In this view, languages other than the target language should be valued for what they could contribute to the acquisition of an additional language. Experiences gained outside of school through the use of the student’s first, second or third language, can be built on in the target language classroom. The reverse is also true, that scientific concepts gained in the language classroom can help students define their experiences with languages outside of school, to generalize and to make connections between their different languages.

The acquisition that goes into learning scientific and everyday concepts can also be termed *appropriation*. To appropriate something is to make something that you have learnt your own, to be able to apply what you have learnt in new contexts and to connect that knowledge with previously appropriated knowledge (Säljö, 2013). Appropriation is learning that has been internalized. However, the term *internalize* is often disregarded within sociocultural theory since it implies a single directionality of knowledge coming from the outside and moving inwards, whereas appropriation suggests a relation between the inner and outer world due to the mediational effect of artefacts (Wertsch, 1998). In the next paragraph artefacts will be described further.

Tools in sociocultural theory

As human beings we have different *tools*, also known as *artefacts*¹⁰, at our disposal. These tools help us make sense of the world around us, to learn new things, to remember things we wish not to forget and to communicate with others. Tools are all around us and used so frequently that we may even forget they exist (Wertsch, 1991).

Within sociocultural theory, tools are generally divided into intellectual, or psychological, tools and physical tools. However, this division is problematic as physical tools also have intellectual properties attached to them (Engeström, 1999; Säljö, 2013). Physical tools have been developed with a specific use in mind, and their design has often been perfected over time. In creating the tool, knowledge of how it should be implemented in specific situations or contexts have accompanied the tool and those who learn to use it (Säljö, 2013). A typical physical tool such as an axe is a blunt instrument to anyone unacquainted with its use. But if you combine the axe with the knowledge needed, the axe can be used to cut down trees, cut and split logs and even partly build houses. Engeström (1999) makes the same connection between physical tools and language, pointing out that for a range of physical tools, such as maps or yardsticks, language or symbols are used simultaneously with the physical tool, making the physical and the intellectual tool impossible to separate.

¹⁰ In this thesis, the words *tools* and *artefacts* are used interchangeably.

There are three different types of tools: primary, secondary and tertiary (Wartofsky, 1979). Primary artefacts can be considered a prolongation of the human body (Säljö, 2013). A common example is the blind man's cane, but it can also be all kinds of physical tools, such as a computer or the axe mentioned above. Secondary artefacts are considered representations of primary artefacts, such as a recipe we use to cook, a calendar so we don't forget where we need to be and a post-it note to help us remember something we need to do (Säljö, 2013). The latter is also referred to as external symbolic storage systems (ESS) (Donald, 1991) or artificial memory systems (AMS) (d'Errico, 1998) or external memory systems (EMS) (Säljö, 2013). In this thesis the term EMS will be used as an umbrella term to refer to artefacts the students used to mediate their memory in the process of writing their essays. An EMS is a way for us to save information for a later time, or to "offload" information (Dennett, 1996), so that we can free our minds for other processes. It can be a simple note, a book, a traffic sign or a calculator (Säljö, 2013). Here it refers to tools such as mind maps and the word wall. While secondary artefacts can be considered prolongations of primary artefacts, tertiary artefacts can be considered prolongations of secondary artefacts as they help us understand the world (Säljö, 2013). Tertiary artefacts are intellectual and theoretical in nature and consist of abstract representations such as scientific arguments, concepts, systems for counting and language rules (Säljö, 2013).

In Wertsch's (1991) words, "Some tools are more powerful and efficacious for certain activities or spheres of life, and others are more powerful and efficacious for others" (p. 102). Tools are used in various ways by various people and the different tools available to us make up our individual *tool kit* (Wertsch, 1991). Out of all the tools that are used, both physical and psychological, language, which will be discussed next, remains the most vital to our needs (Mercer & Littleton, 2007).

Language and speech in sociocultural theory

Within sociocultural theory, language is considered the most important tool of all (Vygotsky, 1978). According to sociocultural theory, learning is the outcome of social interaction. For interaction to take place we need to be able to use language. Halliday (1993) makes a point of this by saying "when children learn language... they are learning the foundation of learning itself" (p. 93).

Vygotsky (2012) posited that language and speech develops in three stages. First it is used in social communication. For small children this may entail observing social interaction before enough language has been learnt that the child is able to take part in the interaction (Vygotsky, 2012). A second developmental stage takes place when the child is able to use language on his/her own in what is known as *egocentric speech*, a concept inspired by Piaget which Vygotsky (2012) expanded on. In egocentric speech

"the child talks only about himself, takes no interest in his interlocutor, does not try to communicate, expects no answers and often does not even care whether anyone listens to him" (Vygotsky, 2012, p. 15). Vygotsky (2012) further describes egocentric speech as "thinking aloud" (p. 15). The next developmental stage occurs around the time when children start school and this is when egocentric speech turns into *inner speech*, which is completely internalized and hidden from view. As inner speech develops, egocentric speech is dropped. According to Vygotsky (2012), inner speech "is to a large extent thinking in pure meanings. It is a dynamic, shifting, unstable thing, fluttering between word and thought" (p. 249).

Whereas inner speech is described as having "peculiar syntax" and to be "disconnected and incomplete" (Vygotsky, 2012, p. 139) due to the way we think, written speech is at the other end of the spectra, being described as "the most elaborate form of speech" (p. 144). Vygotsky (2012) elaborates on this topic by comparing oral speech in dialogue, which because of its speed does not lend itself to "a complicated process of formulation" (p. 144). This is because in oral speech there is not much time to think and because in communication with another you react to their utterances with very little time to refine your speech. In writing, however, we usually do have time, albeit in varying amounts, to use complicated forms. However, writing requires planning, which we may do using our inner speech. Vygotsky (2012) connects the planning we do when we write with inner speech by stating that "usually we say to ourselves what we are going to write; this is also a draft though in thought only [...] this mental draft is inner speech" (p. 144). Here, Vygotsky (2012) is further saying that although writing requires planning, this planning does not have to be written down, but can be done internally using our intramental fictions.

We have thus established that language is used as a psychological tool to mediate our thoughts on an intramental level, to help us reason and make decisions on how to act, among other things, when we write. Yet language can also be used on a collective level, to think collectively on an intermental level in order to mediate how we carry out tasks in groups. I will discuss this in connection with the *intermental development zone* (Mercer, 2000) later on in this chapter in connection with the *zone of proximal development* (Vygotskij, 1978), but first an elaboration on tools and how they can mediate our actions.

Tools and mediation

Tools change and influence our actions, i.e., they mediate the world around us, influencing us and helping us respond in appropriate ways depending on the activity (Säljö, 2013). To counter the behavioristic model, which saw learning as a mere response to

stimulus with the invention of the formula $S \rightarrow R$ meaning *stimulus* leads to *response*, Vygotsky (1978) created his own model, presented below in Figure 2.



Figure 2. Vygotsky's model of mediation (1978) as depicted in Davis (2015, p. 9).

In this triangular model, Vygotsky added the mediational means consisting of tools, signs and artefacts as an intermediate between the stimulus and response. Simply saying that everything we do is the result of a stimulus creating a response, was too simplistic for Vygotsky (Säljö 2013). In his view, the mediational tools help us interpret the situation at hand and to decide how to respond based on our experiences of having been in similar situations before. Different tools will influence our response in different ways (Säljö, 2013).

Building on Vygotsky's model, Leont'ev (1978) developed his own version of the mediation triangle to show how tools mediate people's actions in concrete practices. The original model was modified by exchanging 'stimulus' with 'the subject' and 'response' with 'the object'. According to Leont'ev (1978), the tools connect the 'the subject' with 'the object' which is in focus. 'The subject', or the person, will use different tools in order to work on 'the object' and these tools can have both physical and psychological properties. While I am aware of the division between the Vygotskian concept of mediation, as belonging more to the cognitivist side of sociocultural theory, and Leont'ev's model of mediation as belonging more to activity theory, in this thesis, Leont'ev's version of the mediation triangle will serve as inspiration. For the purpose of clarity, 'the subject' will be changed to 'student' and 'the object' will be changed to 'the writing task', while a range of different mediational tools specific to this study will be listed at the top of the pyramid as seen in Figure 3.

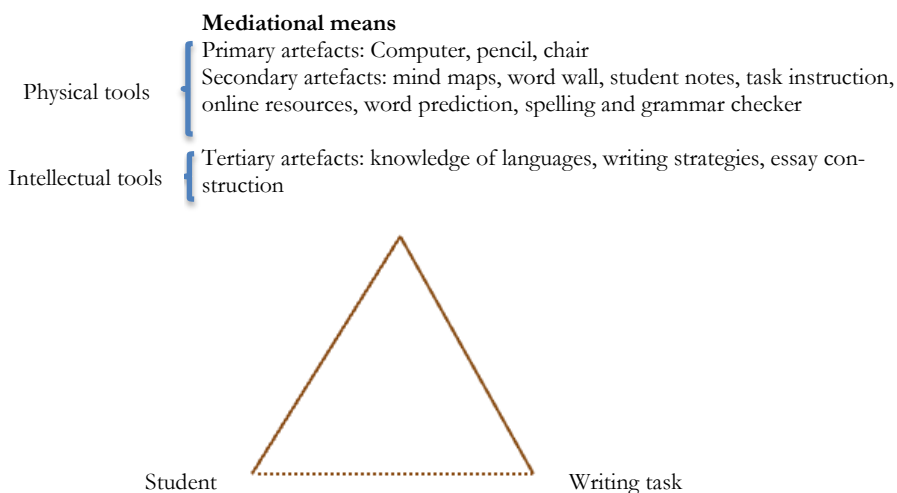


Figure 3. A mediational model inspired by Leont'ev (1978).

This thesis focuses on students' use of tools when writing an essay in English. As seen in Figure 3, the mediational artefacts involved in writing an essay can be both psychological and theoretical, such as language or different writing strategies, but also physical artefacts, such as mind maps, student notes, dictionaries, word walls (explained in the methods section) and task instructions. In the next section, the concept of mediated action is explained as is its centrality to this thesis.

Mediated action

Wertsch (1991) explains mediated action by saying that "human action typically employs 'mediational means' such as tools and language, and that these mediational means shape the action in essential ways" (p. 12). In the classroom, the student will interact with different types of artefacts in order to complete a writing task. The artefacts mediate the student's actions. The tools influence and affect what the student does. He/she will use a physical primary artefact, a pencil or a computer, to write and to create notes and mind maps. The pencil, or computer, is the artefact that mediates the student's writing. The notes and mind maps become secondary artefacts along with a word wall filled with language support as well as digital tools such as Google Translate, word prediction and spelling and grammar checker. The secondary artefacts can be used to support memory, to provide content, to save time and to solve problems as the students proceed in their writing. Additionally, the student will use psychological, or theoretical artefacts, such as previously learnt languages and language rules, different writing tools

and strategies and his/her knowledge of essay construction which mediate the student's actions, i.e., writing an essay is mediated through the use of correct language, the employment of different writing strategies and the knowledge of how one writes an essay in English.

It is important to note that the mediated action can be internal, influencing the way the participants think, and external, influencing the way the participants act (Wertsch, 1998). Mediational means or artefacts have different *affordances*, i.e. they enable us to act in different ways in order to change our process for the better. The concept of affordances is defined by Van Lier (2004) as "what is available to the person to do something with" (p. 91). However, mediational means are not always helpful to our process. While one artefact empowers one participant, it may hamper or make a process more difficult for another (Wertsch, 1998), creating limitations as well as affordances. This is a result of the tension that occurs between participant (referred to as agent) and tool, as explained by Wertsch (1998):

For the most part, my analyses of this tension have focused on how agents accept (reflectively or otherwise) cultural tools and use them. It turns out, however, that the relationship between agent and mediational means is often more complex and less benign. Cultural tools are not always facilitators of mediated action, and agents do not invariably accept and use them; rather, an agent's stance toward a mediational means is characterized by resistance or even outright rejection. Indeed, in certain settings this may be the rule rather than the exception. Resistance and rejection still constitute a relationship between agent and mediational means (a specific form of alterity), they still give rise to mediated action, and they still may have a major impact on the development of the agent (pp. 144-145).

What this means is that a participant's degree of appropriation of a tool is dependent on the degree of acceptance of the tool based on a range of sociocultural aspects. These aspects include who is behind the creation of the tool, the motive behind the tool and whether the individual belongs to the same group of people as the creator in terms of power. If a person of power imposes a tool on a person with less power, the latter may not be inclined to accept the tool. However, it also depends on the motive, whether the tool is intended to help a person or not (Wertsch, 1998). The above quote makes clear, that even though a tool may be resisted or rejected altogether, it can still influence the actions of the participant subjected to the tool.

However, to help students accomplish the complex task of writing an essay in a second, or an additional language, the appropriate level of difficulty in the instruction and support needs to be in place. This is where *scaffolding* and *the zone of proximal development* comes in, to which I now turn.

The zone of proximal development and the concept of scaffolding

The zone of proximal development (ZPD) is described by Vygotsky (1978) as “The distance between the actual developmental level as determined by independent problem solving and the level and potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86). Mercer (2000) refers to the ZPD as “a process by which intramental (individual) processes can be facilitated and accelerated by intermental (social) activity” (p. 140). The ZPD does not suggest that the adult or more capable peer is always present. It can also mean that the student is able to solve a problem on his/her own after the problem has been discussed/experienced/shown with guidance in a different environment altogether (Vygotsky, 1987).

The concept of the ZPD is compatible with that of *scaffolding*, which “helps a student accomplish a task they would not have been able to do on their own” (Mercer & Littleton, 2007, p. 15). The term was first used by Wood, Bruner and Ross (1976) to look into the communication between parent and child. Scaffolding has a temporal element, in that the support needed is only present until the child can accomplish the task on his/her own (Gibbons, 2006). The scaffolding support can have different aims. It can be used in order to reach a certain level of understanding, to attain a new skill or to learn new concepts. The task itself should not be simplified, rather the focus should be on the support being strong enough so that authentic and appropriately challenging tasks can be completed successfully (Gibbons, 2006).

There is an element of dialogue to the concepts of the ZPD and scaffolding, as the knowledge that is acquired from the adult or more capable peer is not given but negotiated and discussed. This is not a case of students being spoon fed with knowledge that they can then apply themselves, rather the student is given tools and is encouraged to think of a solution him- or herself with guidance (Newman, 1989). This is in line with Mercer’s (2000) *intermental development zone*, which is specific to the teacher-student interaction, defined as “a continuing event of contextualized joint activity, whose quality is dependent on the existing knowledge, capabilities and the motivations of both learner and teacher” (p. 141).

Self-efficacy

Self-efficacy is a construct originating with Albert Bandura, a psychologist and professor of social science in psychology at Stanford university in the US. He defined self-efficacy as “people’s beliefs in their capabilities to perform in ways that give them control over events that affect their lives” (Bandura, 2000, p. 212). The construct has been proven valid and used widely in research concerning educational contexts (for an

overview see Zimmerman, 1995) and is closely tied to sociocultural theory of development. As Bandura posits, “Children’s intellectual development cannot be isolated from its social consequences. It must be analyzed from a sociocultural perspective” (Bandura, 1995, p. 19).

According to Bandura (1995) “Efficacy beliefs influence how people think, feel, motivate themselves, and act” (p. 2). Although closely related to other constructs, such as self-control, self-efficacy sets itself apart by being directly related to performance tasks (Zimmerman, 2000). The situation and context in which a task is to be performed influences self-efficacy, as students’ beliefs about their capability regarding their performance in a particular task in a particular subject (and in a particular setting) may differ from a similar task in a different subject (Zimmerman, 2000). Thus, a writing task in the subject of Swedish may not exhibit the same efficacy beliefs as a writing task in the subject of English. According to Bandura (2000), students with low efficacy beliefs shy away from difficult tasks, whereas students with high efficacy beliefs rise to the occasion. Students’ self-efficacy beliefs can therefore influence how they approach a writing task in English.

According to Bandura (1995), a person’s self-efficacy belief can be influenced in four different ways. Described in the order of the most influential to the least, these are: 1. through *mastery experience*, i.e., through personal experiences of success in similar situations with similar tasks, 2. through *vicarious experiences*, i.e., by watching someone else, who is similar to the self, succeed in similar endeavors, 3. through *social persuasion*, i.e., by being told you are capable you become more likely to succeed, and 4. through boosting *physiological and emotional states*, i.e., by feeling good about yourself, reducing stress and other negative emotions, including how to interpret physical reactions so that they are not perceived as negative (Bandura, 1995). The construct of self-efficacy applies equally to teachers and their belief in their capability to motivate learning through their instruction (Bandura, 1995). It can further be applied to groups and their shared beliefs in their collective efficacy to perform a task together (Bandura, 2000).

This concludes the presentation of sociocultural theory and the sociocultural constructs and concepts applied in this thesis. Translanguaging theory, presented next, is relevant to this study as it focuses on language-minoritized students and recognizing the equal value of students’ translanguaging practices in the classroom

Translanguaging theory

Translanguaging was first conceived by Cen Williams (1994) as he was writing his dissertation. Williams used the term *trawsieuthu*, in Welsh, to refer to a pedagogical practice in which the teacher would use one language to instruct and the students a different

language to take notes (Williams, 1994). Baker (2011), who was the first researcher to translate *trawsiethu* into the English term *translanguaging*, referred to it as "the process of making meaning, shaping experiences, gaining understanding and knowledge through the use of two languages" (p. 288). The concept of translanguaging has since flourished into a theory of bilingual communication in which the complete linguistic repertoire is taken into account (García & Wei, 2014). The idea is to go beyond named languages to view the language practices of bi- and multilinguals as the norm, rather than monolingual language practices, which are often used as points of reference (García & Wei, 2014). What differentiates translanguaging from the older concept of code-switching is that the latter identifies different codes or languages to be accessed for cognitive and communicative actions, whereas translanguaging posits only one code, or rather one pool of linguistic data irrespective of which named languages are included (García & Wei, 2014).

Translanguaging can be divided into *spontaneous* and *pedagogical* translanguaging (Cenoz & Gorter, 2020). The former refers to the natural communication practices of bi- and multilingual speakers, whereas the latter refers to a planned, instructional use of translanguaging in a classroom specifically for the purpose of learning. In pedagogical translanguaging the idea is to acknowledge what students already know and to connect this prior knowledge with the new knowledge to be gained.

In the educational context, translanguaging is opposed to the compartmentalization of languages and encourages the use of *translanguaging space*. Translanguaging space allows the use of bi- and multilinguals complete linguistic repertoires in order to understand and to be understood (Li Wei, 2011). It promotes the use of all linguistic resources for learning, be it using different named languages or other kinds of semiotic resources. This ties into the *creativity* in translanguaging, which according to Wei (2011) is "following or flouting norms of language use", and *criticality*, which is "using evidence to question, problematize or express views" (p. 374).

Though there are other concepts that seek to describe the language practices of bi- and multilinguals, translanguaging sets itself apart as "it is transformative, attempting to wipe out the hierarchy of translanguaging practices that deem some more valuable than others" (García & Leiva, 2014, p. 200) supporting *social justice* and *equity* for all students. While the concept of social justice entails recognizing all students as knowledgeable, the concept of equity "means that the teacher ensures that all students, regardless of language backgrounds or proficiency, participate equally" (García & Baetens Beardsmore, 2009, p. 319).

When it comes to the translanguaging that is researched in schools, Beiler (2021) suggests that we separate the translanguaging practices containing minority languages and those that contain majority languages, as these translanguaging practices are often valued differently. She does so by offering the concepts of *minoritized-* and *majoritized*

translanguaging. One reason for this distinction is that majoritized translanguaging is often considered more socially accepted than minoritized translanguaging, which the majority of students in the classroom may struggle to understand (Beiler, 2021). Minoritized translanguaging is also what has been investigated the most in previous research, by looking at the social justice involved when language-minoritized students learn a majority language in school, whereas majoritized translanguaging, often involving students of privilege, has been focused on less (Beiler, 2021).

In this thesis, I use translanguaging to refer both to interaction between individuals but also to individual thought processes, through so called *silent translanguaging* for the purpose of completing the writing task. Closely connected to the concept of *inner speech* within sociocultural theory, I define silent translanguaging as a mental process wherein students use their complete language repertoires flexibly to think while engaging in a complex task on their own. As with inner speech, silent translanguaging can appear fragmented and incomplete to an outsider, but make perfect sense to the speaker, or in this case “the thinker”. Students can engage in this form of translanguaging when they are working on tasks that do not allow interaction with other speakers, such as a national exam which the student is expected to complete in silence on their own.

What unites sociocultural theory and translanguaging theory is the wholistic view of human communicative practices. Translanguaging, much like sociocultural theory, takes the cultural and historic background of the speakers into account (García & Wei, 2014). Like sociocultural theory, it focuses on making meaning and is dependent on situated action, i.e., the way a bi- or multilingual chooses to use their named languages through translanguaging will depend on the context and who they are speaking to. Additionally, translanguaging advocates for bringing language practices in the home and language practices in school together (García & Wei, 2014), much like everyday- and scientific concepts within sociocultural theory.

This chapter has given an overview of the two theories, sociocultural theory and translanguaging. In the next chapter, the research design and methodology will be presented.

CHAPTER 5: METHODOLOGY

This following chapter presents the sampling methods and the teacher and students who graciously agreed to participate in this study. I will start with a presentation of the school and of the participants after which my positionality as teacher-researcher will be explained. A detailed description of the transcription process and analysis of the data will then be offered. The ethical considerations along with the reliability and validity of the study, will be discussed towards the end of this chapter.

Sampling and access

For obvious reasons, the study needed to be partly carried out in a classroom where different teaching and preparatory lessons could be tried out and experienced by both teacher and students. Given that the idea behind the intervention was that it was to be planned and carried out with a teacher, who would bring her experience to the task, the research task demanded an experienced teacher, who had an interest in research, and who was deemed excellent among both her students and her peers. Another reason why the study needed to have access to a teacher and her class(es), was that this provided me with an opportunity to observe lessons where students prepared to write an essay in English. For that reason, the first priority was to find the teacher through criterion sampling (Dörnyei, 2007), i.e., a teacher possessing the criteria mentioned above.

Because the role of the teacher was crucial, contact was established with a former colleague who was also lead teacher¹¹. Southview secondary school¹², where the data was collected was consequently a former work place. As a result, the principals and the school were well known.

In our first meeting, the lead teacher's teaching situation was discussed, whether she would be teaching any classes in year 9 the following academic year and whether taking part in the study was of interest to her. On that same day, the head principal granted access to the school and gave permission for the study to take place. At his request, a detailed plan was sent by email that same afternoon.

¹¹ There are different ways to qualify for a lead teacher (*förstelärare* in Swedish) position. In this case the lead teacher was selected through competition and had to go through a training program. A lead teacher receives a salary increase and has a responsibility to keep up to date with research and to spread this research among colleagues. Depending on the position, the lead teacher may be tasked with working on systematic development within the school and/or within the municipality.

¹² The name is a pseudonym.

Southview secondary school is a medium-sized municipal school¹³ with roughly 500 students. There is diversity in language with several L1s represented. At the time, all students received a Chromebook when they started.

Participants

The lead teacher, called Sara¹⁴, has been working as a teacher for 25 years. She became a lead teacher in 2014. Sara is a simultaneous bilingual, speaking German and Swedish from birth. She is licensed to teach English and German.

Through Sara, contact was established with two classes in year 9. Although these classes are referred to as Class A and Class B, these labels do not refer to their abilities. All students were born in 2005, which means all of them had turned 15 and some had turned 16 at the time of the intervention. Class A consisted of 28 students (15 males and 13 females). There were eight different L1s represented in the class (Albanian, Arabic, Bosnian, Croatian, English, German, Serbian and Swedish). Three of the students were born abroad (two in Germany, arriving in Sweden at the age of 3 and 7, and one born in Iraq arriving in Sweden at the age of 1), and four of the students had spent more than a year living abroad (the two students who were born in Germany, one in Spain and one in Turkey). A total of nine students listed a LOTS as well as Swedish as their L1s and one student listed two LOTS as his L1s (Albanian and German). The LOTS speakers made up 35.7% of the class, which is above the national statistics, as 28.9% of our total student population in Sweden are entitled to mother tongue tuition (Skolverket, 2023a).

In Class B, there were 12 males and 14 females, although one of the female students had poor attendance and was only present for one of the lessons. There were five L1s represented (Arabic, Bosnian, English, Russian and Swedish) and two students were born abroad and arrived in Sweden at the age of 4 (Iraq) and 7 (England), which meant that they had lived more than one year abroad¹⁵. Four students listed Swedish in combination with a LOTS as their L1, making up 15% of the class, which is a little below the national figures regarding students who are entitled to mother tongue tuition.

¹³ In Sweden we have both municipal schools and independent schools. Both are funded publicly by the municipalities but adhere to different regulations when it comes to how they spend their funding. The independent schools have to abide by the same national curriculum.

¹⁴ All names of participants are pseudonyms.

¹⁵ Early childhood bilingualism is influenced by both the language spoken in the home and the language spoken in the community (Baker, 2011). Setting a one-year mark means the child has had time to be fully immersed in the environment where a language is spoken.

Table 1. Audio-recorded students in the study

Pseudonym	Language background	Class/group		Lesson 2	Focus group
Alan	L1: Swedish, Albanian, L2: English L3: German	A	1	√	√
Adam	L1: Swedish, German, L2: English L3: Spanish	A	1	√	-
Frank	L1: Albanian, German, L2: Swedish L3: English	A	1	√	-
Adele	L1: Swedish, Bosnian, Croatian, L2: English, L3: German	A	2	√	-
Erica	L1: Swedish, Bosnian, Croatian, Serbian L2: English, L3: Spanish	A	2	√	√
Axel	L1: Swedish, L2: English, L3: German	B	1	√	-
Esme	L1: Swedish, L2: English, L3: Spanish	B	1	√	-
Leah	L1: Swedish, Russian, L2: English, L3: Spanish	B	1	√	-
Max	L1: Swedish, L2: English, L3: German	B	1	√	-
Avery	L1: Swedish, L2: English, L3: Spanish	B	2	√	√
Bella	L1: Swedish, L2: English, L3: French	B	2	√	-
Mia	L1: Swedish, L2: English, L3: French	B	2	√	-
Shane	L1: Swedish, L2: English, L3: Spanish	B	2	√	-
Amelia	L1: Swedish, Bosnian, L2: English, L3: German	B		-	√
Andrew	L1: Swedish, Arabic L2: English	A		-	√
Emma	L1: Swedish, L2: English, L3: Spanish	A		-	√
Ian	L1: Swedish, L2: English, L3: German	A		-	√
Ray	L1: Swedish, L2: English, L3: Spanish	A		-	√
Zoe	L1: Swedish, Arabic, L2: English	A		-	√
Evelyn	L1: Swedish, L2: English, L3: Spanish	B		-	√
Harper	L1: Swedish, L2: English, L3: Spanish	B		-	√
Megan	L1: Swedish, L2: English, L3: Spanish	B		-	√

To gain deeper insight into the student interactions taking place in the classrooms, a few students were selected to be audio-recorded during the intervention lessons. The criteria for selecting these students were the languages they had in common, allowing them the possibility to translanguage should they wish to do so. To capture diversity in the data, two groups from lesson 2 included students with LOTS as L1s (Albanian and Bosnian), one group included a mixed group with one student with Swedish and Russian as L1s and three students with Swedish as L1, while one group included students with Swedish as their L1.

The students who were audio-recorded during the lessons and who participated in the focus groups are presented in Table 1. The participants are presented in chronological order showing the students of intervention lesson two first followed by the students who participated in the focus group discussions last. The languages listed have been provided by the students themselves through a questionnaire. Although the country of origin is not listed in the table, all students were born in Sweden except for Adam and Frank, who were both born in Germany. English was an L2 (and the first foreign language) for all the students, except for Frank, for whom English was his L3.

As the focus groups relied on students volunteering for a time slot outside of their schedule, some of the students who had been recorded during the lessons did not volunteer. This was especially true for the focus-group discussion in Class B, which had to take place after hours on a Friday afternoon to avoid memory loss during the weekend. The students included in the focus group discussions were Emma, Erica, Zoe, Ray, Andrew, Alan and Ian from Class A and Amelia, Avery, Evelyn, Harper and Megan from Class B.

Positionality

My positionality as a teacher-researcher needs to be considered in this study. Bukamal (2022) refers to the concept of positionality as “a biography that pays particular attention to the context that creates the researcher’s identity, an identity that will affect the way that the social world is seen and understood” (p. 328). My experiences, both as a teacher and a researcher have undeniably influenced the research project in terms of research design, data collection and interpretation of results. To examine one’s positionality, it can be useful to view oneself as either an insider or an outsider of the research context. According to Hamdan (2009), this sometimes “involves a researcher occupying double positions, meaning that he or she is both a member of the researched group *and* an outsider relative to that group” (p. 380). The experience of working as a licensed teacher of English and Spanish with the lead teacher for a number of years allows for an insider perspective in this particular context. The school, staff, classrooms and policy are all familiar to me. An insider position allows me to orient myself in a familiar space, with familiar tasks as a teacher well acquainted with the English syllabus and students of this age. However, having gained a position as a doctoral student allows an outsider perspective, as a person that is no longer a teacher, but a teacher-researcher. My work as a researcher involves knowing about the research in my field of education, about research methods and research ethics. The outside position may not allow me to get as close to the participating students as being their regular teacher would have allowed. Although the intervention involves a writing task for which the students will be

graded, this is one task among many these students have undertaken during their final year and the final grade rests with Sara. As such, the outsider position affords the possibility to be curious about students writing practices without having to think about their overall assessment. Therefore, relying on both experiences of being a teacher and a researcher, I position myself as a teacher-researcher in this study.

Research design

The present study is a classroom intervention multiple case study that uses a mixed method design, but that is ultimately qualitative in nature. The study seeks to understand the phenomena of how and why tools are used when writing in English by looking at multiple cases (Cohen et. al. 2011). The instruments used for data collection in this study are interview, focus-group discussion, questionnaire, observation and audio-recorded student interactions.

All data was collected in the spring of 2021. Before the intervention started, students filled out a pre-intervention questionnaire and a pre-interview took place with Sara, the lead teacher. Observations were made of two lessons in each class, focusing on a pre-writing task. Hereafter the first lesson of the intervention started on a Thursday and ended three weeks later with the sixth lesson on a Friday. After the intervention, students filled out a post-intervention questionnaire and one group of students from each class participated in a focus-group discussion the same day. A post-intervention interview also took place with Sara.

Data collection methods

Figure 4 provides an overview of the data gathered and the participating students. The students whose participation reoccurred at different times in the data collection have been yellowed.

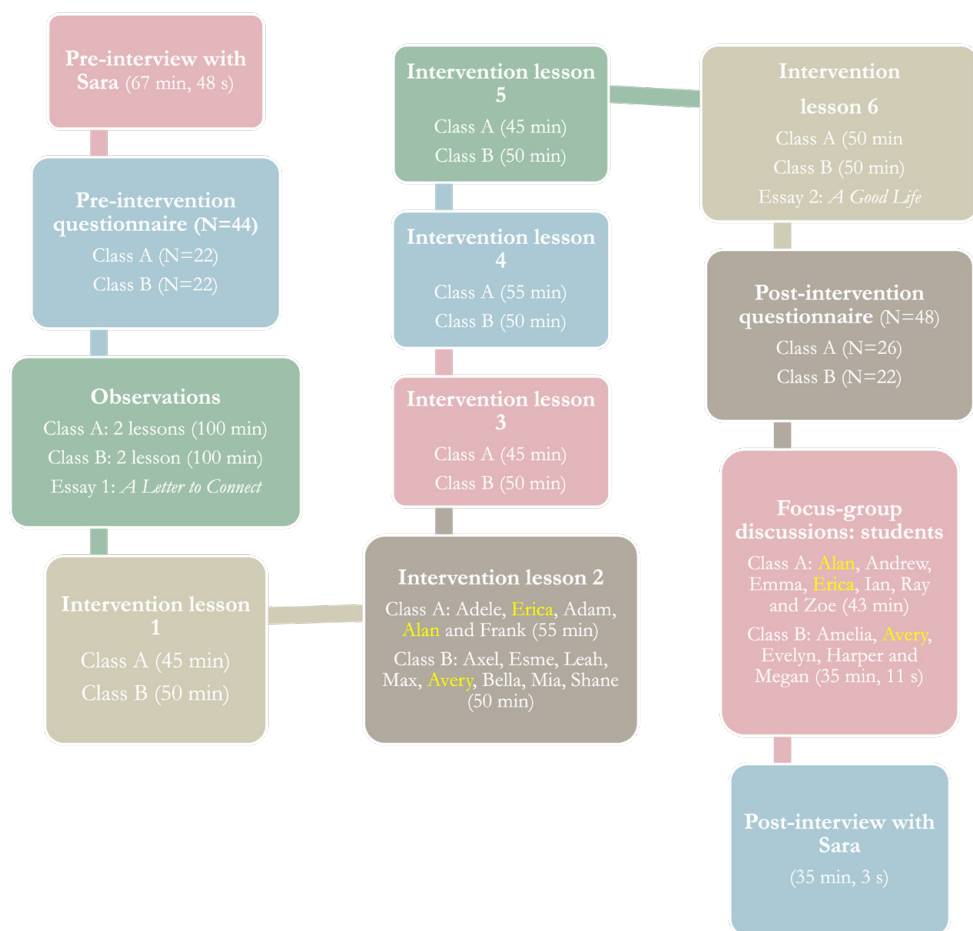


Figure 4. The data collection procedure

A few of the data sources are mentioned due to connections with other data sources. This is the case for the initial four observation lessons, intervention lessons 1, 3, 4, 5 and 6, the recordings of which are not included explicitly but which are referred to by both students in the focus groups and Sara in the post-intervention interview.

Questionnaires

The study employs two questionnaires, one before the intervention started targeting students' background information, and another after the intervention. The pre-intervention questionnaire (Appendix B) was used to create seating charts for the students in the two classes, where students with similar language backgrounds were seated

together to allow for translanguaging. The pre-intervention questionnaire also provided information about students' use of different named languages.

The pre-intervention questionnaire was distributed by Sara in March, six weeks prior to the intervention. While students filled out the questionnaire, I was available online to provide support. This is advocated by Cohen et al (2011), who state that "The presence of the researcher is helpful in that it enables any queries or uncertainties to be addressed immediately with the questionnaire designer" (p.404). Completion time was between 10 and 15 minutes and answers were collected from the 44 students present.

The pre-intervention questionnaire was semi-structured including a total of 18 questions. Out of these 18 questions 15 were closed, provided with pre-made answers which were either dichotomous, multiple choice or rating scales. Four of the closed questions gave students the opportunity to expand their report with a free-text answer. The final three questions posed were open-ended to "enable participants to write a free account in their own terms, to explain and qualify their responses and avoid the limitations of pre-set categories of response" (Cohen et al., 2011, p. 382). The pre-intervention questionnaire was based on the questionnaire employed in Gunnarsson (2015). As the two questionnaires were similar, and time was of the essence, a decision was made not to pilot beforehand.

The post-intervention questionnaire was distributed on the same day as the sixth and final intervention lesson. In order for this to be possible, two other teachers at the school graciously agreed to give me some of their valuable lesson time. Had this not been possible a whole weekend would have passed between the completion of the essay and filling out the questionnaire, which would not have been ideal in terms of students' memory of the event¹⁶ (Bloom, 1954). Similarly to the pre-intervention questionnaire, the post-intervention questionnaire took between 10 to 15 minutes to fill out.

The post-intervention questionnaire contained 23 questions, 22 of which were closed, containing dichotomous or multiple-choice questions. Out of the 22 closed questions, five contained spaces for possible free-text answers, creating a space where student could elaborate further. The final question was open asking students if there was anything they felt had been left out that they wanted to include or expand on. Since the questions in the post-intervention questionnaire were dependent on the respondent having taken part in the intervention, and seeing as a response to the questionnaire was preferably collected in conjunction with the last lesson to prevent memory decay, this second questionnaire was similarly not subjected to piloting.

There are several advantages to using questionnaires to gather data. Dörnyei and Taguchi (2002) explain that "By administering a questionnaire to a group of people,

¹⁶ According to Bloom (1954) memory decay will start anywhere between three hours and three days after the event, but recalls made within 48 hours are 95% accurate.

one can collect a huge amount of information in less than an hour, and the personal investment required will be a fraction of what would have been needed for, say, interviewing the same number of people" (p. 6). Disadvantages include unclear questions, with respondents misreading or misinterpreting (Dörnyei and Taguchi 2002). Simplicity in terms of wording, avoidance of negations and using a clear and coherent structure (Cohen et al. 2011, Dörnyei and Taguchi 2002, Trost 2012) are suggestions that were followed to counter this disadvantage in the construction. Other disadvantages include respondents feeling fatigued if the questionnaire is too long, the halo effect where respondents tend to be more positively inclined, or an acquiescence bias where ambivalent respondents tend to agree even though they are unsure (Dörnyei and Taguchi 2002).

Observations

Before the intervention began, I carried out observations in both classrooms (Class A and Class B) for a duration of two lessons. Observation can be structured, i.e., focusing on certain elements or occurrences of certain phenomena, or unstructured where a larger context is in focus (Dörnyei 2007). The focus of this observation, was to see how Sara prepared her students for the essay part of the national exam of English. The idea was to enter the classroom without any preconceived ideas or hypothesis of what would come to light, i.e., to observe in an unstructured manner. This is in line with Cohen et. al. (2011) who state that this is ideally what we do when "we want to go into a situation and let the elements of the situation speak for themselves" (p.458).

There are advantages and disadvantages with an unstructured observation. While the structured observation has ready-made categories or variables to look for, the unstructured does not. The advantage and disadvantage of the unstructured observation is that anything and everything can be of interest, the advantage being that the researcher is not bound by categories made beforehand, which might make you overlook other important events taking place (Dörnyei 2007). The disadvantage is that the scope of the observation may become too big, with the researcher taking field notes that will later turn out to be unimportant. Taking fieldnotes of all the details may also make the analysis harder, as the researcher might have difficulty seeing the forest for the trees (Cohen et. al. 2011).

I took the role of an overt observer (Cohen et. al. 2011). There are two reasons for this role. First, to preserve ecological validity by being as non-obtrusive as possible, i.e., not taking part in any of the class activities or offering assistance to any of the students but rather letting the lesson unfold as it normally would. It can, however, not be denied that my presence may have altered their behavior through the so called 'observer effect' (Dörnyei 2007). Second, my role as an overt observer allows opportunity to focus on

the observation fully, without interruption, giving attention solely to taking field notes. For this purpose, my role as observer was made clear to the students at the beginning of the first lesson observed in each class. I chose to observe from the back of the classroom for two reasons. First, this would provide an angle for me to view the teacher and the projector she was using. Second, this meant remaining out of the students' view as much as possible to avoid distracting them from the lesson. The drawback to this angle is that it was hard for me to observe the students' faces and bodily reactions.

Observation as a method is dependent on the observer. The observer's background, sex, ethnicity, age, class, language background, personality are just a few of the factors that can influence what the observer sees (Cohen et. al. 2011). Although my positionality has already been discussed, it is safe to assume that having years of experience in similar English teaching classrooms will have affected what was observed and the notes taken while observing. Because the lessons were back-to-back, there was no time to expand the notes in between observations. This goes against the advice given in Cohen et. al. (2011), which states that a second observation should not be undertaken until the note taking of the first is complete as this will "reduce the impact of one set of events by superimposing another and more recent set" (p.301). This was remedied to some extent by the use of audio-visual recordings, which will be discussed in greater detail below. Once the intervention began, notetaking was not possible since I was teaching alongside Sara while keeping track of the technical equipment in the classroom. The observation of the intervention therefore relies solely on the audio-visual recordings that were made during these lessons. An advantage of video recording is that it allows for several viewings in which the observation can be analyzed more fully. A disadvantage is that the fixed camera angle may not capture important events in the classroom (Cohen et al., 2011). I made every effort to minimize the blind spots of the classroom by having three video cameras recording from three different angles.

One of the strengths of observation data is that it presents an opportunity to view a phenomenon *in situ*. In Dörnyei's words "it allows researchers to see directly what people do without having to rely on what they say they do" (2007:185). Although one important factor to keep in mind is that we can only observe that which can be seen and a great deal of the teaching and learning process is carried out in our minds, and can therefore not be seen unless it is verbalized or shown through action (Dörnyei 2007). As an example, while Sara is teaching she is also mindful of the reactions of the students, perhaps posing questions to herself such as: *are they following?*, *am I speaking too fast?*, *am I using language at the appropriate level of difficulty?* The student, on the other hand, is trying to process what the teacher is saying, trying to acquire the new information and connect it to previously acquired information. These processes are not privy to an observation and as an observer one needs to take these processes into account in order to interpret that which is observable. As an outside observer, there may further

be things that are difficult, if not impossible, to interpret, understand or explain, that may be due to the relationship and understandings already established between Sara and her students.

The methods of interview and focus-group discussions are presented next.

Interview data

Individual interviews

The individual interviews were both with Sara, and consist of a pre-interview, made before the intervention lessons began, and one post-interview, made at the very end of the intervention.

Both interviews were semi-structured. As Dörnyei (2007) explains, this type of interview entails:

"a set of pre-prepared guiding questions and prompts, the format is open-ended and the interviewee is encouraged to elaborate on the issues raised in an exploratory manner. In other words, the interviewer provides guidance and direction (hence the '-structured' part in the name), but is also keen to follow up interesting developments and to let the interviewee elaborate on certain issues (hence the 'semi-' part)" (p. 136).

According to Dörnyei (2007) this type of interview is carried out when the interviewer has a good grasp on the subject at hand, but does not want to paint the interviewee into a corner by posing questions that yield a narrow description of the phenomenon. Instead, open-ended questions made up the bulk of the questions in the interview guide, along with questions concerning Sara's background (only in the pre-interview), content questions, probes to elaborate and a final closing question. The content questions in the pre-interview, dealt with Sara's beliefs regarding the writing process in English and the written part of the national exam, whereas the content questions in the post-interview regarded her experience and perceptions of the intervention lessons, including the tools.

The interview guides (Appendix D and E) constructed beforehand served several purposes. First, it was a way of making sure that the most important issues would be covered. Second, the wording of the questions can be crucial (Dörnyei 2007) when the aim is for the interviewee to speak freely and openly. To be able to make sure that the questions were posed in a non-threatening manner that gave room for such answers, the interview guide provided support. Thirdly, because the interview might take

different directions with follow-up questions to interesting details divulged by the interviewee, the guide was a means to coming back on track.

Each interview guide was sent to Sara a few days in advance. Before the start of each interview, she was asked whether she had read the interview guide and whether she had any questions. The purpose of the recording was reiterated, i.e., to transcribe the interview, along with who would have access to the audio file. Only when these initial queries had been settled did the recording of the interview start.

The first interview with Sara was carried out online through Zoom. As a safeguard, both the on-screen recording available in the digital meeting program and an additional Dictaphone was used. For the subsequent interview, Sara and I met in person at her workplace, where the interview was carried out in a small conference room. For this interview, two Dictaphones were used simultaneously.

The main advantage of the interview is the rich data that it yields in terms of exploring a subject. The open-ended questions provide in-depth answers. Another advantage is that you never quite know where the questions posed in the interview guide will take you. If you have a good connection with the interviewee, details will surface which will be of great interest and which will lead into uncharted territories. An obvious disadvantage is that it is time-consuming to transcribe in order to get an overview and to analyze what has been said. Another disadvantage is that the interviewee may not be prepared to divulge the truth, or may try to improve on statements in order to be viewed in a more favorable light (Dörnyei 2007). For focus-group discussions, the premises of the interview change, as does the role of the interviewer, which is the subject of the next section.

Focus-group discussions

For the purpose of collecting data on students' perceptions, I conducted two focus-group discussions, one with students from Class A and another with students from Class B.

Developed in the 1950s to investigate consumer behavior by market researchers (Dörnyei, 2007; Kvale et al., 2009), focus-group discussions have grown in popularity within educational research (Cohen et al., 2011). Whereas in the individual interview you seek answers from a single individual, in the focus group you are looking for a conversation, or discussion, on different topics in which the participants share their opinions and experiences.

The main difference from the researcher's perspective, between the individual interview and the focus group, is what is required of the interviewer. In the focus-group discussion the role changes to that of a *moderator* (Kvale et al., 2009). According to Kvale et al. (2009), the role of the moderator is to set the tone for the conversation so

that all participants feel at ease and are able to divulge their true opinions. Besides asking questions, the moderator further has to make sure that all participants feel included, that they all have their say and no person is left to dominate the floor, while also asking follow up questions when necessary (Dörnyei, 2007).

The ideal number of participants in a focus group seems to vary. If we follow Dörnyei (2007) the ideal number is somewhere between 6 and 12 participants (p. 144). There are, however, those who suggest that a number between 4 and 12 participants is the ideal (Marková et al., 2007). What seems to matter the most is to have a balance between enough participants for the discussions to become fruitful and too many participants making the discussion hard to control (Cohen et al., 2011). The number of students participating in the focus groups in this study were seven from Class A and five from Class B respectively.

The students showed interest in participating in the focus-group discussions by checking a box on the back of the consent form for participation in the study as a whole. Before asking the students to participate in the focus groups, Sara was consulted as to which students should participate. Based on both her advice and the students' participation in the audio-recordings of the intervention lessons, students that represented a range of different factors in terms of gender, language background and grade in English were selected. These students signed a consent form specifically to participate in the focus groups.

The focus groups followed a semi-structured format. The discussions took place in an empty classroom on the day of the final intervention lesson in order to keep students' memories of the events fresh in their minds. The discussion in Class A lasted approximately 43 minutes, while the discussion in Class B lasted approximately 35 minutes.

Two Dictaphones were placed between the students in the middle of the table they were sitting at and a video camera was used to complement the audio-recording. This is in line with Dörnyei (2007), which advocates the use of video to discern speakers if speech is unclear in the audio recording. Before the recording began, information about the study was repeated along with the reasons for both audio- and video recording, who would have access to the files and how they would be stored. The students were also given opportunity to ask questions.

The interview guide (Appendix F) consisted of sixteen questions: the first thirteen were content questions pertaining to the intervention lessons, the fourteenth question concerned the effects of the pandemic, the fifteenth question was whether they wanted to add anything and the closing question was whether students had any questions for me.

Although there are many advantages to focus-group discussions, such as the rich data that they yield and the fact that participants generally find the method enjoyable, there are disadvantages as well. Taking on the role of the moderator, listening to interrupt

with probe questions, setting up technical equipment and making sure all participants get their say means keeping track of several things at once. Two further limitations suggested by Smithson (2000) are that certain types of participants tend to dominate the conversation and that only normative opinions tend to occur in the discussions. If dominant participants have firm views, the less dominant participants may not want to oppose those views, or posit their own views, in fear of what the rest of the group may think (Smithson, 2000). According to Hydén and Bülow (2003), you get less in-depth information from a focus group than you would in an individual interview with each participant. On the positive side, the format of the focus group allows for a nuanced discussion on shared topics. Then again, the discussions can lead to talk that overlap, which makes for a chaotic transcription. The video recording was a means to amend this, even though it proved to be unnecessary in both focus groups.

Data analysis methods

Transcription conventions

The interviews, focus-group discussions and audio recordings of students' classroom interactions were all transcribed in full using Transana. The mode of transcription was simple verbatim with time stamps, not including pauses or gestures. Overlapping talk was registered to show the intensity of the discussions in the focus groups and students' classroom interactions. Parts that were difficult to distinguish were replayed several times and when not resolved labeled 'inaudible'.

While the majority of the transcripts contained languages that are familiar to me, such as Swedish (my L1), English (my L2), German (my L3), Spanish (my L4), some of the transcripts contained languages such as Albanian, Bosnian, French, and Russian, which are unfamiliar. By using the artefacts in the classroom as a guide, i.e., the word wall the students produced, the French and German words spoken could be distinguished without a doubt. A former colleague who speaks Russian assisted with the Russian. Two transcripts of students interacting in lesson two containing Albanian and Bosnian were sent to professional translators for the Albanian and Bosnian words to be written out in full and translated into Swedish. These transcripts differed from the rest as they contained a substantial amount of language being spoken that was not English or Swedish, and as such, warranted further exploration. The different named languages were grouped into four main language categories, the majority language Swedish, the target language English, LOTS (language other than Swedish), such as Albanian and Bosnian, and second foreign languages, such as French, German and Spanish. They were transcribed using different styles, as can be seen in Table 2.

Table 2. The transcription conventions of different named languages

Named languages	Transcription style
The majority language Swedish	Normal font
The target language English	<i>Italics</i>
LOTS (such as Albanian and Bosnian)	Bold font
Second foreign languages (German, French and Spanish)	<u>Underlined</u>

Sociocultural discourse analysis

Sociocultural discourse analysis (Mercer, 2004) was used to analyze the student-to-student, student-to-teacher, and to a small degree, teacher-to-teacher interaction during the second lesson of the intervention, the results of which are presented in chapter 7.

Sociocultural discourse analysis is defined as "the analysis of episodes of talk in social context" (Mercer, 2004, p. 141). According to Mercer (2004), "It differs from 'linguistic' discourse analysis in being less focused on language itself and more on its functions for the pursuit of joint intellectual activity" (page 141). This type of analysis is especially suited to the school context as it additionally concerns learning and developmental outcomes (Mercer 2004).

Sociocultural discourse analysis was used to code student-student interaction. Coding was partly deductive, using the four affordance categories and 34 out of 97 speech functions from Rajendram (2019). The affordance categories include: *planning-organizational*, *cognitive-conceptual*, *linguistic-discursive* and *affective-social* (explained further in chapter 7). Coding was also inductive, constructing 63 new speech functions out of the data which are specific to this study.

Rajendram's (2019) categories were applied since the focus was on student-student interaction, whereas other models, such as the Response to Mediation Rating Scale (RMRS) developed by van der Aalsvoort and Lidz (2002) to show learner reciprocity or the expanded model suggested by Ozkose-Biyik and Meskill (2015) including the four reciprocity actions developed by Poehner (2008), tend to focus on the interaction between child and adult. Other models, such as the Initiation-Response-Feedback (IRF) model developed by Sinclair and Coulthard (1975) or the patterns of learner agency suggested by van Lier (2008), tend to either focus on or include the teacher's role in the classroom, how teaching is accomplished and the patterns of questions and answers between teacher and students. Instead, my focus was on how translanguageing may shape the interaction between students in terms of language use and signs of learning.

The transcripts with interaction were coded using the speech act as unit of analysis defined as "an utterance containing a single interactional function, such as a statement, a request, or a command" (Pacheco, 2016, p. 64). The concept originated with Saville-Troike (2008) who used the term *communicative act* to reference the same phenomenon. In the first phase of the analysis, all speech acts were coded for function and the language constellation used. In instances where more than one function could apply, a decision was made to code for the main function of the speech act and by looking at the speech acts belonging to the same speech event (explained below). The functions were then grouped into the four affordance categories derived from Rajendram (2019) mentioned above.

For this first part of the analysis a colleague was recruited to code one hundred speech acts in one of the transcripts to allow for inter-rater reliability. Out of these 100 speech acts, 76 were coded the same by both of us. The remaining 24 speech acts were discussed until consensus was reached after which I proceeded to code the remaining transcripts.

In the second phase of the analysis, utterances were grouped into *speech events*, much like in Rajendram (2019). As with the speech act, the concept of the speech event originated with Saville-Troike (2008), who used the term *communicative event*. The speech event is defined as "a unified set of speech acts with the same general purpose for communication, the same participants, and the same general topic" (Pacheco, 2016, p. 64). The speech events were used to code for the typology of talk, described next.

Typology of talk

Mercer's (2004) talk typology was used to analyze the speech events that were *disputational*, *cumulative* or *explorative*. Mercer's typology of talk and thinking was applied as it derives from sociocultural theory, in which learning through interaction and using scaffolding is a natural part of an individual's cognitive development (2000).

The term *exploratory talk* originated with the educational researchers Barnes and Todd (1977). The term exploratory talk was later used to describe one out of three archetypical forms of talk, along with *disputational* and *cumulative*, included in a typology of children's talk (Dawes et al., 1992). Mercer has further expanded on this typology by providing more empirical evidence and offering plentiful examples of each type of talk (Mercer, 1995, 2000, 2004; Mercer & Littleton, 2007; Mercer et al., 1999).

Disputational talk is "characterized by disagreement and individual decision making" with "few attempts to pool resources, to offer constructive criticism or make suggestions" and consisting of "short exchanges" (Mercer, 2004, p. 146). The atmosphere in this type of talk is competitive and students are often inclined to work

on their own beside each other rather than working collaboratively to complete the task (Mercer & Littleton, 2007).

Cumulative talk is when "speakers build positively but uncritically on what others have said" and "is characterised by repetitions, confirmations and elaborations" (Mercer, 2004, p. 146). In this type of talk, participants accumulate knowledge for the task, but contributions are never questioned. Although students tend to get along and the atmosphere is positive and supportive, reasoning is left out as is any challenge that would further a participant's thinking (Mercer, 2000).

Exploratory talk, on the other hand, is the kind of talk "in which partners engage critically but constructively with each other's ideas" and "partners all actively participate and opinions are sought and considered before decisions are jointly made" (Mercer, 2004, p. 146). In this type of talk, participants are held accountable for their suggestions, reasoning is made in the open and decision-making is collective.

Another way to distinguish between these different types of talk is how *control* is managed. Mercer (2000) posits that "In cumulative talk, participants do not strive for control, while in disputational talk they do. In exploratory talk, control is a matter of constant negotiation" (p.99).

As exploratory talk is the most desirable type of talk, three 'ground rules' to increase the amount of this type of talk in student collaborations has been proposed by a teacher in a previous study (Mercer, 2004). These include: "1. Members of groups should seek agreement before making decisions., 2. Group members should ask each other for their ideas and opinions., and 3. Group members should give reasons for their views and be asked for them if appropriate"(Mercer, 2004, p. 152). Although it would have been advisable to impart these ground rules on the participants of this thesis, this was not possible as the typology of talk was applied as a method of analysis when data collection was already complete.

Mercer (2000) illustrates how these three archetypical forms, disputational, cumulative and exploratory talk, can be used to distinguish between different types of talk in interactions. However, he cautions that natural dialogue is chaotic and that all three types can be found in one and the same conversation. Despite this, Mercer (2000) still proposes that "this categorization is nevertheless useful for making sense of the messy, category-defying reality of conversation" (p.102).

For the analysis on talk typology speech acts were grouped into speech events, as described above. This analysis was to see whether the affordances of translanguaging space led students' interactions towards disputational, cumulative or exploratory talk and thinking, the last type of talk being the most conducive to learning outcomes according to past research (Barnes, 2008; Mercer, 1995, 2004; Wegerif & Scrimshaw, 1997).

Content analysis

The students' perceptions were analyzed using content analysis. This is a method suitable for analyzing the written word in all forms, ranging from simple documents to transcribed audio files of focus-group discussions, as in this thesis. It is defined as "a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use" (Krippendorff, 2018, p. 24). According to Bengtsson (2016), there are two ways to apply content analysis: a) *manifest*- and b) *latent* analysis. While the former stays close to the semantic content, in this case what the participants divulge in the discussions, the latter gives an interpretive view of what is said, i.e. the basic meaning of what is conveyed (Bengtsson, 2016). The analysis of focus-group discussions presented in chapter 9 were coded using a latent analysis, staying close to the words expressed by the participants while also accepting words with similar meaning (Cohen et al., 2011). This decision was made as using the exact words risks "significant data loss, as words are not often repeated in comparison to the concepts that they signify" (Cohen et al., 2011, p. 567). Participants use of different words to express the same meaning were therefore taken into account in order to include as much as possible in the coding.

To carry out this analysis, participant *utterances* were used as units of analysis. In doing so, Bakhtin's (1986) definition of an utterance was used, which states:

The boundaries of each concrete utterance as a unit of speech communication are determined by a change of speaking subjects, that is, a change of speakers. Any utterance - from short (single-word) rejoinder in everyday dialogue to the large novel of scientific treatise - has, so to speak, an absolute beginning and an absolute end: its beginning is preceded by the utterances of others, and its end is followed by the responsive utterances of others (or, although it may be silent, others' active responsive understanding, or, finally, a responsive action based on this understanding). The speaker ends his utterance in order to relinquish the floor to the other or to make room for the other's active responsive understanding (page 71-72).

The transcribed focus groups were therefore divided into participants' utterances delimited by a change in speaker and responses to each utterance. What this means is that a speaker's utterance is ended when it elicits a response from a different participant. The speaker may relinquish the floor temporarily in order to yield a response and then retake possession of the floor to start a new utterance, which may or may not be on the same subject. When it is an utterance on the same subject, this can result in two utterances being coded in exactly the same way, adding to the frequency of incidences. This becomes particularly salient in a focus-group discussion, in which participants tend to agree or disagree with each other and thereby interject with positive or negative

responsive statements. Content analysis shares several commonalities with thematic analysis, discussed next.

Thematic analysis

For the analysis of Sara's perceptions through the post-intervention interview and for the analysis of mediated action in student focus-group discussions, I used thematic analysis. Whereas some researchers would refer to the construction of themes as part of content analysis (Cohen et al., 2011), others would say that this is a method of analysis in its own right (Braun & Clarke, 2006). A more salient difference between content analysis and thematic analysis is that the former tends to involve frequency of codes to support the findings, while the latter aims for a more abstract yet profound understanding of the phenomenon (Vaismoradi and Snelgrove, 2019). Thematic analysis is described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). To apply this method of analysis, Braun and Clarke's six phases of thematic analysis was employed, involving the *familiarization with data*, *generating initial codes*, *searching for themes*, *reviewing themes*, *defining and naming themes* and *producing the report* (Braun & Clarke, 2006, p. 87).

Similar to the process of content analysis described above, an initial coding was performed after familiarization with the data through repeated readings was complete. In the case of Sara's interview utterances coding was inductive, deriving from the data itself, and latent, going beyond the semantic surface of specific words (Xu & Zammit, 2020). These codes were then searched for themes and grouped accordingly. An attempt was made to include themes depicting phenomena which were considered important in order to understand the essence of Sara's perceptions, and in turn which were sought to answer the research questions. In doing so, I followed Braun and Clarke's (2006), and did not focus on the quantity of codes belonging to a theme as decisive of whether or not a theme should exist.

A theoretical thematic analysis (Braun and Clarke, 2006) was undertaken on students' focus group discussions regarding the mediation of tools. Here, Wertsch's (1998) account of mediated action guided the thematic analysis, identifying what tools mediate and how this mediation shaped students' writing experiences.

The initial analysis involved coding the different tools in student utterances, while a second code involved the type of mediation and the third the possible impact. The generated codes emanating from the initial analysis were therefore deductive, as the tools were already known, while the second and third codes were inductive, letting students' utterances speak for themselves regarding what tools allowed students to do and how this shaped their writing. By the same token, when resistance was identified regarding the use of a tool, the coding was focused on the limitations of the tool and how it could

hinder students' writing processes. The codes were aggregated into themes and sub-themes for review after which each theme was defined, setting clear boundaries for what codes were included in each theme.

Technical equipment

The technical equipment used to record the intervention lessons were three small Go-Pro cameras and six mp3 Dictaphones.

For the intervention lessons, four of the mp3 Dictaphones were placed on desks while Sara and I each had a Dictaphone attached to a lapel microphone. For every lesson a map was drawn detailing where each student sat and where the Dictaphones were positioned. The uptake of sound on these devices was excellent. The Dictaphones were able to capture the interaction between students and the lapel microphones were able to capture the interaction between teacher and student as well as the presentations and lectures given by either myself, as the teacher-researcher, or Sara. The same Dictaphones and GoPro cameras were used for the focus-group discussions and the Dictaphones were additionally used for both interviews with Sara.

All the classrooms at Southview secondary school were equipped with a projector and a docking station used to connect a PC. The projector was used to show slideshows, both in the observation lessons and in the intervention lessons. On both sides of the projector screen there were two whiteboards. The writing, and sometimes drawing, on the whiteboards were documented using my cell phone, as were the photos taken of the students in the classroom. Images were then transferred to the external hard drive and erased from the cell phone.

When the students were working in the lessons, both in the observation and in the intervention, they used their Chromebooks provided by the school. Each Chromebook can be customized to contain applications the student finds useful or is deemed necessary by the special needs teachers at the school. A few applications are standard, such as word prediction, dictionaries and the spelling and grammar checker. Other applications require the passwords of the special needs teachers, such as applications to help students with dyslexia.

Informed consent and confidentiality

Due to the pandemic, the first two consecutive meetings with the students were online. The day before the first meeting, Sara had informed the students of my upcoming visit and that they would be asked to participate in a study. For the purpose of clarity and

to ensure that all students would be comfortable asking questions, we spoke Swedish. The information was also in Swedish.

On the day of the meeting, the research project was presented and information in writing handed out to the students. A few students asked questions regarding the essays they were to write, how they would be assessed and whether or not the result would be included in their final grade. I answered the students that the essays would be assessed jointly by Sara and myself and that the assessment would form part of their grade.

Students read and signed the consent forms. A separate consent form was distributed after observations had begun, specifically regarding photos taken in the classroom. Photos of students who did not consent are not included in this thesis.

Ethical considerations

This study adheres to the Act on responsibility for good research practice and the examination of research misconduct (Vetenskapsrådet & Åkerman, 2024). The study sought and received approval by the Swedish Ethical Review Authority.

Before data collection began, the students were given information both orally and in writing. All participants had opportunity to ask questions beforehand and although a special meeting was set up for answering questions a week after the oral and written information was provided, the students were encouraged to ask questions as often as they liked. Those that were willing to participate, signed a consent form (Appendix A). Since all participants were over the age of 15, consent was not required from their guardians. However, they were informed in writing that students would remain anonymous and that they could withdraw their consent at any time without any consequences.

Steps were taken to safeguard the personal integrity of the participants, including anonymizing the participants and storing the identity key separately. All the data were locked away in a safe at the department of Educational Sciences whenever it was not used for analysis. I have sole access to the data.

Reliability and validity

According to Cohen, Manion and Morrison (2011), “validity is an important key to effective research” (p. 179). Validity is how we determine the worth of a study, which is why it is important as a researcher to take measures to address and minimize any threats encountered when planning, gathering data and analyzing the results of a study. At the same time it is important to remember that “threats to validity and reliability

can never be erased completely; rather the effects of these threats can be attenuated by attention to validity and reliability throughout a piece of research” (2011, p. 179). Steps were therefore taken to minimize threats and support the validity and reliability of this study. These steps were taken both in a general sense, by choosing the appropriate methods for data gathering, but also in how different instruments for data gathering were designed, such as interview guides and questionnaires. Moreover, effort has been made to improve reliability by describing the data collection and analysis of results with enough detail to make the study replicable despite the fact that classroom contexts are unique.

One initial step taken was to implement the video cameras during the observation of the two lessons preceding the intervention. Allowing students to become acquainted with me as the teacher-researcher as well as the equipment prior to the intervention was a means to minimize the Hawthorne effect, which suggests that participants may alter their behavior due to taking part in a research study (Cohen et al., 2011). However, an effect is still visible as one of the student groups recorded during lesson two discuss the fact that they are being recorded.

When it comes to participant sampling, Sara was chosen through purposive sampling, while the students were not. The two participating classes were the only year-9 students that happened to be assigned to Sara for the academic year of 2021. Even though this study is situational and the results are dependent on the specific context in which the data was gathered, the students participating are representative of two normal year-9 classes in Sweden. In accordance with Cohen et al.’s position on the irrelevance of external validity for qualitative research and the focus needing to be on internal validity instead, this study “does not seek to generalize but only to represent the phenomenon being investigated, fairly and fully” (Cohen et al., 2011, p. 181). For the sake of internal validity peer examination of data was additionally sought through Sara, to whom the chapters of this thesis have been sent for factual checks throughout the writing process of the thesis manuscript.

Internal validity was additionally sought for the analysis of results through inter-rater reliability, mentioned above, in which a colleague was recruited to code part of the audio recordings from the second intervention lesson. Peer examination has further been sought throughout from both of my supervisors and other doctoral students. The study has additionally been presented at several different international conferences, where experienced scholars have provided feedback on the study’s design, methods and analysis.

Triangulation, defined as “the use of two or more methods of data collection” (Cohen et al., 2011, p. 195), was achieved by using observation, questionnaires, video- and audio recordings of the intervention, interviews with the Sara as well as focus-group discussions with students, all of which examine the affordances and limitations of

translanguaging and writing tools. Questions posed in the post-intervention questionnaire were matched with questions posed in the interview guide for the focus group discussions. Similarly, observations made before and during the intervention could be matched with both students' and Sara's utterances in the subsequent focus groups (students) and post-intervention interview (Sara) as well as students' questionnaire responses.

The interview guide for the focus-group discussions was designed to enable within method triangulation, i.e. using "the same method on different occasions" (Cohen et al., 2011, p. 196), making it possible to pose the exact same question to different participants. Adhering to Cohen et al.'s (2011) advice, the focus group discussions have been given more space in this thesis compared to questionnaire data due to what is described as "weighting the evidence" (p. 182), meaning certain data are of a higher quality and should therefore be given more attention. In the focus-group discussions students were given opportunity to go into detail in a way that a questionnaire does not permit, which is why the utterances provided by students in focus groups were given more space.

When analyzing the interaction in the focus group, one has to keep in mind that the opinions expressed are context specific and that opinions may be differently expressed in individual interviews or in private conversations where the research is taken out of the equation. Even though measures were taken to pose open-ended questions, it is possible that the moderator's opinions inadvertently shine through depending on language use or body language, which can possibly influence the discussions and the opinions expressed by the participants (see for instance Smithson, 2000). The same can be said for the questions and the manner in which questions were posed in the pre- and post-interviews with Sara.

My positionality as a teacher-researcher has been addressed wherein it is described that who I am and the experience I bring may inevitably have had an effect on the research design and the results presented in this thesis. During the course of this study measures have been taken to try and prevent both *halo-* and *horns effect*, defined as the researcher's view of participants in either a favorable or unfavorable light (Cohen et al., 2011), to offer all evidence no matter how small and to let the data deriving from participants be what drives the analysis forward.

This chapter has presented the research design, timeline, participants and context of the present study. It has further motivated the methods used to collect data as well as the analysis used to interpret the data to identify the results. In the next chapter, the intervention will be described in detail, following the planning of the lessons all the way to their execution. Moreover, the next chapter will present the tools and strategies that were introduced to students, which were motivated by prior research.

CHAPTER 6: THE DESIGN INTERVENTION

The following chapter gives an account of the intervention. Light will be shed on the lesson activities in the six lessons and the rationale for choosing the specific writing tools that were introduced to the students. As the focus of the chapter is the contents of the intervention, the execution of the lesson plans for the six different lessons are provided in Appendix G.

The premise of the intervention

The intervention was scheduled in the spring semester of 2021 and was planned to last for six consecutive lessons. For Class A the first lesson on Thursday morning at 8 am (45 min) and the second lesson on Friday morning at 8:55 am (55 min) were dedicated to the intervention. Class B had intervention lessons on Thursday afternoon at 14:05 pm (50 min) and on Friday morning at 8 am (50 min). The total lesson time for each class was 300 minutes for the six lessons.

To cater to different student needs, Wertsch's tool kit analogy and nongenetic heterogeneity of verbal thinking were kept in the back of our minds (Wertsch, 1991, p. 96). In a nutshell, this means that all students are different, but the nongenetic heterogeneity suggests that even within an individual there are different ways of thinking which are independent of genetic development. Wertsch (1991) explains how "a tool kit approach allows group and contextual differences in mediated action to be understood in terms of the array of mediational means to which people have access and the patterns of choice they manifest in selecting a particular means for a particular occasion" (p. 94). In other words, students may find different tools appealing on different occasions and the same tool can be employed in different ways. The plan was therefore never to insist on students employing any of the tools we introduced, but rather to increase awareness of possible tools that might ease the writing process in English as a foreign language specifically.

The most important tool in sociocultural theory, language, and the way language can be used as a tool when writing, was the overarching theme of all the lessons in the intervention. Helping students understand the tools they possess in terms of language knowledge was therefore a major objective. According to Pat Thompson (2002), when it comes to students, we should all "imagine that each brings with them to school a virtual schoolbag full of things they have already learned at home, with their friends,

and in and from the world in which they live” (p. 1). Treating students' languages and experiences as valuable resources has been known to increase student motivation (Cummins & Wadensjö, 2017) and as such it was important to incorporate students' existing knowledge whenever possible.

Bearing this in mind, one of the first priorities was to organize the classroom so that students with similar language backgrounds were seated next to each other. This was done by creating seating charts for each classroom that were displayed on the smart-board before the start of the first lesson. The idea behind the seating arrangement was based on Bauer, Presadio and Colomer (2016), in which *buddy pairs* were used so students could share their ideas before they started writing. By positioning students according to language, they were free to translanguage using any languages they had in common with their *buddy/buddies*. In the study of Rosiers (2018), the students similarly were seen to adapt their language repertoire depending on the members of their groups. If the members all had an understanding of a language other than the target language, translanguaging involving said language was more likely to occur (Rosiers, 2018). As such, the seating arrangement was intended to open up translanguaging space.

In previous research students have been known to translanguage for a range of purposes. These purposes include the generation of ideas for the content (Van Weijen et al., 2009; Wang & Wen, 2002), solving problems in their writing (Gunnarsson, 2019) such as lexical gaps (Jessner, 2006; Murphy & de Larios, 2010), using translation to check the intended meaning (Wolfersberger, 2003) and holding inner dialogues with oneself to assist the writing process (Gunnarsson, 2019). A previous study showing examples of students employing different named languages in their repertoire to generate context-specific ideas, solve problems and hold inner dialogues (Gunnarsson, 2015), was therefore used in several activities to demonstrate what these processes might look like.

Another objective when planning the lessons was to make sure we followed the educational policy documents, described in detail in Chapter 2. The syllabus (Lgr11) for English specifically states that in order for students to develop communicative competence, they need to learn to use different linguistic strategies in both their receptive and productive skills (Skolverket, 2022a). For year 9, the content that has to be covered when it comes to communication skills, consisting of topics the students are familiar with. Within these topics students should be taught to express opinions, share experiences, communicate their emotions and plans for the future (Skolverket, 2022a). The syllabus states that teaching should include "linguistic phenomena such as to be able to clarify, vary and enrich the communication as in pronunciation, intonation, fixed linguistic expressions, grammatical structures and sentence construction" (my translation) (Skolverket, 2022a, p. 9). In planning the lessons, these aspects of the syllabus therefore needed to be taken into account.

Furthermore, the students need to learn to adjust their language for different purposes and audiences (Skolverket, 2022a), which is likewise supported in Gibbons (2006) whose advice is to make this point explicit in teaching (p. 91). Gibbons (2006) suggests that we should make students take notice of how texts are constructed and focus their attention on that which is specific to the type of text we are asking them to write (p. 96). Showing students what is specific to different genres and how to construct text can be done in different ways. One way, which has been suggested to be helpful to students, is to project sentences or pieces of texts on the smartboard for the whole class to see and discuss (Gibbons, 2006). By discussing text with the whole class, student thoughts and comments are made visible, and teachers have an opportunity to address queries that otherwise might not be posed.

Rosén and Wedin likewise stress the importance of holding class discussions as this supports language development and the development of desirable interactional patterns for learning (Rosén & Wedin, 2015). Examples of text were therefore displayed and discussed on several occasions.

As encouraging student discussion on different tasks was essential to our goals, and in line with the central content, we decided to scaffold student interaction by providing structure. According to Bakhtin, “addressivity, the quality of turning to someone, is a constitutive feature of the utterance; without it the utterance does not and cannot exist” (Bakhtin et al., 1986, p. 99). What Bakhtin meant is that meaning is created in the interaction between speaker and listener. To structure the interaction in the classroom, and to make sure students were given time to think about important issues on their own, and together, before writing, we employed a technique called *alone, pairs, everyone* (APE) a translation of the Swedish acronym EPA (*ensam, par, alla* meaning ‘alone, pairs, everyone’). Whereas other researchers, for instance Bauer et. al. (2016), have chosen to call this “turn and talk” (p. 24), the technique is based on a discussion model referred to by teachers as *think share pair* which was used in the late 70s in Maryland, USA (Lyman, 2022). The idea is to give students time to process what is said for at least three seconds on their own before turning to a partner to discuss. Once the pair have had ample time to discuss, their answers are shared with the class. Over the years, teachers have made variations to the model, for instance by letting pairs become smaller groups, by giving more or less time to one of the stages, or by omitting a stage.

The model, which is used extensively in classrooms with different subjects and different skills (reading, writing, speaking) (Andréasson, 2022), has shown positive effects in that more students are actively participating in the conversations in the classroom and understanding the content better (see for instance Carss, 2007). As a rule, APE was employed for all tasks which demanded an evaluation, such as evaluating sentences or a piece of text, or exploration and discussion of the topic *A Good Life*.

In the next section, the teaching model that was used as the basis for the intervention lessons will be described.

The curriculum cycle

The intervention was planned with the *curriculum cycle* (see Figure 5), which provides guidance in how to teach students about the process of writing (Cohen et al., 2011; Derewianka, 1991), at its core. I chose the curriculum cycle because it aligns well with the process of learning according to sociocultural theory, in which the student learns through interaction about the subject and is given support by a teacher or a more capable peer. As the student appropriates the new information, the support can be withdrawn allowing the student to stand on their own when ready. What makes this teaching model unique is explained in the following quote by Gibbons (2009) who states:

"What perhaps most sets this approach apart from some other ways of teaching writing is the amount and quality of the scaffolding provided. Students are set up for success because this scaffolding (stages 1, 2 and 3) is "front-loaded" - provided before students begin writing alone. It integrates subject content and language, while at the same time integrating listening, speaking, reading, writing, and some research and study skills. " (2009, p. 121).

It was precisely the support through means of scaffolding and the expectation of student success that made this model appropriate for the intervention. The curriculum cycle has been used in several previous studies on writing research (see for instance Chen, 2021; Lin, 2006; Walter-Echols, 1990) as well as in pedagogical development material (Gibbons, 2006, 2007, 2009; Scott, 2005) meant for student teachers and experienced teachers alike. The curriculum cycle, presented in Figure 5, is divided into four phases: 1) context exploration in which knowledge is built on the subject and the text genre, 2) text exploration in which similar texts are studied, 3) joint construction where students write together, and 4) individual application in which an individual text is constructed (Lin, 2006).

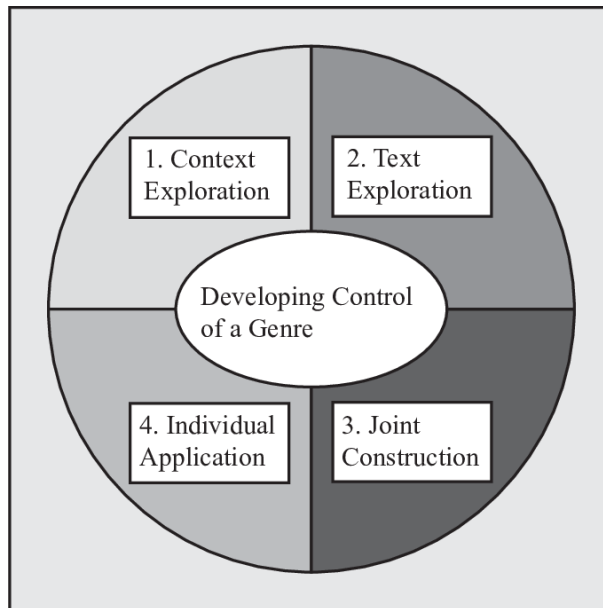


Figure 5. Derewianka's (1991) *The curriculum cycle* as presented in Lin (2006, p. 73).

Within each phase of the curriculum cycle there is a list of suggestions on possible actions to take in the classroom, which were adhered to when planning the six lessons. However, based on our mutual experience-based knowledge of students needing variation in their lessons to stay attentive, we leapt between phases 2 and 3 before the final stage in phase 4. The idea was to interweave parts of the lessons where we, as teacher-researcher and teacher, needed to provide the students with information and explanations with more practical tasks for the students to perform. Table 3 provides an overview of the lesson plans and their place in the curriculum cycle.

Table 3. The lesson plans and their place in the curriculum cycle

Intervention	1. Context exploration	2. Text exploration	3. Joint construction	4. Individual application
Lesson 1	Introduction of writing task, APE, mind map,			
Lesson 2	Word wall (keyword, emotion words, synonyms)	Discussion of student sentences		
Lesson 3			Sentence starters, linking words, solving lexical gaps, idea-generation	
Lesson 4		Peer response		
Lesson 5			Writing strategies: postponing, rehearsing, backtranslating	
Lesson 6				Students wrote an individual text on the topic <i>A Good Life</i>

Table 3 presents the six intervention lessons vertically in the first column and the four phases of the curriculum cycle horizontally in the first row. To save room only the main teaching components are displayed resulting in a mix of content, teaching techniques, such as APE or discussions, and writing tools, such as mind maps and word walls, presented in the specific lesson. As can be seen in Table 3, the fourth lesson breaks the trend and takes a step back to phase 2. As explained above this was done to keep a good balance between theoretical and practical tasks in order to keep the students' attention. Further, the peer response activity, which is addressed under the heading Phase 2 below, demanded an entire lesson in order for students to have ample time to benefit from the exercise in one sitting. We were reluctant to break up this exercise over two lessons, as it would have involved extra time for students to get reinvested in the task, which might have affected the quality of the outcome.

Next, each phase of the curriculum cycle will be introduced along with exercises suggested by Gibbons (2006), what was incorporated in our teaching and how this relates to previous research and policy documents.

Phase 1: Context exploration

Phase one of the curriculum cycle is about exploring the topic and understanding the genre. Because phase one of the curriculum cycle includes topic and genre, a decision was made to let students know the topic of the essay in advance. That way all the tools introduced could provide support specific to the task, even though this goes against current policy regarding the national exam. The idea is to build on students' experiences and immerse them in the writing topic, in this case *A Good Life*, to the point of them being able to write about it on their own. The focus in this phase is not just on writing, but rather using all four skills (reading, listening, speaking, writing) in order to gather information for the content of their texts. According to Gibbons, this stage represents an excellent opportunity for students to translanguage in order to gather and share information (Gibbons, 2009). At the top of her suggestions for useful exercises, Gibbons (2006) lists mind maps, flipcharts connecting previous experience with new information and flipcharts with word banks specific to the topic. This is consistent with modeling translanguaging techniques in the classroom, which has been the focus of several studies (Cummins, 2005; Cummins & Wadensjö, 2017; García et al., 2017; García & Kleyn, 2016; Velasco & García, 2014). One such example is to use so called *word walls* for support (Gibbons, 2009; Ollerhead, 2018).

A *word wall* is a cultural tool used to visualize students' collective language knowledge. An exercise, such as the creation of a word wall, can be explained as "an exercise in collective remembering and the consolidation of learning driven by the pedagogic goals of the teacher" (Mercer, 2004, p. 154). Word walls allow students to make connections between old knowledge, for instance previously learnt languages, and new knowledge, such as new English vocabulary. To allow students to make these connections between different named languages and gain metalinguistic awareness both on a word-level and a grammatical level has been encouraged by many (Cummins, 2005; García et al., 2017; García & Wei, 2014; Gibbons, 2006; Wedin, 2018). Talking about language, i.e., learning how to metalanguage, was therefore a recurring theme throughout the lessons, where words such as cognates, homonyms and false friends were often discussed. The rationale behind teaching students metalanguage is that it will make feedback on future written tasks simpler for the teacher to convey and easier for the students to understand and will ultimately help the students discuss their own texts (Gibbons, 2006).

Adhering to Gibbon's (2006) suggestions, one of the first writing tools to be introduced was mind mapping. Using mind maps has proven successful in studies such as the one by Bauer, Presadio and Colomer (2016) wherein mind maps, referred to as *graphic organizers*, were used as a pre-writing activity in which the students wrote down key words when discussing their previous experiences with the topic. In their study the

mind maps were returned to before the students engaged in individual writing, to remind them of possible content to include in their texts.

Previous studies have found that students are in favor of the use of mind maps (see for instance Padang, 2014 for an overview). In these studies, the mind map has been used as a tool to help plan a text, to gain a better understanding of a topic and to increase creativity (Yunus & Chien, 2016). Additionally, studies have found that mind maps can decrease the attentional load while writing (Lee, 2013), help students connect old knowledge with new knowledge and increase motivation (Zhang, 2018). The essay instruction *A Good Life* contained a completed mind map (see Appendix G for a more thorough description of the essay instruction), which displayed 6 nodes with possible topics for the students to write about (social life, education/job, money, environment, health and recreation). As the tool had already been provided, and as there is clear support for the tool in previous research, a decision was made to introduce and work with mind mapping in the first lesson. Our plan extended the use of the mind map by including an empty chart with the topic, *A Good Life*, in the center node for the students to start with. Using APE, the students filled out the empty mind map with their own ideas of the topic, which was then discussed in pairs, and then with the whole class before comparing it to the completed mind map included in the writing instruction. Below, Figure 6 presents the students' completed mind map version created during the class discussion.

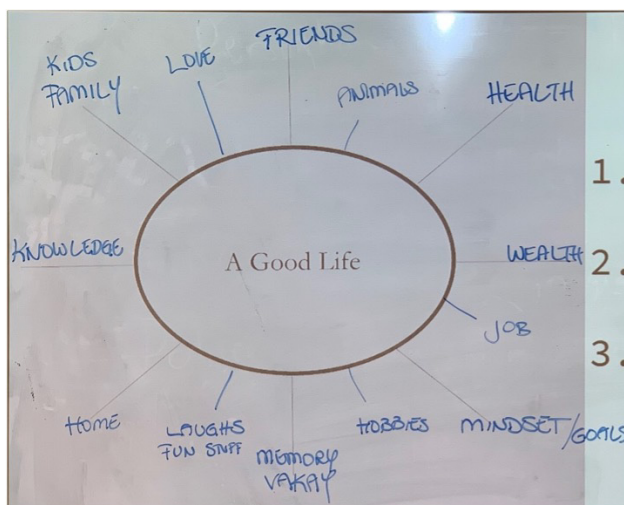


Figure 6. Students' completed mind map after class discussion

As can be seen in Figure 6, this exercise expanded the existing mind map by several nodes, creating more possible content for the students to consider when writing their texts in the final lesson.

Phase 2: Text exploration

The second phase deals with the characteristics of the type of text the students are about to write, i.e., understanding the structure and the purpose of writing an exposition essay (Gibbons 2006). According to Lundahl (2012), the English syllabus for upper secondary school contains key words that are linked to writing an exposition, such as to be able to summarize, value, reason and motivate one's opinion (p. 297). The focus was to show the students what an exposition looks like and to work with the grammar and vocabulary they would need to use.

The metalanguage that was introduced in phase one was therefore expanded to include value words, linking words, sentence starters and how to state one's opinion. Grammatically, we focused on tense, verb conjugation and capitalization rules. Vygotsky himself concluded "the study of grammar to be of paramount importance for the mental development of the child" (Vygotskij, 2012, p. 100) a conclusion supported by Williams (2004) who posits that "there is an interesting and relatively unexplored potential for children to develop abstract resources for thinking about language systematically through meaning-oriented grammatical study" (2004, p. 241). According to Williams (2004) grammar is easier for students to learn when they are exposed to the grammatical features through practical activities in the classroom and can learn to see their usefulness. Similarly, Gibbons (2009) stresses the importance of focusing on structure and significant vocabulary.

To make all of the above characteristics salient, Gibbons (2006) recommends using gap-filling exercises focusing on pertinent vocabulary and grammar. This provides opportunity to discuss word choice, structure and grammar belonging to a certain genre. We therefore displayed sentences created by the students themselves in the pre-writing task, *A Letter to Connect*, set the lesson before the intervention started. To protect the students the sentences were anonymized and were selected from almost all of the students' texts showing a variety in terms of quality and complexity.

Following the previously mentioned advice, the sentences were presented on the smartboard (Gibbons 2006). Applying APE, the students had an opportunity to first think about their own response, then discuss in pairs one sentence at a time displayed on the smartboard before discussions with the whole class ensued. The task involved determining whether a sentence was correct or incorrect, appropriate for the context or inappropriate, and to motivate why. As such, the second phase involved several

opportunities to interact about sentence structure, grammar and significant vocabulary in use as exemplified in Figures 7 and 8 below.

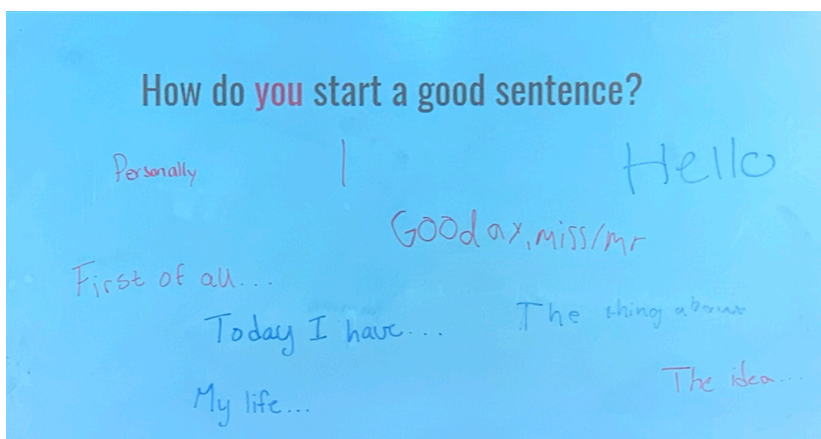


Figure 7. Sentence starters produced in Class A.

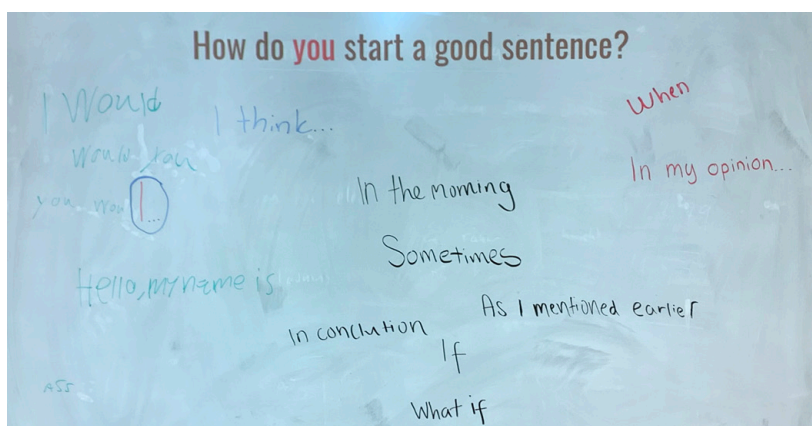


Figure 8. Sentence starters produced in Class B.

A second suggestion for this phase is to have students experience similar texts and to break these down to understand the different components creating the whole (Gibbons 2006). To provide students with an understanding of the genre and examples of how to write an exposition on the topic of *A Good Life*, a peer response task was introduced. According to Hyland (2016), “Peer response enables writing teachers to help their students receive more feedback on their papers as well as facilitate students’ meaningful interaction with peers and greater exposure to ideas” (pp. 101-102). Known positive

effects of peer feedback range from increased interaction in the target language to improving memory, developing identity and, ultimately, improving academic achievement (see for instance Choi, 2013 for an overview).

Due to time constraints, this study only dealt with giving peer feedback on texts and was not able to include students receiving peer feedback. Although research has shown that students benefit from both receiving and giving peer feedback (see Choi, 2013 for an overview), Lundstrom and Baker (2009) found that students giving feedback were able to improve their own writing more than students who only received feedback. Interestingly, Lundstrom and Baker (2009) hypothesize that this may be because it is the giver of feedback that decides the level of difficulty in the comments, making it fall within their own zone of proximal development. If the zone of proximal development of the student on the receiving end is not on the same level, he or she may not benefit as much from the feedback (Lundstrom & Baker, 2009). One of the concerns teachers have raised using peer feedback, besides it being time-consuming (Choi, 2013), is that students tend to prefer teacher feedback instead (Topping et al., 2000), as the comments they receive from their peers can be incomprehensible at times (Yang et al., 2006).

Keeping this in mind, the peer response task was designed following Sadler (2010, 2015), using several student texts of varying quality and allowing students to discuss and evaluate all the texts before a teacher-led discussion followed. These texts were written by unknown students and were accessed along with the writing instruction for *A Good Life*, as is standard practice for past national exams that have been made available to teachers. Letting students discuss the texts first without the interference of the teacher(s) means they will become better at judging the quality of their own texts both while in the process of writing and when viewing their texts as a final product (Sadler, 2015).

Our teaching experience made us choose different texts for different groups in the classroom. This was to avoid the activity becoming a competition between the tables where groups might want to know their classmates' opinions on specific texts. Consequently, there were three different versions of compendiums with texts, meaning two groups in each class would have the same set of texts.

Using APE, the students were told to read each text and to grade them according to the grading criteria. Once the groups had finished grading all the texts a class discussion was held in which the students were asked to motivate the grade they had agreed to assign a specific text. The grade of each text was then revealed and discussed with the class using the commentary material provided with the instruction for teachers (Göteborgs universitet, 2022).

Phase 3: Joint construction

The third phase of the curriculum cycle deals with joint construction and the writing process. The joint construction aligns well with the ZPD in that either a teacher or a more capable peer provides support during the writing process (Vygotskij & Cole, 1978). As the writing task was meant for students attending the first semester of upper secondary school it was also a task that was slightly more difficult than what the students were used to, further justifying the support involved in joint construction. The aim for this phase was to provide activities that would allow students to work together to understand different aspects of writing. As such, phase three included teaching strategies to cope with the complexity of the writing process, both in general, and specifically when writing an essay on the topic of *A Good Life*.

To equip students with tools, also referred to as strategies, to support them in their writing process, *postponing*, *rehearsing* (Velasco & García, 2014) and *back-translating* (Velasco & García, 2014; Wolfersberger, 2003) were explained and demonstrated. These strategies were introduced to the students on the basis that bilingual writers tackle writing tasks and solve problems in their writing differently than do monolingual writers (Cumming, 1990; Cummins, 2005; Velasco & García, 2014).

According to Velasco and García (2014), “Postponing entails putting down the word in the “other” language and continuing to write only to come back to that word at the end” (p. 10). However, for the purpose of this study, we stretched the definition to include all types of postponing, and not just putting down a word in a different language. This meant that postponing could be skipping a paragraph or an entire section, such as the introduction or the conclusion, only to return to said paragraph or section at a later time. Although Velasco and García (2014) describe rehearsing as something you do “when not able to think about a word in midsentence, to rehearse (in the sense of trying out) all the words in his or her linguistic repertoire that may provide the best fit” (p. 10), the concept was expanded to include phrases. The strategy of *back-translating* was introduced, involving the translation back and forth between the target language and other languages in the students’ repertoire (Velasco & García, 2014) to check the intended meaning of the word, phrase or sentence (Wolfersberger, 2003). While some of these strategies were known to the students, some were not.

According to Gibbons (2006), the third phase of the curriculum cycle is crucial as it informs the students of the actual process of writing, what this process might look like in their minds and in the minds of other students or more capable peers. By subjecting the students to examples from a previous study of students thinking aloud while writing a similar text (Gunnarsson, 2015), students could be provided with examples of how to employ new strategies or confirm that what they were already doing in their writing process was done by other successful students.

Under normal circumstances the national exam of English is used to assess students' English language proficiency. Hence, students are expected to show their language skills by writing without the use of tools, such as online dictionaries, machine translations or computer features such as spelling and grammar checker. However, in the current study we wanted to determine the outcome of allowing all possible tools, both physical and psychological, to be used in order for students to experience an authentic writing situation, much like the one they eventually will experience at university or in adult life.

The debate about allowing versus restricting writing tools such as Google Translate (GT), the computer's spelling and grammar checker and word prediction has been ongoing as writing on different kinds of devices (computers, tablets, Chromebooks and phones) has gone from being rare in the 90s to being the norm in today's classrooms (see Oh, 2020 for overview). According to East (2008) and Weigle (2002), prohibiting the use of these very common features when writing on a digital device presents an artificial situation, one that is unlikely to occur anywhere outside the language classroom. Similarly, Weigle (2002) argues for the use of dictionaries in writing exams in spite of the aim to assess vocabulary knowledge stating that "one could argue that a good writer *does* know how to use resources such as dictionaries and the appropriate, efficient, occasional use of a dictionary allows a good writer to choose the precise word for his or her meaning" (2002, p. 106). Furthermore, the topic of the national exam is released only the very moment the teacher distributes the writing instructions and students are left with a time limit within which to submit. This, Weigle (2002) argues, is yet another sign of the inauthenticity of a writing exam, given that academic writing in the university will involve them knowing the topic well in advance of submitting a final product.

As such, following sociocultural theory and the assumption that learning is mediated through the use of artefacts and tools, the students were presented with a unique opportunity to use any writing tool of their choice. To do this the students needed to have an adequate understanding of how the different tools function, specifically GT, which several students (N=16) showed a preference for in the pre-intervention questionnaire. Therefore, an exercise was designed to explain how GT is built and what limitations there are to its capabilities. The exercise involved students entering single words and phrases into GT that we knew would result in faulty translations. These faulty translations were discussed and tweaked, meaning the wording was changed or an entry was made that was possible for GT to extract from the existing corpus. This was done until it became clear to the students what to do and what not to do in order for GT to assist them. The exercise expanded to include popular dictionaries online and a demonstration of how the first suggestion of the built-in spelling and grammar checker could sometimes prove inaccurate, advising the students to make sure they check the whole list of suggestions and to try them out in the text before making their choice. We

similarly demonstrated the content available in different physical dictionaries in terms of verb conjugation and tense. Given that this was the last lesson before the students were to write their individual texts, an offer was made to provide physical dictionaries in the languages of their choice. Out of the two classes, one student requested an English-Swedish dictionary, which was provided on the day of the essay writing.

Phase 4: Individual application

Phase four is about the students writing their own text (Gibbons, 2006). At this point, they should be well informed of the topic and the genre. For these particular students it was further important to raise awareness of the tools that can be employed, both physical and psychological, in their writing process. On this day, the students were waiting outside the classroom and proceeded to take their seats as the door was opened. As promised, students were seated facing the word wall they had built during the previous lessons, which can be seen in the Figure 9.



Figure 9. Students in Class B writing their essay facing the finished word wall.

Besides the posters including key words, synonyms and emotion words, the word wall had been supplemented on students' request with linking words, sentence starters, links to online dictionaries discussed and examples of back-translating, postponing and

rehearsing. As in the study by Bauer et al. (2016), the mind maps that the students had created themselves in the first intervention lesson were distributed to be used at their discretion. The students who had been absent during the first lesson were given the option to create a mind map on their own and to bring the map with them to this final lesson. Writing was done on their school Chromebook in a Google document which was submitted to Google Classroom. Most students made use of the 45 minutes allocated to write their texts, while the odd few left with minutes to spare.

In the next chapter, the focus is on the student interaction in which students translanguaged.

CHAPTER 7: THE AFFORDANCES AND LIMITATIONS OF TRANSLANGUAGING

This chapter provides results pertaining to research question: a) *What named languages do students employ and what are the affordances and limitations of their translanguaging?* Data were collected in the second lesson in which the students in Class A and Class B were tasked to create a word wall. In this chapter I search for the distribution of the four main affordance categories: *affective-social*, *cognitive-conceptual*, *linguistic-discursive* and *planning-organizational* proposed by Rajendram (2019). These categories were used, as they were developed for the specific purpose of analyzing student interaction in an English classroom setting. I begin by presenting the participants.

Participants

The four groups of students, two groups from Class A and two from Class B, were selected because they had multiple languages in common and could therefore choose to use these should they wish to do so. Another reason for choosing these four groups was the diversity in their language repertoires, where two groups included more than one MEM (minoritized emergent multilingual) student speaking a LOTS (language other than Swedish), in the home (Albanian, Bosnian and German), a third group including only one student with a LOTS in the home (Russian) and a fourth group including students with a typical Swedish background. Two of the participants were born abroad in Germany, arriving in Sweden at the age of 3 (Adam) and 7 (Frank) respectively. The participants and their language repertoires are presented in Table 4:

Table 4. Students who were audio recorded during the second intervention lesson.

Class A groups	Participant	Language repertoire	Class B groups	Participant	Language repertoire
1	Adele	L1: Swedish, Bosnian, L2: English, L3: German	3	Avery	L1: Swedish, L2: English, L3: Spanish
1	Erica	L1: Swedish, Bosnian, L2: English, L3: Spanish	3	Bella	L1: Swedish, L2: English, L3: French
2	Adam*	L1: Swedish, German, L2: English, L3: Spanish	3	Mia	L1: Swedish, L2: English, L3: French
2	Alan	L1: Swedish, Albanian, L2: English L3: German	3	Shane	L1: Swedish, L2: English, L3: Spanish
2	Frank*	L1: Albanian, German, L2: Swedish, L3: English	4	Axel	L1: Swedish, L2: English, L3: German
			4	Esme	L1: Swedish, L2: English, L3: Spanish
			4	Leah	L1: Swedish, Russian, L2: English, L3: Spanish
			4	Max	L1: Swedish, L2: English, L3: German

* Born abroad

Data collection

The data for this chapter consists of student interactions that were audio-recorded in lesson two, where students were tasked with the creation of a word wall on the topic *A Good Life* while using language(s) of their choice. The lesson, which was additionally video recorded, lasted 55 minutes for Class A and 50 minutes for Class B, which gave students roughly 30 to 35 minutes to complete the task. The task was divided into three stages, asking students to construct key words, emotion words and synonyms. These three stages were interspersed with teacher instruction and whole class discussion.

Data analysis procedure

Below, the results of the sociocultural discourse analysis will be presented. The unit of analysis for the first part of the analysis was the *speech act*, defined as "an utterance containing a single interactional function, such as a statement, a request, or a command" (Pacheco, 2016, p. 64). For the second part of the analysis, speech acts were grouped into *speech events*, defined as "a unified set of speech acts with the same general purpose for communication, the same participants, and the same general topic" (Pacheco, 2016, p. 64).

First, I will highlight the translanguaging constellations used by the students overall, and each of the four focal student groups specifically. By translanguaging constellations, I refer to the different combinations of named languages that students chose to employ. To do this, each speech act was labelled with the named languages that were used. The speech acts were then grouped and counted according to their label and divided with the total number of speech acts to determine the percentage of each translanguaging constellation.

Second, the part of the analysis concerning the *affective-social*, *cognitive-conceptual*, *linguistic-discursive* and *planning-organizational* affordances borrowed from Rajendram (2019) resulting from the translanguaging offered in this study will be shown. All four affordance categories will be detailed with examples of the different functions the students accomplish within each affordance category. For this part of the analysis student interactions were both coded deductively, using 34 (out of 97) existing codes in Rajendram (2019), and inductively, identifying 63 inductive codes specific to the context and participants in this study using the speech act as the unit of analysis.

Thirdly, the part of the analysis highlighting the type of talk students engaged in will be determined by following Mercer's (2004) typology of talk and thinking. This analysis is to see whether the affordances led students' interactions towards *disputational*, *cumulative* or *exploratory* talk and thinking, the last type of talk being the most conducive to learning (Barnes, 2008; Mercer, 1995, 2004; Wegerif & Scrimshaw, 1997). For this second part of the analysis, the speech event was used as the unit of analysis.

Students' use of translanguaging constellations

To showcase the dynamic classroom environment (Harjunen, 2012), where interactions shift between student-to-student and student-to-teacher, Sara's speech acts and mine were included in this first part of the analysis. This choice was made as the different students tended to both engage the teachers in interaction and be engaged by the teachers' instructions. To remove the voices of the teachers would therefore result in a

removal of context for some of the student-to-student interactions. Other student voices were also included whenever a group member was included. However, to make sure the analysis was pertinent to the students in the group, all other background noise was eliminated, such as other student voices or teachers interacting with students outside of the audio-recorded group.

Likewise, it should be noted that other multimodal or semiotic resources, including writing, drawing or using gestures are included in the analysis whenever context was needed to define the function. This entailed me going through video files and photos of the classroom to double check if students, for instance, were pointing to the word wall when interacting about words they did not write themselves.

The word wall itself was also used initially to determine which words were talked about, especially in the groups using a LOTS or second foreign languages outside of my knowledge domain.

In each of the four audio transcripts (one transcript per group) the number of language combinations ranged from 12 to 18 (N=12, N=13, N=14, N=18). Several of these constellations, such as Swedish, Swedish and English, English, German, Spanish, and Spanish and Swedish existed in all four groups, whereas other constellations, such as Russian only existed in one group. The constellations were narrowed down to six, including translanguaging constellations: 1. involving a LOTS spoken in the home, 2. involving the majority language Swedish, 3. involving the target language English, 4. involving a second foreign language (French, German or Spanish), 5. involving other languages (such as Latin, Norwegian and Turkish) and 6. involving interjections. The latter are either words signaling a break in the thought process of the speaker or a need to not have thoughts interrupted, such as the word 'wait' repeated in quick succession. Interjections can also include non-words, such as 'ah' or 'uhm' signaling that the person is in the middle of a thought process. Figure 10 below reveals the 6 translanguaging constellations outlined above.

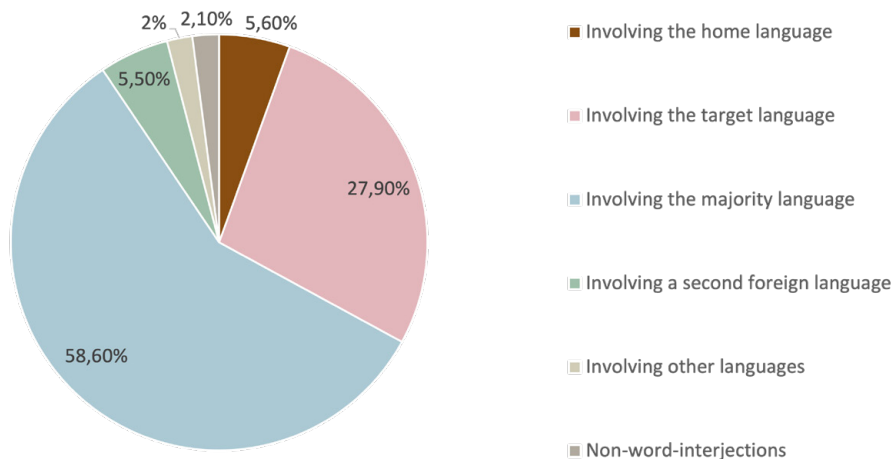


Figure 10. Percentages of translanguageing constellations of all four groups combined

Looking at the translanguageing constellations of all groups combined, the most frequent was the constellations involving Swedish, accounting for 58.6% of the total number of speech acts (N=1853). Constellations involving English was the second most frequent and accounted for 27.9%, whereas LOTS was the third (5.6%) and constellations involving a second foreign language was the fourth (5.5%) most frequent. Interjections accounted for 2.1% while constellations involving other languages accounted for 2.0%.

Only students in one of the groups (Avery, Bella, Mia and Shane) incorporated words in languages that were less familiar to them, such as using the Latin equivalent for human being (*homo sapien*) and the Turkish slang for girl (*guzz*) and money (*para*). Avery and Shane further discussed different Norwegian words at length. Figure 10 illustrates the translanguageing constellations engaged in by all four groups combined, whereas Figure 11 presents the translanguageing constellations specific to each of the four groups.

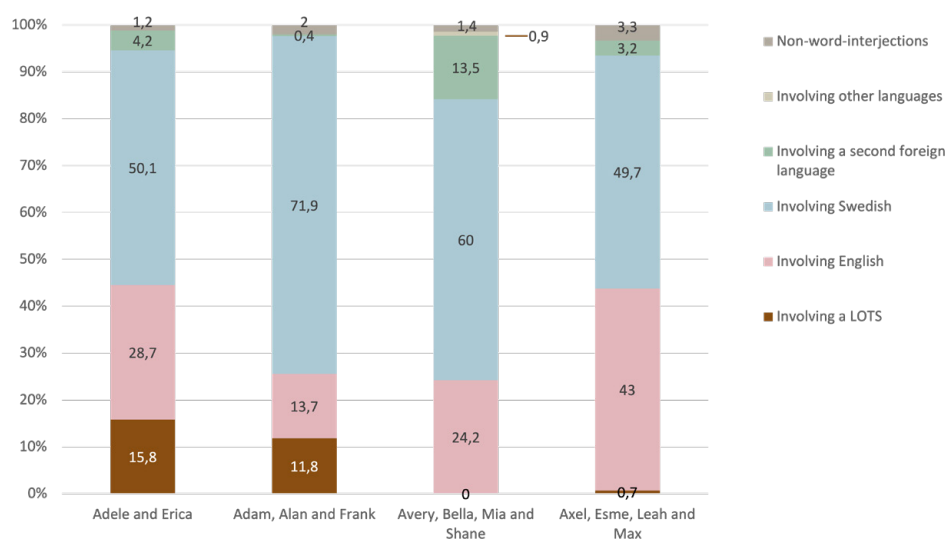


Figure 11. Percentages of translinguaging constellations specific to each group

Looking at the translinguaging constellations specific to each group in Figure 11, a few things stand out. The first is the extent to which translinguaging constellations involving Swedish was used, ranging between 49.7 and 71.9%. The second is the extent to which English was used, ranging from 13.7 to 43.0%. In the group with the highest number of constellations involving English, one student (Leah) actively tried to keep the interaction in English by initiating the use of the language eleven times when working with her group.

When looking at the use of constellations involving a LOTS there is a difference between the three groups including MEM students. In Adele and Erica's group Bosnian was shared and constellations involving Bosnian amounted to 15.8% (N=41 speech acts) of their audio transcript. In Adam, Alan and Frank's group two home languages were shared. Adam and Frank shared German, while Alan and Frank shared Albanian. Constellations involving a LOTS amounted to 11.8% (N=59 speech acts) in this group. In the third and last group, Russian, a home language, was not shared but spoken by only one member. The number of constellations including Russian amounted to 0.7% (N=4 speech acts).

The affordances of translanguaging

The student interaction was analyzed to see whether affordances emerged when students were translanguaging. The concept of *affordances* was defined as “what is available to the person to do something with” (van Lier, 2004, p. 91; 2008). The affordance categories were adopted from Rajendram (2019) and include a) *affective-social*, b) *cognitive-conceptual*, c) *linguistic-discursive* and d) *planning-organizational* affordances.

The audio transcripts were analyzed deductively, using Rajendram’s (2019) functions, and inductively, letting the functions derive from the data. When all the coding was done, I removed stray functions that were used once or twice in all four audio transcripts collapsing functions to include binaries, such as both asking and responding to an issue. This left a total of 97 functions, 24 belonging to the category affective-social affordances, 23 belonging to the category cognitive-conceptual affordances and 25 belonging to each of the other two categories of linguistic-discursive and planning-organizational affordances. Out of these 97 functions, 34 functions were either inspired by or taken directly as deductive codes from Rajendram (2019) leaving 63 inductive codes. The 63 inductive codes are an elaboration of the functions found in Rajendram (2019), that are specific to my data and highlight the specific context in which this study took place. The affordance categories are briefly presented below.

- a) Affective-social affordances are “functions that focus on building rapport, engaging peers in social interactions, providing socio-emotional support, and assisting each other” (Rajendram, 2019, p. 80).
- b) Cognitive-conceptual affordances are “functions that focus on understanding the concepts and content related to the task, and the exchange of information and ideas” (2019:80).
- c) Linguistic-discursive affordances are “functions that focus on learning and using the linguistic structures and discourse required to complete the task, and supporting peers’ linguistic and discursive knowledge” (2019:80).
- d) Planning-organizational affordances are “functions that focus on planning and organizing roles, responsibilities and tasks within the group, and coordinating the collaboration” (2019:80).

Combining all the groups, the most common affordance category was planning-organizational (30.4%), followed by cognitive-conceptual (28.8%), linguistic-discursive (23.6%) and affective-social (17.2%). In Figure 12 the distribution of the four different affordance categories can be seen specific to each student group.

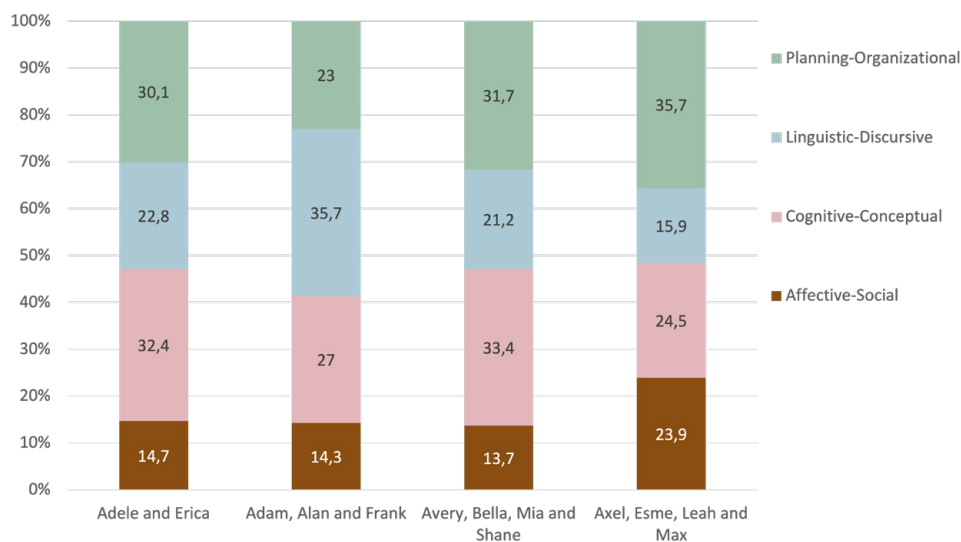


Figure 12. Percentage of affordances specific to each group

Figure 12 reveals a difference between Adam, Alan and Frank's group compared to the other three who all have more planning-organizational affordances than linguistic-discursive affordances. For Adam, Alan and Frank these two categories are inverted with more linguistic-discursive than planning-organizational affordances present in their interaction.

Another difference is the number of affective-social affordances in Axel, Esme, Leah and Max's group compared to the other three groups who have at least 9% less of this type of affordance. Axel, Esme, Leah and Max further have less linguistic-discursive affordances than all the other groups, with a difference of at least 6%.

A similarity for three of the groups, all except Axel, Esme, Leah and Max, is that the cognitive-conceptual and linguistic-discursive affordances combined take up more than half of their interaction (between 54.6 and 62.7%), revealing the amount of interaction that was spent on completing the task. Another similarity is seen in the number of planning-organizational affordances, which roughly comprises a third of the interaction for three groups (30.1 to 35.7%), while a little less for Adam, Alan and Frank (23.0%). A more thorough description of each affordance category and subsequent functions will be offered below, starting with affective-social affordances.

Affective-Social Affordances

The affective-social affordances comprised functions that had a social quality, where students expressed emotion, surprise and shared a laugh. Students would tell jokes and humorously distort their voices to provide a translation of a word by, for instance, adopting a French accent. Emotions could also be negative, such as feeling frustrated with a peer or showing disbelief.

Table 5 comprises the 24 functions specific to affective-social affordances arranged from the most frequent to least frequent function and marked with the percentage of all speech acts (N=1853) from all four audio transcripts combined. To provide context the speech act before and after is sometimes included. For those instances the example function is marked with a *. My translations are shown within parentheses and actions and inaudible words are shown within brackets. Swedish words are written in normal font, English in *italics*, LOTS in **bold** and second foreign languages are underlined>. All functions inspired or taken from Rajendram (2019) are marked by the cell being blue, while all functions in white cells stem from my own inductive coding.

Table 5. Affective-social functions of all four groups combined (N=319).

Function	Example of speech act (* indicates the example of the function)
Off-task-talk (20%)	Adele: jag vill bara ha matteprovet nu så att jag inte glömmet bort det i mitt huvud (I just want to have the math's test now so that I won't forget it in my head)
Commenting on a peer's work (13.5 %)	*Esme: varför klistrade du fast alla på en (why did you paste all of them on one) Axel: nej det är bara två ... det ser <i>nice</i> ut nu (no it is just two... it looks nice now)
Showing/responding to interest in language ability (10.7%)	Shane: fan vad mycket franska ni kan vi kan ingen franska vi kan ingen spanska (damn that's a lot of French you know we don't know any French we don't know any Spanish)
Affirming/agreeing with peers' suggestion/answers (9.7%)	Alan: ska vi köra på engelska först och så tar vi andra språk om vi känner för det (should we do this in English first and then we'll move on to other languages if we feel like it) *Adam: ja (yes)
Expressing emotions/empathizing with peers (9.1%)	Axel: ja E på slutet (Yes with an E at the end) *Leah: <i>you couldn't said that fucking earlier ok</i> Axel: men jag visste inte vilken verbform vi skulle ha eller vilken substantivform vi skulle ha (But I didn't know what form of the verb we wanted to use or what form of noun we wanted) *Leah: <i>oh shit oh yes I'm sorry</i>

Joking with peers/expressing amusement at peers' ideas (6.3%)	Adam: jag har aldrig hört glädje på tyska (I've never heard happiness in German) *Alan: så ni är inte glada i Tyskland (so you're not happy in Germany)
Jokingly (and often incorrectly) providing the translation or suggestion of a word in a second foreign language (6%)	Mia: vad heter syskon (how do you say siblings (in French)) *Bella: ähm <i>siblings</i> [pronouncing the word with a French accent, laughs]
Asserting own ability or showing self-confidence (4.4%)	Alan: Sara hur säger du kåt på tyska (Sara how do you say horny in German) Adam: nej (no) [laughs] Alan: <u>ich vab vab</u> nej ja nej jag snackar om va det är nånting sånt du vet <u>shieß</u> eller <u>sheiß</u> vad fan hette det du vet den där man vad heter det (ich vab vab no yes no I'm talking about what it is something like shieß or sheiß what was it you know the one that what's it called) Sara: <u>heiß</u> (horny) *Alan: <u>heiß</u> ja titta <u>heiß</u> , e dita (heiß yes look heiß I knew that)
Responding to receiving materials from the teacher (2.8%)	Sara: <i>here's another pen for you</i> *Mia: oj ähm tack (oh uhm thanks)
Commenting on/asking about events in the classroom (2.5%)	Frank: helvete åh nej dom har ritat på [inaudible] (oh hell oh no they have drawn on [inaudible])
Giving the impression of not caring whether something is right or wrong (2.5%)	Avery: hur stavas <u>bien</u> nu (how do you spell bien again) *Shane: skitsamma (never mind)
Seeking peers'/teachers' attention (2.5%)	*Alan: ursäkta (excuse me) Tina: ja (yes)
Student response to teacher instruction/comment/question on task (2.2%)	Tina: <i>ok last but not least today with the word walls we have synonyms what is a synonym</i> *Alan: <i>another another word for</i> Tina: <i>one more time so everyone can hear you</i>
Commenting on peers not understanding LOTS/second foreign language (1.3%)	Adele: jag råkade skriva med ett stort R vem bryr sig dom kan ju läsa detta(I happened to write with a capital R but who cares they can read it anyway) Erica: ja (yes) *Adele: hallå men dom kan inte läsa detta (hello but they can't read this)

Laughing (1.3%)	Leah: <i>hello what does that mean</i> Axel: <i>that's health</i> Esme: frihet (freedom) Leah: jaha (oh) *Axel: [laughs]
Responding to peer's/teacher's call for attention (1.3%)	Fletcher: Leah Leah *Leah: ja (yes) *Leah: <i>what</i>
Encouraging group effort/collaboration among group members (0.9%)	Erica: vad fan jag har glömt hela bosniskan (what the hell I have forgotten all the Bosnian) *Adele: To cemo ja i ti pisat... daj mi papira (that is what you and I are going to write... give me some paper)
Defending an erroneous answer/not losing face (0.6%)	Andrew: vad är <i>sticky tape</i> (what is sticky tape) Erica: detta är <i>sticky tape</i> (this is sticky tape) Andrew: <i>sticker tape</i> Sara: <i>sticky</i> *Andrew: jaja vad (yeah yeah what)
Expressing frustration with peer not understanding the task (0.6%)	Leah: <i>oh shit I forgot</i> *Esme: <i>what do you need to ask now</i>
Showing disbelief/shock at a peer's utterance (0.6)	Alan: nä men vet du anledningen för att om du säger <u>ich bin heiß</u> innebär det kåt och det ska man inte säga till taxichaufförer i Tyskland har hon sagt till oss hon har sagt det till oss (no but do you know why because if you say ich bin heiß it means horny and you should not say that to taxi drivers in Germany she has told us she has told us) *Frank: har hon (she has) Alan: ja (yes) *Adam: vänta va (wait what)
Singing (0.6%)	Esme: <i>home a place where I can go</i> [singing]
Putting trust in the linguistic ability of your peers (0.3%)	Frank: vänta är det inte <u>liebe</u> utan N (wait isn't it liebe without N) Adam: det är både och tror jag (it can be both I think) Frank: <u>lieben</u> det är väl mer specifikt (isn't lieben more specific) *Alan: ni bestämmer ta vilken ni vill (you decide take whichever you want)
Teacher responding to student being polite (0.3%)	Mia: <i>thank you</i> *Tina: <i>you're very welcome</i>

As revealed in the examples in Table 5, the functions belonging to the affective-social affordances involve students telling jokes (N=20 speech acts), supporting each other with encouragement (N=3 speech acts) and affirmation (N=31 speech acts) but also showing different kinds of emotion. The emotions could vary from frustration (N=2

speech acts) to disbelief and shock at a peer's utterance (N=2 speech acts). There were also emotions that were closely tied to students' self-confidence, such as giving the impression of not caring (N=8 speech acts) or comments about saving face when a mistake had been pointed out (N=2 speech acts). Students were praised and held accountable for their actions and decisions as the second most frequent function, *Commenting on peer's work* (N=43), for this affordance category suggests.

Off-task talk was the most frequently used function within affective-social affordances (N=64 speech acts). Although all groups engaged in off-task talk there was great variation between groups. Adam, Alan and Frank only had two speech acts (0.4% of their entire audio transcript) involving this function, regarding Adam's choice of second foreign language in school. Avery, Bella, Mia and Shane had 5 speech acts (1% of their audio transcript) that could be considered off-task-talk in which Shane let it be known that he had seen another boy in class speeding with his Volvo A tractor¹⁷. Adele and Erica had 13 speech acts (5%) involving off-task-talk, discussing an upcoming maths test that had them nervous. However, the fourth group, with Axel Esme, Leah and Max had 44 speech acts (7.6% of their entire transcript) functioning as off-task-talk. The reason for this is that Esme, towards the end of the lesson, started thinking about the fact that there was a Dictaphone on their shared desk and whether I would be listening to the recording eventually. Axel tells her that this is precisely what will happen and proceeds to make a comparison to the situation in Germany during the Second World War, when there were hidden microphones everywhere. The others are intrigued by his story, and they go into some length discussing what it must have been like to experience that type of society. All the off-task-talk in all four groups was carried out entirely in Swedish.

Two important functions, specific to my data, deal with students' knowledge of languages other than the target and majority languages. In the present study, these functions were direct affordances of the opportunity to translanguage that was offered, as the languages were normally not used in English class. As these languages were brought into the classroom, students noticed the linguistic ability of their friends and responded positively through the function *Showing/responding to interest in language ability* (N=34). This function was observed in all four groups and related both to LOTS and second foreign languages. While students were working on the task, they would ask members of adjacent groups what languages they were using and express comments such as "can you write in Bosnian" and "is that the same alphabet" addressed to Erica from a fellow female classmate not in her group. Alan is similarly spoken to by Ray who wants to know "are you writing in Albanian" and when confirmed states "I'm going to

¹⁷ An A tractor is a remodeled car which has a limit on the engine so that the maximum speed is 30 kilometers per hour.

look at those later" sounding thoroughly impressed. Leah is called on by Fletcher, a boy in a different group, to provide the Russian equivalent for *money*, but initially refuses as she states "I'm not going to say you can't spell it anyway" using a defiant tone. Comments of this nature within groups could equally be observed, such as the example above with Shane noticing the amount of French words Bella and Mia are able to produce in a short amount of time. Esme makes comparable comments regarding Leah's writing in Russian using Cyrillic script, stating how beautiful her handwriting is and exclaiming "wow what does it say". There was further a sense of pride in knowing a language that shone through in the function *Commenting on peers not understanding LOTS/modern language* (N=4), where, for instance, Mia states "but really no one else knows French besides us so we can write whatever we want". While functions of affective-social affordances often displayed emotions and interest in language ability, as shown above, it was often a way to ease tension and let off steam. This stands in contrast to the cognitive-conceptual affordances, to which I now turn.

Cognitive-Conceptual Affordances

The functions of cognitive-conceptual affordances focus on the cognitive demands of the task. This second largest affordance category was all about working together to accomplish the task of building a word wall, by discussing and coming up with concept-specific words dealing with the writing topic *A Good Life*. In Table 6 below all 23 functions are listed and the frequency of their use in terms of percentages within parenthesis. As in Table 5 above, all functions inspired by or taken from Rajendram (2019) are marked in blue, while all the white functions stem from my own inductive coding.

Table 6. Cognitive-conceptual functions of all four groups combined (N=533)

Function	Example of speech act (* indicates the example of the function)
Suggesting a word for the task (32.6%)	*Erica: ska jag skriva dit ljubav (should I write love) Adele: I napisi prijatelji (and then write friends)
Confirming suitability of a word/agreeing with peer's suggestion (12%)	Alan: martim kan jag säga martes (wedding can I say marriage) *Frank: martes ja men ta det (marriage yes take that)
Asking peers for a word for the task (8.4%)	*Leah: <i>ok so which word should we start with</i> Esme: <i>friends in Swedish</i>

Challenging peer's answer (6.8%)	<p>Alan: Shoqëri a asht (friendship is it)</p> <p>Frank: ja (yes)</p> <p>*Alan: Ma hangsh mutin nuk asht q e butë det är inte med (Eat my shit it is not with a soft tch it is not with)</p> <p>Frank: vaddå (what)</p> <p>*Alan: så edhe shoqe, si shoqëri är med ett sånt Q så [inaudible] (so even girlfriend as society is with a Q like that)</p>
Thinking out loud concerning task/word (6.4%)	<p>*Mia: glömde att skriva matbegär (forgot to write craving for food)</p> <p>*Mia: ah jag måste skriva det (ah I have to write that)</p>
Providing explanation/rationale for an answer/suggestion (5.6%)	<p>Adele: <i>happy</i> kan man säga <i>happy lucky</i> så här (happy could you say happy lucky like this)</p> <p>*Erica: nej <i>lucky</i> det är sreće da imas sreće (no lucky that is luck, to have luck)</p> <p>Adele: men brukar man inte säga <i>I'm so lucky</i> typ jag är så eller nej (ohörbart) (but don't you usually say I'm so lucky like I am so or no [inaudible])</p> <p>*Erica: det är också ett annat ord (that is also a different word)</p>
Commenting/discussing words that go well together/ with the concept of <i>A Good Life</i> (4.5%)	<p>Axel: ledsen (sad)</p> <p>Leah: älskad (loved)</p> <p>*Esme: men det är ju det är ju uppskattad men skriv inte ledsen det är inget bra (but that is that is appreciated but don't write sad it's not good)</p>
Responding to challenge from peer by standing your ground (4.1%)	<p>Alan: gezimë med ë i slutet tror jag det är gezimë (happiness with an ë at the end I think it is happiness)</p> <p>Frank: men jag tror inte det är med ë eller (but I don't think that is with an ë or)</p> <p>*Alan: jag tror det faktiskt det (I think that it is actually)</p> <p>Frank: jo kanske (yeah maybe)</p>
Disagreeing with a suggestion from a peer, with or without explanation (3.2%)	<p>Shane: har redan nån skrivit ha ... skriv smet deg (did someone already write have... write batter dough)</p> <p>*Avery: nej (no)</p> <p>Shane: det är bra det är sjukt bra (it's good it's really good)</p> <p>*Avery: men inte smet (but not batter)</p>
Building/elaborating on own or peer's answers/suggestions (2.8%)	<p>Bella: <u>grand</u> vad heter om är typ stor <u>grand e</u> grandlös (big what is it called if like big grand grandiose)</p> <p>*Mia: <u>il le très grand</u> (he is very big)</p> <p>Bella: grandlös kan ju vara på svenska (grandiose could be in Swedish)</p> <p>*Mia: <u>petite</u> grandlös? (small grandiose)</p>

Discussing/reading words out loud from the wall (2.3%)	*Axel: [laughing] ledsen mindre glad [laughing] (sad less happy) *Max: det är inte direkt synonymer (they're not really synonyms) *Axel: nej (no)
Asking peer for explanation/definition of a concept (such as emotion) (1.5%)	Esme: det är väl en känsla att vara mätt (it is an emotion to be full is it not)
Confirming understanding of teacher's/peer's explanation (1.5%)	Erica: <i>grateful</i> det är typ så att du är glad att du har det du har i livet (grateful means that you are happy with what you have in life) *Adele: jaha (oh ok)
Using meta-marker (1.5%)	Alan: ok <i>travel</i> resa (ok travel travel) Adam: ja (yes) *Adam: vänta vänta vänta (wait wait wait) *Frank: äh (uhm) Adam: vad fan är det på tyska (what the hell is it in German)
Not knowing the answer to a question (1.3%)	Shane: [inaudible] riksdaler ([inaudible] <i>money</i> [archaic]) Avery: det är väl det eller ... eller? (it is that isn't it... or) *Shane: jag vet inte (I don't know)
Explaining/defining a concept (such as emotion) although sometimes incorrectly (1.1%)	Avery: <u>chico</u> kille [inaudible] hus är <u>casa</u> [inaudible] (boy boy house is house) Shane: ja jag kan det nu (yes I know that now) *Shane: men det är ingen det är bara en översättning det är ingen synonym det är ett annat ord (but that is not it is just a translation it is not a synonym that is a different word)
Responding to question on task (0.9%)	Tina: <i>where does that come from how do you get happy? what makes you happy?</i> *Adele: <i>Uhm I don't know</i>
Teacher asking question pertaining to task (0.9%)	*Tina: <i>can you think of more synonyms?</i> Erica: <i>no</i> Adele: <i>no I can't</i>
Reading out key word (0.9%)	Adele: han skrev <i>relatives</i> (he wrote relatives) *Erica: familj (family)
Settling on an easier word/simplification of a word to avoid making errors (0.8%)	Bella: är det <u>la travailler</u> eller <u>le</u> (is it la travailler or le) Mia: <u>la travailler le travailler</u> (worker or worker) *Bella: vi skriver bara <u>travailler</u> kan vi ju skriva (let's just write worker we can write that)
Referring to when similar words were dealt with in language class (0.4%)	*Mia: det var så länge sen vi gjorde detta (it was so long ago that we did this) *Bella: ja det var egentligen alltså känslor var jättelänge sen typ ska vi sätta upp så vi inte glömmar (yes it really was like emotions was a really long time ago like should we post these before we forget)

Recounting events/details from one's personal life that are related to the topic (0.2%)	<p>Avery: men Jason jag tror inte man fick göra så det ska vara på samma språk (but Jason I don't think you were allowed to do that it's supposed to be in the same language)</p> <p>Jason: nej hon sade det var så (no she said it was like that)</p> <p>Avery: [inaudible] bara det (just that)</p> <p>Jason: ja (yes)</p> <p>Shane: ta tusen ta en tusen lök ta lök (take thousand take one thousand onion take onion)</p> <p>*Jason: [inaudible] kommer du inte ihåg när Finn bara åh har du nåt deg på kontot eller (don't you remember when Finn just oh do you have any dough in your account like)</p>
Teacher providing explanation/rationale concerning task (0.2%)	<p>Tina: <i>so different ways of saying friend</i></p> <p>Erica: ähm</p> <p>*Tina: <i>pal buddy</i></p>

As the students were tasked with building a word wall, the three most frequent functions within the cognitive-conceptual affordances involved either suggesting a word (N=174), confirming suitability of a word (N=64) or asking for a word for the task (N=45). Looking at the examples in Table 6, we see functions such as challenging a peer's answer (N= 36), putting students' knowledge to the test and holding them accountable for their suggestions and contributions to the task. Students exposed to such a challenge could choose to use the function to stand their ground (N=22) and sometimes this would end with an explanation being provided to settle the argument (N=30).

A LOTS was sometimes included in the explanation provided to make it clear and understandable, as in the example with Adele and Erica above regarding whether *happy* and *lucky* could be considered synonyms. In this example Erica uses Bosnian to show how the two words have different meanings and therefore cannot be considered synonym pairs.

In addition, discussing words that would go well with the concept (N=24) was quite common in Avery, Bella, Mia and Shane's group (N=10) as well as Axel, Esme, Leah and Max's group (N=12). Out of the 15 speech acts involving the function of elaborating on a peer's suggestion, 10 belonged to Bella and Mia who were particularly productive in terms of writing words on the wall (producing 41 French words in roughly 30 minutes).

Although the cognitive-conceptual affordances centered on the functions that were needed to complete the task in the different groups, the linguistic essence of the task sometimes made it difficult to distinguish between cognitive-conceptual and linguistic-discursive affordances in the coding process. This was especially so when words

suggested for the word wall were generated through translation. The next section focuses on the linguistic-discursive affordances and the functions belonging to this category.

Linguistic-Discursive affordances

All the functions that dealt with linguistic aspects were coded as linguistic-discursive affordances. In addition, a few functions dealt with discursive factors, such as asking someone to repeat themselves or confirming what someone else had said. Table 7 provides the 25 functions organized from most frequent to least frequent provided in percentages of all four audio transcripts combined.

Table 7. Linguistic-discursive functions of all four groups combined (N=438)

Function	Example of speech act (* indicates the example of the function)
Asking for the translation of a word (11.9%)	*Erica: jobb kako se kaze jobb hur skrev man det (work how do you say work how did you write that) Adele: ähm posao (uhm work)
Helping peers to spell a word/correcting their spelling (9.4%)	Alan: hur stavas det (how do you spell that) *Frank: det vill säga R E I (that is R E I) Adam: ja (yes) *Frank: S E N [inaudible] (S E N)
Asking for/checking the spelling of a word (9.1%)	*Mia: stavas inte <u>drôle</u> så (isn't funny spelt like that) Bella: jo det gör det nog (yes I think it is)
Asking peer to repeat utterance (8.2%)	Leah: <i>yes do you have any ideas of key words what will you write</i> *Esme: va (what) Leah: <i>what will you write key words which key words</i> Esme: hälsa (health)
Providing (although sometimes incorrectly or an incomplete) translation of a word (8%)	Alan: hur säger man släktingar på tyska (how do you say relatives in German) *Adam: ja jag vet vad fan heter det på tyska... <u>schlekte</u> det måste vara det (yes I know what the hell is it called in German schlekte it has to be that)
Repeating own/peers question/answer or teacher's instruction (5.9%)	Erica: <i>interest</i> kako se to kaze (interest how do you say that) Adele: koje (what) *Erica: <i>interest</i>

Comments pertaining to language ability/forgetting words in a LOTS/second foreign language (5.9%)	Erica: <i>education kako se kaze?</i> (education how do you say it) *Adele: ähm hur säger man det jag minns inte hur fan säger man znam ja al sam zaboravio (uhm how do you say that I don't remember how the hell do you say it I know it but I have forgotten)
Asking for/checking the meaning/usage of a word/phrase (5.3%)	*Mia: är det inte nåt sånt <u>ennuyeux</u> eller nåt sånt <i>annoying</i> <u>ennuyuese</u> <i>annoy</i> (isn't something like boring annoying bored annoy) Bella: jo det är det (yes it is)
Confirming own/peer's/teacher's statement/answer/suggestion (4.8%)	Frank: vad heter det <i>fucking</i> skyldighet är det ett ord (what's it called fucking obligation is that a word) *Alan: ja (yes)
Asking about/explaining/commenting on writing conventions (4.3%)	Avery: <u>chico</u> kille [inaudible] hus är <u>casa</u> [inaudible] (boy boy house is house) Shane: nej jag tror inte nej jag tror inte den har nån apostrof eller ingenting jag tror bara det är <u>casa</u> (no I don't think it has an apostrophe or anything I think it's only house)
Inviting peers to check/provide feedback on one's answer/work (3.9%)	*Alan: vad fan gör jag (what am I doing) Adam: vad är det på spanska (what is it in Spanish) *Alan: vad fan gör jag jag skriver ju så hela tiden det är så skönt att skriva ett R... varför inte det (what am I doing I'm writing this all the time it's so nice to write an R why not)
Correcting/helping peer with grammar/syntax/vocabulary (3%)	Axel: <i>what is friends in Russia</i> Leah: <i>wait</i> *Max: <i>Russian</i>
Assessing own/peer's linguistic knowledge (2.7%)	Adam: vi glömde musik på spanska (we forgot music in Spanish) *Alan: alltså jag kan inte det på spanska (well I don't know that in Spanish) *Adam: men jag kan (but I do)
Teacher commeting/correcting/giving feedback on student language (2.7%)	Alan: äh <i>excuse me is that right</i> *Tina: <i>yep yep</i> ja (yes)
Looking up the translation/spelling/meaning of a word online (2.3%)	Alan: kan du söka upp hur udhëtim stavas (can you look up how travel is spelt)
Not knowing how to spell/translate a word (2.3%)	Bella: vad är pengar på franska (what is money in French) *Mia: jag vet inte (I don't know)
Not finding the word sought after in a particular language (2.1%)	Adele: Nema valjda isto na bosanski [inaudible] (there's not an equivalent in Bosnian is there) *Erica: nej det finns inte så mycket (no there isn't a whole lot)

Explaining the meaning of a word/phrase/sentence (1.8%)	Girl in class: är det casa (is that home) Erica: mi casa är mitt hus ja (my home is my home yes)
Asking about grammar/syntax (1.6%)	*Mia: <u>la famille</u> är det <u>la</u> (the family is it the) Bella: <u>la famille</u> är det väl (it is the family isn't it)
Teacher providing translation of word (1.4%)	*Adam: vad är intressen på tyska (what is interests in German) Sara: <u>intressen</u> (interests)
Challenging teacher/questioning why certain things have not been taught in language classes (1.1%)	Axel: <i>ok in yes what is glad happy in deu in Germany va</i> Sara: <u>froh</u> (happy) *Axel: <i>why haven't you say that</i>
Confirming understanding of teacher's/peer's explanation (0.9%)	Alan: <u>taurig</u> [incorrect pronunciation] Adam: nej det är <u>traurig</u> (no it's sad) *Alan: jaha jag hör ja <u>traurig</u> (oh I hear yes sad)
Reading/sounding out words in order to write them correctly (0.9%)	Alan: <i>ac ti v activ</i>
Commenting on the sound of a word/phrase/sentence (0.2%)	Alan: lumturi ah jag vet inte (happiness ah I don't know) Frank: ja ja (yeah yeah) *Alan: det låter så mycket finare (it sounds so much nicer)
Correcting own language use (0.2%)	Esme: <i>Russian cause you said that on your blanket</i> Leah: <i>yes I know</i> Esme: <i>not blanket</i> Leah: <i>on my blankett</i> (on my form)

In Table 7 the top three functions involved asking for translations (N=52) and helping with (N=41) or asking peers for the spelling of words (N=40). Other frequent functions include providing translations (N=35) and checking meaning and usage of different words (N=23). In addition, students resorted to using Google Translate to double check on their translations and spellings (N=10) to make sure they were correct or to solve disputes on these matters, as in the example with the word *udhëtim* (the Albanian word for *travel*) above. Besides these functions there are also discursive features, such as asking a peer to repeat an utterance (N=36) or providing confirmation of a statement or suggestion (N=21).

A noteworthy result, evident in the examples above, is the translanguaging used as students switch between Swedish, English, a LOTS and a second foreign language. When students are translanguaging, they support each other by offering confirmations and explanations of words and grammar through their metalinguistic awareness.

Looking at the functions included in the linguistic-discursive affordances, a counterpart to the positive aspects of knowing a language in the classroom can be observed. Students expressed sadness and frustration when they did not remember words in a

LOTS or second foreign language, revealed in the function *Comments pertaining to language ability/forgetting words in a LOTS/second foreign language* (N=26)). This function was difficult to code as the answers dealt with language knowledge, and as such fit well with the linguistic-discursive affordances but could just as easily have been coded as affective-social as the functions were expressed with emotion, as the example above revealing Adele's frustration. Frank equally expressed his frustration in this regard in reference to the word 'relatives', which he is unable to find in Albanian, stating "but wait it's hard because some words they should come easier without me writing". Another example of this function can be seen in the dialogue in Excerpt 1 between Bella and Mia¹⁸.

Excerpt 1

Bella: but I know it like back here

Mia: it lies somewhere within

Bella: and the word I'm looking for is glad but content (French word for 'content') is glad but it's like content, like you're not you're not jumping for joy then, happy and glad they are different words are they not

Mia: heureuse (happy)!

Bella: oh shit heureuse (happy)!

Mia: yes it came to me... yes

In this example both Bella and Mia are referencing the missing word as something hidden inside themselves that they can't quite reach. The conversation finds its climax as Mia all of a sudden remembers the word *heureuse* (meaning *happy* in French) and remarks how the word "came to her", as if resurfacing from within.

The planning-organizational affordances, which were much easier to discern, as they all dealt with practical matters regarding how to plan and carry out the task, will be the focus next.

¹⁸ The student interaction in Swedish has been translated into English by me. When student are speaking English words are italicized. Albanian, Bosnian and Russian words are bolded. Albanian and Bosnian words were translated by a professional translator and translations are included within parenthesis. Second foreign languages are underlined.

Planning-organizational affordances

The functions belonging to the planning-organizational affordances mainly centered on the instructions provided for the task and the division of labor and collaboration within the groups. This is the largest of the four affordance categories (30.4%) where the functions involving the teachers were the most prevalent. This is perhaps not surprising as the teachers started off the planning and organization of the task by providing instruction, which was revisited at regular intervals during the lesson. The 25 functions of planning-organizational affordances from all four groups combined, organized from most to least frequent are provided in Table 8.

Table 8. Planning-organizational functions of all four groups combined (N=563)

Function	Example of speech act (* indicates the example of the function)
Teacher instruction on task (17.6%)	Tina: <i>yeah exactly so music in Spanish is <u>música</u> right so it's quite similar so this will help us trigger our memory when we write if we know these words in all of the languages that we know</i>
Student response to teacher instruction/comment/question on task (13%)	Leah: <i>oh should I write like one word on each post-it note</i> Tina: <i>yeah and if you need to you can actually stick two of them together if its</i> *Leah: <i>yeah ok</i>
Giving directions pertaining to the task (12.3%)	Adam: <i><u>familie</u> heter det släkt på tyska är <u>familie</u> står där (family it is called relatives in German is family it says)</i> *Alan: <i>skriv släktEN istället (write the family instead)</i> Adam: <i><u>die familie</u> (the family)</i>
Asking for directions pertaining to the task (7.5%)	*Avery: <i>vad menar dom med <u>key words</u> (what do they mean by key words)</i> Mia: <i>alltså dom orden fast typ vad har ni spanska (like those words but in like what do you have Spanish)</i>
Teacher commenting on task progress (7.5%)	Tina: <i>right so many keywords on that board right now we have sh we have a bunch of different languages we have English Swedish Spanish Arabic uh German</i>
Teacher response to/confirmation of student comment/question (5.7%)	Mia: <i>kan man inte säga [quietly] <u>exstatic</u> [loud enough for everyone to hear] (couldn't you say exstatic)</i> *Tina: <i><u>exstatic absolutely</u> (exstatic absolutely)</i>
Commenting on/expressing frustration with/asking to borrow/offering materials used for the task (4.8%)	Adele: Gledaj papiri kakvi... (look at these papers)
Taking action/ explaining/asking about actions taken (4.6%)	Erica: <i>om jag lägger jag går och sätter upp direkt innan alla kommer (if I put I'll go and post (these) right away before every one comes)</i>

Teacher breaking up task activity to provide new instructions (3.7%)	Sara: <i>alright moving along</i>
Teacher-researcher/teacher interaction pertaining to organization of task, including confirming each other's instruction (3.6%)	Tina: <i>excited is one happy</i> Sara: <i>you could say glad in English</i> *Tina: <i>glad</i>
Identifying/confirming/ what needs to be done (3.4%)	Avery: vi skriver vänner eller ska vi alltså vi kan skriva <i>friends</i> här (let's write friends or should we like we can write friends here) *Mia: ja ... ska vi sätta upp det (yes... shall we post it)
Asking teacher for instruction on task (2.7%)	*Leah: <i>uh Tina Tina should I like in Russian should I write [inaudible] letter because I also write in in cursive but should I write it like in in what in like regular letters</i> Tina: <i>that's fine whatever works</i>
Teacher asking question pertaining to task (2.5%)	Sara: <i>do you understand what you're supposed to do</i>
Checking on progress/completion of the task (2.3%)	*Adam: ska vi bara göra en till eller ska vi bara göra en till (should we just do one more or should we just do one more) Frank: Hajde ma shpejt (come quicker)
Distributing/negotiating roles/responsibilities/tasks in the group (2.1%)	Alan: tack så mycket ska jag börja direkt eller ska jag vänta lite (thank you very much should I start right away or should I wait a moment) Frank: ja du kanske kan börja (yes maybe you can start)
Inviting peers to join in the decision-making/collaboration of the task (1.8%)	*Alan: ska vi köra på engelska först och så tar vi andra språk om vi känner för det (should we do this in English first and then we'll take other languages if we feel like it) Adam: ja (yes)
Confirming understanding of teacher's/peer's explanation (1.2%)	Adele: Sretan, srećan som du sade (happy, lucky like you said) Erica: amen det har vi redan skrivit (but we have written that already) *Adele: jaha (oh ok)
Teacher managing the classroom (1.1%)	Tina: <i>one more time so everyone can hear you if everyone's quiet</i>
Teacher/student comment on seating arrangement (1.1%)	*Tina: <i>do you want to sit there or do you want to move here or</i> *Erica: <i>I can sit here</i>
Disregarding peers suggestion with or without explanation (0.5%)	Shane: <i>ok you want the pen ... skriv <u>amigo</u></i> (ok you want the pen... write amigo) Mia: nej[inaudible] (no)
Elaborating on actions taken (0.5%)	Erica: amen det finns redan två <u>casa</u> (but there already are two homes)

Teacher providing material for the task (0.4%)	*Sara: <i>here have another pen</i> Axel: <i>thank you</i>
Asking peer to contribute to whole class interaction (0.2%)	Tina: <i>so that starts with an M as well right it's the sound M any other languages that we know money</i> *Girl in class: Leah? Leah: nej (no)
Not knowing the answer to a question (0.2%)	Adele: ska man skriva på olika språk eller ... vad ska man skriva på olika språk eller (should you write in different languages or... what should you write in different languages or) *Erica: jag vet inte (I don't know)

As advertised, the two most frequent functions for the planning-organizational affordance category dealt with instruction emanating from the teachers (N=99) and students' response to this instruction (N=73). Moreover, students frequently sought (N=42) and gave direction (N=69) on their own concerning the task while collaborating with their fellow students. This affordance category shows examples of the practical matters that were relevant to the completion of the task, ranging from dealing with seating arrangements (N=6) physical artefacts in the shape of writing materials (N=27) and direct actions (N=26), such as pinning post-it notes on the wall. In the above examples there are cases of translanguaging as students used named languages, such as Albanian, Bosnian, English, German, Spanish and Swedish, to plan and organize the task at hand.

Sara used English exclusively in all her instructions and in all her interactions with students in the four groups apart from two words, which she was asked to translate into German. As the teacher-researcher, all of my instructions and interactions with students were carried out in English, apart from three short 'yes' in Swedish, two to confirm a student's suggestion regarding task instructions and one to answer a call for my attention by Alan. I also use a few example words to demonstrate the task using languages such as Arabic, Spanish and German. There are very few instances in which students used Swedish to address the teachers. Most of the time they would then switch to English during student-teacher interaction, as this was the preferred language when interacting with the teacher and when asking for clarification in front of the whole class.

While the functions and affordances derived from the opportunity to translanguaging above offer clarity regarding how, and for what purpose, students' were translanguaging, there is a need to analyze the typology of talk. Although it is impossible to say anything about the actual learning that took place in this lesson, the typology of talk can at least provide the answer as to whether learning was made possible through the type of interaction that occurred. Mercer's (2004) typology of talk and thinking was therefore used to see how much of the student interaction was dedicated to *exploratory*

talk, the type of talk known to be conducive to learning. The next section details this analysis and the different types of talk that occurred.

The typology of talk

To see whether student interactions showed signs of learning, a second analysis was made. This goes hand in hand with sociocultural theory and the idea that learning takes place through interaction (Mercer & Littleton, 2007). For the purpose of this analysis, all talk consisting of teachers' instructions directed to the whole class was left out, as was off-task talk and noticing peers' linguistic ability seeing as this was not focused on the task and was therefore not pertinent to learning.

Mercer's (2004) typology for talk and thinking, consisting of *disputational*, *cumulative* and *exploratory* talk were used as categories. As these types of talks were mentioned in chapter 5, I will only briefly describe them here. 'Disputational talk' encompasses interactions with short exchanges and a competitive atmosphere. Essentially, students perform the task individually without collaboration or a sense of a common goal with their peers. Disagreeing without just cause and denying peers assistance are common traits. 'Cumulative talk', according to Mercer (2004) is distinguished by students positively building on each other's suggestions but doing so uncritically and without providing explanations or rationales for their ways of thinking. In this type of talk, students are trusting their peers and rarely question their suggestions or answers. The atmosphere can be described as overly positive, as contributions remain unchallenged. Last, but not least, 'exploratory talk' is defined by students working collaboratively towards a common goal. Reasoning in this type of talk is made visible, opinions are valued and explanations and solutions are offered in order for decision making to be collective. Students are encouraged and supported by members of their own group, but also held accountable for their contributions. Using Mercer's (2004) typology of talk and thinking could therefore make visible how well the students were able to work collaboratively on the task to reach the common goal of creating the word wall.

There were 199 speech events in all four audio transcripts combined. Disputational talk accounted for 12.1%, cumulative talk for 41.2% and exploratory talk for 46.7%. However, when looking at the groups individually, there are differences, as demonstrated in Figure 13.

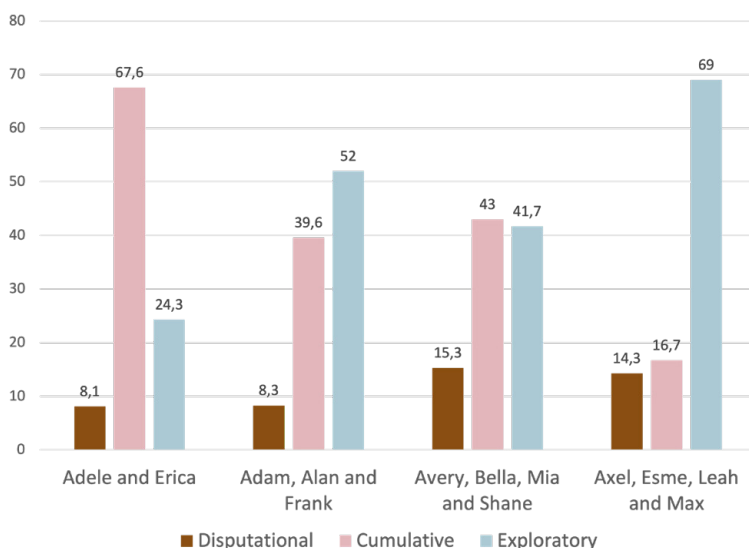


Figure 13. Percentages of the three different types of talk in each of the four groups

In Figure 13 disputational talk makes out the smallest portion of all individual groups' speech events, ranging from 8.1% to 15.3%. One example of this type of talk can be seen in Excerpt 2, where one student, Fletcher, calls out to Leah to give him a word in Russian.

Excerpt 2

Fletcher: Leah Leah

Leah: yes ... what

Fletcher: money in Russian

Leah: I won't say you can't spell it anyway

Fletcher: oh come on

Leah: you can't spell it you can't spell it

Fletcher: ok

Leah: you can't spell it it has other we have another alphabet ... **den'gi** (money)... yeah spell it

This speech event is characteristic of disputational talk in the data of the present study. By refusing Fletcher the translation in Russian, the atmosphere becomes negative. Towards the end, Leah relents and provides the translation, however this sharing of knowledge is what Mercer (1995) would describe as "flaunted rather than shared" (p.105). Leah closes the interaction by extending a challenge "yeah spell it", something she knows Fletcher will not be able to do without her help.

Although disputational talk was quite uncommon overall in the four audio transcripts (N=3 to 11 speech events in the respective groups) it could both involve negative interactions, such as the example with Leah above, as well as less negative interactions mainly dealing with group members making decisions on their own without consulting their peers.

The tone of voice was often key to determining whether something was said calmly and positively or defiantly and defensively. Sometimes the call from students in the group to take action would result in a disputational speech event emanating from frustration. This can be seen in the Excerpt 3 involving Adele and Erica.

Excerpt 3

Adele: but write something in Bosnian some word

Erica: what the hell do you want me to write

Adele: **sretan, srećan** (happy, lucky) like you said

Erica: but we've written that already

Adele: oh

Here, Adele is clearly frustrated with the way they are performing, wanting Erica to contribute more. Erica, in turn, is not responding well, asking Adele what she wants her to do. The speech event comes to an end as Adele realizes her mistake in asking for a word that they have already produced.

Adele and Erica's group stands out as being the group with much more cumulative talk (N=25 speech events) than exploratory (N=9 speech events). Avery, Bella, Mia and Shane have more cumulative talk as well (N=31 speech events) but the difference is only one speech event as they have 30 that are exploratory. The other two groups (Adam, Alan, Frank and Axel, Esme, Leah and Max) show the same pattern of having least disputational talk, somewhat more cumulative talk and the most speech events belonging to the type of talk known as exploratory. Part of the reason for more

cumulative talk may stem from the fact that, apart from the disputational example above, Adele never challenges or questions Erica's contributions to their work, whereas Erica challenges Adele on a few occasions pointing out differences in meaning and providing explanations as to why she is wrong. Instead, most of their effort centers on building uncritically on each other's suggestions.

The nature of the task may be a reason for much of the cumulative talk in all groups, as providing key words, emotion words and synonyms can spark another word to be suggested, building on, or elaborating on, the previous suggestion. A typical cumulative talk can be seen in the interaction between Adele and Erica in Excerpt 4.

Excerpt 4

Erica: what else is there

Adele: **ima** (there is) home **napisat kuća** (write home)

Erica: **kuća** (home) yes I'll write it here on this

Adele: **pare** (money) I'm remembering everything now

Erica: **A kako se** (and how you)

Adele: yes before **pare** (money) money

Erica: **pare** (money) yes I'm writing **pare** (money) here

Adele: **pa ja pare** (but yes money)

In Excerpt 4, Erica asks for a suggestion of a word and Adele provides two. The suggestions are met simply with Erica confirming that she is writing them down. Since the suggestions are key words part of the instruction they are not questioned, they are simply registered. This is an example of how the nature of the task enables more cumulative talk to occur. Another example is shown in Excerpt 5.

Excerpt 5

Bella: what is love

Mia: amour (love)

Bella: famille (family)

Mia: des sports (sports)

Avery: friends how is it (inaudible) friends amigos (friends)

Shane: amigos (friends) yes but that is

Bella: not that I want it as a key word but still

Shane: you write better than me

Mia: les intrests (the interests)

Avery: three words in one

Shane: I don't understand what we're supposed to write on all

Mia: isn't voyageur (travel) travel

Bella: yes

Avery: hello are we supposed to write three words in one note

Mia: no one word

Bella: one word on each note if you can write it using one note

Avery: ok

In Excerpt 5, I would like to point out the uncritical building of words for the word wall. Several words are suggested by Avery, Bella and Mia, who all have their own ideas about which words to include. Their unique contributions testify to the individual engagement of the task, as they are not collaborating as such, but rather throwing everything on the table as it were. There is no reasoning or criticizing of suggestions. Instead, words are written down and posted without question, even as Bella states that she is reluctant to use her suggestion as a key word for her text. The atmosphere is positive and there is a sense of a common goal as Avery's question regarding the instruction is answered amiably, but there is no public reasoning or explanation given for the choice of words. Though reasoning and collaboration can be seen in the exploratory talk taking place in Excerpt 6 below, where Alan asks Frank for his opinion.

Excerpt 6

Alan: Frank, Frank **a muna me shkru gjini ose robt... gjini ose robt... robt**
(Frank, Frank can I write family or subjects... family or subjects... subjects)

sounds really crude that's why

Frank: yes, but it really isn't it is yes

Alan: It is **robt robt e mi** (subjects my subjects)

Frank: yes, or you could write them both

The context in Excerpt 6, is that the group is working on different words for *family* using different named languages in their repertoire. However, Alan is unsure of which word to choose in Albanian, afraid that one of the words *robt*, may be too crude and asks Frank for his input. Here, the reasoning is made public and the opinions of a peer are sought in order for a joint decision to be made. Alan and Frank engage in this type of talk on several occasions throughout the second lesson, asking each other for opinions on different words, regarding meaning, appropriateness and spelling.

Exploratory talk can be filled with extended challenges from peers, holding fellow students accountable for their contributions to the task. The difference between disputational talk and exploratory talk in this regard is that extended "challenges are justified and alternative hypotheses are offered" (Mercer, 2004, p. 146) in exploratory talk. An example of such a challenge can be seen in Excerpt 7, where Adele thinks she has found a synonym pair in the words *grateful* and *proud*, until Erica challenges her by giving different definitions of the words.

Excerpt 7

Adele: **Našla sam** (I have found) which two words that are

Erica: which

Adele: isn't *grateful* and *proud* different words for *proud grateful* still *grateful* means thankful and *proud* that is also thankful

Erica: no no *grateful* means thankful *proud* is like proud

Adele: oh uhm

Erica: *grateful* is like you are happy with what you have in life

Adele: oh

Erica: *proud* is like you are happy that you have accomplished something

Adele: (inaudible) man what words are there

In Excerpt 7 Adele is very excited to say that she has found a synonym pair for them to write. As soon as she announces the two words, however, Erica intervenes saying that they are not a synonym pair. While Adele responds with a short *jaha* (roughly meaning *oh*), Erica goes on to explain the meaning of each word thereby providing reason as to why they are not a synonym pair. Similar challenges can be seen in Adam, Alan and Frank's group regarding both meaning and spelling of words. These types of challenges are not ill-intended but part of the process of completing the task and doing so correctly. I see it as a way of helping each other out and taking pride in the collaborative work.

Looking more closely at the exploratory type of talk, I want to draw attention to the different functions that have exploratory traits. All functions that make reasoning visible, provide explanations or rationale, challenge, counter challenges and encourages collaborative efforts by, for instance, asking questions have exploratory traits. Functions adhering to this description are: *challenging peer's answer*, *providing explanation/rationale for an answer/suggestion*, *responding to challenge from peer by standing your ground*, *asking for- and explaining/defining a concept although sometimes incorrectly*, *asking for- and providing the meaning of a word/phrase*, *asking about/explaining writing conventions*, *helping peers to spell*, *inviting peers to provide feedback*, *encouraging group effort*, *putting trust in the linguistic ability of your peers* and even *looking up the spelling of words online* can all contribute to exploratory talk. Still, I want to highlight that it is not so much the function in itself that is exploratory or not, it is the way in which something is put forward, the tone of voice and the intentions behind what is said. Exploratory talk is characterized by a will to help each other out, with students taking turns being the more capable peer and seeking a genuine collaboration in order to complete a joint endeavor. Although it is not the main type of talk for two of the groups, exploratory talk is present to a great extent (24.3 to 69%) in all four groups, suggesting that learning in this second lesson was made possible.

Summarizing the results

In this chapter I have addressed the question: a) *What named languages do students employ and what are the affordances and limitations of their translanguaging?* In doing so I have pointed to translanguaging constellations that students choose to employ. The most common translanguaging constellation involves the use of Swedish and the second most common involves the use of English. The LOTS and second foreign languages are used to almost the same extent (ranging from 5.5 to 5.6%).

There is a tendency to use more of the LOTS when the language (for example, Bosnian) is shared by everyone in the group. Analysis also revealed that the student using Russian, who was the only speaker of Russian in the classroom, limited her use of this language since the language was not shared with anyone else.

While translanguaging, different types of affordances become available to students. The most common affordance was planning-organizational, followed closely by cognitive-conceptual, linguistic-discursive and affective-social. As the affordance categories of cognitive-conceptual and linguistic-discursive were hard to separate at times, combining these two allowed me to see how much of the interaction was spent working cognitively and linguistically on the task, which for all four groups was the main part of the interaction (ranging between 40.4 to 62.7%).

Within the affordance categories other results emerged, such as the function of *Showing/responding to interest in language ability* and the amount of *off-task talk* that was found. The first function was both offered and received positively, raising the status of students who are speakers of low-status LOTS. The second function of *off-task talk* (ranging between 0.4 and 7.6%) showed that even when named languages that are normally not used in the classroom, are invited, students still stick mainly to the task.

Last, I have shown that by looking at the type of talk present, it is possible to see that learning was made possible since exploratory talk was present in all student groups (ranging between 24.3 and 69%) through functions mainly belonging to cognitive-conceptual and linguistic-discursive affordances. This, in turn, suggests that translanguaging in the English classroom can be conducive to learning.

The topic of the next chapter is the interaction between students and artefacts made available in the two different classrooms.

CHAPTER 8: ARTEFACTS AND MEDIATED ACTION

This chapter presents results pertaining to research question: b) *What are the mediational properties of the writing tools introduced and how does this mediation shape students' writing experiences?* The data consists of the student utterances concerning tools in the two focus-group discussions. To answer the research question a qualitative, theory-driven thematic analysis was performed using Wertsch's definition of mediated action as the basis.

Participants

The focus-group discussions were carried out in Swedish¹⁹ at the end of the intervention, i.e., on the same day as the students completed the essay. Twelve students participated in the discussions, seven from Class A (Alan, Andrew, Emma, Erica, Ian, Ray, Zoe) and five from Class B (Amelia, Avery, Evelyn, Harper, Megan). Participation was voluntary and students could register their interest in taking part on the back of the consent forms. In Class A, 18 students volunteered and in Class B, 12 students volunteered. The students who participated were selected as they represented diversity in their language backgrounds. The participants are presented in Table 9.

Table 9. Participants in the focus group interviews

Class A	Language repertoire	Class B	Language repertoire
Alan	L1s: Swedish, Albanian, L2: English L3: German	Amelia	L1s: Swedish, Bosnian, L2: English, L3: German
Andrew	L1s: Swedish, Arabic L2: English	Avery	L1: Swedish, L2: English, L3: Spanish
Emma	L1: Swedish, L2: English, L3: Spanish	Evelyn	L1: Swedish, L2: English, L3: Spanish
Erica	L1s: Swedish, Bosnian, Croatian, Serbian L2: English, L3: Spanish	Harper	L1: Swedish, L2: English, L3: Spanish
Ian	L1: Swedish, L2: English, L3 German	Megan	L1: Swedish, L2: English, L3: Spanish
Ray	L1: Swedish, L2: English, L3: Spanish		
Zoe	L1s: Swedish, Arabic, L2: English		

¹⁹ All excerpt of student utterances in this chapter are provided in Swedish using normal font. My translation of Swedish utterances into English is provided in bold.

As shown in Table 9, five are simultaneous bilinguals or trilinguals of Swedish and another language, whereas seven are L1 users of Swedish.

Data collection

The data consists of two focus-group discussions of two aggregated groups, i.e., consisting of participants with shared experience, belonging to the same cohort of students and having the same teacher (Hydén & Bülow, 2003). The idea is to draw on participants' opinions and experiences as they interact about a topic provided by the researcher (Cohen et al., 2011), in this case the experience of the intervention. Discussions lasted approximately 43 minutes in Class A and 35 minutes in Class B. An interview guide (Appendix F) comprising 16 items was used. 10 interview questions and subsequent responses dealing with the tools introduced during the lessons prior to the writing task in lesson six were selected to be included in the analysis presented in this chapter. Both interviews were transcribed verbatim by me.

Data analysis procedure

Students' responses were sectioned into utterances using Bakhtin's (1986) definition of an utterance, which is a speech unit determined by a change in speaker. The utterances were then subjected to a latent thematic analysis, staying close to the spoken word while also taking an interpretative view of what is said to go "beyond the semantic content" (Braun and Clarke 2006, p. 84). The latent analysis was necessary in order to capture students' use of words with similar meanings, as a manifest analysis would have risked "significant data loss" (Cohen et al., 2011, p. 567). An example of this can be found in students using the word 'help' instead of 'tools'.

The analysis was divided into three stages. First, each utterance was coded for the tool that was referenced and the mediation of said tool. Second, the mediation codes were grouped into themes. Third, the causal effect of the mediation was analyzed resulting in codes which were then grouped into themes which illuminate the impact on students' writing.

I will start by detailing the results of the analysis concerning the secondary artefacts, as these are physical tools that can be discerned with the naked eye. Next, I will move on to the tertiary artefacts. Finally, I will present how the mediation of both secondary and tertiary artefacts shaped students' writing processes.

The mediation of secondary artefacts

During the lessons preceding the writing task, a total of six writing tools were introduced that can be categorized as secondary artefacts. These include the mind map from lesson one, the word wall from lesson two and the digital tools, namely online dictionaries (mainly Google Translate), spelling and grammar checker, word prediction and online searches.

The first stage of the analysis of student responses regarding these six artefacts resulted in 23 mediation codes ranging from *correct spelling* and *translation* to *self-confidence* and *subject knowledge*. In the process of this analysis, a conscious decision was made to disregard frequency of the different codes and instead treat all codes as important (Cohen et al., 2011, p. 572). As a second stage these codes were grouped together to reveal themes as suggested by Cohen et al (2011). In doing so it was important to show any resistance students may have in using the different tools, thus both confirming and disconfirming evidence of mediation of secondary artefacts. This second stage of the analysis resulted in six overarching themes in the mediated action described by the students: a) *Idea generation*, b) *Memory*, c) *Lexical access*, d) *Metalinguistic awareness*, e) *Essay outline*, and f) *Affirmation*. A description of these themes and what they contain, is available below.

- a) *Idea generation* - includes the ideas that students themselves produce in order to write their texts, but also the assembly of ideas from other sources, such as through interaction with classmates, using information based on experience or provided in texts of different kinds. In this theme I therefore include the amassing of subject knowledge, in this case about *A Good Life*, that students need in order to write an essay on this topic.
- b) *Memory* - involves both memory retention, as in the ability to remember something over a period of time, but also external memory systems, such as a checklist, that can be used both to assist and alleviate memory.
- c) *Lexical access* - comprises everything dealing with vocabulary, such as the meaning, translation, spelling and pronunciation, of words.
- d) *Metalinguistic awareness* - refers to a meta understanding or focus on language, of linguistic building blocks, and the ability to compare and contrast different linguistic elements both within and between different named languages.
- e) *Essay outline* - concerns a skeletal frame consisting of the different parts of an essay, such as introduction, arguments or ideas and conclusions. An outline can also include summary points for each paragraph to show how the text will unfold.

- f) Affirmation - encompasses emotions of support, confirmation, validation, self-confidence and a general sense of composure.

Following Cohen et al's (2011), the mediation of the secondary artefacts is presented in Figure 14 showing the causal relationships between each artefact and the six different themes. The mediational themes are shown in rectangular boxes in the center of the figure and the six secondary artefacts in ellipses in the periphery on both sides.

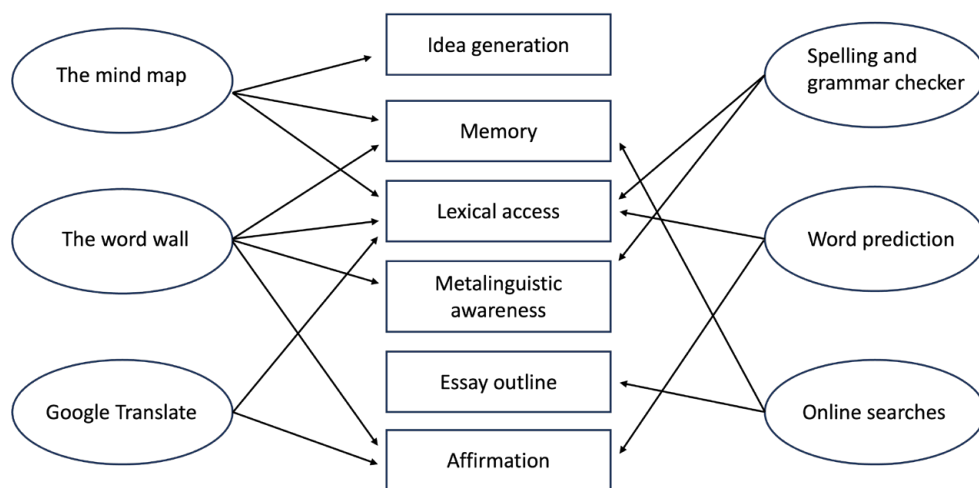


Figure 14. The mediation of secondary artefacts

I would like to point out that the mediation themes do not have equal value, as can be seen in terms of the number of arrows pointing to each theme in Figure 14. As an example, lexical access is mediated by five out of the six secondary artefacts, while essay outline is mediated through online searches only. It should moreover be noted that Figure 14, and the main results in this chapter, are based on students' utterances in the focus group discussions, which could be both short and long. Further, it is entirely possible that the artefacts introduced in the lessons mediated more during the writing process than what was mentioned by the students in the focus-group discussions.

Below, I present each individual artefact in the chronological order in which they were introduced to the students. Even though some of these artefacts have overlapping qualities, they will nonetheless be described and discussed individually to emphasize the mediation emanating from each tool specifically.

The mind map

The mind map is linked to three mediational themes: *idea generation*, *memory* and *lexical access*. While working with the mind map, students described generating ideas for the essay they were to write three weeks later. They further described how working with their classmates, interacting about their different mind maps, introduced them to new perspectives that they had not associated with the topic themselves. The interaction led students to discuss the different nodes on the map in greater detail, thinking in terms of chain-of-events instead of just a sub-topic to *A Good Life*, situated in the parent node in the middle. Comparing mind maps led students to feel confident about their own mind map and the different nodes they had given space within, an example of which can be seen in Figure 15.

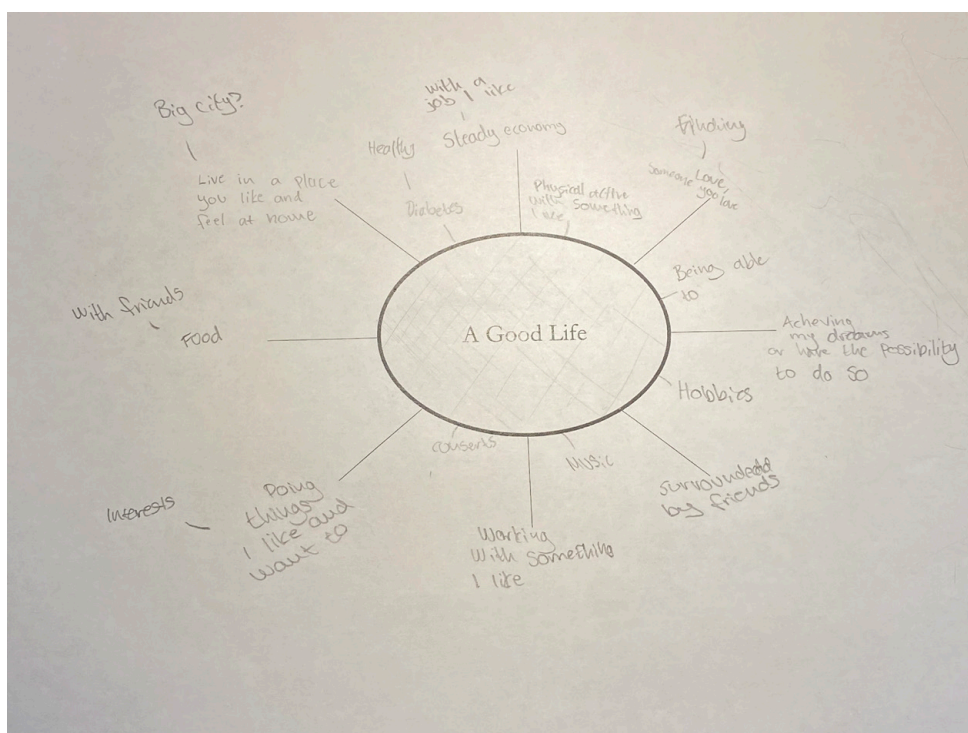


Figure 15. Example of student mind map.

In terms of memory, the nodes of the mind map were seen as representative of different possible sub-topics to include in the text, turning the mind map into a check list or external memory system (EMS). A few students (Alan, Andrew and Ian) reported that the act of creating it had mediated memory retention resulting in them being able to remember what had been written on the map without looking at it. Ian additionally clarified that even though he did not look at the map, he picked what he thought was most important from the memory of the map when writing his essay.

Last, the mind map mediated lexical access, as vocabulary associated with each sub-topic of *A Good Life* were written on the child nodes in the map. This can be seen in Evelyn's statement in Excerpt 8:

Excerpt 8

sen var det typ lite påminnelse också amen typ vilka ord man kan använda till
just den kategorin

**(then it was like a reminder too like what different words you could use for that
category specifically)**

In Excerpt 8, Evelyn uses the word 'category' to refer to the different nodes on the map. Her thoughts about the mind map providing words to be used in the writing of the essay was supported by Amelia and Harper, chiming in with agreement.

Although all of the students in the focus-group discussions were positive in terms of the mediational properties presented by the mind map as a tool, one of the students, Andrew, displayed resistance in using it. The resistance stemmed from a feeling of stress, that looking at the mind map would be an additional task to cope with while writing. Andrew's decision was therefore to forego the mind map in the sixth lesson and write his essay without it. In this particular case, the tool as such mediated unwanted feelings when the pressure was on to write an essay, adding to the burden of the task instead of simplifying it.

While the mind map was the main focus of the first lesson, the second lesson was spent almost entirely on the creation of the word wall, the second secondary artefact, the mediation of which is presented below.

The word wall

The analysis of the mediation of the word wall yielded the following mediational themes: *metalinguistic awareness*, *memory*, *lexical access* and *affirmation*. When asked

about the process of creating the word wall, Alan was particularly positive about the potential of connecting the different languages in students' repertoires, saying that different sentences and expressions in English require the use of different named languages. He further pointed to the fact that most of the students in class are multilinguals and use their languages for translation purposes while thinking. Making connections between the languages was facilitative in his opinion, an opinion shared by Zoe who similarly pointed out that making connections between named languages, to fill lexical gaps, specifically, was useful to her. MEM (minoritized emergent multilingual) students Alan and Zoe, being speakers of a LOTS, further posited that creating a word wall is beneficial to speakers of several languages, and perhaps also to students who struggle with English. If students are struggling, Alan suggested, the word wall could be a great tool to be used as a stepping stone until the struggling student is able to visualize the wall internally. Megan, an EM (emergent multilingual) student with L1 Swedish, equally found it helpful to use both Swedish and English in the creation of the word wall, suggesting that the mediational properties of the wall may not be tied to the number of named languages or a specific L1 included in students' repertoires. All of these utterances point to the mediation of metalinguistic awareness. When students created the word wall, the way they used their languages and the knowledge they possess to navigate between languages became evident to themselves.

As with the mediation of the mind map above, several students talked about the word wall's mediational effect on their memory. Amelia, Avery, Evelyn, Harper and Megan in Class B related how the creation of the word wall had made memory retention possible, to the point that they did not need to look at the wall to remember what was there. The following exchange in Excerpt 9 between the Class B students depicts the mediation on memory presented by the word wall:

Excerpt 9

Harper: ja men just för att det var typ inte vi lärde ju oss det inte på ett vanligt sätt vi brukar inte sitta ner och typ göra nånting kul av det

(yes but just because it wasn't like we didn't learn it in a normal fashion we don't usually sit down and do something fun with it)

Megan: mm (mm)

Harper: så det gjorde att man kom ihåg det mer under man behövde inte alltid kolla det satt liksom redan i huvudet

(so that made you remember it better during, you didn't always have to look, it was already there in your head)

Amelia: ja (yes)

[...]

Evelyn: för att det hade blivit typ en grej av det

(because we made a thing out of it)

Harper: ja (yes)

Avery: det var mer en (ohörbart) jämfört med en vanlig lektion så

(it was more a (inaudible) compared to a normal lesson, a normal like)

Evelyn: det var utöver det normala

(it was beyond what was normal)

Here, they are discussing the creation of the word wall and the mediation of memory resulting from the experience. Harper, in the first utterance, even goes as far as to discuss learning, as in the experience of creating the word wall had resulted in learning what was on it. The memory of the contents of the word wall is illustrated in her choice of words, as she says that she didn't have to look at the word wall because "it was already there in your head".

As the name of the tool suggests, the word wall featured an array of different kinds of vocabulary that could be used when the students were to write their essays. Student utterances in focus groups detail this mediation in terms of access to specific types of vocabulary, such as synonyms and linking words, but also phrases such as sentence starters. The lexical access meant that students could look at the word wall to double check spelling of known words and to seek out words with similar meaning to prevent the repetition of words in their texts. The mediation of lexical access further meant that students could take inventory of words that could be used in different sub-topics of their essays, deciding on words they felt best matched their intended meaning. The word wall mediated a buffet of words of sorts, for students to pick and choose as they saw fit.

Ray, one of the students who did not use the word wall while writing, remarked on the support the tool presented. Even though he did not need to use the word wall during the writing process, it was reassuring to know it was there and that all he had to

do, if he ran into problems, was to look up. This type of support, which I have chosen to include in the mediational theme of affirmation, is ubiquitous to several of the secondary artefacts, not least of all Google Translate, to which I now turn.

Google Translate

Even though several online dictionaries were introduced in the fifth lesson, Google Translate (GT) remained the favored option among students. However, the mediational theme found for GT was not only *lexical access* but also *affirmation*. Regarding *affirmation*, several students pointed to the fact that having access to GT was not just reassuring, but also relieved stress. This sentiment can be seen in Excerpt 10 by Erica:

Excerpt 10

alltså jag tycker mest jag tycker det är enklare att skriva nåt om jag har tillgång till att söka upp om jag skulle vilja för då har jag inte lika mycket stress över det och då hakar jag inte upp mig på nåt och det är mer likt det vardagliga livet liksom att vi har tillgång till nätet om vi behöver det och så

(well I think mostly I think it is easier to write something if I can look things up if I should want to, because then I won't feel as much stress about it and I won't get stuck on something and it's more like everyday life like having access to the internet if we need it and that)

In this utterance, Erica makes a comparison to 'everyday life', referring to the situation of completing a high-stakes task without the support of a tool, such as GT, as being something artificial and foreign to what she would normally do. She talks about feeling stressed and even getting stuck as a result of not having access to GT. Evelyn was of the same opinion, saying that being allowed the tool made writing more comfortable, while the prohibition of the same had the potential of leading to black outs. Amelia, echoing this reaction, similarly stated that having access to GT imbued a sense of freedom resulting in her using the tool less than she had predicted. According to her, not having access to this tool led to feelings of panic and blackouts, due to the pressure of having to know everything by heart, even spelling.

Spelling, moreover, was one of the main reasons to employ GT, which was included in the mediational theme of lexical access. Alan reasoned that many students use GT because of the irregular orthography of the English language, where letters often don't correspond to sound. Alan therefore argued that students need to use GT to confirm the spelling of already known words, saying that he often knows the sound of a word,

but not the spelling. This sentiment resonated with Zoe, who stated that she similarly uses GT to double check spelling. Amelia and Harper in the other class supported this finding, specifically mentioning looking up the word 'achieve' to check spelling, a word in which sound and letters do not correspond.

GT was used to translate unknown words as well. Having pondered the missing word for a while, Harper eventually gave up and found 'depending on' using GT. Zoe similarly stated that she used GT to translate through the use of Swedish. However, there was some resistance in using GT for unknown words. Alan and Zoe both talked about the risks involved in accepting the translations suggested without scrutiny. Zoe stated that there were instances when she knew the suggestions were inaccurate, resulting in her being wary and not accepting every translation by default. But then again there were other tools mediating lexical access that could equally be relied upon, such as the spelling and grammar checker discussed next.

Spelling and grammar checker

The analysis of the mediation of the Chromebook's spelling and grammar checker resulted in two themes: *lexical access* and *metalinguistic awareness*. The mediation of lexical access was discussed by all the students in Class B and by Emma and Ian in Class A. While Megan emphasized the value of the incorrect spelling being signaled instantaneously, Harper was more enthused about the tool's indication of grammatical errors, commenting that this was a relatively new feature²⁰ that they had not had access to before. She continued by saying that this tool made her aware of the grammar she was using, as her mistakes were highlighted. According to Harper, becoming aware of grammar mistakes caused her to think twice about her use of grammar the next time around instead of being oblivious to her errors. Another built-in software available in students' Chromebooks was word prediction, presented next.

Word prediction

Although the built-in word prediction in the students' Chromebooks was not discussed at length in the two focus-group discussions, the mediation themes of *lexical access* and *affirmation* could be gleaned from students' utterances. Megan was enthralled by the machine's ability to predict words that she could use while writing. She even used the word 'scary' to refer to the software's capacity of suggesting the exact same words that

²⁰ A quick google search revealed that the implementation of a grammar checking tool for Chromebooks was something that Google was discussing in October 2020, the semester before the data for this study was collected. I was, however, unable to find the actual implementation date.

she had been thinking of, providing affirmation for her own choice of words. This opinion was supported by Amelia, saying that this was the case even when using less common words. Avery, on the other hand, pointed to the lexical access made available by the tool and the ease with which he only needed to click the arrow to incorporate the ready-made suggestions. Another tool that was discussed briefly was online searches, which concludes the mediation of secondary tools below.

Online searches

Alan was the only one to discuss online searches, and the mediation thereof, in the interviews. The analysis of his responses yielded an *essay outline* and *memory* as mediational themes. He went into detail revealing how he used the search string 'how to write an essay' online to help him with the process of writing his text in terms of paragraphing, number of arguments to use and conclusions to draw. This essay template, he said, aided his memory so he would not forget what to include as he went about writing his text. The template can therefore be understood as mediating both an essay outline and memory, as it served as an external memory system (EMS), helping Alan to remember how to organize the textual elements involved.

Summary: secondary artefacts

The mediational themes that were central to secondary artefacts were *lexical access*, *memory* and *affirmation*. These types of mediation were referred to by several of the students and for many of the artefacts, as shown by the number of arrows in Figure 14. Affirmation, in particular, tended to be heavy on students' minds, as they described feeling less stressed when the use of secondary artefacts was permitted.

The mediation of tertiary artefacts

The analysis of the focus group utterances concerning the tertiary artefacts was completed in similar fashion to that of the analysis of secondary artefacts. The thematic analysis resulted in the same six mediational themes as for the secondary artefacts, namely: *idea generation*, *memory*, *lexical access*, *metalinguistic awareness*, *essay outline* and *affirmation*. Figure 16 illustrates the causal relationship between each of the six tertiary artefacts (in ellipses) with the mediational themes in boxes in the center.

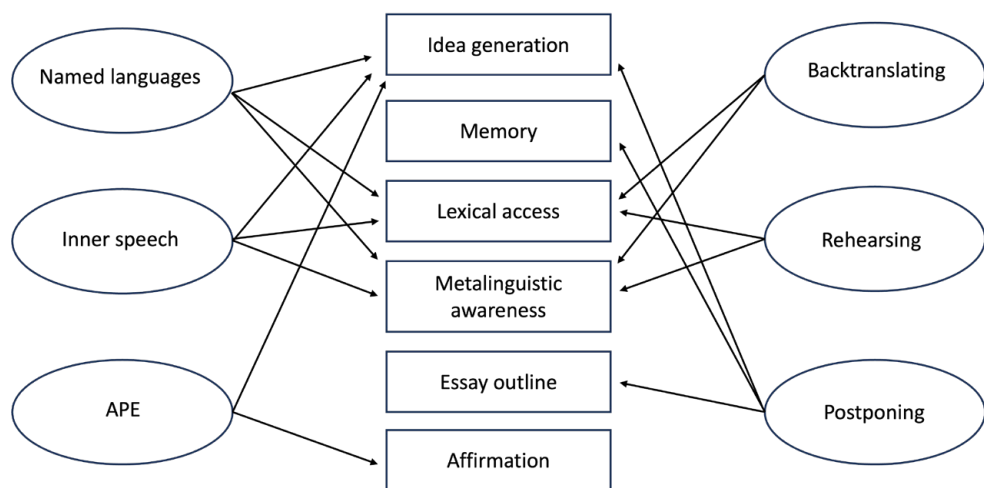


Figure 16. The mediation of tertiary artefacts

As shown in Figure 16, *lexical access* continued to be central across both types of tools, the explicit and physical secondary artefacts and the implicit and psychological tertiary artefacts. However, the student utterances regarding the tertiary tools tended to be more focused towards the mediation of *idea generation* and *metalinguistic awareness*.

Below, each tertiary tool is presented individually even though several of them share overlapping characteristics to exemplify the mediation specific to each. The resistance towards using an artefact will be shown where this is applicable. I will begin with APE, as this was the tool that was introduced first and continued to be used throughout the intervention.

APE (alone, pairs, everyone)

A decision was made to include APE in the implicit tertiary tools, even though this is a visible strategy many teachers employ in today's classrooms. The reason for characterizing it as an implicit tool is that it would be difficult for anyone not privy to what the students were doing in a classroom to discern its use. It separates itself from the other tertiary artefacts in this study, as it not only focuses on the individual's internal use, but rather is a hybrid tool consisting of both individual intramental processes, and a collective tool, used for intermental processes as students interact.

Analysis revealed that APE mediated *idea generation* and *affirmation*. Several of the students in Class B mention that having their ideas about the topic confirmed by a partner felt reassuring and gave them confidence in their writing. Harper talked about the risk of misunderstanding when you have to think about a topic on your own.

Discussing your thoughts with a friend and having these thoughts legitimized is encouraging. Megan continued this train of thought by adding that she believes the discussion in pairs led to more students feeling confident enough about their ideas to want to share them with the entire class (the final stage of APE). Avery agrees with his classmates, accentuating the need to brainstorm with a peer for confirmation.

Class A mainly talked about the idea generation that resulted from using APE. Although they liked the fact that they had to think on their own to start with, they felt inspired by the ideas of their classmates. One of the aspects frequently discussed in connection with the written part of the national exam is the ability to use different perspectives when writing about a topic. According to the students in Class A, using APE allowed them to both gain new ideas and to arrange them in levels starting with their personal ideas, their friends' ideas and finally the ideas of the community and society at large. APE therefore allowed them to organize their ideas into tiers, which could then be extrapolated to the writing of their essays. Emma stressed how much she liked using APE, saying "I learn so much better when I discuss with others". The mediation of idea generation was also discussed in relation to two other tertiary artefacts, namely named languages and inner speech. I now turn to named languages.

Named languages

Analysis of focus-group utterances on the use of named languages yielded *idea generation*, *lexical access* and *metalinguistic awareness* as mediational themes.

In talking about using named languages, three of the students in Class A, who are speakers of a LOTS, reflected on their language use. Alan, Erica and Zoe all said that using Swedish was essential. Zoe emphasized the use of Swedish specifically to generate ideas as she has a larger vocabulary in Swedish and can use it whenever she runs out of ideas for what to write about in English. This suggests that idea generating and lexical access may be mediated simultaneously. Likewise, Erica stated that she uses Swedish when she writes in English, and never Bosnian. The reason for this, she believes, is that she was born in Sweden and has spoken Swedish from birth, while other students, who may have arrived in Sweden more recently, will use more of their LOTS, as their Swedish may not be as strong. Both Zoe's and Erica's statements imply that proficiency may be a factor. Ian, an L1 speaker of Swedish, corroborates this, saying that he only knows Swedish and English. Realizing he takes German as well, he changes his mind saying he knows German too, but that he doesn't feel comfortable using it (as a tool to write in English), indicating that he doesn't know German well enough. In the other class, Megan said that she knows Spanish but not well enough to use it as a language of thought to think about words. For that purpose, she only has English and Swedish to fall back on.

In terms of lexical access, Amelia had the following to say in Excerpt 11:

Excerpt 11

jag blandar jättemycket jag tänker på engelska eftersom jag skriver på engelska men jag tänker också på svenska men sen finns det vissa ord som jag tycker är lättare på bosniska och då tänker jag på det amen vi skriver detta sen så översätter jag det och sen skriver jag den liksom

(I mix [the named languages] a lot I think in English because I am writing in English but I also think in Swedish but then there are certain words that I find are easier in Bosnian and then I think about that and oh well we'll write this later I'll translate it and I'll write it like)

Here Amelia specifically expresses how using Bosnian mediates lexical access, as certain words are easier to retrieve using this language. She moreover makes another point with her utterance, namely that she has to use English for thinking as she is writing in English. A sentiment which is echoed by Megan.

Andrew is of a different opinion, expressing his resistance in using anything but English when writing in English. According to him, using other languages, especially Swedish, will result in more errors. He therefore uses only English when he writes his texts. Alan agrees with Andrew, saying that there is a risk involved in using Swedish, which may result in Swedish sentence construction being transmitted. Students consciously reflecting on their use of named languages and the different mediation that results from each language points to a metalinguistic awareness, i.e., knowing when to use a named language and for what purpose. This perception is repeated when talking about the mediation of inner speech, which will now follow.

Inner speech

The analysis revealed that inner speech mediates *idea generation*, *lexical access* and *metalinguistic awareness*. This is perhaps not surprising as these tools overlap in the way they are used as languages of thought, as mentioned above. The opinion that inner speech mediates thoughts in English in order to formulate text in the same language is reiterated by Andrew and Megan. Several of the students (Amelia, Avery, Harper, Megan, Ray) remark that using inner speech as a tool when writing is a natural process. However, Alan remarks that having access to multiple languages in your mind will result in inner speech mediating dialogues with oneself in different languages. This type of inner dialogue using named languages in students' repertoires is what I refer to as silent translanguaging. To engage in silent translanguaging, a level of metalinguistic

awareness is required for students to be able to translanguage flexibly for dialogic purposes in their minds.

The idea generation mediated through the use of inner speech was what I would refer to as context-specific idea generation, also present in think-aloud-data while students were writing an essay in English in Gunnarsson (2015). In this type of idea generation different languages will be invoked for different contexts resulting from experiences that students have had in these specific languages. Alan's utterance in Excerpt 12 reflects this type of context specific idea generation:

Excerpt 12

till exempel det med siffror och liknande tycker jag det är enklare att ha det på albanska än på svenska för att det blir (ohörbart) det blir typ ett mönster i mitt huvud som jag tycker är mycket enklare att skriva ner och såna saker men med viktiga detaljer eller väsentliga detaljer tycker jag svenska är bättre

(for example numbers and such I think it's easier to have that in Albanian than in Swedish because it becomes (inaudible) it becomes a pattern in my head that I find is much easier to write down and such but with important details or essential details I think Swedish is better)

In Excerpt 12 we see different named languages fulfill different communicative needs. Alan's utterance points to the mediation of a metalinguistic awareness, resulting in the use of inner speech and silent translanguaging in different languages for different contexts and purposes.

Amelia stresses the importance of using her inner speech through silent translanguaging when she gets stuck or forgets a word in English. Her inner speech can then be used to mediate lexical access as she searches for the missing word using Bosnian and Swedish. She explains that she had such an incident recently, where she couldn't think of the word for 'traffic lights' in English accessing the word first in Bosnian. Lexical access was similarly mediated through back-translating, discussed next.

Back-translating

Analysis revealed that back-translating mediated *lexical access* and *metalinguistic awareness*. Although there were few utterances dealing with back-translating exclusively, some of the answers were quite lengthy, providing insight into the student's thinking about the tool. Alan's utterance was an example of this, disclosing how he uses both Albanian and Swedish to translate back and forth into and from English. He said that sometimes

it is easier to back-translate using Albanian, while at other times it is easier to use Swedish, revealing his metalinguistic awareness. Now and then he will know the sentence he wants to write in Albanian and Swedish but not in English. Still, he said, back-translating makes it easier to figure out the full sentence and use the correct sentence construction in English.

When it comes to lexical access, Harper had the following to say in Excerpt 13:

Excerpt 13

men det med språken jag tänkte alltså äh jag varierar både mellan engelska och svenska ju för att jag jämförde mycket vilka ord jag kunde använda i vissa sammanhang och då tänkte jag först vilka ord som fanns tillgängliga på svenska och sen hur dom är på engelska och sen lite tvärtom så det var man gör nog det lite hela tiden utan att tänka på det

(but this about the languages I was thinking like uhm I vary the use of both English and Swedish like because I compared what words I could use a lot in different circumstances and then I thought first about what words that were available in Swedish and then what they are in English and then the other way around so it was I think you do this a little all the time without thinking about it)

According to Harper, back-translating is something done unconsciously while she is writing. Having just completed a writing task before the focus-group discussion, she said she thought more about her process on this occasion. In her statement above she reveals that she uses back-translating to compare the words available to her in Swedish and English to convey the intended meaning. She does this by first taking inventory of the words available to her in Swedish and then translating them into English. In her saying "and then the other way around", she indicates that she translates the English words back into Swedish, i.e. back-translating. Both Amelia and Megan agree with Harper.

One student, Ray, showed resistance to using back-translation as a tool. He admitted to using both English and Swedish as languages of thought to read and to translate, but if he switches between the languages too often, he says, he will end up writing in English using Swedish grammar, or the other way around. Although the tools have similar characteristics, resistance was not found in rehearsing, presented next.

Rehearsing

Analysis showed that rehearsing mediated *lexical access* and *metalinguistic awareness*. Several of the students in Class A (Andrew, Emma, Erica) remark on the mediation of lexical access in order to prevent repeating themselves, using the same words on numerous occasions in their texts. Erica specifically talks about finding synonyms to express herself in different ways.

The students in Class B talked about rehearsing as a way to try things out in their text. According to Megan, this may come to pass when you are writing and become unsure of how to phrase things. When this happens, she will try to reformulate the sentence. Avery, Amelia and Harper all agree with this statement, Harper saying that sometimes you know the word you want to use but not the sentence, indicating that it is about how to phrase it. This understanding of how to use words by rephrasing and comparing different available options signals a metalinguistic awareness of how to be creative with words and phrases to be able to communicate in writing.

Excerpt 14 further points to metalinguistic awareness and an understanding of their own writing process, as Harper realized that these writing tools, back-translating and rehearsing, can be combined.

Excerpt 14

Harper: men alltså jag tänker ju på svenska och sen så kommer jag fram till det på engelska men om jag inte gillar det jag kommer fram till på engelska så går man ju tillbaka och försöker göra om man kanske kombinerar dom lite faktiskt

(but like I think in Swedish and then I'll come up with it in English but if I don't like what I come up with in English then I'll go back and try to redo it maybe you combine these two a little actually)

Amelia: mm (mm)

Tina: det är inte helt ovanligt att man gör **(it is not unusual that you do)**

Harper: nej för att om jag inte gillar den meningen eller inte kan formulera mig så som jag vill på engelska så då går jag vidare till vad var det rehearsing och försöker komma på andra ord

(no because if I don't like that sentence or can't express myself like I want to in English so then I'll go on to, what was it rehearsing, and try to figure out different words)

Megan: mm (mm)

Harper: och då kanske jag sen går vidare till på svenska då börjar jag om på svenska med ett nytt ord och så

(and then I might go on to Swedish and then I'll start over in Swedish with a new word and so on)

Amelia: och då kommer ju också inner speech och då pratar man ju också med sig själv och sånt

(and then you'll also use inner speech, then you'll also talk to yourself and things like that)

Avery: jo (yes)

In the first utterance Harper started off talking about back-translating from Swedish into English, the mediation of which allows her to 'come up with it in English', pointing to the translation of Swedish words into English. If she was unhappy with the result, she would go back to Swedish to try another translation. This is when she realized that back-translating can be intertwined with rehearsing, as she tries out different translations to match her intended meaning. Harper's reasoning suggests a cyclical process in which words are translated and rehearsed until a decision is made to use them in writing. Amelia, understanding Harper's way of thinking complemented the discussion by adding her own thoughts on how inner speech, or silent translanguaging, can be incorporated into this line of reasoning.

Next, I turn to the last of the tertiary artefacts, postponing.

Postponing

The analysis of students' responses showed that postponing mediated *memory*, *essay outline* and *idea generation*. In Class A, Zoe was the only student who regarded postponing in a positive light. According to her, postponing mediated an essay outline by allowing her to divide her text into parts. She would then return to these different parts to fill them with text.

The other students in Class A were not as positively inclined. They rejected the use of postponing, as this would inevitably lead to frustration, having not been able to solve a problem in the text, or a fear of forgetting what was wrong with the text and, hence, why it was postponed. Although Alan agreed with this resistance, especially as he was afraid of losing his trail of thought, he still admitted to sometimes writing something in Swedish, "or in a different language", or writing something incorrectly in English.

When returning to this part of the text he would then be reminded of what needed to be changed.

In Class B, the discussion on the use of postponing as a tool shed a different light. Amelia described that she uses postponing when she encounters a problem or is unsatisfied with what she has produced. When she doesn't know how to resolve it, she will hit 'enter' and work on a different part of the text only to return once she has finished those parts. As she has left a few sentences of the problematic passage untouched, she has a reminder of what the passage was supposed to be about and why it was postponed. Evelyn remarked in a similar fashion how she stumbled upon a sentence that sounded off while reading through her text. Not knowing how to fix the sentence she marked the spot and continued writing the next passage. She then returned to work on the sentence when she felt she had more time. This idea of returning to a spot in the text that has been marked can also generate new perspectives and new ideas. According to Avery, if he does not know how to fix it right away, he will have an idea of how to fix it when he returns to the same spot.

Summary: secondary and tertiary artefacts

Comparing Figures 14 and 16, secondary artefacts mediate *lexical access*, *memory* and *affirmation*, while tertiary artefacts mediate *lexical access*, *idea generation* and *metalinguistic awareness*. Further, the thematic analysis revealed what was mediated through the tools we introduced. I now turn to looking at how the mediation of these 12 tools shaped the writing process.

The impact on students' writing

Research question c) (*What are the mediational properties of the writing tools introduced and how does this mediation shape students' writing experiences?*) not only involves the mediational properties of tools but also how the actions students took as a result of the mediation impacted their writing. According to Wertsch (1998) "cultural tools such as poles in pole vaulting and the forms of syntax used in solving multiplication problems are powerless to do anything. They can have their impact only when an agent *uses* them" (p. 30). I have chosen to call the themes resulting from this analysis *impact factors* in line with Wertsch's (1998) choice of words.

Drawing on the six mediational factors revealed in the thematic analysis, I returned to the students' utterances in the focus groups to discern how the mediation of tools may have shaped their writing. Figure 17 below provides what I call impact themes.

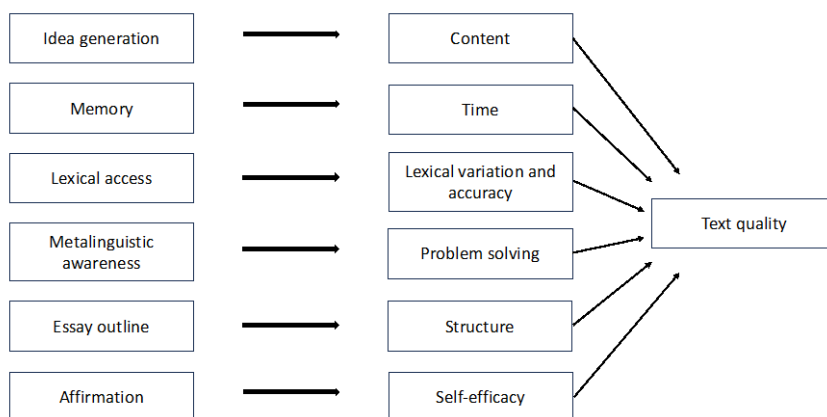


Figure 17. The impact factors shaping students' writing.

In Figure 17, the six mediational factors resulting from the thematic analysis can be seen on the left. While idea generation, lexical access and essay outline support students in their construction of the essay, metalinguistic awareness and memory support students' cognitive capabilities. Affirmation, the last mediational factor supports students emotionally with the task. Each of these mediational factors lead to an impact factor, which in turn is assumed to contribute to the quality of the text. These are: *content*, *time*, *lexical variation and accuracy*, *problem solving*, *structure* and *self-efficacy*. I will continue by discussing each mediational theme and connecting it to the impact theme using students' utterances in the focus groups as support to show how the writing process was shaped.

Impact on content

Five writing tools mediated idea generation: the mind map, the named languages, inner speech, postponing and APE.

In talking about the mind map, students' utterances pointed to students being able to pick and choose among the nodes on their maps and incorporating this content directly into their texts. Zoe illustrated this point in Excerpt 15 below:

Excerpt 15

min tankekarta hjälpte mig alltså jag alltså jag tycker det är så man ska skriva och så ska man välja så kan man lägga väldigt mycket energi på att välja och så

glömmer man liksom bort att skriva men jag bara tog tre saker som liksom som jag hade skrivit ner på min tankekarta som jag kände var bra

(my mind map definitely helped me like I think you have to write and then you have to choose and then you can put a lot of energy into choosing and then you forget to write but I just picked three things that I had written down on my mind map that I thought were good)

In this utterance, Zoe points to the energy she often spends on choosing what to write about. Thanks to the mind map, she had already listed her main ideas about the topic and was able to include this content in her essay with ease. Amelia, Harper and Megan, in the other focus group (Class B), equally pointed to the impact of the provided content and of being able to pick and choose from the mind map. According to Amelia this also had the effect of saving time that would otherwise be spent trying to figure out the content, i.e., idea generating, before the actual writing could commence.

The named languages and inner speech, which were closely linked in the student utterances, mediated a dialogue in students' minds which in turn had an impact on the production of content. As Andrew explained, "I think first what to write and then I write it". While postponing equally mediated idea generation, this idea generation was somewhat different as it often meant students gaining new perspective after having left a passage of their text only to return to it at a later stage. Having gained the experience of writing other parts of the text the students were given new insights and new ideas of how to proceed with the passage that had been postponed, impacting the production of new content.

Finally, APE, gave students an opportunity to generate ideas both on their own and with their friends. These ideas were then turned into content in their texts, wherein some of the students even organized the ideas into tiers representing the self, their friends, the community and society as a whole. Several of the focus-group participants mention the interaction of ideas as inspirational for the production of their texts.

Next is the mediation of memory and how this impacts students' distribution of time.

Time

According to student participants, memory was mediated through mind maps, the word wall, online searches and postponing. It was mediated either through *memory retention*, i.e., making the students remember over a period of time, or through *external memory systems* (EMS), which could assist or alleviate students' working memory.

The mind map, online searches and postponing mediated the students' memory, functioning as EMSs and checklists, which in turn assisted and alleviated memory for

other parts of the writing process. The only online search made was by Alan and resulted in a web page explaining the outline of a well-written essay, which he could then use as a checklist while writing his own text.

When students chose to postpone a part of their text, they generally marked the passage in one fashion or other to be able to find their way back. Marking the text in this manner allowed students to remember their initial thoughts about the passage and what had made them postpone it in the first place, again, assisting their memory.

The mind map further mediated memory retention as the act of creating the tool allowed ideas to solidify to the point of students not needing to check their maps to know what was written on them. The mediated action therefore impacted students' use of time when writing, with students saving time on idea generation and organization that could instead be spent on other parts of the writing process. On the topic of the mind map and the facilitation of time, Amelia had the following to say in Excerpt 16:

Excerpt 16

ja jag tyckte det var bra att vi tog det i helklass också så man fick liksom idéer av andra också och man var förberedd lång tid innan man skulle skriva så man kunde ju tänka lite så att man på plats inte behövde sitta och tänka jättelänge utan man kunde använda all tid till att skriva för att man redan visste ungefär vad man skulle skriva

(yes I thought it was good that we dealt with it in the bigger group too so that you got ideas from others also and you were prepared a long time in advance of the writing so you could say that when you were seated for the test you didn't have to sit and think for a very long time but rather you could use all the time available to write because you already knew kind of what you were going to write)

Student utterances equally pointed to the memory retention mediated by the word wall as the creation of the word wall had been something out of the ordinary that students remembered. This similarly had an impact on students' distribution of time, as students were already aware of their options in how to proceed with their texts in terms of what was offered by the word wall. Students like Erica pointed out the impact on time by saying that the word wall allowed her to write "better, faster". Needless to say, sentence starters, linking words, key words, synonyms and emotion words additionally mediated lexical access for both students who chose to look at the wall and for those who relied on their memory of the wall. The facilitation deriving from the mediation of lexical access will now follow.

Lexical variation and accuracy

Lexical access was mediated through nine out of twelve tools: the mind map, the word wall, GT, spelling and grammar checker, word prediction, named languages, inner speech, back-translating and rehearsing. However, lexical access was mediated somewhat differently depending on the tool. In the case of the mind map, lexical access was mediated as a reminder of the words the students could use. Likewise, the word prediction gave students possible suggestions of words to be used. The word wall mediated a similar lexical access, although this tool offered more than mere lexical items, as phrases and words that enhance coherence such as the linking words could be accessed. Using this tool, students reflected that they could find synonyms to avoid repeating themselves in the essay impacting lexical variation, which in turn is one of the criteria that teachers take into consideration for the assessment of national exams, discussed later in this chapter.

While GT mediated lexical access in terms of translations of unknown words, Alan, Amelia, Ray and Zoe agreed that it was mostly used to double-check both the meaning of known words and their spelling. Alan further pointed to the need to check his spelling due to the challenging spelling of the English language, where letters and sound do not always correspond. This type of mediation therefore impacted lexical accuracy, as GT made students avoid unnecessary errors in terms of lexical meaning and English orthography.

The lexical access mediated through named languages and inner speech was of a different kind. In this type of mediation, students explained that it was more about lexical retrieval, finding words to fill the lexical gaps in English. Sometimes words would be more easily accessed through one of the languages in their repertoire, which in Amelia's case was Bosnian, while at other times words would be more accessible through another named language. Filling these lexical gaps impacted lexical accuracy as sentences would become complete.

Finally, the lexical access mediated through back-translating and rehearsing contributed to both the impact on lexical accuracy and lexical variation. This impact was pointed to as students' utterances revealed a need to compare and contrast different words and sentences, as illustrated by Harper's utterance in Excerpt 17:

Excerpt 17

men det med språken jag tänkte alltså äh jag varierar både mellan engelska och svenska ju för att jag jämförde mycket vilka ord jag kunde använda i vissa sammanhang och då tänkte jag först vilka ord som fanns tillgängliga på svenska och sen hur dom är på engelska och sen lite tvärtom

(but the thing about the languages I thought like uhm I vary between English and Swedish because I compared a lot the different words I could use in certain circumstances and then I thought first about which words that were available in Swedish and then what they are in English and then a little the other way around)

This comparison was done both to vary their choice of vocabulary and to find the lexical items that best matched their intended meaning in the essay. Naturally, there is an overlap in students' ability to fill lexical gaps and make linguistic comparisons with the mediational theme of metalinguistic awareness and the impact on problem solving, presented next.

Problem solving

Problem solving refers to the different problems students may encounter as a result of writing an essay in English. These problems can be different in nature and concern anything from lexical gaps at the word level, to spelling and grammar, to trying to figure how to express the intended meaning by comparing and contrasting vocabulary using the entire linguistic repertoire through silent translanguaging. The word wall, the spelling and grammar checker, named languages, inner speech, back-translating and rehearsing all mediated metalinguistic awareness.

According to Alan, this mediation became apparent when working with the word wall, in which the connection was made between different languages to generate words for the wall. Zoe specifically stated that making connections between different languages was facilitative when filling lexical gaps, a typical problem to be solved.

The spelling and grammar checker was of great help according to Avery, Amelia, Emma, Harper, Ian, and Megan. The students in Class B were especially enthusiastic about the spelling and grammar errors that were signaled by the tool which they were able to fix before handing in their texts. Harper had the following to say in Excerpt 18, regarding the grammar feature of the tool with Amelia and Avery chiming in with positive reinforcement:

Excerpt 18

Harper: men ändå det gör att man tänker lite mer på ähm amen jag skriver have istället för has eller nåt sånt

(but still it makes you think a little more about uhm well I'll write have instead of has or something like that)

Amelia: ja (**yes**)

Harper: och den ändrar det då ser jag ju jaha vad jag gjorde för fel

(**and it changes it then I'll see aha what kind of mistake I made**)

Avery: ja vad man gjorde fel (**yes what you did wrong**)

Harper: då kommer jag ihåg det till nästa gång istället för att bara missa det helt

(**then I'll remember that for next time instead of just overlooking it completely**)

Being made aware of the mistakes not only made Harper solve the problem, but also made her think twice about how to use the same grammatical feature the next time around. This suggests that the tool's mediation of metalinguistic awareness had an impact that ventured beyond the completion of this particular writing task into preventing similar errors in the future.

Amelia explicitly talked about turning to her inner speech when she got stuck in her essay. The problem would then make her think in Swedish and in Bosnian impacting the finding of a solution. Zoe, in the other class, similarly stated that she uses English to think when writing a text in English, but when things get difficult, i.e., she runs into a problem, she turns to Swedish. Turning to other languages when the writing process turns problematic to hold an inner dialogue through silent translanguaging, which combines other languages with English, therefore impacts problem solving.

The phenomenon of problem solving can equally be found in students' utterances regarding back-translating and rehearsing. Emma, Erica, Megan, Amelia, Andrew and Avery used these tools to rephrase themselves to work around a lexical gap, to avoid repeating themselves or to solve the problem of how to express themselves to get their intended meaning across. Contrasting different options was found particularly helpful when words or sentences didn't seem to fit. Next, the mediation of an essay outline impacting structure follows.

Structure

Structure in this study encompasses the different parts that make a whole in terms of the finished essay, i.e., the building blocks needed to make an essay complete. In this particular case an appropriate structure of the essay entitled *A Good Life*, would entail an introduction, a main body, preferably with a few paragraphs containing different key ideas motivating the student's view of what *A Good Life* is, followed by a concluding

paragraph. Mediation of an essay outline was only present in two of the tools introduced to students, online searches and postponing. The only online search made was performed by Alan, who used the search string "How to write an essay" and who had this to say about the experience in Excerpt 19:

Excerpt 19

alltså jag kan skriva en essay men för att inte glömma liksom styckeindelning och liknande så sökte jag upp 'how to write an essay' så hade jag typ en bild eller typ en mall så stod det typ så här tre argument eller tre såna och sen en conclusion i slutet så att jag inte ska liksom glömma hur jag ska göra det så hade jag den typ som en mall

(like I know how to write an essay but in order not to forget like paragraphing and such I looked up 'how to write an essay' so that I had like an image or like a template and it said like this three arguments or three whatever and then a conclusion in the end so that I wouldn't forget how to do it I used that as a template)

Having found such a web site, explaining the different parts that need to be included in an essay, Alan proceeded to write his text accordingly, which impacted the structure of his final product.

When talking about postponing Amelia, Avery, Evelyn, Harper and Zoe all discussed marking passages in their text only to return to them at a later stage. Zoe talked about this in detail, as a way for her to outline her text, dividing the text into five parts which she would write about briefly before returning to each part and filling them out with text. Amelia explained similarly how she started on her introduction, wrote two sentences on her first paragraph and then moved down to proceed with other paragraphs before returning to the first. Writing small snippets of text, or marking the text in some fashion, signaling where the passages needed to be continued mediated an outline of the text. The outline could then be filled out with more words and sentences until the draft was complete and equipped with the characteristic structure of an essay.

Self-efficacy

Eleven of the students, all except Emma, talk about affirmation being mediated through one of the following tools: the word wall, GT, word prediction or APE. This affirmation took different shapes depending on the tool, but all of them ultimately lead to strengthening students' self-efficacy beliefs. APE mediated affirmation through

students validating other students in their thoughts about the topic, *A Good Life*. This is illustrated in Excerpt 20 by Harper:

Excerpt 20

man blir lite bekräftad också i ens tankar typ om jag om det är en specifik fråga och jag tänker på den själv så kan det ju vara att jag har fått fel uppfattning av den men om man pratar med andra så får man man bekräftas lite i det man tänker också

(you get validated too in your thoughts like if I if it's a specific question and I think about it on my own I could have the wrong idea about it but if you talk to others you get validation about what you're thinking)

This sentiment was endorsed by both Avery and Megan, who pointed to the mediation of affirmation impacting students' belief in themselves enough to contribute to whole class discussions.

While the word wall mediated confirmation of the spelling of certain words for Evelyn, Ray, who said he did not use the wall, felt comforted by the wall's existence. Alan reasoned that the word wall could be a great source of support for students less proficient in English and that it could function as a stepping stone until it was possible to visualize the support internally. This type of affirmation, more along the lines of a supportive structure or scaffolding, differed from that mediated through GT below.

Several of the students (Alan, Andrew, Ray, Zoe) discussed GT as mediating confirmation of their spelling and as a way to double check meaning of already known words. According to Amelia, Evelyn and Erica, prohibition of this tool resulted in feelings of stress, and even panic, whereas access to the tool imbued a sense of freedom and belief in their own ability. Amelia showing surprise at how little she used the tool now that she was granted access during a test-like situation, had the following to say on the topic of using GT in Excerpt 21:

Excerpt 21

ja jag blev lite förvånad jag använde inte (det) så mycket jag sökte upp typ achieve sökte jag på achieve så som jag trodde att det stavades sen så kom det upp och så dubbelkollade jag bara att det betydde det jag misstänkte att det betydde och så gjorde det det men inte mycket mer än så för att jag precis som du sade (Evelyn) det man får en frihet och då får man inte hjärnsläpp på samma sätt (som) när

man vet att nu måste jag kunna allting själv måste kunna stava allting så får man ju typ panik och glömmar allting

(yes I was a little surprised I didn't use (it) so much I looked up like achieve looked up achieve like I thought it was spelt and then it came up and then I just double checked that it meant what I suspected it meant and it did but not much more than that because I like you said (Evelyn) you gain a freedom and then you won't get black outs in the same way (as) when you know that you have to know everything on your own have to know how to spell everything then you'll like panic and forget everything)

Being able to use GT was a great sense of comfort to these participants, impacting their self-efficacy beliefs in the writing process. Erica stated that having access to GT was more like 'everyday life', suggesting that this was her normal process outside of test situations.

Summarizing the results

The twelve tools introduced to the students mediated the following: idea generation, memory, lexical access, metalinguistic awareness, essay outline and affirmation. While the majority of focus-group participants were positive towards the use of tools, it should be noted that five of the tools (the mind map, GT for unknown words, named languages, back-translating and postponing) encountered resistance by at least one student. Analysis show that these mediational factors shaped students writing in six different ways: the creation of content, time distribution, lexical variation and accuracy, problem solving, the structure of the essay and students' self-efficacy beliefs. These impact factors are assumed to contribute to the quality of the essay.

In the next chapter I present students' perceptions of the affordances and limitations of translanguaging and writing tools.

CHAPTER 9. AFFORDANCES AND LIMITATIONS: STUDENT PERCEPTIONS

This chapter focuses on student perceptions of affordances and limitations of translanguaging and writing tools. This is based on the analysis of the focus-group discussions and post-intervention questionnaire data and addresses research questions a) and b) (*What named languages do students employ and what are the affordances and limitations of their translanguaging?* and *What are the affordances and limitations of writing tools, other than translanguaging, and knowing the essay topic in advance?*). I begin by presenting the participants and data. I then present participants’ perceptions of classroom translanguaging and other tools.

Participants and data

The participants in the focus-group discussions are the same as in Chapter 8, thus including the same twelve participants, again listed in Table 10.

Table 10. Student participants of the focus groups and their language repertoires.

Class A	Language repertoire	Class B	Language repertoire
Alan	L1s: Swedish, Albanian, L2: English L3: German	Amelia	L1s: Swedish, Bosnian, L2: English, L3: German
Andrew	L1s: Swedish, Arabic L2: English	Avery	L1: Swedish, L2: English, L3: Spanish
Emma	L1: Swedish, L2: English, L3: Spanish	Evelyn	L1: Swedish, L2: English, L3: Spanish
Erica	L1s: Swedish, Bosnian, Croatian, Serbian L2: English, L3: Spanish	Harper	L1: Swedish, L2: English, L3: Spanish
Ian	L1: Swedish, L2: English, L3 German	Megan	L1: Swedish, L2: English, L3: Spanish
Ray	L1: Swedish, L2: English, L3: Spanish		
Zoe	L1s: Swedish, Arabic, L2: English		

The post-intervention questionnaire was completed by all participating students in Class A and B (N=48). This sample includes the focus-group participants. The questions in the post-intervention questionnaire included in the analysis for this chapter pertain to students’ perceptions of translanguaging and other writing tools.

The post-intervention questionnaire (Appendix C) was completed immediately after the students had written their essays at the end of the intervention. It contained 23 questions and took 10 to 15 minutes for students to complete.

Analysis procedure

Student focus-group discussions

A latent inductive content analysis (Bengtsson, 2016) was carried out using the utterance as the unit of analysis, consisting of student answers to focus-group questions 13 and 15. I conducted a content analysis rather than thematic analysis to allow for frequency of codes to determine the strength of the thematic development (Vaismoradi and Snelgrove, 2019). As students’ utterances varied in length, I assigned more than one code to each utterance whenever necessary.

The relation between the questions posed and students’ perceptions of translanguage-ing and other tools is illustrated in Figure 17. The translation into English is mine.

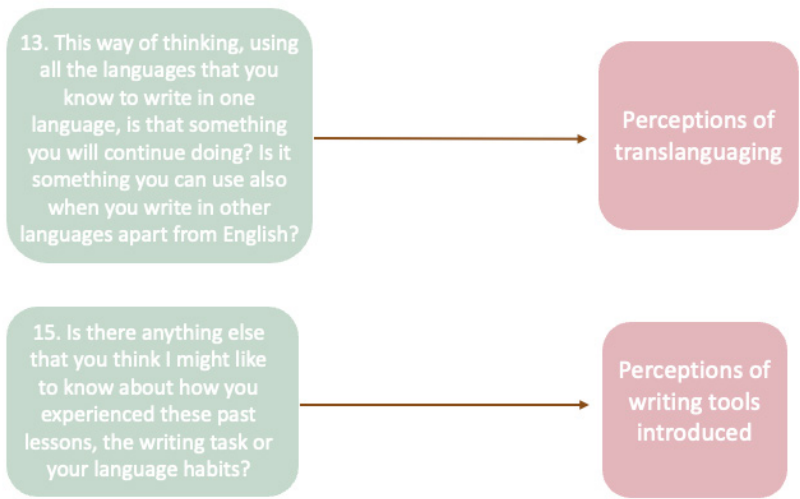


Figure 17. Focus-group questions 13 and 15 and their relation to perceptions.

As shown in Figure 17, question 13 resulted in the theme perceptions of translanguage-ing. The second theme, perceptions of writing tools introduced, was derived from ques-tion 15.

Figure 18 provides a representation of the two themes.

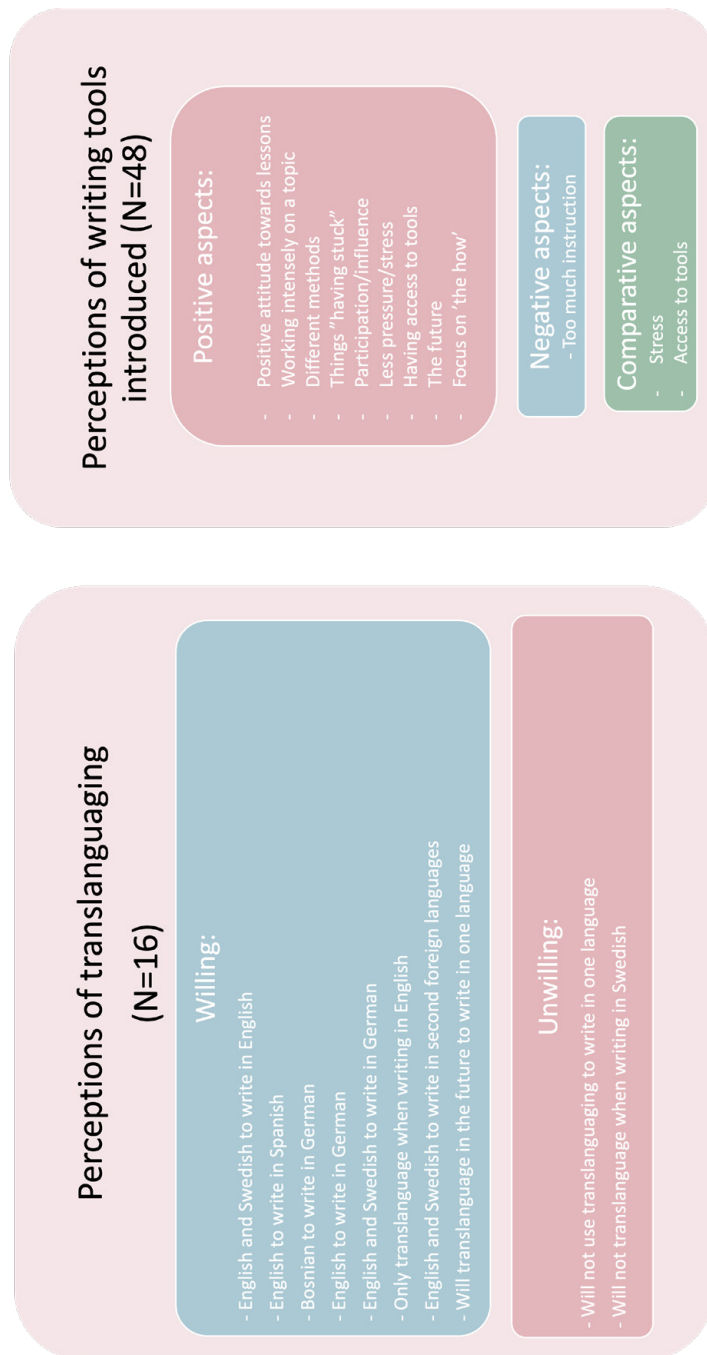


Figure 18. Themes, sub-themes and codes used for student perceptions in focus group analysis

The theme, *perceptions of translanguaging*, yielded 10 codes based on 16 utterances and was divided into the two sub-themes *willing* and *unwilling*. The theme *perceptions of writing tools introduced*, was divided into three sub-themes: *positive aspects*, *negative aspects* and *comparative aspects*. The *positive aspects* of the intervention far outweighed the *negative*, as it was based on 45 utterances. As for the *negative aspects* on the intervention one student utterance was offered. The *comparative aspects* yielded 2 codes stemming from 2 utterances. Thus, the second theme was the largest, as the coding was based on a total of 48 student utterances.

The post-intervention questionnaire

The post-intervention questionnaire contained 23 questions. Out of these 11 relate to student perceptions. These questions (translated by me) are presented in Table 11.

Table 11. The post-intervention questionnaire items relevant to student perceptions.

Themes of focus-group analysis	Post-intervention questionnaire questions
Perceptions of translanguaging	<p>5. We worked with words by building a so called 'word wall', consisting of keywords, emotion words and synonyms in all the languages that we know. What did you think about working with words and your different languages like this?</p> <p>8. Did you at any point use a second foreign language (French, German, Spanish) to help you while you were writing in English?</p> <p>9. Did you at any point use a mother tongue other than Swedish to help you while you were writing in English?</p>
Perceptions of writing tools introduced	<p>6. Did you use our 'word wall' when you wrote your essay today?</p> <p>7. How many times did you look at our 'word wall' while you were writing?</p> <p>10. During lesson 3 we looked at some of your sentences from the first essay together to assess if they were good or if they needed improvement. What did you think about working with sentences like this?</p> <p>13. During lesson 4 we worked with texts that other students had produced on the topic A Good Life, which you discussed the assessment of [peer response]. What did you think about working like this?</p> <p>14. Did the work with the texts help you understand how to write a good text?</p> <p>19. Which digital tools did you use while writing your text today?</p> <p>22. Out of everything that we have done in the past 5 lessons, what did you think gave you the most support while you were writing? You may tick more than one box.</p>

Below, I present perceptions of translanguaging.

Student perceptions of translanguaging and other writing tools

Perceptions of translanguaging in focus-group discussions

Sixteen utterances were about *perceptions of translanguaging*. Analysis revealed two sub-themes showing students who were *willing* (N=14) and *unwilling* (N=2) to translanguange.

When it comes to utterances showing *willingness* to translanguange, several of the focus-group participants state that specific languages have specific affordances demonstrating students' metalinguistic awareness. Avery, Evelyn, Harper, Megan and Ray name using English specifically when writing in Spanish.

Alan, Amelia and Ian state that English and Swedish can be used when writing in their second foreign language. Amelia maintains that Bosnian can also be used when writing in German, illustrating this in Excerpt 22:

Excerpt 22

men på tyskan där finns det ju artiklar det finns ju också i på bosniskan och det är ibland ganska likt så det har jag använt sen innan också vissa ord typ ähm pflaster det är liksom plåster och på bosniska är det flaster bara utan p:et så liksom det jag använder det väldigt mycket där i alla fall

(but in German there are articles that also exist in Bosnian and that can sometimes be pretty similar so that I have used from before some words too like uhm *pflaster* [band aid in German] that is like *plåster* [band aid in Swedish] and in Bosnian it is *flaster* [band aid in Bosnian] just without the 'p' so like that I use that quite a lot there)

Excerpt 22 shows how knowledge of previously learnt languages presents an affordance to students when writing in one of the languages included in their repertoire. Amelia makes comparisons between the languages in her repertoire by looking at grammatical features, such as articles, and by looking at specific lexical items that are typologically similar, such as *pflaster*.

The two responses that signaled *unwillingness* both belonged to students in Class A, namely Alan and Andrew. Andrew's utterance can be seen in Excerpt 23:

Excerpt 23

Andrew: personligen så gillar jag inte detta sättet att skriva så att jag är rädd att man blandar ihop grammatik och sånt för att grammatik på olika språk är ju olika

(personally I don't like this way of writing so I am afraid that you'll mix grammar and such because grammar in different languages is different)

Excerpt 23 shows that Andrew is afraid that translanguaging will cause him to mix the grammar of different languages. Alan's unwillingness is linked to the proficiency he has in the language he is writing in. If he is writing in Swedish, one of his L1s, he does not feel the need to translanguaging.

Perceptions of translanguaging in the post-intervention questionnaire

In the questionnaire, translanguaging was raised in connection with the creation of the word wall in question 5. The quantitative results in Table 14 point to the majority of the 48 students appreciating translanguaging.

Table 14. Responses to question 5 in post-intervention questionnaire.

Question 5. What did you think about working with words and your different languages like this?	<i>Very good</i>	<i>Good</i>	<i>Not so good</i>	<i>Bad</i>	<i>I don't know</i>	<i>Mixed answer: Not so good, bad, I don't know</i>
(N=48) (N=2 absent)	11	22	7	3	2	1

By merging responses *very good* with the *good* in question 5, Table 14 shows 33 students (69%) in favor of translanguaging and working with words as we did in the second lesson.

Table 15 provides the responses to question 8 targeting students' use of second foreign languages. The three who responded 'yes' gave concise free-text answers consisting of "to construct sentences", "to find words" and "as a language of thought", signaling that second foreign languages afforded specific functions.

Table 15. Responses to question 8 in the post-intervention questionnaire.

Question 8. Did you at any point use a second foreign language (French, German, Spanish) to help you while you were writing in English?	<i>Yes</i>	<i>No</i>
(N=48)	3	45

Table 16 shows responses to question 9, targeting the use of a LOTS while writing in English. The four students who responded ‘yes’ listed a particular language as being used, which consisted of Albanian (N=2), Bosnian (N=1) and Kurdish (N=1).

Table 16. Responses to question 9 in the post-intervention questionnaire

Question 9. Did you at any point use a mother tongue other than Swedish to help you while you were writing in English?	Yes	No
(N=48) (‘I don’t know’ N=1) (Yes and No N=1)	4	42

Thus, according to the responses of questions 8 and 9 in the post-intervention questionnaire, a few students (N=7) used a language other than Swedish when writing in English, involving either a second foreign language (N=3) or a LOTS (N=4).

I will now turn to the second theme of the focus group analysis, comprising students’ perceptions of the writing tools introduced.

Perceptions of writing tools: focus-group discussions

The second theme *perceptions of writing tools introduced* contained 48 utterances including three sub-themes involving *positive aspects* (N=45), *negative aspects* (N=1) and *comparative aspects* (N=2).

To start, the 12 utterances concerning a *positive attitude towards lessons* comprised students saying it had been "fun", "rewarding", "more efficient and better" to "learning more about writing a text", "feeling more comfortable writing in English" and liking the fact that they had "learnt something in a new way". Ian expressed surprise at how much they had learnt about tools during such a short amount of time and liking the fact that the way we approached the writing task was "more like real life" (*mer likt verkligheten*), referring to the discussion of having access to all possible tools when writing outside of school. Emma had more positive things to say in the following Excerpt 24:

Excerpt 24

det här var verkligen liksom hur ska vi tänka när vi skriver och inte bara hur ska vi skriva utan ska vi tänka och det tror jag kan hjälpa väldigt många elever när dom skriver texter både på engelska men också på andra språk så jag tyckte det var väldigt bra

this was really like how should we think when we write and not just how should we write but should we think and that I think can help a lot of students when they write texts both in English but also in other languages so I thought that was really good)

In Excerpt 24, Emma refers to the code '*the how*', which deals with students talking about not just learning what to do, but how to do it. She explicitly talks about learning how to think when writing and that what she has learnt can be extrapolated to writing essays not just in English, but in other languages as well.

Learning was further discussed by Zoe, who says she believes she will take with her in *the future*, suggesting that the intervention may have positive consequences down the line. Amelia and Harper instead refer to "things having stuck". Amelia exemplifies this in Excerpt 25:

Excerpt 25

ja och mycket fastnar omedvetet jag har ju inte suttit och pluggat på det här men ändå känner jag att mycket har fastnat

(yes and a lot of it sticks unconsciously I haven't sat and studied this but still I feel a lot has stuck)

In Excerpt 25, Amelia remarks on the fact that she hasn't had to study to learn what she was taught in the intervention, but rather a lot of this was learnt incidentally without her realizing that learning took place. According to Harper some of this is credited to students' involvement in practical tasks, such as the creation of the word wall, where they had to play an active part.

Megan and Zoe remark that they felt *less stress/pressure* when writing during the sixth lesson. Evelyn explains this in Excerpt 26:

Excerpt 26

jag känner typ att man känner sig mindre stressad som innan denna uppsatsen så kände jag mig mer typ lugn och kände men detta kan jag typ för att nu har jag jag vet inte man känner sig lite bekvämare nu med att skriva på engelska

(I feel like that you feel less stress like before this essay I felt more like calm and felt but I know this like because now I have I don't know you feel more comfortable now writing in English)

In the above utterance, Evelyn emphasizes feeling *less stressed* connecting it to the calm she felt before writing her essay in lesson six. The sense of calm is referred to similarly when students mention *having access to tools*. Avery starts off the discussion on *having access to tools* while on the subject of feeling prepared. In Excerpt 27 he refers to tools as ‘help’:

Excerpt 27

för nu fick vi ju typ all hjälp och fick ju använda all hjälp vi kunde få

(because now we had like all help and were allowed to use all the help we could get)

The ‘help’ Avery refers to in his utterance is the permission students were given to use all available tools at their disposal while writing their essay in the sixth lesson. On the subject of *access to tools* Amelia, Harper and Evelyn had the following to say in Excerpt 28:

Excerpt 28

Amelia: jag blev också chockad av att jag inte använde hjälpen så mycket jag tror det är för att jag har lärt mig alltså det är inte bara att jag har facit i hand utan det är jag kunde det ju det faktiskt det mesta

(I was also shocked that I didn’t use the help so much I think it’s because I have learned like it’s not just that I have the key in hand but rather I knew it actually most of it)

Harper: det är ganska lugnade att bara veta att det finns där men man behöver ju inte alltid använda det

(it is pretty calming knowing that it is there but you don’t always need to use it)

Evelyn: precis för när man inte har tillgång till ja men typ det här [pointing to the word wall] eller Google Translate eller så så är det bara så här åh tänk om jag bara hade haft det nu nu är det så här jag har det men jag behöver det typ inte

(exactly because when you don't have access to yes well this like [pointing to the word wall] or Google Translate or such then it's just like oh what if I had just had that now now it's like this I have it but I don't need it like)

The conversation in Excerpt 28 illustrates the affordance of allowing *access to tools* while writing an essay in English. Amelia is 'shocked' by how little she used this 'help' expressing later on in the focus group how "it is easier to write when you are free", again pointing to *access to tools* affording students a sense of freedom. Harper agrees with Amelia and connects *access to tools* with feeling calm, adding that it doesn't mean that you always need to use the tools. Evelyn exemplifies this further by stating that when she is not allowed access, she misses it but having been granted that access she feels less reliant. These statements suggest that students' access to tools affords a safety net, providing a sense of calm and something to lean on if a need should arise, but that this access does not automatically lead to overuse.

Concluding with the positive aspects from the focus groups, the issue of *different methods* was raised by Alan in Class A and Amelia in Class B. The different methods concerned the writing tools that were employed during the intervention, the variation of which was highlighted in a positive way. Alan's perception is provided in Excerpt 29:

Excerpt 29

ni hade metoder för oss ni hade metoder för personer som kan andra språk som jag liksom kan andra språk ja ni hade metoder för personer som har problem med att komma på ord på engelska till exempel att man ska skriva lite senare ni hade jättemånga olika alltså bara skitmånga metoder som till exempel Andrew använder inte alla metoder som jag använder och han använder inte alla metoder som jag använder så att det blir inte som jag använder så att det blir inte som att det är endast jag som lär mig och inte han för att skolan ska inte vara en plats där endast jag lär eller inte han utan det ska vara en plats där alla vi har alla metoder och lär oss liksom

(you had methods for us you had methods for people who know other languages like me like know other languages yes you had methods for people who have problems thinking of words in English for example to write something a little later you had so many different well like so many methods that for example Andrew doesn't use all methods that I use and he doesn't use all the methods that I use so it's not like I use so that it's not like I am the only one who learns and not him because school should not be a place where only I learn or not him but rather it should be a place where everyone we all have methods and we all learn like)

In Excerpt 29, Alan stresses the importance of having *different methods* to suit different student needs in order for learning to be possible for all. One of the methods Alan mentions is postponing when saying how it is possible to “write something a little later”. Alan’s use of the word ‘methods’ is his way of referring to the different tools introduced during the intervention and the fact that these tools were not appropriated equally among the students. Amelia has another take on the *different methods* in her utterance in Excerpt 30:

Excerpt 30

jag tyckte det var så bra att vi fick ta del av det på så många olika sätt vi fick liksom vara med och göra den här väggen och bedöma dom där texterna elevexemplena

(I thought it was so good that we got to take part in so many different ways we got to take part in creating this wall and assessing those texts student examples)

Amelia talks about the different ways students participated in the lessons, referring to the creation of the word wall and the peer response session specifically. Since she mentions student examples as an afterthought, as if creating a list, it is unclear to me whether she is also referring to the examples of student sentences taken from the first essay that was written, which was used in the third lesson.

One utterance was included in the sub-theme of *negative aspects*. This concerned Alan’s perception of the lengthy teacher instructions regarding inner speech and the writing strategies back-translating, rehearsing, and postponing. According to Alan, the affordances of the tools introduced became more evident when students engaged in practical tasks trying them out instead of listening to how these tools may be applied in theory.

There were two student perceptions concerning *comparative aspects* of the writing tools introduced, related to *stress* (N=1) and *access to tools* (N=1). Beginning with *stress*, Megan explained that with the first essay (*A Letter to Connect*), and previous tasks before that, she felt stressed and “that it’s such a big deal”, whereas now she felt that it was easier and that all she had to do was to “just go in [to the classroom] and write it”.

The second comparative aspect concerns the *access to tools* and the authenticity of the task, a perception delivered by Erica in Excerpt 31:

Excerpt 31

det liksom hon ni gjorde det möjligt för oss att äh ha det som normalt liv att vi har tillgång till allting ähm men andra lärare kanske inte tillåter det och det är inte så vi har det annars så ähm att lära sig på det sättet är nog lättare och bättre än andra

(what she you did was make it possible for us to uhm have it like in normal life that we had access to everything uhm but other teachers might not allow it and that is not how we have it otherwise so uhm to learn this way is probably easier and better than in other [ways])

In Excerpt 31, Erica addresses the fact that by allowing tools, the intervention has become more grounded in reality, as students have access to all possible tools when writing outside of school. She compares the teaching in the intervention to other teachers who might not allow the use of tools, stating that she prefers this way of learning.

Perceptions of writing tools: the post-intervention questionnaire

The responses of questions 6 and 7 targeted students' use of the word wall while writing their essay. The 48 student responses can be seen in Table 17:

Table 17. Student responses to question 6 and 7 in post-intervention questionnaire.

Question 6. Did you use our 'word wall' when you wrote your essay today?	<i>Yes</i>	<i>No</i>			
(N=48)	28	20			
Question 7. How many times did you look at our 'word wall' while you were writing?	<i>Many times</i>	<i>Quite a few times</i>	<i>A few times</i>	<i>Never</i>	<i>Once</i>
(N=48)	2	8	26	11	1

The responses to question 6 show that more than half of the students (58%) stated that they used the word wall while writing their essay. Responses to question 7, however, suggest that the number of students looking at the word wall while writing was somewhat higher, namely 37 students (77%). This gives us an indication that one of the tools students were permitted access to, the word wall, was in fact used on the day of the essay writing by more than half the students responding to the questionnaire.

For question 19 students were asked to state which digital tools they had opted to use while writing their essay. For this question students could tick more than one box. The results are presented in Table 18:

Table 18. Student responses to question 19 in post-intervention questionnaire.

Question 19. Which digital tools did you use while writing your text today?	Google Translate	Online dictionary	Word prediction	Spell and grammar checker	Other	None	NA
	20	6	15	25	3	7	1

Table 18 shows that the favored digital tools were the *spelling and grammar checker*, *Google Translate* and *word prediction*. Out of the three students who listed the use of 'other', one student listed "synonyms", a second responded "synonyms.se"²¹ and the third wrote "searched for how I thought the word was spelt" (*Sökte på hur jag trodde ordet stavas*). 40 students (83%) reported that they used a digital tool when writing, 13 of whom used two digital tools and 9 of whom used three digital tools or more. That 83% of the questionnaire respondents used a digital tool indicates that these tools were an important feature when students wrote their essays.

Working with the students' own example sentences was raised in question 10. The responses can be seen in Table 19:

Table 19. Student responses to question 10 in post-intervention questionnaire.

Question 10. What did you think about working with sentences like this?	<i>Very good</i>	<i>Good</i>	<i>Not so good</i>	<i>Bad</i>	<i>I don't know</i>
(N=48)	18	24	0	2	3
(N=1 absent)					

Pooling the responses of *very good* and *good*, Table 19 reveals that the majority of students (N=42, 88%) were positive towards working with their own example sentences.

Table 20 provides the results of question 13 and 14 targeting the peer response students experienced in lesson four.

²¹ This website is no longer active when I am writing this (12 March, 2024).

Table 20. Student responses to questions 13 and 14 in the post-intervention questionnaire.

Question 13. What did you think about working like this?	<i>Very good</i>	<i>Good</i>	<i>Not so good</i>	<i>Bad</i>	<i>I don't know</i>
(N=48) (N=4 absent)	22	18	4	0	0
Question 14. Did the work with the texts help you understand how to write a good text?	<i>Yes</i>	<i>No</i>	<i>Yes and No</i>		
(N=48) (N=4 absent)	36	7	1		

Of particular note is the answers to question 13, which resulted in 40 students (83%) responding positively towards working with peer response. This positivity filters down to the responses to question 14, which resulted in 36 students (75%) reporting that the work with peer response had afforded an understanding of how to write a good text.

Question 22 gave students an opportunity to give feedback on the support provided by the different writing tools introduced during the intervention. Students' responses can be seen in Table 21:

Table 21. Student responses to question 22 in the post-intervention questionnaire.

Question 22. Out of everything that we have done in the past 5 lessons, what did you think gave you the most support while you were writing.	<i>Mind map</i>	<i>Word wall</i>	<i>Peer response</i>	<i>How to solve a lexical gap</i>	<i>Knowledge of digital tools</i>	<i>Writing strategies (back-translating, rehearsing, postponing, inner speech)</i>	<i>Other</i>	<i>None of the above</i>	<i>All of it</i>	<i>Don't know</i>
(N=48)	19	20	21	4	6	12	3	5	2	1

Table 21 shows that the *mind map*, *word wall* and *peer response* provided the most support in students' writing. Two students further posited that *all* of the different tools from the five lessons had provided support, while five reported *none of the above*. Three students ticked the box for *other*. Two of these answers were from participants of the focus groups, namely Andrew, responding "reading the old" (*läsa gamla*), which I interpret as reading the student essays on the same topic, i.e., the peer response that was done in lesson four. Erica wrote "how to start a sentence in different ways" (*hur man börjar en mening på olika sätt*), i.e., the sentence starters that we created with the students and posted on the word wall. The final *other* came from Leah, the student with L1 Russian in Class B, who stated "the instruction in the beginning" (*genomgång i början*). Although the number of responses cannot be related to the number of

participants, since more than one box could be ticked, the overall picture offered by Table 21 suggests that the majority of students may have found affordances in the tools introduced during the five lessons.

The results of this chapter will now be summarized.

Summarizing the results

The analysis of students' perceptions of translanguaging revealed two participants (17%) to be unwilling to translanguange. One participant was unwilling to translanguange because he feared that he would mix the grammar of the different languages he employed. The other unwilling student said that if he was proficient in a language (Swedish in this case), he may not need to use another language for support.

Several of the students spoke of affordances tied to specific named languages when writing in one language. Five focus group participants (42%) stated that they used English for support when writing in Spanish, while three used English to support them when writing in German. Amelia illustrated the affordances of having a LOTS in her repertoire, as her use of Bosnian aided her when writing in German in terms of articles and cognates.

The post-intervention questionnaire revealed that 69% (N=33) of students were positive towards translanguaging. When asked whether a second foreign language or a LOTS was used during the essay writing in lesson six, 7 (15%) responded that such a language had been used for support. Three of these responses revealed distinct functions, which involved sentence construction, to find words and to use said language as a language of thought indicating that specific named languages afforded specific functions.

As for the perceptions of the writing tools, most participants were positive (N=45 utterances). These perceptions ranged from feeling more prepared to write their essay to enjoying how the lessons were delivered to learning a lot in a short amount of time. Students further commented on 'the how', as in learning how to do something and how to think and not just what to do. Several made references to the future and what they would take with them as a result of 'things having stuck', i.e., what they had learnt and how this could benefit them later on in life. Feeling calm and less stressed as a result of the intervention lessons was discussed as was the access to tools and the fact that having access made them less reliant on the tools. Students' access to tools was shown to afford students a safety net, providing a sense of calm and support in a high-pressure situation.

The post-intervention questionnaire disclosed that 58% of students (N=28) used the word wall, but that 77% (N=37) reported having looked at the word wall while writing.

In terms of digital tools, students showed a preference for using the spelling and grammar checker, word prediction and Google Translate when writing. It was thus clear that digital tools play an important role.

In chapter 10, I turn to Sara's perceptions, examined in order to tap her professional, experience-based knowledge as well as her context-specific expertise, i.e., her knowing the participating students.

CHAPTER 10. AFFORDANCES AND LIMITATIONS: THE TEACHER'S PERCEPTIONS

This chapter presents the teacher's, Sara's, perception of the affordances and limitations of translanguaging and other writing tools. First, I present the data and analysis procedures. Then I turn to the results.

Participants, data and data analysis procedure

Sara is a lead teacher of English and has more than 25 years teaching experience. She also teaches German. As stated previously in this thesis, we had been colleagues previously, and we collaborated in designing the intervention. Our collaboration is conceptualized such that I brought in the research perspective whereas Sara's contribution was to use her experience-based knowledge as a teacher and her context-specific knowledge of the two year-9 classes for which the intervention was designed.

The data for this chapter consists of the post-interview, carried out 12 days after the end of the intervention. The interview was conducted in Swedish, lasted 35 minutes and 10 seconds and included 16 main questions and sub-questions (see Appendix E for interview guide), the first 15 of which were selected for the analysis included in this chapter²².

Using the utterance as the unit of analysis, I conducted a latent thematic analysis of the interview transcript in order to provide a description of qualitative data "in (rich) detail" (Braun & Clarke, 2006, p. 79). I used an inductive approach, letting the data speak for itself, without letting interview questions or any pre-conceived ideas guide the analysis (Nowell et al., 2017). An initial coding was done for all utterances, which were then grouped into themes. Following Cohen et al. (2011), I used more than one code for each utterance when needed, as some were quite lengthy and referred to more than one phenomenon.

Analysis revealed the following themes:

- *Scaffolding*: refers to the support and guidance provided in the classroom in order for students to be able to understand and complete a series of smaller tasks as part of their preparation to write the essay entitled *A Good Life*.

²² The sixteenth question was "Do you have any questions for me"? and was therefore not pertinent to Sara's perception of the intervention.

- *Artefacts*: deal with the different physical and psychological artefacts that were introduced during the lessons and students' response to the activities involving these artefacts.
- *Participation*: concerns students' interaction, cooperation and level of activity during the intervention lessons.
- *Time*: applies to the pace of the lessons, how much time was spent on different lesson activities and on the intervention as a whole. It further refers to the amount of time given to students to complete lesson tasks and the essay.
- *Effort*: relates to students' approach to the tasks they were set and how they performed on the final essay.
- *Self-efficacy*: refers to emotions displayed by the students, such as feeling stressed, panicked, confident, calm, comfortable and capable. Sara's perception of whether tasks were considered enjoyable are also included in this theme.

Although the themes are relatively distinct, they do have a tendency to overlap. As an example, *scaffolding* is discussed in relation to *time* and distribution of the different *artefacts* that were introduced during the lessons. Similarly, students' *self-efficacy* in terms of showing enjoyment in class had an effect on their *participation*. A few of the results will therefore be reiterated to display the connection to the individual themes. I will start by presenting the first theme, *scaffolding*, and then proceed through the list of themes presented above.

Scaffolding

Codes pertaining to scaffolding include the following: *students being told the topic*, *content* and *translanguaging*. Something that was out of the ordinary in the first lesson was *students being told the topic* of the essay they were going to write in three weeks' time. Sara reflects that students may have thought this was strange, as this deviates from the typical process of writing an essay as part of the national exam. From Sara's point of view, however, knowing the topic before an extensive writing task is a logical step affording students a chance to gather facts and information.

When addressing the *content* of the lessons, Sara was happy with the tasks that were selected to be included. She explained that quite a lot of time was spent demonstrating how to think, what to do and showing examples, which are all inherent to the concept of scaffolding. However, she said that students' affordances might have increased with a different distribution of tasks. She refers to this specifically concerning the tertiary tools back-translating, rehearsing, and postponing, also referred to as writing strategies, that perhaps working practically with one at a time may have increased the affordances

of these tools. Students enjoyed the peer response task in lesson four but may have learnt more had the essays been addressed individually. Sara's perception is, therefore, that these tasks should have been mixed. Had students been given individual peer response essays with individual writing strategies to try out practically they would have had to think more about what grade to assign and would have a better understanding of the tools' affordances.

On the topic of *translanguaging* in the classroom, Sara commented on students' use of previously known languages. She reveals her perception in Excerpt 32:

Excerpt 32

jag brukar säga till elever och så att tänk på olika språk och associera till vad ni kan och det gör jag både när jag har engelskundervisning och tyskundervisning

(I usually say to students and such to think in different languages and associate to what you know and I do that both when teaching English and when teaching German)

Here, Sara highlights the fact that she usually reminds students of the affordances of their previously learnt languages as a scaffolding technique. Sara, therefore, signals being open to students using their previously learnt languages as tools, while simultaneously using only the target language herself.

Artefacts

Sara gives her perception of the following tools: *APE, the mind map, the word wall, students' example sentences, peer response, writing strategies, online dictionaries and physical dictionaries*.

One observation that Sara makes regarding APE is students' tendency to skip the first step, i.e., to think on their own before turning to a friend. She reflects on this limitation and a solution how to address it in Excerpt 33:

Excerpt 33

dom vill gärna hoppa över den här det här första steget med att tänka själv dom är så vana nu ska jag vända mig till min kompis och så ska vi börja prata äh så att man kan ju vara kanske ännu tydligare än vad vi var med att liksom ok så här

trettio sekunder en minut nånting bara fundera själv sen börjar ni prata med någon annan

(they like to skip that this first step in thinking on their own they are so used to now I should turn to a friend and we should start talking so that you could perhaps be even more clear than we were with like ok like this thirty seconds a minute whatever just think on your own then you start talking to someone else)

Excerpt 33 shows that Sara's perception is that students have a habit of turning to a friend to talk during the lessons and that this is perhaps why there is a tendency to skip the first step of APE. Sara suggests that a solution to this limitation is to remind students and to set a time limit for the first step. When students skip the first step, they start talking to their friends "without any deeper thought" (*utan att ha någon djupare tanke*), according to Sara, which limits the affordances of APE and the content of student discussions.

Sara's perception of *the mind map* was that we spent too much time on this activity in lesson one. Sara's perception of *the writing strategies* also centered on the issue of time, as the lectures during lessons three and five, introducing back-translating, rehearsing, postponing and inner speech took too long, resulting in students losing their focus, which could be observed through their body language. According to Sara it was hard to think of exercises for these tools, for instance *inner speech*, as this is an implicit tool meant to be used intramentally, which is why we chose to model them for the students instead.

One affordance of the word wall from Sara's perception was student engagement. One limitation of the word wall included students' inclination towards posting the same words on the word wall. This limitation led Sara to interrupt the task during the second lesson to suggest that students look at the wall before posting to avoid the posting of multiple "friends" and "family". This is in line with the teacher's continuous situated intentional planning referred to as P3 in Uljens' Model of School Didactics (1997), in which a teacher modifies her plans while the teaching is being realized to better align with the goals of teaching. As the purpose of the word wall was for students to be able to use it as a tool when writing, having the same words posted would have limited the affordances of the tool.

Sara presents two solutions to this limitation, suggesting that parts of the word wall could be created through a digital word cloud instead, in which entries of the same word would simply result in the word becoming enlarged. Another solution could be to sort *the word wall* into English words and words belonging to other named languages. Sara proposes that sorting the words could potentially avoid confusion if students were unsure of which words were English words.

Another limitation concerned the insufficient amount of adhesive on the Post-it-notes, which caused Sara to use Scotch Tape to make sure the notes remained. This meant that there was no time left to walk around the classroom to listen to students' conversations and check on their progress. This suggests that physical artefacts need to keep a certain standard to prevent them interrupting ordinary classroom procedures, such as the teacher's presence during group discussions.

Sara liked the fact that we built the word wall together with the students, affording them an opportunity to take part in the type of support they needed.

While on the topic of using *students' examples sentences*, Sara mentions liking the concept of using students' own work to teach them how to improve their writing. She illustrates this point in Excerpt 34:

Excerpt 34

jag tycker ju om det konceptet att man tittar på nånting som är nära en äh om det är sina egna uppsatser eller egna meningar eller kompisarnas det känns liksom lite mer ja nära och lite viktigare än om det är ett elevexempel som kanske någon läromedelsförfattare har skrivit och låtsas vara ett elevexempel

(I like that concept that you look at something that is close to you uh if that means your own essays or own sentences or friends' it feels a little more yeah closer and a little more important than if it's just a student example that perhaps some author of teaching material has written pretending to be a student example)

In Excerpt 34, Sara points to the affordance of working with artefacts that feel relevant to students, that are close to them, as this makes the work feel more important. She additionally emphasizes the authenticity involved in working with students' own examples, as working with "pretend" examples that an author of teaching materials has created does not carry equal weight. One limitation is that it is time consuming, indicating that it is not something teachers, who have limited time, can engage in all too often.

Sara's perception of student's example sentences concerned a limitation of this activity. The sentences were presented on the Smartboard so that all students could see and follow. While students were given opportunity to think about the different sentences, and to raise their hands to offer their opinion whether a sentence was right or wrong, the answers were divulged quite quickly. Although this meant that more sentences could be presented and addressed, the procedure gave students limited time to reflect on the positive and negative traits of the sentences themselves. Sara's perception is that

presenting fewer sentences and allowing students more time to discuss may increase students' affordances of what makes a good sentence.

The peer response task, in which the student groups received different sets of essays had another limitation according to Sara. In some cases, the grade assigned by Gothenburg University corresponded to the length of the essay. This limitation meant that the shortest text was assigned an E and the longest text was assigned an A, making it easier for students to assess. Sara's perception can be seen in Excerpt 35.

Excerpt 35

dom tyckte ju om det här med uppsatserna man hade kanske om man hade fördelat det dom här olika strategierna på fler dagar så kanske man inte hade gett dom tre uppsatser utan dom kanske hade fått en uppsats per gång och liksom vilken nivå tycker ni denna är utan att dom har tre att jämföra med

(they liked this exercise with the essays perhaps you could if you had distributed them these different strategies on several days then perhaps you wouldn't have given them three essays but instead they would have received one essay at a time and like what level do you think this is without them having three to compare with)

Removing the ability to compare by distributing one essay at a time, would make the exercise more challenging, would prolong student engagement with essays on the same topic and may afford an increased ability to assess text quality.

The lesson activity involving *online dictionaries* in lesson 5, also presented a limitation in that the talk centered on Google Translate. The activity was designed to show students affordances and limitations of machine translations and how to use the tools with scrutiny. Sara's suggestion is to expand on this exercise and include multiple online dictionaries and have students translate the same words or phrases in each to compare their affordances.

Sara's perception of the use of *physical dictionaries* is that these should have been discussed more. According to Sara, the affordance of physical dictionaries is that you can see so much more than just the word you want to translate, such as phrases, sentences, expressions and collocations. She proposes that exercises including a physical dictionary could easily be incorporated into the intervention's lesson plans.

While working with the physical artefacts presented above, Sara was pleased with the level of student participation, which is the theme discussed next.

Participation

The codes belonging to the theme participation consisted of *cooperation* and *student activity*. In Sara's perception student *cooperation* worked really well, apart from individual cases of students who prefer not to talk to others in both classes. For some of these individual students it is about refusing to work with anyone other than their best friend. This presented a limitation during the first lesson when constructing mind maps, as the cooperation between a reclusive student and the person sitting next to her broke down. The failure to communicate resulted in her partner having to invite two more discussants into the conversation by turning their chairs around²³. As this turned into a group discussion, rather than a discussion in pairs, the reclusive student was left somewhat outside the discussion limiting her affordances of the mind map activity.

Another limitation concerned the longer lectures in lessons three and five, in which Sara noticed that students started to "zone out" and student activity was low. This relates to the teacher's continuous situated evaluative reflection of their teaching represented as E3 in Uljens' Model of School Didactics (1997), as Sara made this reflection during the lesson.

Sara's perception of the peer response is that this was the most successful lesson in which students were highly engaged. The activity afforded students an insight into how essays are assessed and what makes a good quality essay. Sara suggests that students' affordances would have increased even more with more opportunities for group discussions, but that this would require more time. Time is the next theme to be discussed.

Time

The utterances dealing with time in Sara's interview included the codes *time was short*, *too much time*, *time and distribution*, *pace* and *time efficient*.

Sara's perception of time is discussed in terms of a limitation. One limitation was not having enough time to include activities on the writing strategies and inner speech in lessons three and five, which instead resulted in longer lectures. Sara makes suggestions to improve these lessons by spreading the contents of the third and fifth lesson into several lessons, dealing with one or a maximum of two writing tools per lesson. A second solution would be to have more practical tasks between the presentation of each writing tool, letting students experience the affordances and limitations of one writing tool at a time.

²³ The students in this class were seated in pairs with other students sitting behind them in a row of four to five student pairs.

Sara's perception of *pace* was that the first two lessons were quite slow, forcing us to go through the lesson content more quickly towards the end of the intervention. Sara expands this perception to include the time spent on the creation of mind maps in the first lesson, saying that it took too long and that it could have been much faster. The pace being quicker towards the end of the intervention was also a result of unforeseen circumstances leading to time being limited. Sara talks about this unfortunate situation in Excerpt 36:

Excerpt 36

jag tänker så hade inte vi varit sjuka båda två i omgångar och allt som alltså vi har fått skjuta upp det ganska mycket så hade vi ju bara kunnat liksom säga att nej vi tar mer lektionstid men nu hade vi ju inte mer tid

(I think like this if we hadn't been sick both of us in turns and everything that like we have had to postpone it quite a bit we could've just said like no we'll take more lesson time but we didn't have more time now)

Excerpt 36 highlights the ill-timed sickness that we were both subjected to due to the pandemic, which was raging at the time. The restrictions that were set by The Public Health Agency of Sweden meant that we had to stay home longer than usual, postponing the first intervention lesson until the beginning of May. As the students' grades were to be set at the beginning of June, and since the essay *A Good Life* was to be assessed and included in their grades, this left no room to expand the number of lessons, which left us with the option of speeding up the pace. Sara mentions the fact that, had there been a possibility, we could have just taken more time, referring to the teacher's prerogative and flexibility concerning time management in Swedish classrooms.

Sara's final perception regarding time concerns *time efficiency*. Despite the fact that students only had roughly 45 minutes to produce an essay in lesson six, they managed to write essays of good quality, leading Sara to suggest that students had completed the task efficiently in spite of time restrictions. This is closely linked to the effort students put into the task, which is the theme presented next.

Effort

The theme effort included the codes *quality of task*, *preparation*, *high-achieving students* and *low achieving students*.

Sara had the following to say in Excerpt 37 on the subject of *quality of task*:

Excerpt 37

ja alltså jag tyckte ju att det var jättebra resultat det var ju en ähm jag skulle ju inte säga att det är en svår uppgift men det är ju ändå en ganska vuxen uppgift att fundera över vad är ett bra liv liksom där var ju inga såna här nå men ett bra liv är att bara att ligga vid poolen [...] dom hade verkligen tänkt på ämnet

(yes well I thought that the results were really good it was a uhm I wouldn't say that it was a difficult task but it is still a pretty grown up task to ponder what a good life is like there weren't any like no but a good life is just to lay by the pool [...] they had really thought about the subject)

In Excerpt 37, Sara expresses her perception of the student results in a positive light. She was impressed by students' effort and how they handled the grown-up topic of *A Good Life*. Sara remarks on how students had been able to show both definitions of *A Good Life* from multiple perspectives and aspirations for their own future, an affordance of the mind map activity in which organizing perspectives into different levels had come naturally. Being able to include different levels of perspectives in the essays increased the quality of the task.

Sara's perception is that students put in a lot of effort to *prepare* for the task. She refers specifically to Andrew, who had practiced by writing three texts on the topic of *A Good Life* at home the day before. Others had put effort into preparing their mind maps, some of which had been created at home due to absence during the first lesson.

While Sara mentions the fact that many students improved their grade from the first essay, *A Letter To Connect*, to the second, *A Good Life*, the intervention was not for everyone. Sara's perception of two *high-achieving students* is that they did not perform to their standards when writing the second essay, *A Good Life*. Her hypothesis is that these students overexerted themselves and by aiming too high missed the target. One example of this is a high-achieving student in class B, who normally performs very well when it comes to writing essays. Sara refers to observing the student spending a lot of time looking at the word wall during the sixth lesson. Sara suggests that there may have been too much for her to look at, indicating a possible limitation of the tool and that this may have gotten her to lose her trail of thought. The student in question was graded one level below her usual grade for this essay²⁴.

²⁴ The student effort was mirrored in the results on their essays. However, as Sara and I were the only teachers to assess the students' texts, these results can be considered biased and should be taken with a grain of salt. Our process of assessment and results on both student essays are provided in Appendix H.

Although Sara mentions that her overall impression of lesson six was that all students were confident, there was one *low-achieving student* who stood out. When talking about this student in Class A, Sara refers to him as the only one who didn't know what to write about. His essay turned out to be just a paragraph, based on the bullets in the instruction to which he provided short answers. Sara's perception is that he was intentionally dis-engaged in the previous lessons and that his essay is a result of choosing not to pay attention in class.

The last individual student Sara mentions is another *low-achieving student*, who surpassed even her own expectations writing the essay *A Good Life*. Sara's perception is revealed in Excerpt 38.

Excerpt 38

Sara: nä men vi som Fiona som alltså hon har ju haft F alltid och brukar inte alltså speciellt skrivuppgifter brukar vara jättesvåra för henne hon brukar behöva sitta nere med speciallärare och där brukar dom alltså skriv först på svenska och sen så försöka översätta om du kan ähm men hon skrev ju direkt på engelska och hon gick inte via svenskan och översatte vissa ord och så såg jag men inte så att hon körde det den strategin utan hon försökte använda det vi hade gjort och hon lyckades få ett D på den här och hon

(no but we like Fiona that like she has always had an F and usually don't well especially writing tasks are usually very difficult for her she usually needs to sit down with the special education teacher and there they usually well write first in Swedish and then try to translate if you can uhm but she wrote directly in English and she didn't go through Swedish and translate certain words I saw not that she used that that strategy but rather she tried to use what we had done and she managed to get a D on this and she)

Tina: så hon höjde sig två steg då?

(so she improved her grade by two levels then?)

Sara: precis och när jag pratade med henne också så frågade jag liksom tyckte du att det här hade hjälpt dig och hon var liksom ja det har hjälpt jättemycket för hon var ju lite så ska jag vara med på den här detta här är för svårt för mig men sen nu i efterhand så inser hon ju att amen herregud det har det här hjälpte ju

(exactly and when I talked to her too I asked her like did you think that this was helpful to you and she was like yes it has helped a lot because she was a little like should I be apart of this this is too difficult for me but now afterwards she realizes that well oh my god it has this actually helped)

The above conversation demonstrates the affordances that the intervention had on this particular student, a low-achieving student who had always received the grade F on writing tasks until now. Lacking self-confidence in her ability to write in English, she had almost opted out of the intervention, but decided to join last minute and was pleasantly surprised at how helpful it had been. In Excerpt 38 Sara says that she observed the student not using the usual strategy of first writing her essay in Swedish and then translating it into English. Instead, the student used what she had learnt from the first five lessons of the intervention and managed to get a D on her essay. This student's hesitancy to join the intervention and the subsequent joy of achieving her first D in writing in English is closely related to students' self-efficacy beliefs, the theme presented next.

Self-efficacy

The utterances regarding Sara's perception of student's self-efficacy beliefs included the codes *enjoyable*, *calm* and *capable*.

When talking about what students found *enjoyable*, Sara relates her impression of the fourth lesson, which she felt was the most successful, in Excerpt 39:

Excerpt 39

mitt intryck var att dom fick ut mycket av det att dom tyckte att det var skoj och kanske att det hänger ihop när dom tyckte att det blev roligt så blev det också viktigt

(my impression was that they got a lot out of it that they thought it was fun and perhaps this is connected when they thought it was fun it also became important)

By making the connection between what students found enjoyable and how they perceived the importance of the task, Sara's utterance in Excerpt 39 emphasizes the affordances of engaging students in practical tasks. According to Sara, if students find the task *enjoyable*, they will also find it worthwhile doing. Lesson four involved students assessing other students' essays and trying to figure out which grades they had been assigned. Sara mentions that the peer response task afforded students an understanding of how essays are assessed, which they could then use when writing their own essays in lesson six.

Sara's perception of students arriving on the day of the sixth lesson, was that they were very *calm*. This, she says, was her strongest impression of the day. The calming atmosphere was further observed by Sara as none of the students displayed insecurities or feelings of panic regarding what to write about, which is very common in situations such as these. One reason for students feeling calm in the sixth lesson, Sara hypothesizes, was the word wall, as this tool afforded guidance and support. This perception is illustrated in Excerpt 40:

Excerpt 40

ingen så här fullkomlig panik nånstans äh liksom situationer utan det var jaja men det är detta vi ska skriva om kommer jag inte på nånting tittar jag på tavlan ähm och det kändes som att dom hade tavlan eller väggen väckte liksom också dom här minnena från vad vi hade jobbat med och då väcks ju också tankarna på hur skulle jag nu göra här

(no like immediate panic anywhere uh like situations rather it was oh well we are going to write about this if I can't think of anything I'll look at the board uhm and it felt like they had the board or the wall awakened too the memories of what we had been working on and then thoughts about how was I supposed to do this now awaken too)

The above utterance demonstrates the affordances Sara believes the word wall had in terms of students' sense of calm when writing their essays. Sara believes the word wall reminded students about what we had done, affording them an understanding of how to go about the task, without the emotions of panic usually experienced by some. Sara's experience in lesson six was that students felt confident and *capable* regarding what they were about to do.

The results presented are summarized below and conclude this chapter.

Summarizing the results

In this chapter Sara's perceptions of the intervention have been revealed thematically according to the themes *scaffolding*, *artefacts*, *participation*, *time*, *effort* and *self-efficacy*.

Sara's perception regarding scaffolding is that disclosing the topic beforehand presented an affordance and was essential to prepare students for the complexity involved in completing the task *A Good Life*. Knowing the topic beforehand meant students were afforded an opportunity to gather facts and information collaboratively to be used

individually when writing. One affordance of translanguaging from Sara's point of view, is the possibility for students to make connections to what they already know.

Sara observed limitations with APE, the word wall, the peer response and students' example sentences. One limitation of APE involved students skipping the first step, which may have limited the quality and content of students' discussions.

Another limitation involved the word wall, where the adhesive on the Post-it notes was inadequate, which limited Sara's ability to oversee student progress. Additionally, two high-achieving students may have found the word wall confusing to look at while writing their essays in lesson six. While Sara believed the word wall afforded students a sense of calm during the final lesson, another limitation was that many students tended to post the same words.

Sara's perception of students' example sentences was that using material closely connected to the students adds importance and authenticity to the task.

While Sara perceived student cooperating well, there was one example of a student who did not want to participate in the mind-map activity, limiting the affordances of the mind-mapping tool as a result.

In Sara's perception, time was seen as a limitation. Because time was limited pace and lesson activities had to be adjusted. One positive aspect concerning time was students' ability to produce good quality texts in spite of time restrictions.

Sara reveals that she is happy with the effort the majority of students put in and impressed with how they approached the topic in their essays. One low-achieving student outdid herself by receiving her first D, two levels above her usual F, which equals fail. Having almost opted out of the intervention altogether, this student was delighted at how much the lessons had helped her.

One of the more important affordances, according to Sara, was the calming effect of students knowing the topic in advance and being allowed the use of tools while writing their essays in lesson six.

In this chapter Sara's perceptions of translanguaging and writing tools have been revealed as well as her suggestions for improvements. This chapter concludes the results part of this project. In the next chapter, I proceed to discussing them.

CHAPTER 11: DISCUSSION

The aim of this thesis was to examine the teaching of writing by looking at the affordances and limitations of student translanguaging and other writing tools for the purpose of writing an essay in English on a topic used in a past national exam. The aim was operationalized by designing an intervention in which a variety of tools were introduced, based on prior research, and then used in two classes of year-9 students. In the following chapter I discuss the results from a theoretical, empirical and pedagogical point of view.

I begin by discussing translanguaging in the English classroom, including both the translanguaging that takes place in the interaction between students and the translanguaging that students can engage in on their own, referred to as *silent translanguaging*. The discussion then centers on students' use of writing tools, the mediated action of tools and, in turn, the impact on students' writing experiences. In order to address also the socio-emotional aspect of L2 language classrooms, I then discuss students' perceptions of the tools. Further, to bring in Sara's experience-based knowledge and context-specific expertise, I discuss her perceptions of the same tools. Finally, I suggest implications for teaching and policy, followed by avenues for future research.

Translanguaging in the English classroom: quantity of use

In the present study students were encouraged to translanguage for the purpose of generating a word wall in the second intervention lesson. The word wall, a secondary artifact, was then used as a tool while students were writing their essays, the topic of which was entitled *A Good Life*. The data collected to examine translanguaging in student interaction consists of transcribed audio-recordings of four student groups, selected on the basis of their specific repertoire of languages. This data and analysis show that when students were given the opportunity to translanguage, they employed a range of different translanguaging constellations, i.e., involving different combinations of named languages in their interactions. There was a prevalence towards using Swedish (58.5%) and English (27.9%) in interaction. This is consistent with previous studies carried out in different contexts (eg., Duarte, 2019) in which students have demonstrated a preference towards the majority and school language while translanguaging during lessons.

Interestingly, second foreign languages (French, German and Spanish), which are rarely used in the out-of-school context according to the questionnaire data, are still used in these interactions (5.5% in total). In one group (including Bella and Mia) the second foreign language was used more than in others (13.5%). The use of a LOTS, a language other than Swedish and spoken in the home, (5.6%), varies between the different groups and appears to be dependent on interlocutors in the group being able to understand and interact using the language in question. Even though the use of a LOTS can be encouraged by classmates, as it was in the fourth group with Leah, the sole speaker of Russian, the number of speech acts involving the use of Russian was low (N=4). Where the use of a LOTS to interact was an option, the number of speech acts including the language was higher, such as in the group with Adele and Erica (N=41) and Adam, Alan and Frank (N=56), as members of these groups were familiar with Bosnian and Albanian respectively. The results therefore suggest that the use of a LOTS as a tool to interact, and by extension to learn from a sociocultural perspective, will be limited if that LOTS is not shared by other students of the group. This may have implications for both class placement and seating arrangements during lessons. Grouping students with the same language background in the same class, and letting them work together during lessons, may afford these students an opportunity to engage in minoritized translanguageing as a tool to interact and learn.

The affordances of translanguageing

By using a framework constructed for the analysis of student translanguageing in the past (Rajendram, 2019), and applying inductive coding (63 inductive codes out of the total of 97) to this framework, this study shows that inviting other languages than the target language (English) offered several affordances. The data presented in chapter 7 demonstrates a presence of all four affordance categories, i.e., affective-social, cognitive-conceptual, linguistic-discursive and planning-organizational affordances. The latter, i.e., the planning-organizational category, was the most prominent (30.4%). The functions belonging to the planning-organizational affordances, as the name suggests, dealt with students' planning and organizing the task through division of labor, using several named languages, such as Albanian, Bosnian, English, German, Spanish and Swedish to interact. The results show that the framework has the potential to be applied in highly diverse language settings, i.e., beyond a trilingual setting where all students were speakers of the same languages in (Rajendram, 2019).

While the affective-social affordances offered students opportunity to socialize in their groups and to respond emotionally to lesson content, two functions that are of particular importance emerged within this affordance category. The first is the act of *noticing*, a concept advanced by Schmidt (1990), defined as "the basic sense in which

we commonly say that we are aware of something" (p. 132). The concept is useful since "Having noticed some aspect of the environment, we can analyze it and compare it to what we have noticed on other occasions" (Schmidt, 1990, p. 132). *Noticing* was present in all four recorded groups, with students displaying an interest in the LOTS that their peers were able to use in the function entitled *Showing/responding to interest in language ability*. In the classroom, students reacted both within and between groups, making positive comments about students' ability to use and perform in their LOTS. I argue that the phenomenon of *noticing* changed the atmosphere of the classroom propitiously by levelling students' status, empowering the students with minority language backgrounds. The MEM (minoritized emergent multilingual) students, whose LOTS had previously been left outside the classroom door, were acknowledged positively for having a linguistic tool of value.

Students with L1 Swedish equally benefitted from *noticing*, as proficiency in second foreign languages was recognized under the same premises. An example of this was Shane's astonishment at the number of French words (41 French words in roughly 30 minutes) produced by Bella and Mia for the word wall. The type of *noticing* demonstrated in the present study has been observed before (Ollerhead, 2018), among secondary school students (aged 13 to 16) in an Australian context, where inviting students' complete language repertoires in the English classroom allowed students "to see their respective L1s alongside each other" (p. 113), levelling the status between different languages.

Another affordance, revealed within the category of affective-social affordances, is *off-task talk*. Off-task talk is talk that deviates from the task at hand, including anything and everything but that which pertains to the task. In this study the amount of off-task talk represents a small portion of student interactions (0.4 to 7.6%) concerning typical everyday matters such as an upcoming test or the fact that a recording was being undertaken. This amount of off-task talk is low when compared to previous studies examining student interaction in the classroom, such as Duarte's (2019) study, which found 25% off-task talk. All off-task talk was spoken in Swedish, a named language that is shared by everyone present in the classroom, giving students an opportunity for communal engagement and building rapport with one another. This can be compared to the results in Rosiers' (2018) study, wherein Belgian students' (aged 9-10) off-task talk was generally in the home language, i.e., comparable to the LOTS in this study, rather than the majority and school languages Dutch and French.

Although the low amount of off-task talk may be due to students being recorded and the fact that there were two teachers in the classroom, the result suggests that students continued their work on-task regardless of whether they were translanguaging, using several languages that neither I nor Sara knew. Thus, the LOTS were not used to utter negative comments or to upset students' working environment. In fact, all languages in

students' repertoires were used to explain, give examples and move the task forward towards completion. In previous research, teachers who are reluctant to invite LOTS into their classrooms have expressed fear of not understanding what students say, and that the use of languages not known by the teacher will lead to disruptive behavior or derogatory remarks (Macaro, 2005; Ticheloven et al., 2021). However, the results presented in this thesis do not provide any foundation for these fears.

While interacting, students were afforded cognitive-conceptual functions in which translanguaging was used to work on and complete the task. In this study these functions accounted for almost a third of student interactions (28.8%), a result similar to that found in Rajendram (2019) (28.2%). For these functions, translanguaging was used to challenge, to respond to a challenge, or to provide an explanation or a rationale. On occasion, explanations included the use of a LOTS to make matters salient by providing translations and definitions in the home language, consistent with previous research (Rosiers, 2018).

However, access to the different named languages in students' repertoires is not always unproblematic, as is shown in several examples belonging to the category of linguistic-discursive affordances. One such function of affordances were *comments pertaining to language ability/forgetting words in a LOTS/second foreign language*, a function found through inductive coding and one that I did not see in Rajendram's (2019) data. Several of the MEM students expressed frustration and sadness about not being able to retrieve words in a LOTS, such as Adele saying "I know it but I have forgotten" (Table 7). Similarly, EM (emergent multilingual) students Bella and Mia were at a loss for words in French, speaking of the word as something that was in the back of their minds and lying "within". Here, a limitation of classroom translanguaging is made evident in students' inability to find the right words. However, there is also joy when students are able to overcome this limitation and surface the words that are hidden within, as in the example with Mia finding the word *heureuse* in Excerpt 1. This study suggests that students may need to practice using translanguaging as a tool and that doing so can potentially "help students develop their translanguaging proficiency further" (Canagarajah, 2011, p. 9) allowing easier access to the words "within".

The affordances of *exploratory talk*

Typology of talk refers to three forms of talk found in student interactions that are either disputational, cumulative or exploratory in nature (Mercer, 2004). By analyzing the typology of talk in students' interactions from the second lesson, this study reveals that translanguaging in the English classroom can be conducive to learning through students' use of exploratory talk. While there is a difference in distribution of the three different typologies of talk, all four recorded groups employed exploratory talk

(between 24.3 and 69%), the type of talk that has been shown to promote learning in past research (Barnes, 2008; Mercer, 1995, 2004; Wegerif & Scrimshaw, 1997). What became evident when analyzing student interaction for typology of talk is that tone of voice is key, meaning that it is not just the words that are spoken, but the manner in which they are spoken that can determine which typology of talk is used. An example of this can be seen in the disputational talk illustrated in Excerpt 2, wherein Leah responding to Fletcher's pleading for the Russian word for *money*, at first denies him a response and then, once given, defiantly challenges him to spell it. In contrast, challenges extended within the typology of exploratory talk could be amiably delivered, intended to support a fellow classmate. This type of challenge was instead meant to provide support by preventing unnecessary mistakes to be made and to afford the student in question an opportunity to be proud of his/her work. Tone of voice was therefore crucial in understanding how a speech event transpired and which typology of talk was used.

When using exploratory talk, students engaged in public reasoning, providing explanations and examples by drawing creatively on their complete language repertoires through translanguaging. Challenges were extended providing rationale and alternative solutions to enable joint decision making (Mercer, 2004) and taking collective pride in the finished product. By supporting each other in this manner, students were able to perform on a level that exceeds the ability of the individual student, similarly found in Uddling and Reath Warren's study (2023). The results thereby show that engaging in exploratory talk through translanguaging affords students the possibility to work within their zone of proximal development by collaborating with a more capable peer. The recordings of student interactions further show that the role of the more capable peer can change from one speech event to the next.

With the exception of Duarte's (2019) study, which showed students using 56.2% exploratory talk (distributed over a range of different speech acts such as *claiming*, *informing* and *confirming*, which she attributed to exploratory talk) in mathematics and social science lessons, other studies have shown that exploratory talk was used without analyzing to what extent (Rajendram, 2019; Uddling & Reath Warren, 2023). This study shows students using their languages creatively and critically while engaged in exploratory talk through translanguaging. Creatively, students translanguage to "choose between following and flouting the rules and norms of behavior, including the use of language, and to push and break boundaries between the old and the new" (Li Wei, 2011, p. 374). Critically, students translanguage "to question and problematize received wisdom, and to express views adequately through reasoned responses to situations" (Li Wei, 2011, p. 374). The results of this study are therefore consistent with previous research suggesting that exploratory talk and translanguaging support one

another dynamically, creating opportunities to learn in multilingual classrooms (Duarte, 2019; Rajendram, 2019; Uddling & Reath Warren, 2023).

The affordances of *silent translanguaging*

Through utterances in focus group discussions, students described how named languages in their repertoires are used for thinking while working individually on a writing task, revealing *silent translanguaging* as an affordance. While students are able to translanguage in student interactions in the classroom, written exams, such as the national exam, require that students work on their own in silence through silent translanguaging. I define silent translanguaging as a mental process wherein students translanguage to think and have an inner dialogue with themselves. Results from focus-group discussions suggest that students engage in silent translanguaging when left to work on a high-stakes task, such as writing an essay that will be assessed on their own. The inner speech that is mediated through silent translanguaging can be used to reason with the self and to solve problems in the text with the student using multiple named languages for support. Besides solving lexical gaps, silent translanguaging affords the generation of context-specific ideas for the content (Gunnarsson, 2019) and the ability to back-translate and rehearse different words (Velasco & García, 2014), phrases or sentences until the student is satisfied that the right meaning is conveyed. Silent translanguaging may therefore afford students an opportunity to be creative and critical with their text, translanguage to both solve problems and generating ideas for the content.

The contribution this study makes in terms of affordances and limitations of secondary and tertiary writing tools other than translanguaging are discussed next.

Students' use of writing tools: affordances and limitations

The thesis reveals the mediation of specific writing tools that were introduced during the intervention, the action this mediation elicits and the impact on students' writing in English as a result. The tools introduced and trialed during four of the intervention lessons (one lesson was reserved for peer review and another for writing the essay) include six secondary artefacts (mind map, word wall, GT, spelling and grammar checker, word prediction and online searches) and six tertiary artefacts (named languages, inner speech, APE, back-translating, rehearsing and postponing).

Focus-group discussions revealed the twelve tools as having six mediational properties: *idea-generation*, *memory*, *lexical access*, *metalinguistic awareness*, *essay outline* and

affirmation. Lexical access was shown to be the most prominent factor, in terms of it being mediated by nine out of twelve tools. Memory and affirmation were mediated the most by the secondary artefacts, through tools such as the mind map, the word wall and GT. Tertiary artefacts tended to mediate idea generation and metalinguistic awareness. Metalinguistic awareness mediated students' awareness of using the named languages in their repertoire as tools for specific purposes through silent translanguaging.

A second analysis of the focus-group utterances shows the six mediational factors impacting students' writing in different ways: *content, time, lexical variation and accuracy, problem solving, structure and self-efficacy*. The tools that mediated idea generation impacted the production of content for student essays and the tools that mediated students' memory impacted students' use of time when writing the essay. Nine of the twelve tools (all but APE, postponing and online searches), impacted lexical variation and accuracy in students' essays. The metalinguistic awareness mediated by two of the secondary tools (the word wall and spelling and grammar checker) and four of the tertiary tools (named languages, inner speech, back-translating and rehearsing) impacted students' ability to solve problems in their writing.

For the tertiary tools the mediation of metalinguistic awareness was accessed through silent translanguaging, in which students used their language repertoires flexibly to have an inner dialogue with themselves to solve problems. Online searches mediated students' creation of their essay outline which in turn impacted the structure of the essay. The tools word wall, GT and APE, mediated affirmation, which in turn impacted students' self-efficacy beliefs. This last impact factor provides evidence that certain tools can affect how students "think, feel, motivate themselves, and act" (Bandura, 1997, p. 2) when faced with a task. Removing elements of stress is essential if we are to avoid students underperforming during these high-stakes tests (Hirsh, 2016). The results provided here demonstrate that students' feelings of stress and anxiety in connection with a performance task can be reduced by letting students know the topic beforehand and allowing access to tools, boosting self-efficacy beliefs.

The affordances and limitations of secondary tools

The secondary tools used include: the mind map, the word wall, GT, spelling and grammar checker, word prediction and online searches. Focus-group students found the mind map mediated the generation of ideas for the content of their essay. The mind map further supported students' memory, working both as an EMS turning the map into a checklist for the content, but also mediating memory retention, as the act of completing the mind map led students to remember the important nodes they wanted to use. The mind map additionally mediated lexical access with both parent nodes and child nodes displaying possible words to use for the different sub-topics of *A Good Life*.

The results found in this study therefore go beyond previous studies which suggest mind mapping as facilitative for the activation of prior knowledge (Zhang, 2018) and to support idea generation (Lee, 2013) by adding mediation of memory and lexical access to the list. This mediation impacted students' writing by providing content, lexical variation and accuracy, which additionally gave students more time to focus on other matters when writing. However, it was clear that the mind map also had limitations and was a tool not appropriated equally by all the students. One student, Andrew, resisted the appropriation of the tool on the grounds that it made writing more stressful. According to him the mind map became an additional task to focus on while writing, hampering the process instead of sustaining it. This type of resistance has been noted before with pre-university students (aged 18-19) finding the tool difficult and time consuming to use (Yunus & Chien, 2016).

The second intervention lesson implemented the word wall, which afforded students the ability to connect and compare different named languages in their repertoires. MEM students Alan and Zoe found this tool particularly helpful. The interaction that resulted in the word wall made students aware of the knowledge they already possess. Alan explained that this tool was a great stepping-stone until students were able to visualize the wall internally on their own. The word wall mediated students' metalinguistic awareness through its visual representation of students' language repertoires in connection with the topic *A Good Life*. The word wall mediated students' memory, resulting in several students saying they did not have to look at the wall to know what was on it. The word wall further mediated lexical access through the vocabulary displayed including synonyms, linking words and sentence starters, which could also be double checked for meaning and spelling before use. The data in this study suggest that even though not everyone used the word wall, the majority were positive towards both constructing it (69% of questionnaire responses) and having it present (75% of questionnaire responses) when the essay was written, providing students a chance to see their named languages side by side and to feel reassured while writing.

Sara's perception was that this tool had a calming effect on students on the day they were writing their essays, impacting students' self-efficacy beliefs. One limitation discussed by Sara, however, was that students initially tended to post the same words on the wall. Another limitation was the materials used for the task with Post-it-notes that kept falling down from the wall. Sara solved this problem by Scotch-taping the notes to the wall, which meant she had little time to listen in while her students were working. Having time to oversee students' work in the classroom is essential for a teacher to be able to see student progress. To have lesson material take up some of this valuable time is therefore not ideal.

Although the use of word walls has been advocated as a translanguaging strategy (García & Wei, 2014), to the best of my knowledge they have not been part of any

research in the subject of English in the Swedish context before. This particular word wall with its specific content geared towards the task *A Good Life* therefore provides new empirical evidence suggesting that the tool mediates students' metalinguistic awareness, memory, lexical access and affirmation. The mediation, in turn, impacted students' distribution of time, problem solving, lexical variation and accuracy while writing as well as boost students' self-efficacy beliefs leading them to feel capable

A tool which similarly mediated affirmation among students was GT, with students saying access to the tool relieved stress and made the writing experience more comfortable. Students mentioned using the tool to confirm spelling and the meaning of already known words, consistent with previous studies (Fredholm, 2015; Lei, 2008; Oh, 2020). While it was pointed out that GT was additionally used to translate unknown words, Alan and Zoe showed some resistance to using the tool for this purpose. The resistance stemmed from experiences in which GT had provided faulty translations, indicating a limitation with the tool giving students reason not to trust the tool completely. The students in Fredholm's (2015) study equally identified this limitation, but chose to employ the tool regardless. An interesting result is the affirmation that was mediated through GT and the consequent impact on students' self-efficacy beliefs. Students felt calm because they had access to this tool, while stating that having access made them use the tool less than predicted. One limitation of the intervention, highlighted by Sara in the interview, however, was the fact that most of the lesson time concerning online translations was spent using one tool, GT, as this was the favored tool among the students.

The spelling and grammar checker was valued by students for signaling errors and mediating lexical access in student essays. The grammar checker was a relatively new feature to these students and was valued specifically by Harper. She revealed that the tool afforded her awareness of mistakes to the point that she thought about how to use the same grammar correctly the second time around. This is consistent with Fredholm's (2015) study in which one student was made aware of adjective congruence errors which she similarly learnt to correct on her own.

The built-in word prediction mediated lexical access and affirmation, as it was able to suggest words that were already on students' minds confirming their ability. The results in this study are therefore in line with Oh's (2020) study, which suggests that digital tools have the ability to boost students' self-efficacy beliefs, by confirming what they already know.

Online searches were mentioned by one student in this study, Alan. Through the search Alan managed to find an essay template which could be used to mediate an outline of his essay. Moreover, the template acted as an EMS allowing Alan to remember how to organize and include different textual elements, such as the introduction, body and conclusion. Whereas previous studies have shown students using online

searches to gather information and see examples of written texts (Kang & Pyun, 2013; Lei, 2008; Oh, 2020), this study shows online searches mediating an essay outline and the student's memory. The mediation of an essay outline impacted the structure in Alan's essay, and using the outline as a checklist supported Alan's distribution of time while writing, affording him the opportunity to focus on issues other than which textual elements to include.

The results concerning tertiary tools are discussed next.

The affordances and limitations of tertiary tools

The following tertiary tools were used during the intervention: named languages, inner speech, APE, back-translating, rehearsing and postponing. Focus-group discussions showed APE to mediate idea generation and affirmation, which impacted textual content and students' self-efficacy beliefs. Several of the students mentioned feeling reassured by their classmates and that APE afforded legitimization of individual thinking through collective reasoning and confirmation. According to Megan, APE afforded students' confidence to want to share their ideas in class. This finding coincides with results revealing increased participation demonstrated in Carss' (2007), which studied year-6 students (aged 10 to 11) in a classroom during guided reading lessons in New Zealand. The idea generation that was mediated through APE involved students being able to organize their ideas in different levels, taking into account not only their own personal perspective on the topic *A Good Life*, but also a communal and societal perspective as well. Being able to take on different points of view is often discussed in connection with the written part of the national exam. The results from this study reveal that this tool afforded students thinking along these lines.

Sara's perception of APE, based on her teaching experience, is that the tool presents a limitation. The limitation consists in students having a tendency to skip or shorten the first stage, i.e., when students are meant to think individually. Sara hypothesizes that this may be because students are eager to get to the intermental stage and working in pairs. The limitation is important to consider when using the tool, and Sara's suggestion of stipulating a specific time frame for the A- (alone) stage, could be a possible remedy.

Named languages were revealed to mediate idea generation, metalinguistic awareness and lexical access. Focus-group discussions showed the majority of students (N=10) being positively inclined towards the use of named languages in their repertoires and silent translanguaging to write in one language. Students revealed their metalinguistic awareness by revealing how named languages can be used for specific purposes when working individually on a writing task. This phenomenon has been observed before in previous research involving students of a similar age (12 to 16) (Carbonara et al., 2023;

García & Kano, 2014). For instance, several of the students in this study (Avery, Evelyn, Harper, Megan and Ray) mentioned thinking in English when writing in Spanish due to the typological similarity between the languages. Zoe specifically mentions the size of her vocabulary as being relevant to whether or not she will use a language to support her thinking, indicating that lexical access is one affordance of named languages. Amelia and Ian revealed Swedish and English mediating lexical access when writing in German, pointing to how the languages complement each other for the purpose of lexical retrieval. Amelia states that she also uses Bosnian to write in German, giving the example of the word *Pflaster* (band aid in German) and its similarity to the word *flaster* in Bosnian, and *plåster* in Swedish. Amelias use of Bosnian to write in German is a typical example of a student using a concept in one language to mediate a concept in another language described by Swan et al. (2015). This ties in with everyday and scientific concepts described within sociocultural theory (Vygotsky, 2012), as Amelia uses what she has learnt in one language and typologically links it to another language. These results concur with previous findings in which students have used languages in their repertoires to solve lexical gaps involving university graduates writing in English as their L2 (Murphy & de Larios, 2010), university students writing in English as their L3 (Jessner, 2006) and secondary school students writing in English as their L4 (Tullock & Fernández-Villanueva, 2013). The current study adds to this existing research by involving both a majority and high-status language, such as Swedish, second foreign languages such as French, German and Spanish, but additionally including a LOTS, such as Bosnian, a low-status language in Swedish society. Both Amelia and Megan agree, however, that when writing an essay in English thinking has to be carried out in English as well, coinciding with student perceptions in García and Kano's (2014).

While ten of the focus-group participants were in favor of using named languages, listing affordances such as lexical access, two of the students saw limitations. Andrew rejected named languages as a tool altogether, saying that when writing in English he does not want to use any other language for thinking. Concurring with previous studies (García & Kano, 2014; Lei, 2008; Prilutskaya & Knoph, 2020), this study shows that Andrew rejects the tool of named languages out of fear that this will increase errors in his essay. This result points to the different needs of individual students and the importance of not taking a one-size-fits-all, or in this case, a one-tool-supports all approach.

According to Alan, the resistance he feels towards using named languages is dependent on the level of proficiency. When Alan writes in Swedish, a language he has used since birth, he resists the use of other languages, which he is less proficient in. However, as demonstrated by his willingness to use English and Swedish when writing in a second foreign language, a language he is less proficient in, he does not reject the use of his

complete language repertoire and silent translanguaging altogether. This is in line with Wolfersberger's (2003) study, which suggests that proficiency and language limitations play a part when implementing strategies acquired in a more proficient language, such as the L1.

Inner speech was revealed to mediate idea generation, lexical access and metalinguistic awareness. The idea generation emanating from inner speech, and in prolongation, silent translanguaging when students employed their language repertoire for thinking, was shown to be context-specific at times. Alan exemplified this by revealing his preference to think in Albanian when it comes to numbers, which he says "becomes a pattern" in his head. This means that students' inner speech mediated context-specific idea generation, which impacted students' writing by providing content for their essays.

A limitation of inner speech, presented by Sara, is that it is hard to construct lesson activities involving this tool. This limitation was addressed in the intervention lessons by modelling what inner speech could look like by using examples of students thinking aloud from a previous study involving students of the same age (15 to 16) enrolled in a Swedish secondary school (Gunnarsson, 2015).

Results show that back-translating and rehearsing mediate metalinguistic awareness and lexical access, impacting students' problem solving and lexical variation and accuracy. Students could use their knowledge of languages to trial different vocabulary and sentences for their essay with these tools until they found the best fit for their intended meaning, consistent with previous research (Velasco & García, 2014).

A limitation of back-translating was presented by Ray, who resisted the tool because of the risk of transferring Swedish grammar into his English writing, a thought supported by Alan. Students' fear of negative transfer when thinking in one language to support writing in another has been found before among university students (Kang & Pyun, 2013; Lei, 2008). The results provided in this study reveal secondary school students as having firm beliefs regarding the affordances and limitations of tools on their writing process, including which tools may have a possible negative impact.

Postponing gave way to more resistance as all but one student (Zoe) in Class A rejected using the tool. The limitations listed by students include fear of being confused by the tool, of losing their trail of thought, of feeling frustration if the tool needed to be used because it meant they had a problem in the essay they could not solve immediately. Even though Alan agreed with the resistance posed by his classmates, he revealed using the tool by writing something down in Swedish, or one of his other languages, or even incorrectly in English, so that he knew where to return later on. Results such as these have been observed before involving a younger student in second grade, using English vocabulary to postpone in a Korean text (Velasco & García, 2014).

However, several of the students in Class B and Zoe in Class A were positive towards postponing, saying that marking a problem in the essay and leaving it behind

momentarily afforded them the possibility of returning with new perspectives and new ideas. Those who used the tool were supported in terms of generating content and structure for the essay and leaving the problem behind meant that they could remember what needed fixing and as a consequence save time. This tool therefore divided the students into those appropriating the tool, who were able to shelve their problems briefly to find a solution later on, and those who reject the tool out of a sense of frustration, wanting to solve the problem found at once.

Several of the tools used in the study had cognitive affordances, supporting students with the construction of their essays, such as the mind map, online searches and spelling and grammar checker. Students translanguaging to create the word wall had social affordances in that LOTS, languages that are otherwise considered low-status, were valued as tools, creating a positive atmosphere in the classroom. Finally, there were four tools; the word wall, GT, word prediction and APE, which had emotional affordances, mediating affirmation and impacting students' self-efficacy beliefs.

This concludes the discussion of the affordances and limitations of tools and I turn to considering implications for teaching.

Teaching implications

Several implications can be made based on the results of this study. Creating the word wall digitally, giving students opportunities to discuss more and including multiple online dictionaries, are suggestions mentioned by Sara in the post-interview. An important implication to note is that working with EM students, with the goal to increase their understanding of how to use their linguistic repertoires as a tool, takes time.

Another implication is making the topic known to students in advance, which was found to be beneficial to students, giving them time to think while also reducing stress before the essay writing. Student perceptions in this thesis reveal a discourse centered around the authenticity of the task and how being allowed the use of tools when writing in English more closely resembles daily writing practices outside of school. The access to tools and being given the topic beforehand, had a calming effect on students, providing students with time to ponder ideas for their text and boosting self-efficacy beliefs while reducing stress. The calming effect, also observed by Sara, meant students used the tools at their disposal less than predicted according to perceptions given in the focus-group discussions.

There is a dissonance between students' writing practices outside of school, where students' daily practices involve the use of writing tools, and writing assessments in school, which prohibit the use of tools. The grading criteria for English further states that in order to pass students have to be able "to use essentially functional strategies

which to some extent solve problems” (Skolverket, 2011b). The word *strategies*, in turn, is defined as “using aids such as dictionaries and computer programs” in the commentary provided by the National Board of Education (Skolverket, 2011a, p. 15). Although the national exam in Swedish allows students to use both spelling checker and dictionaries, the national exam in English does not (Skolverket, 2024d). To be able to assess students’ use of strategies when writing in English, and to allow for more equitable teaching and social justice for all, the present study suggests that assessment tasks, including the national exam, need to embrace the use of tools, such as the secondary and tertiary artefacts in this study. By allowing tools, such as students’ complete language repertoires, dictionaries, spelling and grammar checker to be used, writing assessment may be transformed and “the hierarchy of translanguaging practices that deem some more valuable than others” (García & Leiva, 2014, p. 200) may be leveraged.

I suggest that a re-conceptualization of what it means to be a good writer in English is needed, as one who is able to use tools to improve written production suggested by Weigle (2002). Such a re-conceptualization would require us to actively teach students about tools, their affordances and limitations, to prepare them for academic and professional life in which tools are used to write. By implementing the use of tools, including translanguaging, for writing assessment, we may broaden the construct of writing to better reflect the skill of writing needed in students’ future.

Suggestions for future research comprises the last section of this thesis, discussed next.

Future research

As this study has provided evidence of the beneficial effects of students using both their complete language repertoires through translanguaging and the use of writing tools, future studies may focus on linking student results to this use. An example would be a pre-test, post-test study using the findings provided by the current study to re-design the intervention, including more lessons, more student discussions as well as perfecting the materials employed, and have independent teachers mark the essays.

One idea could be to incorporate screen recordings on student devices to see what their writing process looks like. This would enable us to see which digital tools students choose to use and for what purpose in real time, allowing us to assess students’ use of functional strategies as stipulated in the syllabus. The video recording could then be used in stimulated recall interviews in which students could potentially give detailed explanations concerning their writing process, which could give us valuable insights in terms of how to support students’ writing.

Another avenue worth pursuing is students use’ of exploratory talk while translanguaging during English lessons and how teaching this type of talk may increase

its use in the classroom. As with the suggestion above, a study examining students' exploratory talk could similarly benefit from connecting the typology of talk to learning outcomes, both from a student perspective but also by looking at task accomplishment.

A third and final suggestion for future studies is to explore ways of incorporating the use of translanguaging and tools further in assessment, not only in writing, but in the skills of speaking, listening and reading as well. I argue for future studies to focus on ways to increase social justice among students, taking their virtual schoolbags (Thomson, 2002), an example of which is depicted on the front cover of this thesis, into account, to support all students while also increasing the grade average of those who are minoritized within our schools.

SAMMANFATTNING PÅ SVENSKA

Den här studien handlar om flerspråkiga elevers användning av transspråkande och skrivverktyg när de skriver på engelska. Studien bygger på en intervention bestående av sex lektioner. Under fem lektioner undervisades elever i årskurs 9 i att skriva en uppsats på engelska. Uppsatsen skrevs den sjätte lektionen på ett ämne från ett tidigare nationellt prov för årskurs 1 i gymnasieskolan.

Studien utvecklades mot bakgrunden i den märkbara skillnad som finns i elevers betyg efter nio år i grundskolan mellan de elever som enbart pratar svenska i hemmet och de elever som pratar ett annat språk än svenska hemma (Skolinspektionen, 2010; Skolverket, 2023b). Varför det finns en skillnad mellan dessa två grupper av elever är det ingen som vet, men Skolinspektionens hypotes är att vi inte tar elevers språkliga bakgrund i beaktning i skolan (Skolinspektionen, 2010).

I vårt samhälle har språk olika status. De språk som talas i hemmet av ungefär en tredjedel av vår elevpopulation (28.9%) (Skolverket, 2023a), som t.ex. arabiska, albanska och bosniska har lägst status (Hult, 2012). Dessa språk bjuds inte gärna in i våra klassrum då det finns en risk att inte alla förstår vad som sägs, att språken används för att prata illa om någon eller att de kan ha en negativ inverkan på arbetsron (Haglund, 2004; Macaro, 2005; Ticheloven et al., 2021). Detta hindrar elever som pratar dessa språk att använda alla sina språk som verktyg när de skriver på engelska.

Svenska och engelska har hög status och betraktas som språk som är viktiga att lära för att få en plats i vårt samhälle och kunna tillgodogöra sig eftergymnasial utbildning (Cabau, 2009). Svenska är majoritetsspråket och skolspråket. Engelska är ett världsspråk som omger oss i vår vardag genom det stora utbudet av film, serier, böcker, musik, sociala nätverk och datorspel (Cabau, 2009). Engelska är ett kärnämne i skolan och ett ämne som har nationellt prov i årskurs 9. Historiskt sett har lärare i engelska haft en tendens att förlita sig på svenska i engelskundervisningen, vilket är ofördelaktigt för de elever som inte har svenska som sitt starkaste språk (Tholin, 2012).

En annan bakgrund till studien utgörs av det faktum att på den skriftliga delen av nationella provet i engelska i årskurs 9 får elever inte använda sig av skrivverktyg, även om en del verktyg, såsom ordbok och stavningskontroll är tillåtna i motsvarande nationella prov i ämnet svenska. Till saken hör att det både i gamla kursplanen (LGR11) och i den nya (LGR22) i ämnet engelska står skrivet att elevers förmåga att använda sig av strategier för att lösa problem när de skriver ska bedömas (Skolverket, 2022a). I kommentarmaterialet till kursplanen (LGR11) beskrivs ordet strategi som förmågan ”att använda hjälpmedel som t.ex. lexikon och datorprogram” (Skolverket, 2011a, p. 15). Samma mening går att finna i kommentarmaterialet till den senaste kursplanen

(LGR22) med undantaget att ordet *datorprogram* bytts ut till *digitala verktyg* (Skolverket, 2022b, p. 16). För att eleverna ska få tillträde till gymnasiet måste de ha godkänt betyg i alla kärnämnen, varav engelska är ett (Skolverket, 2025). Även om resultatet på nationella provet ska vara vägledande och inte slutgiltigt för elevers betyg ska det tas i särskild beaktning och ha större betydelse än övriga enskilda uppgifter i engelska (Skolverket, 2024e). Resultatet på det nationella provet är därför avgörande för att elever ska kunna få godkänt i ämnet engelska och söka sig vidare till gymnasiet.

Enligt både svensk (Hirsh, 2016) och internationell forskning (Horwitz et al., 1986; Küçük, 2023) skapar prov som dessa känslor av stress och oro bland våra elever. I Sverige har man de senaste tio åren sett en nedåtgående trend i elevers psykiska hälsa där just prov och betygssättning legat till grund för stress och ångest (Klapp et al., 2023). Då förekomsten av prov med hög insats för elever fördubblats sedan 1990 (Verger et al., 2019) är det viktigt att försöka hitta alternativa vägar för att bedöma elevers skrivande på engelska samtidigt som vi förbereder för framtiden och stöttar såväl elevers välbefinnande i klassrummet som deras psykiska hälsa.

Tidigare studier som fokuserat på elevers användande av skrivverktyg har valt att fokusera antingen på digitala verktyg (Fredholm, 2015; Oh, 2020) eller fysiska verktyg i form av ordböcker (East, 2008). Den här studien tar ett steg längre och inkluderar både fysiska verktyg, såsom ordböcker och digitala verktyg, och intellektuella verktyg, såsom elevers språkliga repertoarer och så kallade skrivstrategier.

Tidigare studier om transspråkande i svenska skolor har undersökt elevers ordinlärning i ämnet engelska i årskurs 8 och 9 (Gyllstad et al., 2023; Källkvist et al., 2022a; Källkvist et al., 2024), undervisning på engelska i årskurs 4-6 (Toth, 2018), en nyanländ elevs spontana transspråkande i ämnet fysik i årskurs 8 (Uddling & Reath Warren, 2023) och i ämnena geografi och svenska som andraspråk i årskurs 6 och 7 (Nordman, 2024). Denna studie tar ett mer samlat grepp om skrivverktyg och undersöker elevers transspråkande och lärande i engelskklassrummet.

Syfte och forskningsfrågor

Ett övergripande syfte med avhandlingen är att överbrygga den diskrepans som finns mellan elevers skrivande utanför skolan, där elever ofta använder sig av olika typer av verktyg (Oh, 2020), och innanför skolan, där elever allt som oftast inte tillåts använda verktyg i bedömningsammanhang. Mer specifikt syftar studien till att undersöka undervisning av skrivande samt skrivverktygens affordanser och begränsningar när elever tillåts använda dessa, inklusive deras språkliga repertoarer, för att skriva en uppsats i ämnet engelska. Utöver att transspråka och att använda verktyg fick eleverna veta uppsatssämnet i förväg.

Syftet operationaliseras genom att besvara följande tre forskningsfrågor:

- a) Vilka namngivna språk använder elever sig av och vilka affordanser respektive begränsningar medför deras transspråkande?
- b) Vilka affordanser respektive begränsningar har andra skrivverktyg än transspråkande samt vetenskapen om uppsatsämnet i förväg?
- c) Vad medierar de olika skrivverktygen och hur påverkar denna mediering elevers skrivande?

För att kunna besvara dessa frågor har jag använt mig utav teori som presenteras härnäst.

Teori

Sociokulturell teori, som utgör den övergripande teoretiska ramen för studien bygger på att inlärning och utveckling sker genom interaktion och att interaktionen i sin tur påverkas av tidigare erfarenheter och olika individers sätt att se på världen (Vygotsky, 1978). Verktyg inom sociokulturell teori kallas också för artefakter. Verktyg hjälper oss att förstå världen, att lära oss nya saker, att komma ihåg saker, att skapa och att kommunicera med andra. De medierar våra handlingar och underlättar för oss på olika sätt (Wertsch, 1998) genom att ge oss olika affordanser.

Den proximala utvecklingszonen är ett begrepp från sociokulturell teori som har särskild betydelse för denna studie. Begreppet hänvisar till avståndet mellan den problemlösning en elev kan göra på egen hand gentemot den problemlösning eleven kan göra tillsammans med någon mer kapabel, som t.ex. en lärare eller en mer kunnig klasskamrat (Vygotsky, 1978).

Transspråkande, som utgör den andra teorin i studien, har sitt ursprung i Cen Williams (1994) avhandling, i vilken fenomenet transspråkande beskrivs som en undervisningsmetod. Sedan dess tillkomst har begreppet utvecklats och utgör nu en teori i flerspråkig kommunikation (García & Wei, 2014). Det anses vidare vara ett strategiskt verktyg som kan användas kritiskt för att problematisera och kreativt genom att användaren väljer när språkregler och normer ska följas respektive när språkregler och normer ska brytas (Li Wei, 2011). Transspråkande fungerar också som ett verktyg då elever behöver tänka och lösa problem på egen hand, med hjälp utav de olika namngivna språken de kan, så kallat *tyst transspråkande*, då de skriver på engelska.

Studien bidrar till tidigare forskning inom sociokulturell teori genom att ta ett helhetsgrepp om skrivverktyg, inklusive transspråkande, deras medierande effekt och deras påverkan på skrivandet. Skrivverktyg approprieras, dvs. tillägnas, i olika grad av

eleverna. Hur eleverna i sin tur använder verktyg och vilka handlingar dessa medierar varierar därför från person till person. Det betyder att vi inte kan anta att skrivverktyg har en positiv inverkan på elevers skrivande, att de också kan ha en negativ inverkan och avvisas helt av eleven på olika grunder (Wertsch, 1998).

Studien bidrar vidare till studier i transspråkande genom att undersöka fenomenet transspråkande ur ett teoretiskt perspektiv i flerspråkig kommunikation och dess tillgänglighet som verktyg för att förbättra skriftlig kommunikation. Den transspråkande teorin förespråkar vikten av att betrakta språk som tillgång och strävar efter social rättvisa genom ett utjämnande av språkliga hierarkier i klassrummet (García & Baetens Beardsmore, 2009).

Båda teorier förespråkar att erfarenheter och kunskaper som elever skaffar sig utanför skolan bör överbrygga de erfarenheter och kunskaper elever får genom undervisning (García & Wei, 2014; Vygotsky, 2012).

Metod

Studien kombinerar kvantitativa data (enkäter) och kvalitativa data (ljudinspelad elev-interaktion samt fokusgruppsamtal med elever, och en intervju med läraren). Den mest centrala metoden i studien är interventionen som planerades i samförstånd med Sara, en förstelärare i engelska och tyska med över 25 års erfarenhet. Totalt deltog 48 elever. Planeringen av de fem första lektionerna gick till som så att jag presenterade olika verktyg genom empiri från tidigare forskning som visat ge goda resultat på elevers skrivande. Därefter planerade vi tillsammans hur vi skulle introducera verktygen för eleverna och ge möjlighet till praktisk användning.

Före interventionens början observerade jag två lektioner då eleverna fick skriva en annan skrivuppgift med titeln *A Letter to Connect*, ett frisläppt nationellt prov för engelska i årskurs 9. Under observationen satt jag längst bak i klassrummet och förde anteckningar. Dessa två lektioner filmades också med tre kameror för att vänja elever vid utrustningen i klassrummet. Eleverna fick också fylla i en enkät med bakgrundsinformation i vilken de beskrev sina språkliga repertoarer och språkvanor både inom och utanför skolan.

På lektionerna fick eleverna arbeta med skrivverktygen för att generera idéer för innehållet samt få exempel på hur olika problem kunde lösas medan de skrev sin uppsats. Under första lektionen introducerades skrivuppgiften *A Good Life* (ett frisläppt nationellt prov i engelska 5), tankekartan och APE (även kallad EPA: *ensam, par, alla*). Under andra lektionen skapade eleverna språkväggen genom att använda sina totala språkliga repertoarer för att interagera kring olika ord, såsom nyckelord, synonymer och känslord, som kunde vara viktiga när de skulle skriva uppsatsen. Tredje lektionen

introducerade skrivverktyg i form av så kallade skrivstrategier som *back-translating*, *rehearsing*, *postponing* och inre tal (*inner speech*). Fjärde lektionen tillägnades helt och hållet åt kamratrespons, medan femte lektionen fortsatte arbetet med skrivstrategier samt introducerade digitala verktyg i form av internetbaserade ordböcker, såsom Google Translate, stavnings- och grammatikkontroll samt ordprediktion. Den sjätte och sista lektionen skrev eleverna uppsatsen med titeln *A Good Life*. Elevernas upplevelse av transspråkande och skrivverktygen fångades samma dag genom en enkät (48 elever) och två fokusgrupp-intervjuer (totalt 12 elever). För att få Saras perspektiv på interventionen intervjuades hon både före och efter interventionen.

Fokusgruppintervjuerna och de två intervjuerna med Sara transkriberades och analyserades med hjälp utav innehållsanalys (Bengtsson, 2016) (elevers utsagor kring deras perspektiv på skrivverktyg och transspråkande) och tematisk analys (Braun & Clarke, 2006) (elevers utsagor kring verktygens mediering samt Saras utsagor kring perspektiv på interventionen, skrivverktygen och transspråkande). Ljudinspelningar av elevers transspråkande under lektion två analyserades genom social diskursanalys (Mercer, 2004).

Genom att analysera elevers transspråkande i klassrummet blev de språkkonstellationer som elever använde sig utav synliga. En andra analys gjorde det möjligt att se transspråkandets affordanser och vilken taltypologi elever ägnade sig åt. Den senare kan ge oss insikter kring huruvida transspråkande möjliggör lärande genom att mäta mängden explorativt (*exploratory*) tal som tidigare forskning visat bidrar till lärande (Mercer et al., 1999). Resultaten från dessa analyser beskrivs och diskuteras nedan.

Resultat och diskussion

Resultaten visar att svenska har en central roll när elever transspråkar. Det är det namngivna språket elever använder mest (58,5%) följt av målspråket engelska (27,9%). Andra hemspråk än svenska, som t.ex. albanska och bosniska, används i ungefär samma utsträckning som moderna språk (5,6% respektive 5,5%). De olika språkens användning beror på huruvida elevernas samtalspartners förstår och kan använda samma språk. Om det endast finns en elev som pratar ryska i elevgruppen begränsas användningen av detta språk. Elevers preferens att använda majoritetsspråket och skolspråket svenska går att jämföra med tidigare forskning i vilka majoritetsspråket tyska användes mest för att transspråka av elever i samma ålder i matematik- och samhällsklassrum i Hamburg (Duarte, 2019).

Mängden tal som går utanför uppgiften i denna studie, så kallat *off-task talk*, är liten, talas alltid på det gemensamma språket svenska och handlar om vardagliga saker i elevernas liv, som t.ex. ett stundande matteprov. Denna typ av tal ger eleverna möjlighet

för gemensamt engagemang och att bygga relation med varandra. Resultaten i denna studie skiljer sig från Duarte (2019) som hittade 25% off-task talk i elevers klassrumsinteraktioner, medan elever i denna studie använder off-task talk mellan 0,4 till 7,6%, vilket är avsevärt mindre.

En av de begränsningar som ofta nämns i samband med att andra språk bjuds in i flerspråkiga klassrum är lärarens oro för att språken ska inverka negativt på undervisningen. Exempel som nämns i tidigare studier är att de inbjudna språken används för att säga elaka saker om någon som inte förstår (Haglund, 2004), att eleverna frångår uppgiften och pratar om annat, att det leder till störande eller avvikande beteende (Macaro, 2005) eller att det blir svårt för läraren att följa elevernas diskussion och arbete (Ticheloven et al., 2021). Resultat i denna studie visar inga tecken på att språken används för att tala illa om någon eller för att störa arbetsron på något sätt.

Tvärtom visar studiens resultat att elever använder sig av så kallat explorativt tal (*exploratory talk*) när de transspråkar (mellan 24,3% och 69% i de olika elevgrupperna), vilket tidigare studier har visat möjliggör lärande i klassrummet (Mercer et al., 1999). Explorativt tal kännetecknas av elevers gemensamma engagemang att ta sig an en uppgift, att resonera, utmana och hålla varandra till svars för att därefter ta kollektiva beslut som för uppgiften framåt (Mercer, 2004). Precis som tidigare studier visar således också denna studie att transspråkande och explorativt tal går hand i hand när elever interagerar (Duarte, 2019; Rajendram, 2019; Uddling & Reath Warren, 2023).

Studien visar vidare att elevers användning av explorativt tal genom transspråkande gör det möjligt för en elev att arbeta inom den proximala utvecklingszonen och utföra uppgifter tillsammans med en mer kompetent kamrat och därmed gå bortom den enskilda förmågan. Rollerna i de olika inspelade elevgrupperna visar sig också skifta så att den elev som är mest kompetent också kan vara den elev som får stöttning av klasskamraterna i gruppen vid ett annat tillfälle i interaktionen.

Elevers utsagor i fokusgruppintervjuer beskriver hur transspråkandet inte bara förekommer elever emellan i klassrummet, utan också i form av en inre dialog när elever arbetar själva med en komplex uppgift, såsom att skriva ett nationellt prov på engelska. Då elever skriver prov tillåts de inte att kommunicera med andra elever och måste då istället tänka under tystnad. Detta fenomen har jag valt att kalla för *tyst transspråkande*, en form av tyst inre tal i vilket elever rör sig mellan de namngivna språken i sin repertoar för att resonera med sig själva och lösa problem i skrivandet. Elevers utsagor visar på stor medvetenhet kring vad de kan utnyttja sina olika namngivna språk till då de använder sig av tyst transspråkande. Några exempel är en elev som löser lexikala bortfall med hjälp utav bosniska och en annan elev som tänker på siffror och mönster med hjälp utav albanska, medan de båda skriver på engelska.

Studien visar att skrivverktyg tillägnas på olika sätt av olika elever. Medan ett skrivverktyg kan ha en positiv inverkan på en elevs skrivande kan samma skrivverktyg ha en

negativ inverkan på en annan elev, vilket är förenligt med sociokulturell teori (Wertsch, 1998). Ett exempel på ett sådant fysiskt verktyg är tankekartan, som tillägnades positivt av majoriteten elever i studien. Ett fåtal elever kände däremot att verktyget gav upphov till stress, att tankekartan var ännu en uppgift att fokusera på under själva skrivandet och valde därför att förkasta verktyget. Att arbete med tankekarta kan upplevas som tidsödande och svårt har även visats av tidigare studier (Yunus & Chien, 2016).

För en del av de intellektuella skrivverktygen, såsom att använda namngivna språk för att tänka och föra en inre dialog genom tyst transspråkande, framkom liknande resultat. Även om de flesta elever var positiva till att använda sina totala språkliga repertoarer för att tänka när de skulle skriva på ett av språken, fanns det ett fåtal elever som förkastade de namngivna språken som skrivverktyg. Dessa elever uppgav att de var rädda för att blanda ihop språken och språkens grammatik om de valde att tänka på ett annat språk än det som skrivandet skulle ske på. Liknande resultat har visats i tidigare forskning där högstadieelever (García & Kano, 2014; Prilutskaya & Knoph, 2020) i USA och Norge samt universitetsstudenter (Lei, 2008) i Kina visat rädsla för att en hybridisering av skrivspråket och tankespråket ska förekomma i texten om de inte väljer att tänka enbart på skrivspråket då de skriver.

Genom en djupare inblick i elevers utsagor från fokusgruppintervjuer framkommer att skrivverktygen, både fysiska och intellektuella, medierar olika handlingar som på olika sätt påverkar elevers skrivande. De verktyg som hjälper eleverna att forma idéer kopplade till ämnet *A Good Life*, som t.ex. tankekartan, stöttar eleverna med innehållet i texten. De verktyg som medierar elevers minne, som t.ex. språkväggen avlastar deras tankeverksamhet och ger eleverna mer tid till annat under skrivprocessen. Tillgång till ord medierades av ett flertal verktyg, t.ex. namngivna språk, vilket påverkade språklig variation och korrekthet i texten. Även språklig medvetenhet medierades av ett flertal verktyg, som t.ex. att översätta den skrivna texten fram och tillbaka (*back-translating*). Användning av back-translating bidrog till att lösa problem i texten, vilket är förenligt med vad tidigare forskning visat (Velasco & García, 2014). Ett viktigt resultat är att flertalet verktyg, tre fysiska och ett hybrid-verktyg (språkväggen, Google Translate, ordprediktion och APE, även kallat EPA: *ensam, par, alla*) medierade bekräftelse, vilket i sin tur påverkade elevers tro på sin egen själv effektivitet (*self-efficacy*). Det sistnämnda betyder att elevers tillgång till verktyg påverkar deras känslor och tro på den egna kapaciteten i förhållande till en prestationsuppgift, som t.ex. ett nationellt prov. Resultaten när det gäller skrivverktygen i studien pekar således på vikten av att erbjuda elever olika verktyg för skrivande då dessa approprieras, d.v.s. tillägnas, i olika grad, medierar olika handlingar och påverkar deras skrivande på olika sätt.

Implikationer

Saras utsagor, baserade på hennes gedigna lärarerfarenhet, visar på vikten av att välja rätt material och hantera tiden väl för att få ut det bästa ur interventionens sex lektioner. En del av tiden under lektion två spenderade Sara med att tejpa upp lappar på språkväggen, vilket inte är optimal användning av en lärares resurser. Sara lade vidare märke till att eleverna tenderade att spendera för lite tid i det första stadiet av APE (EPA) då tanken var att eleven skulle tänka på egen hand. När elever hoppar över det första steget i APE begränsas verktygets affordanser liksom innehållet i elevernas efterföljande diskussioner både i par och i helklass. För att elever ska få ut så mycket som möjligt av verktyget är det därför viktigt att sätta tydliga tidsgränser för verktygets tre steg.

Elevinteraktionen under lektion två i interventionen pekar på fördelarna med att bjuda in andra språk än målspråket i engelsklassrummet. Atmosfären förändrades positivt när elevernas språkliga repertoarer synliggjordes och de använde sig av explorativt tal för att lösa uppgifter tillsammans i den proximala utvecklingszonen. Trots att explorativt tal var en del av alla ljudinspelade elevinteraktioner kan det tänkas att mer explorativt tal hade förekommit om taltypen hade diskuterats på förhand. För de lärare som vill dra nytta av dynamiken mellan explorativt tal och transspråkande kan det därför vara en poäng att ha en genomgång av explorativt tal först samt modellera transspråkande innan eleverna interagerar i grupper eller par.

Studien visar att elever mår bra av att få veta ämnet de ska skriva om samt att få använda verktyg då de skriver. De upplever mindre stress och oro när de vet att verktyg finns tillgängliga då de ska skriva ett prov, såsom nationella provet. Ett fåtal elever i studien uttryckte förvåning över hur lite de använde verktygen när de väl var tillåtna. Vad de olika verktygen medierar och hur det påverkar skrivandet varierar från elev till elev. Skrivverktygen approprieras inte på samma sätt eller till samma grad av eleverna, vilket visar på vikten av att erbjuda elever många olika typer av verktyg så att de får bästa möjliga stöttning i sitt skrivande.

I dagens kursplan för ämnet engelska ingår att lärare ska bedöma elevers användning av funktionella strategier när de skriver, något som bland annat definieras som användandet av ordböcker och digitala verktyg i kommentarmaterialet till kursplanen i engelska (Lgr22). Om vi ska kunna bedöma elevers användning av skrivverktyg måste dessa inkluderas i bedömningsuppgifter. För att kunna bedöma elevers skrivande på engelska och deras användning av verktyg då de skriver krävs att vi vidgar innebörden av skrivande som färdighet. Det betyder att vi inte enbart ser skrivandet som det elever kan göra med papper och penna utan också det skrivandet de kan göra med hjälp utav verktyg. För att detta ska bli en verklighet behöver skrivverktyg, deras affordanser och begränsningar vara en del av undervisningen. På så sätt kan vi också öka autenticiteten

i skrivandet genom att överbrygga elevers erfarenheter av skrivande utanför skolan med skrivandet i skolan och göra undervisningen mer relevant för elevernas framtid.

Framtida forskning

I min studie har jag visat på transspråkandet och skrivverktygens roll i flerspråkiga elevers skrivande på engelska. Framtida forskning bör utforska fler sätt att undervisa om skrivverktyg samt hur dessa kan användas i bedömningsuppgifter. Forskningen bör tydligt koppla skrivverktygens användning till resultat på bedömningsuppgifter för att se huruvida de gör skillnad på resultatet eller ej och, i så fall, på vilket sätt. Ett förslag är att använda skärminspelningar då elever skriver bedömningsuppgifter och sedan använda dessa inspelningar som stimulus för att intervjua elever om deras skrivprocess. På så sätt kan man tydligare se vilka verktyg elever använder i realtid samt vad de har för inverkan på elevers texter och resultat.

Ett liknande förslag skulle kunna tillämpas för forskning i transspråkandets roll i undervisningen. En tydligare koppling behöver göras mellan elevers transspråkande och deras resultat på skrivuppgifter, men även på uppgifter i andra färdigheter såsom att läsa, att lyssna och att tala engelska. Ytterligare ett förslag skulle vara att skapa en ny interventionsstudie i vilken explorativt tal undervisades för att se om dess förekomst kan öka samt om det går att koppla dess användning till elevers lärande.

Framtida forskning bör även fokusera på hur vi på bästa sätt kan öka den sociala rättvisan genom att utjämna den språkliga hierarkin i form av språkstatus i klassrummet. På så vis får vi möjlighet att bättre stötta de elever som talar ett annat språk än svenska i hemmet så att de når en högre måluppfyllelse i ämnet engelska.

APPENDIX A-I

A: Student consent form

Samtycke om deltagande i forskningsstudie om att skriva på engelska

Jag har tagit del av skriftlig och muntlig forskningspersonsinformation, har haft möjlighet att ställa kompletterande frågor och har fått dessa besvarade.

Jag är medveten om att mitt deltagande är frivilligt, och att jag när som helst kan avbryta mitt deltagande utan att ge några skäl.

När jag samtycker till att delta, samtycker jag också till att mina personuppgifter lagras på ett säkert sätt och att det pseudonymiserade materialet används i olika presentationer och publikationer.

Vänligen välj ett av alternativen nedan:

- ☐ Jag samtycker till att delta fullständigt i studien. Detta betyder att min uppsats och mina enkätsvar används enbart i forskningssyftet enligt ovan. Detta betyder också att jag samtycker till att bli filmad under det planerade undervisningsupplägget och att mina samtal på filmer och ljudupptagningar används enbart i forskningssyftet enligt ovan.
- ☐ Jag kan tänka mig att medverka i en del av projektet: Jag samtycker till att min uppsats och mina enkätsvar används enbart i forskningssyftet enligt ovan. Jag samtycker till att observeras under det planerade undervisningsupplägget och att mina samtal på ljudupptagningarna används enbart i forskningssyftet enligt ovan. Jag samtycker inte till att bli filmad. Jag accepterar att det är mitt ansvar att inte gå runt i delen av rummet som filmas.
- ☐ Jag vill inte medverka i studien på något sätt. Det innebär att min del av samtal på ljudupptagningarna då klassrummet filmas inte kommer att användas i studien. Jag accepterar att det är mitt ansvar att inte gå runt i delen av rummet som filmas.

Datum

Namnteckning

Namnförtydligande

Anmälan om intresse att delta i fokusgruppintervju tillhörande forskningsstudien om att skriva på engelska

Efter det planerade undervisningsupplägget inbjuds fyra elever till en fokusgruppintervju. Eftersom denna intervju sker utanför lektionstid kommer de som deltar att kompenseras med en biobiljett. Om fler elever kan komma än det finns plats för väljs deltagare ut med basis på deras enkätsvar. Målet är att ge utrymme för många perspektiv på hur det planerade undervisningsupplägget och skrivandet av uppsatsen har upplevts.

Fokusgruppintervjun kommer att spelas in med ljudupptagning, och samtycke till detta ges på plats. Även detta material kommer att pseudonymiseras och hanteras enligt GDPR (se s. 3).

- ☐ Jag kan tänka mig att delta i en frivillig fokusgruppintervju tillsammans med tre andra elever där vi diskuterar vår upplevelse av undervisningen och skrivandet av uppsatsen.
- ☐ Jag vill inte delta i någon gruppdiskussion.

Namn (var vänlig bokstavera)

Tack för din medverkan!



**HUMANISTISKA
OCH TEOLOGISKA
FAKULTETERNA**

B: Pre-intervention questionnaire

Forskningsstudie om att skriva på engelska: enkät

Du kommer nu att få några frågor som handlar om vilka språk du kan. Skriv ditt namn överst på sidan. Namnet tas sedan bort och ersätts med ett påhittat namn.

Dina svar är viktiga!

1. Är du ... Tjej? ☐
- Kille? ☐
- Varken kille eller tjej? ☐

2. Vilket år är du född? 2005 ☐ 2006 ☐ 2007 ☐

3. I vilket land föddes du?

- Sverige ☐ Libanon ☐ Syrien ☐ Danmark ☐
- Irak ☐ Makedonien ☐ Serbien ☐ Ungern ☐
- Bosnien ☐ Kosovo ☐ Kroatien ☐ Thailand ☐
- Albanien ☐ Annat:

Om du föddes i annat land än Sverige, hur gammal var du när du kom hit?

Ålder: _____

4. Vilket eller vilka språk har du talat sedan du föddes?

Svenska ☐ Makedonska ☐ Albanska ☐
Arabiska ☐ Serbiska ☐ Bosniska ☐
Danska ☐ Ungerska ☐ Thaiändska ☐
Persiska/Farsi. ☐ Annat:.....

5. Har du någon gång bott mer än 1 år i ett annat land än Sverige?

Ja ☐ Nej ☐
Om ja, vilket land:

6. Brukar du tillbringa hela sommaren i något annat land än Sverige för att besöka släktingar eller vänner?

Ja, nästan varje sommar ☐ Nej, nästan aldrig ☐
Om ja, vilket land:

7. Vilka språk lär du dig i skolan?

Svenska ☐ Tyska ☐ Mandarin ☐
Engelska ☐ Spanska ☐ Franska ☐
Modersmål ☐

8. I vilken årskurs började du lära dig engelska i skolan?

Årskurs 1 ☐ Årskurs 2 ☐ Årskurs 3 ☐ Årskurs 4 ☐
Kommer inte ihåg ☐

9. Hur bra tycker du att du kan dina olika språk? Skriv språket på linjen och ange hur bra du kan just det språket genom att ringa in en siffra mellan 1 och 4, där 4 betyder att du kan språket riktigt bra och 1 betyder att du inte alls kan det bra.

Språk	Inte alls bra	Ganska bra	Bra	Mycket bra
_____	1	2	3	4
_____	1	2	3	4
_____	1	2	3	4
_____	1	2	3	4
_____	1	2	3	4

10. Vilket språk använder du mest för att prata med de olika personerna nedan. Sätt ett X under rätt språk. Det går bra att sätta mer än ett X på varje rad.

När jag pratar med:	Svenska	Arabiska	Makedonska	Serbiska	Albanska	Bosniska	Annat
Mamma							
Pappa							
Syskon							
Släktingar							
Kompisar							
Klasskompisar							
Grannar							

Om du har angett "Annat" i fråga 10 var god ange vilket/vilka språk

.....

.....

11. Vilket språk tänker du på/pratar du med dig själv på när du gör följande saker? Sätt ett X under rätt språk. Det går bra att sätta mer än ett X på varje rad.

Aktivitet	Svenska	Arabiska	Makedonska	Serbiska	Albanska	Bosniska	Engelska	Annat
Räknar								
Memorerar ett telefonnummer								
Tränar/Motionerar								
Pluggar								
Drömmer								

Om du har angett "Annat" var god ange vilket/vilka språk :

.....

12. Finns det tillfällen då du blandar olika språk som du kan?

Ja ☐

Nej ☐

Om ja, kan du berätta mer om när och hur det sker?

.....

13. Känner du att du har nytta av dina olika språk i skolan?

Ja ☐

Nej ☐

Om ja, på vilket sätt:

.....
.....

14. Finns det något språk som du känner att du inte får använda så mycket som du vill i skolan?

Ja ☐

Nej ☐

Om ja, vilket och varför:

.....
.....

15. Finns det lektioner i skolan där du får tillfälle att använda alla språk som du kan?

Ja ☐

Nej ☐

Om ja, vilket ämne är det och hur brukar du använda språken:

.....
.....
.....
.....
.....
.....

16. Finns det några hjälpmedel som du gärna använder dig utav då du ska skriva på de olika språken som du kan? (t.ex. ordböcker, stavningsprogram eller annat)

.....

.....

.....

.....

17. På vilket sätt har senaste årets pandemi påverkat din inlärnin g av engelska?

.....

.....

.....

.....

18. Finns det något mer du tycker jag borde veta om dig och dina språk och språkvanor? Skriv gärna här:

.....

.....

.....

.....

Tack för att du har tagit dig tid att svara på mina frågor!

Tina Gunnarsson

C: Post-intervention questionnaire

Forskningsstudie om att skriva på engelska: enkät

Du har nu deltagit i 5 lektioner med målsättningen att förbereda dig inför en skrivuppgift. Du har nyss blivit klar med skrivuppgiften och jag skulle vilja ställa några frågor till dig om din upplevelse. Svaren på frågorna i enkäten förblir anonyma, d.v.s. de kan inte härledas tillbaka till dig som svarar. Dina svar är viktiga!

1. Är du ... Tjej? ☐
- Kille? ☐
- Varken kille eller tjej? ☐

Lektion 1: återkoppling på första uppsatsen samt arbete med tankekartor

2. Under lektion 1 fick ni återkoppling på första uppsatsen ni skrev. Använde du återkopplingen när du skrev andra uppsatsen idag?

Ja ☐ Nej ☐ Jag vet inte ☐

3. Vi arbetade med tankekartor genom APE (alone, pairs, everyone) där ni fick utveckla er tankekarta i varje steg. Vad tyckte du om att arbeta med tankekartor så här?

Mycket bra ☐ Bra ☐ Mindre bra ☐ Dåligt ☐

Jag vet inte ☐

4. Använde du din tankekarta när du skrev din uppsats idag?

Ja ☐ Nej ☐

Lektion 2: 'word walls'

5. Vi arbetade med ord genom att bygga en s.k. 'word wall', bestående av nyckelord, känslord och synonymer på alla språk vi kan. Vad tyckte du om att jobba med ord och dina olika språk så här?

Mycket bra ☐ Bra ☐ Mindre bra ☐ Dåligt ☐

Jag vet inte ☐

6. Använde du vår 'word wall' när du skrev din uppsats idag?

Ja ☐ Nej ☐

7. Hur många gånger tittade du på vår 'word wall' medan du skrev?

Många gånger ☐ Ganska många gånger ☐ Några gånger ☐ Aldrig ☐

8. Använde du någon gång ett modernt språk (franska, tyska, spanska) för att hjälpa dig när du skrev på engelska?

Ja ☐ Nej ☐

Om ja, på vilket sätt hjälpte språket dig?

9. Använde du någon gång ett modersmål annat än svenska för att hjälpa dig när du skrev på engelska?

Ja ☐ Nej ☐

Om ja, på vilket sätt hjälpte språket dig?

Lektion 3: exempelmeningar från uppsats 1, bindeord och 'sentence starters'

10. Under lektion 3 tittade vi på några av era meningar från uppsats 1 för att tillsammans bedöma om de var bra eller behövde förbättras. Vad tyckte du om att jobba med meningar så här?

Mycket bra ☐ Bra ☐ Mindre bra ☐ Dåligt ☐

Jag vet inte ☐

11. Vi gick igenom hur man startar en bra mening och även dessa satte vi upp på vår 'word wall'. Använde du någon av dessa när du skrev idag?

Ja ☐ Nej ☐

12. Använde du bindeorden som vi satte på vår 'word wall'?

Ja ☐ Nej ☐

Lektion 4: kamratbedömning

13. Under lektion 4 arbetade vi med texter som andra elever skrivit på ämnet 'A Good Life' som ni fick diskutera bedömningen av. Vad tyckte du om att arbeta så här?

Mycket bra ☐ Bra ☐ Mindre bra ☐ Dåligt ☐

Jag vet inte ☐

14. Hjälpte arbetet med texterna dig att förstå hur du ska skriva en bra text?

Ja ☐ Nej ☐

Lektion 5: strategier som 'back-translating', 'rehearsing', 'postponing', 'inre dialog', att lösa 'lexical gaps' (ordluckor) och använda digitala hjälpmedel

15. Under lektion 5 arbetade vi med olika typer av strategier man kan använda när man skriver. Vad tyckte du om att arbeta med dessa?

Mycket bra ☐ Bra ☐ Mindre bra ☐ Dåligt ☐

Jag vet inte ☐

16. Vilka av strategierna använde du när du skrev din uppsats idag? Du kan kryssa i mer än ett alternativ.

Back-translating ☐ Rehearsing ☐ Postponing ☐ 'Inre dialog' ☐

Inga ☐

17. Hade du några 'lexical gaps' (ordluckor) när du skrev din text idag?

Ja ☐ Nej ☐

Om ja, hur gjorde du för att lösa dom? Vilka språk använde du dig av?

18. Använde du dig av en 'inre dialog' när du skrev din text idag?

Ja ☐ Nej ☐

Om ja, kommer du ihåg vad du tänkte och på vilket språk?

19. Vilka digitala verktyg använde du dig av när du skrev din text idag? Du kan kryssa i mer än ett alternativ.

Google translate ☐ Ordbok online ☐ Ordprediktion ☐
Stavnings-och grammatikkontroll ☐ Annat ☐ : _____
Inga ☐

Lektion 6: Uppsatsen

20. Vad tyckte du om skrivuppgiften idag?

Svår ☐ Lagom svår ☐ Lätt ☐ Varken eller ☐

21. Läste du igenom din text innan du lämnade in den idag?

Ja ☐ Nej ☐

Om ja, fanns det något du upptäckte när du läste igenom texten som du inte sett tidigare?

22. Vilket av det vi har gjort de senaste 5 lektionerna tycker du gav dig mest stöd när du skrev? Det går bra att kryssa i mer än ett alternativ.

Tankekartan ☐ Word wall ☐ Kamratbedömning ☐

Hur man löser 'lexical gaps' ☐ Kunskap om digitala verktyg ☐

Strategierna (*backtranslating, rehearsing, postponing, inner speech*) ☐

Annat ☐ : _____ Inget av det ☐

23. Finns det något mer du tycker jag borde veta om hur du upplevde lektionerna/skrivuppgiften eller dina skriv/språkvanor? Skriv gärna här:

.....

.....

.....

.....

.....

Tack för att du varit med i studien och har tagit dig tiden att svara på mina frågor!

Tina Gunnarsson

D: Pre-intervention interview guide for Sara

Intervjuguide 1: försteläraren Sara

1. Hur länge har du arbetat som lärare?
2. När blev du förstelärare i engelska? Hur gick det till att bli förstelärare?
3. Läroplanen för grundskolan består av 'Skolans värdegrund och uppdrag', 'Övergripande mål och riktlinjer' samt kursplanerna för de olika ämnena. På vilket sätt implementerar du de två förstnämnda i din undervisning i engelska?
4. Kursplanen i engelska består av en inledande text om ämnets vikt, ämnets syfte, centrala innehåll samt kunskapskraven. Hur använder du dig av dessa olika delar av kursplanen i ditt jobb som lärare?
5. Vilket/vilka språk använder du dig av när du undervisar i engelska? Är språket/språken du använder kopplade till specifika aktiviteter?
6. Hur ser du på elevernas språkanvändning på dina lektioner? Finns det tillfällen då de använder sig av sina tidigare inlärd språk i undervisningen? Om ja, på vilket sätt?
7. Hur viktigt är det att använda elevernas förkunskaper i engelska?
8. Finns det tillfällen i din undervisning då du kan dra nytta av sådant som eleverna lärt sig utanför skolan?
9. Brukar du använda dig av olika hjälpmedel i undervisningen, t.ex. fysiska hjälpmedel i skrift/bild, digitala hjälpmedel, saker på väggarna i klassrummet etc.?
10. Om du använder dig av något hjälpmedel, vilket/vilka språk är de kopplade till?
11. Använder du dig av digitala resurser i din undervisning, t.ex. olika programvaror, hemsidor, spel etc.? Om ja, kan du ge exempel? På vilket sätt bidrar de till inläringen?
12. Finns det tillfällen då du och eleverna skapar något tillsammans? Om ja, hur gör ni det?
13. Hur brukar du gå tillväga när du undervisar om skrivande på engelska? Brukar du inleda/följa upp och avsluta på något särskilt sätt?
14. Hur ber du eleverna att gå tillväga då de ska skriva? Skriver de t.ex. en kladd först, tankekartor, stödpunkter?
15. Finns det något generellt tema i de skrivuppgifter som eleverna brukar få? Vad brukar de handla om rent innehållsmässigt?
16. Finns det något som du brukar be eleverna återvända till innan de ska skriva en text, t.ex. ett grammatikmoment, en sida i en bok, tidigare återkoppling etc.?
17. Har eleverna tillgång till några hjälpmedel då de skriver en text till engelskan?
18. Hur arbetar du med de nationella proven i engelska?
19. Vad brukar du använda för material då du förbereder inför det skriftliga nationella provet? Är något av materialet egentillverkat?

20. Finns det något som du anser kräver särskild uppmärksamhet när du förbereder dina elever på lektionerna innan provet? Finns det något som du ber eleverna tänka särskilt på då de ska skriva?
21. Hur går det skriftliga nationella provet till? Vilka förutsättningar har eleverna? I vilket rum sitter de? Skriver de digitalt eller på papper? Har de tillgång till några hjälpmedel?
22. Hur skiljer sig rättningen av nationella provet mot rättningen av en 'vanlig' textproduktion i ämnet engelska?
23. Hur har ditt arbete och din undervisning påverkats av det senaste årets pandemi?
24. Varför valde du att bli lärare?

E: Post-intervention interview guide for Sara

Intervjuguide 2: försteläraren Sara

1. Under första interventionslektionen fick eleverna återkoppling på den första uppsatsen de skrivit, därefter introducerades nästa skrivuppgift och eleverna fick i uppgift att göra tankekartor. Vad tyckte du om detta? Hur upplever du att lektionsinnehållet togs emot av eleverna?
2. Under första lektionen introducerade du arbetsformen APE. Vad kunde du observera när eleverna arbetade enligt APE? Hur tycker du att samarbetet fungerade mellan elever? Mellan elever och lärare?
3. Under andra lektionen introducerades konceptet med en 'Word wall' bestående av bl.a. nyckelord, känslord och synonymer på flera språk. Vad var din upplevelse av detta?
4. När du undervisar vill du gärna prata enbart engelska. Vad tyckte du om att släppa in andra språk så här?
5. Under lektion 3 och 5 användes meningar från elevernas första uppsats för att illustrera olika exempel, meningar som var bra och meningar som behövde förbättras. Vad tyckte du om detta? Har du använt elevernas egna produktion så här förut?
6. Under lektion 4 arbetade eleverna med kamratbedömning. Vad var ditt intryck av denna lektion? Hur brukar du gå tillväga när du arbetar med kamratbedömning i vanliga fall?
7. Under lektion 5 presenterades strategier som eleverna kunde använda då de skrev samt olika digitala verktyg de kunde använda. Vad tyckte du om denna lektionen? Hur upplever du att den togs emot av eleverna?
8. Under lektion 6 fick eleverna skriva sin andra uppsats. Kan du berätta lite om vad du upplevde denna lektionen?
9. Upplevde du att det fanns någon skillnad i hur eleverna tog sig an skrivuppgiften denna dag mot hur de brukar ta sig an skrivuppgifter tillsammans med dig?
10. Vad tycker du om resultaten på den andra uppsatsen? Var där något som förvånade dig?
11. Hur ser du på interventionen som helhet?
12. Vilken del av interventionen bedömer du fungerade bäst?
13. Vilken del av interventionen fungerade mindre bra enligt dig?
14. Om du kunde göra interventionen igen, vad skulle du då ändra på?
15. Finns det något i interventionen som du tror att du kommer att använda dig av igen?
16. Har du några frågor till mig?

F: Interview guide for focus-group discussions

Fokusgruppintervju: elever

Jag vill nu ställa lite frågor till er angående de senaste engelsklektionerna ni deltagit i samt skrivuppgiften ni gjort idag. Jag kommer att börja med frågor som handlar om er engelskundervisning i allmänhet för att sedan gå över till frågor som handlar om de senaste lektionerna och ert skrivande. Vårt samtal spelas in så att jag slipper att ta anteckningar och kan lyssna på vad som sagts flera gånger om jag behöver det. Samtalet filmas också, eftersom det kan vara svårt att urskilja olika röster i en ljudinspelning när det är flera som pratar. Ni får gärna ta tid på er och fundera innan ni svarar på frågorna och ni kan när som helst välja att avbryta intervjun.

1. Under första interventions-lektionen fick ni sitta i par och diskutera skrivuppgiften medan ni fyllde i en tankekarta. Vad tyckte ni om det?
2. Hade ni användning av tankekartan när ni sen skulle skriva på egen hand?
3. Vad tyckte ni om arbetsformen APE? Hur fungerade samarbetet med andra elever? Med lärarna?
4. Under andra lektionen hjälptes ni åt att skriva s.k. 'Word walls' med bland annat nyckelord ('key words'), känslor ('emotions') och synonymer ('synonyms'). Under tredje lektionen diskuterade vi 'sentence starters' och bindeord som vi också satte upp på 'väggen'. Vad tyckte ni om att arbeta med era språk så här? Använde ni er av 'väggen' när ni skrev idag? På vilket sätt?
5. Ni fick titta på några elevexempel under lektion 4, dvs texter som andra elever skrivit till samma skrivuppgift. Vad tyckte ni om det? Lärde ni er något på detta?
6. Under lektion 5 pratade vi om *inre dialog*. Var det någon utav er som använde sig av en *inre dialog* medan ni skrev er uppsats? Om ja, på vilket språk förde ni en dialog och vad handlade dialogen om?
7. Fanns det något tillfälle när ni skrev uppsatsen då ni saknade ett/flera ord på engelska? Om ja, hur gjorde ni för att lösa det? Tog ni hjälp av andra språk? I så fall vilka?
8. Under lektion 5 pratade vi om strategier, bl. a. *backtranslating* och *rehearsing*. Använde ni någon av dessa när ni skrev idag?
9. I undervisningen har vi pratat om *flödet* i skrivandet, dvs att man kan lämna saker som gör att man fastnar i skrivandet för att återkomma till det senare, s.k. *postponing*. Använde ni det när ni skrev idag?
10. Målet med de fem lektionerna var att visa er hur ni kan använda alla språken ni kan som ett verktyg när ni skriver, bl. a. för att komma på innehåll till texten. Använde ni andra språk än engelska när ni skrev er text idag? I så fall, vilka?
11. Då ni skulle skriva er uppsats idag hade ni tillgång till alla digitala hjälpmedel ni önskade, som t.ex. Google Translate, ordböcker online, ordprediktion och stavnings- och grammatikkontroll. Använde ni något av dessa? Hur var det?

12. Texten ni nyss skrivit, skiljer den sig på något sätt från texter som ni brukar skriva på engelska? Är den lika lång? Lika detaljerad? Skiljer den sig från den första uppsatsen ni skrev?
13. Detta sättet att tänka, att använda alla språk man kan för att skriva på ett språk, är det något som ni kommer att fortsätta med? Är det något ni kan använda även när ni skriver på andra språk än engelska?
14. Hur har det senaste årets pandemi påverkat er inlärnin g av engelska?
15. Finns det något annat som ni tror jag skulle vilja veta om hur ni upplevt de senaste lektionerna, skrivuppgiften eller era språkvanor?
16. Har ni några frågor till mig?

G: Lesson plan for the intervention

After a brief introduction, lesson one started with Sara and I reiterating information about the study. As a starting point we decided to give collective feedback on the essay the students had just written (during the observation of Sara's two writing lessons). Feedback included capitalization rules, structuring, common misspellings and adjusting the text to an intended audience as well as sticking to genre. As the first essay entailed writing a letter, we discussed form, such as how one generally starts a letter, answering questions posed, posing new questions and how one usually ends a letter.

Once the general feedback had been discussed, the new writing assignment, entitled *A Good Life*, was introduced (see description of essay instructions at the end of this appendix). Following the first stage of the curriculum cycle (Derewianka, 1991), which entails building knowledge of the subject, we tasked the students with creating a mind map following the APE-model, with the title of the instruction at the center and at least eight arms stretching out to new nodes (Figure 20).

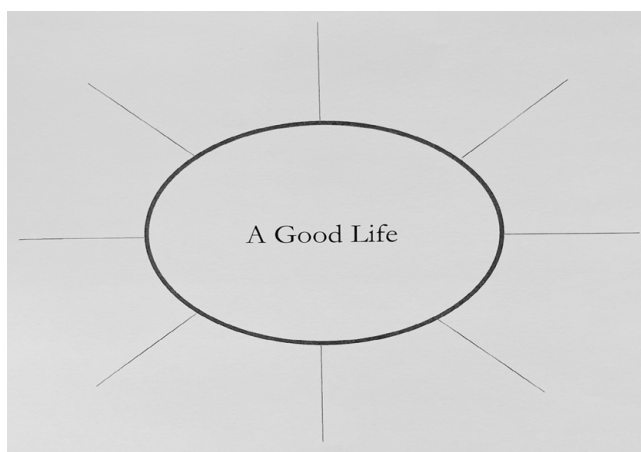


Figure 20. An empty mind map for the topic *A Good Life* provided to students.

The students proceeded to first construct their own mind map and then to turn to their neighbor to discuss. In the discussion in pairs, the students added what they liked about the other student's mind map to their own before we eventually discussed and filled out a mind map together on the board. To capture the interaction in pairs, in small groups and in the class, Dictaphones were placed on four student tables, while Sara and I both wore lapel microphones. Before the lesson ended, we compared and discussed the mind map we had created (see a student example in Figure 21) together with the mind map from the instruction. Before the end of the lesson, the mind maps were

collected, and students were advised that they would be distributed again on the day of writing the essay.

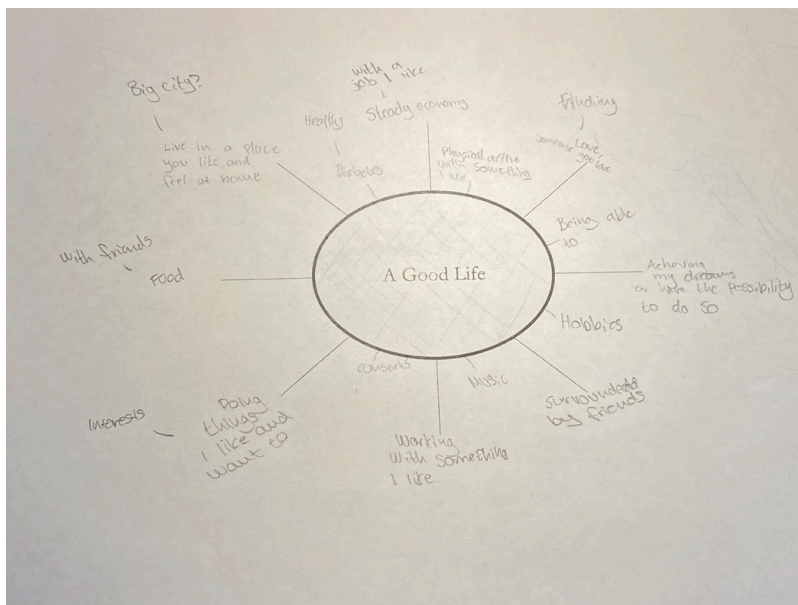


Figure 21. A student's completed mind map.

Lesson two proceeded the next day with a short recap of how we had ended lesson one. The first task of the second lesson was to continue the first phase of the curriculum cycle by creating a *word wall*. As such, we asked the students to list key words to do with a good life using any language(s) at their disposal in the smaller groups where they were seated. The students wrote down the words they discussed on post-it notes and posted them on the classroom wall. The keywords were then discussed in class. The same procedure was employed for emotional words and for synonyms, all in connection with the concept of a good life. The students would discuss the words, post their post-its and then proceed to discuss the words with the whole class, a portion of which is shown in Figure 22.



Figure 22. Students in Class B working on the creation of the word wall.

Before the second lesson ended, we had a look at some of the sentences that the students had written in their first essay. In order to increase linguistic awareness, we anonymized sentences and presented them on the smartboard. In our presentation of the sentences, we added an animation showing either that the sentence was correct or that it needed to be improved. This animation was not shown to the students until each sentence had been discussed briefly in the small groups and then in the whole class. This was a way to transition the students into phase two of the curriculum cycle, which involves studying texts within the genre to gain inspiration. By looking at these sentences together and deciding whether they were correct, adjusted for the intended situation and audience, the students were made aware of the metalanguage used to talk about written language.

The third lesson was started much the same as the second lesson, with a short recap involving a discussion of a few more sentences on the board. We then stepped into phase three of the curriculum cycle, involving co-construction of an essay. As a first measure, we asked the students to write different ways of starting a sentence on the smartboard. The *sentence starters* the students produced in the different classes generated a discussion on genre and adjusting the essay for the intended reader. The words were discussed in terms of how one should begin an introduction, a paragraph, an ending and how to ensure variation throughout the essay by making sure sentences do not start the same. The discussion emanated in a presentation of possible sentence starters suited to the topic of *A Good Life*. These were copied onto a poster and posted on the word wall before the next lesson. *Linking words* were similarly discussed to show students ways of transitioning into new paragraphs and to tie main clauses and subordinate clauses together using a variety of words. The linking words were divided into eight different categories, *addition*, *contrast*, *cause and effect*, *comparison*, *time and sequence*, *illustration*, *emphasis* and *direction and place*. Each category contained eight suggestions, which were printed and posted on the word wall (Figure 23).

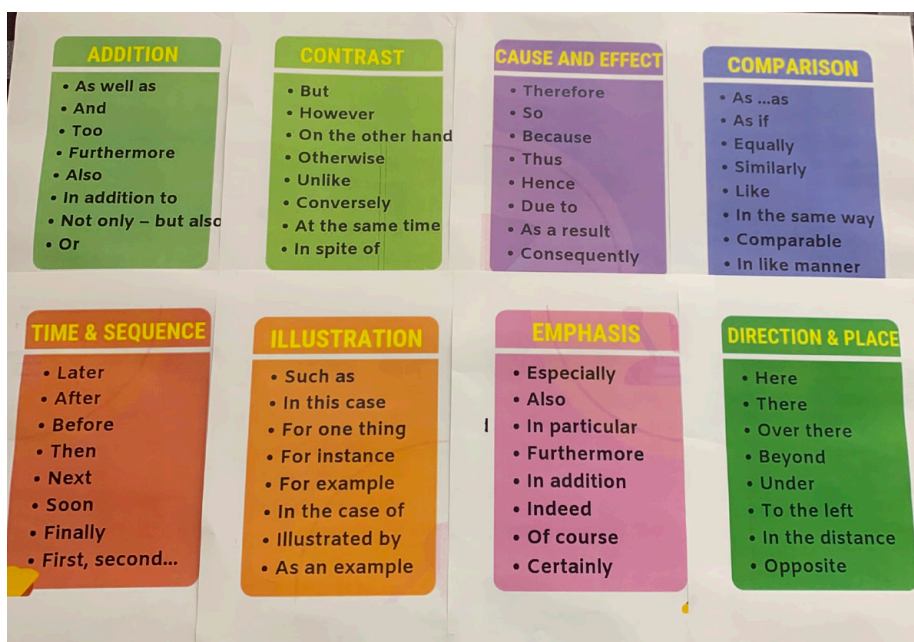


Figure 23. Linking words posted on the word wall.

Our next order of business was to introduce strategies for writing, such as what to do when you are at a loss for words, i.e., have a lexical gap. We illustrated the problem of the lexical gap by showing students a concrete example of a participant in a previous study (Gunnarsson, 2015), thinking aloud while responding to a lexical gap in the text. By borrowing sentences from the students' first essay and removing a crucial word, the students had opportunity to solve lexical gaps themselves. Following the APE-model, students had a short time to ponder the missing word of a sentence before discussing possible suggestions with their neighbor and then the whole class. This gave rise to a metalinguistic discussion explaining why some proposed words could not fill the gap while others could.

The end of lesson three was spent on the concept of idea-generation. The concept was explained and modelled by the teachers. Examples from a previous study were shown to illustrate different ways of generating ideas (Gunnarsson, 2019) before the students were given an opportunity to generate ideas themselves connected to *A Good Life*. In this example, a participant thought about her sister's wedding using Bosnian, as the wedding took place in Bosnia where she was surrounded by family and friends speaking Bosnian. The study showed that while students were immersed in idea-generating for an English text, other languages in the students' repertoire could be employed for thinking about the content (Gunnarsson, 2019).

Lesson four was spent entirely on peer response, which meant returning to phase 2 of the curriculum cycle dealing with exploring similar texts for inspiration (Gibbons, 2006). The task was for the groups to read four student texts on the topic of *A Good Life* and to discuss what grade the individual texts had been given based on the grading criteria which accompanies the writing instruction. The groups were supplied with a variation of four texts (meaning out of the six groups in the classroom, only two groups would have the same composition of texts), the grading criteria and the knowledge that only the grades A, C and E had been used. This meant that two texts had been graded the same. The groups chose to tackle this assignment in somewhat different ways. Some read each text aloud, while the rest of the group members listened and others chose to read one text each in silence. In the discussion we wanted the students to focus on what was done well in the texts, how the instruction was used, what could be improved, the difference between texts, what grade each text had been given and why.

The students were given the greater part of the lesson to read, discuss and grade the texts. Once their discussions started to ebb out, we stopped the group work and discussed a few of the texts with the whole class, revealing the grades of the texts and the motivation for the grade provided by Gothenburg University. Ample time was given to the students to raise questions about the texts they had read and to discuss grades they thought were questionable. One such discussion in Class A was about the length of a text and how quantity is not always synonymous with quality and a higher grade. Another such discussion was about sticking to the topic and not venturing off in the text, but rather paying close attention to what is asked in the instruction, adjusting the text for the intended purpose and audience.

The fifth lesson started with a recap of the third lesson, with students practicing how to deal with a lexical gap in the text. We continued with a presentation of three specific writing strategies. The idea behind the introduction of three strategies was not to promote that students would use all three, rather we wanted to present the students with a buffet of strategies so that we could cater to their individual preferences (Wolfersberger, 2003). The first writing strategy we introduced to the students was *postponing*. We also presented the possibility of postponing more than just a word in the text, to include a larger chunk of text, for instance developing an idea, expanding a paragraph, or postponing an entire paragraph of the text to return to later. In our example, which we presented to the students, we illustrated different techniques for postponing and discussed the advantages and disadvantages to some, such as just leaving an empty space in the text, highlighting with color, using all capital letters as well as writing words in languages other than English (Figure 24).



Figure 24. Examples of postponing on the word wall.

The second writing strategy we presented was *rehearsing*. The students were shown examples from the previous study, illustrating how the writing strategy could be employed for both words and phrases (Gunnarsson, 2019). The third and final writing strategy to be introduced was *back-translating*. As with the other strategies, the students were provided with examples from the previous study (Gunnarsson, 2019), showing what this might look like in the writing process of someone their own age. In dealing with back-translations, we also covered the dangers of simple translations for words that have several meanings.

Speaking of translation, we transitioned into talking about digital resources and the fact that they would be allowed to use all tools available while writing their essays the following day. An inventory was made of the possible resources to use and an explanation of each ensued. As most students mentioned using Google Translate as a tool when writing, we talked about how translations are made possible using this tool. To make our explanation clear, we gave the students sentences to translate, which we knew would cause difficulty, containing homonyms (both homographs and homophones) and idiomatic expressions. As the translations came back faulty, we discussed why and how to take these faulty translations into account when wanting to use the tool. The word prediction and spell checker installed on their Chromebooks were considered before providing the classes with possible online dictionaries, examining their trustworthiness. The links to the online dictionaries discussed were written on a poster and added to our word wall. An offer of having a physical dictionary in a language of the individual student's choosing while writing was presented. One student responded to this offer and opted to have a Swedish/English dictionary, which was provided to him on the day of writing the essay.

The sixth lesson was dedicated to writing the essay *A Good Life*. The lesson was scheduled on a Friday morning and scheduling arrangements were made to allow students

50 minutes to write their essays. Before the start of the lesson, the classroom had been arranged so that all chairs and tables were facing the word wall. On the whiteboard, a slide was showing the lesson time, the agenda of the day, which was Essay 2, and both a digital and analogue clock displayed the time. As the students took their seats, they were provided with the mind maps created on the first lesson and paper and pencil in case they wanted to make any handwritten notes while writing on their Chromebooks. Most of the students used the lesson time provided, while a few turned in their essays with a few minutes to spare.

Essay instructions

Two different essay instructions were used in this study, one which the students used during the second lesson of observation, and another that was used as the final task of the intervention lessons.

The first instruction, used in the observation, was entitled *A Letter to CONNECT* and was available to use freely as preparation for the national exam in year 9 through the Gothenburg university website (2024). Unfortunately, this particular instruction has since been removed and replaced with a new instruction.

As is mentioned in the title, the task is to write a letter to the international youth camp CONNECT in order to take part in a three week stay promoting international understanding. Included in the task are five bullet points with instructions in the imperative entitled *introduce*, *explain*, *suggest*, another *suggest* and *describe*. The task is to introduce yourself, explain why you would like to join the camp, suggest an activity and an issue to be discussed, and describe the possible impact of the camp in the future. *A Letter to CONNECT* comes complete with instructions for the teacher, which was used when the students' written products were assessed.

The second instruction, used in the intervention lessons, was entitled *A Good Life*. The instruction targets students in English 5 (the first year of upper secondary), and is available online at the Gothenburg university website (2022) to be used as preparation for the national exam. The task is to define a good life to people in general and to the student him/herself. Questions such as *What makes a good life?* and *What is important to you?* are posed seeking personal judgement and reasoning. The instruction includes a mind map with six nodes with the titles: *health*, *recreation*, *social life*, *education/job*, *money* and *environment*. Connected to these six titles are child nodes with subordinate titles to give examples of what the students could write about concerning, for instance, health. As the aim of the instruction is for students to value, motivate their opinion and to reason regarding the concept of *A Good Life* from both a global perspective and a personal one, I have chosen to classify the genre as exposition (Lundahl, 2012).

H: Student results on essays

Students' essays were corrected by Sara and myself. Our process was to first correct all essays on our own and then meet to compare and discuss the essays which we disagreed on. Although we did not record how many essays we disagreed on, our assessments were fairly consistent and disagreement mainly centered on whether the grade should be followed by a plus (+) or a minus (-). These signs have therefore been taken away from the results presented below.

In order to be able to say anything about the results, a comparison was made to the results of the first essay students wrote, *A Letter to Connect*, which was submitted before the intervention lessons started. This being said, the first essay belonged to a completely different genre, as it entailed writing a letter, whereas the second essay was expository in nature. Table 21 below, contains the results of both essays categorized with regards to the grade they received.

Table 21. Students' results on essays *A Letter to Connect* and *A Good Life*.

Essays	F	E	D	C	B	A
<i>A Letter to Connect</i> (N=51)	-	12	6	24	7	2
<i>A Good Life</i> (N=49)	1	1	8	15	14	10

Table 21 demonstrates that more students received a higher grade for the essay *A Good Life*. Although it cannot be established without a doubt that the intervention was the cause behind more students receiving a higher grade, it is still interesting to note that so many students performed better. Taking a closer look at the individual students, who wrote both essays (N=47), enabling a comparison between the two assessments, a total of 29 students improved their results. Nine of these students improved their results by two or more levels. One example is Erica, who received a C+ on her first essay and an A on her second. Noteworthy, is that there were three students who achieved a lesser result on the second essay, all of them receiving one grade below what was achieved in the first essay. There was further one student who received an F on the second essay, who was not present for the first. As the participants of the focus groups have played a significant part in this thesis, their results are displayed in Table 22:

Table 22. Essay results of the focus group participants, the number 1 referring to the first essay (A Letter to Connect) and the number 2 referring to the second essay (A Good Life).

Focus group participant	E	D	C	B	A
Class A					
Alan			1 and 2		
Andrew	1	2			
Emma			1 and 2		
Erica			1		2
Ian			1 (C-) and 2 (C+)		
Ray				1	2
Zoe	1			2	
Class B					
Amelia				1	2
Avery			1	2	
Evelyn			1		2
Harper				1 and 2	
Megan				1	2

As seen in Table 22, all the participants of the focus groups either received the same grade on essays one and two, or improved their grades by one or more levels. Zoe is the most exceptional case, having received an E on her first essay and a B on her second. Erica and Evelyn both improved their grades by two levels, moving from a C to an A, whereas Andrew, Ray, Avery and Megan all improved by one grade. Although none of the participants of the focus groups lowered their grade, four of them received the same grade for both essays.

I: Timeline of data collection

2020:

18th of June - a meeting with the lead teacher

18th of June - an informal meeting with the principal

2021:

11th of March, 2021 - a planning session with the lead teacher

12th of March, 2021 - a first online meeting with the student participants

19th of March, 2021 - a second online meeting with the student participants

22nd of March - a first interview with the lead teacher

26th of March - the students fill out the first questionnaire

8th of April - observation of the first lesson in writing preparation

9th of April - observation of the second lesson in writing preparation

12th of April - a planning session with the lead teacher

16th of April - a planning session with the lead teacher

6th of May - the first intervention lesson

7th of May - the second intervention lesson

10th of May - a planning session with the lead teacher

17th of May - a planning session with the lead teacher

19th of May - a planning session with the lead teacher

20th of May - the third intervention lesson

21st of May - the fourth intervention lesson

24th of May - a focus group interview with the English teachers

27th of May - the fifth intervention lesson

28th of May - the sixth intervention lesson

28th of May - the students fill out the second questionnaire

28th of May - focus group interview with the students

31st of May - assessing student essays with the lead teacher

3rd of June - assessing student essays with the lead teacher

9th of June - a second interview with the lead teacher

REFERENCES

- Andréasson, A., Sandell Ring, A. . (2022). Interaktion - tala, samtala och föra dialog. 2022. Retrieved 12th of October, 2022, from <https://www.skolverket.se/download/18.2f324c2517825909a162929/1623826717186/artikel-4-interaktion-2.pdf>
- Antón, M., & DiCamilla, F. (1998). Socio-cognitive functions of L1 collaborative interaction in the L2 classroom. *Canadian modern language review*, 54(3), 314-342.
- Baker, C. (2011). *Foundations of bilingual education and bilingualism*. Multilingual Matters.
- Baker, C., & Wright, W. E. (2021). *Foundations of bilingual education and bilingualism*. Multilingual Matters.
- Bakhtin, M., McGee, V. W., Holquist, M., & Emerson, C. (1986). *Speech genres and other late essays*. Univ. of Texas Press.
- Bandura, A. (1995). Exercise of personal and collective efficacy in changing societies. In A. Bandura (Ed.), *Self-efficacy in changing societies* (pp. 1-45). Cambridge university press.
- Bandura, A. (1997). *Self-efficacy in changing societies*. Cambridge university press.
- Bandura, A. (2000). Self-efficacy. In *Encyclopedia of psychology*, Vol. 7. (pp. 212-213). Oxford University Press
- American Psychological Association. <https://doi.org/10.1037/10522-094>
- Barnes, D. (2008). Exploratory talk for learning. *Exploring talk in school*, 1-15.
- Barnes, D., & Todd, F. (1977). *Communication and learning in small groups*. Routledge & Kegan Paul.
- Bauer, E. B., Presiado, V., & Colomer, S. (2016). Writing Through Partnership. *Journal of Literacy Research*, 49(1), 10-37. <https://doi.org/10.1177/1086296x16683417>
- BBC. (2023). *New York Times sues Microsoft and OpenAI for 'billions'*. Retrieved 2024-11-25 from <https://www.bbc.com/news/technology-67826601>
- Beiler, I. R. (2021). Marked and unmarked translanguaging in accelerated, mainstream, and sheltered English classrooms. *Multilingua*, 40(1), 107-138.
- Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus open*, 2, 8-14.
- Bloom, B. S. (1954). The thought process of students in discussion. In S. J. French (Ed.), *Accent on teaching: Experiments in general education* (pp. 23-46). Harper.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Bukamal, H. (2022). Deconstructing insider–outsider researcher positionality. *British Journal of Special Education*, 49(3), 327-349.
- Cabau, B. (2009). The irresistible rise and hegemony of a linguistic fortress: English teaching in Sweden. *International Multilingual Research Journal*, 3(2), 134-152.
- Canagarajah, S. (2011). Translanguaging in the classroom: Emerging issues for research and pedagogy. *Applied Linguistics Review*, 2(1), 1-28.

- Carbonara, V., Scibetta, A., & Torregrossa, J. (2023). The benefits of multilingual pedagogies for multilingual children's narrative abilities. *International Journal of Multilingualism*, 1-25.
- Carss, W. D. (2007). *The Effects of using Think-Pair-Share during Guided Reading Lessons* [Masters, University of Waikato The University of Waikato]. Hamilton, New Zealand. <https://hdl.handle.net/10289/2233>
- Cenoz, J., & Gorter, D. (2020). Pedagogical translanguaging: An introduction. *System*, 92, 102269.
- Chen, A.-h. (2022). The Effects of Writing Strategy Instruction on EFL Learners' Writing Development. *English Language Teaching*, 15(3).
- Chen, F. H. (2021). Exploring students' perceptions and attitudes towards genre-based pedagogy developed in persuasive writing teaching: The systemic functional linguistics perspective. *Arab World English Journal (AWEJ) Volume*, 12.
- Cheng, Y. s., Horwitz, E. K., & Schallert, D. L. (1999). Language anxiety: Differentiating writing and speaking components. *Language learning*, 49(3), 417-446.
- Choi, J. (2013). Does peer feedback affect L2 writers' L2 learning, composition skills, metacognitive knowledge, and L2 writing anxiety? *ENGLISH TEACHING (영어교육)*, 68(3), 187-213.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education*. Routledge.
- Collie, R. J., & Martin, A. J. (2016). Adaptability: An important capacity for effective teachers. *Educational Practice and Theory*, 38(1), 27-39.
- Council of Europe. (2001). *Common European framework of reference for languages: Learning, teaching, assessment*. Cambridge University Press.
- Cumming, A. (1990). Metalinguistic and ideational thinking in second language composing. *Written communication*, 7(4), 482-511.
- Cummins, J., Bismilla, V., Chow, P., Cohen, S., Giampapa, F., Leoni, L., Sandhu, P. and Sastri, P. (2005). Affirming Identity in Multilingual Classrooms. *Educational Leadership*, 63(1), 38-43.
- Cummins, J., & Wadensjö, P. (2017). *Flerspråkiga elever : effektiv undervisning i en utmanande tid*. Natur & Kultur.
- d'Errico, F. (1998). Palaeolithic origins of artificial memory systems: an evolutionary perspective. In C. Renfrew & C. Scarre (Eds.), *Cognition and material culture : the archaeology of symbolic storage* (pp. 19-50). McDonald Institute for Archaeological Research.
- Daniels, H. (2008). *Vygotsky and research*. Routledge.
- Davis, S. (2015). Transformative learning: Revisiting Heathcote and Vygotsky for the digital age.
- Dawes, L., Fisher, E., & Mercer, N. (1992). The quality of talk at the computer. *Language and Learning*, 10, 22-25.
- Dennett, D. C. (1996). *Kinds of minds : towards an understanding of consciousness*. Weidenfeld & Nicolson.
- Derewianka, B. (1991). *Exploring how texts work*. Primary English Teaching Association.
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in second language learning and teaching*, 4(2), 237-274.

- Donald, M. (1991). *Origins of the modern mind : three stages in the evolution of culture and cognition*. Harvard University Press.
- Duarte, J. (2019). Translanguaging in mainstream education: A sociocultural approach. *International Journal of Bilingual Education and Bilingualism*, 22(2), 150-164.
- Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge University Press. <https://doi.org/DOI: 10.1017/CBO9780511667343>
- Dörnyei, Z. (2007). *Research methods in applied linguistics : quantitative, qualitative, and mixed methodologies*. Oxford University Press.
- East, M. (2008). *Dictionary use in foreign language writing exams: Impact and implications* (Vol. 22). John Benjamins Publishing.
- Engeström, Y. (1999). Innovative learning in work teams: analyzing the cycles of knowledge creation in practice. In Y. Engeström, R. Miettinen, & R.-L. Punamäki (Eds.), *Perspectives on activity theory* (pp. 377-404). Cambridge Univ. Press.
- Fredholm, K. (2015). El uso de traducción automática y otras estrategias de escritura digital en español como lengua extranjera. *Estudios de Lingüística Aplicada*, 33(62), 9-31.
- Fredholm, K. (2021). Google Translate search strategies used by learners of Spanish L3: A complex lexico-morpho-syntactic weave of trial and error. *Estudios de Lingüística Aplicada*, 30(72), 9-48.
- García, O. (2012). 20. American Multilingualism for a Global Future: Recommendations for Parents, Educators and Policy-makers. In G. Ofelia, Z. Zeena, & O. Bahar (Eds.), *Bilingual Community Education and Multilingualism* (pp. 309-314). Multilingual Matters. <https://doi.org/doi:10.21832/9781847698018-022>
- García, O., & Baetens Beardsmore, H. (2009). *Bilingual education in the 21st century : a global perspective*. Blackwell Pub.
- García, O., Johnson, S. I., Seltzer, K., & Valdés, G. (2017). *The translanguaging classroom: Leveraging student bilingualism for learning*. Caslon Philadelphia, PA.
- García, O., & Kano, N. (2014). Translanguaging as process and pedagogy: Developing the English writing of Japanese students in the US. *The multilingual turn in languages education: Opportunities and challenges*, 258-277.
- García, O., Kleifgen, J. A., & Cummins, J. (2018). *Educating emergent bilinguals : policies, programs, and practices for English learners*. Teachers College Press.
- García, O., & Kleyn, T. (2016). *Translanguaging with multilingual students : learning from classroom moments*. Routledge.
- García, O., & Leiva, C. (2014). Theorizing and enacting translanguaging for social justice. *Heteroglossia as practice and pedagogy*, 199-216.
- García, O., & Wei, L. (2014). *Translanguaging : language, bilingualism and education*. Palgrave Macmillan.
- Gibbons, P. (2006). *Stärk språket, stärk lärandet : språk- och kunskapsutvecklande arbetssätt för och med andraspråkselever i klassrummet*. Hallgren & Fallgren.
- Gibbons, P. (2007). Writing in a second language across the curriculum. *BILINGUAL EDUCATION AND BILINGUALISM*, 61, 195.
- Gibbons, P. (2009). *English learners, academic literacy, and thinking : learning in the challenge zone*. Heinemann.

- Gitlin, A., Buendía, E., Crosland, K., & Doumbia, F. (2003). The production of margin and center: Welcoming—unwelcoming of immigrant students. *American Educational Research Journal*, 40(1), 91-122.
- Gunnarsson, T. (2015). *Multilingual students' writing in English : the role of their L1(s)*. Centre for Languages and Literature, Lund University.
- Gunnarsson, T. (2019). Multilingual students' use of their linguistic repertoires while writing in L2 English. *Lingua*, 224, 34-50.
<https://doi.org/10.1016/j.lingua.2019.03.007>
- Gyllstad, H., Sundqvist, P., Sandlund, E., & Källkvist, M. (2023). Effects of Word Definitions on Meaning Recall: A Multisite Intervention in Language-Diverse Second Language English Classrooms. *Language learning*, 73(2), 403-444.
- Göteborgs universitet. (2022). *Exempel på uppgiftstyper för Engelska 5*. Retrieved 2023-01-23 from <https://www.gu.se/nationella-prov-frammande-sprak/prov-och-bedomningsstod-i-engelska/engelska-5-gymnasiet/exempel-pa-uppgiftstyper-for-engelska-5>
- Göteborgs universitet. (2024). *Exempel på uppgiftstyper för årskurs 9*. Retrieved 2025-02-07 from <https://www.gu.se/nationella-prov-frammande-sprak/prov-och-bedomningsstod-i-engelska/engelska-arskurs-7-9/exempel-pa-uppgiftstyper-for-arskurs-9>
- Haglund, C. (2004). Flerspråkighet och identitet. In Kenneth Hytlenstam & I. Lindberg (Eds.), *Svenska som andraspråk: i forskning, undervisning och samhälle* (pp. 359-387). Studentlitteratur.
- Hagström, M., & Wetterstrand, F. (2018). EPA blir STAR. *NÄMNAREN*(1).
- Halliday, M. A. (1993). Towards a language-based theory of learning. *Linguistics and education*, 5(2), 93-116.
- Hamdan, A. K. (2009). Reflexivity of discomfort in insider-outsider educational research. *McGill Journal of Education*, 44(3), 377-404.
- Harjunen, E. (2012). Patterns of control over the teaching—studying—learning process and classrooms as complex dynamic environments: a theoretical framework. *European Journal of Teacher Education*, 35(2), 139-161.
<https://doi.org/10.1080/02619768.2011.643465>
- Hirsh, Å. (2016). *Nationella prov i grundskolan [Elektronisk resurs] En studie av hur lärare och rektorer uppfattar och hanterar prov och provresultat* (Skolverket:447). <https://hj.diva-portal.org/smash/get/diva2:1061550/FULLTEXT01.pdf>
- Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, 70(2), 125-132.
- Hult, F. M. (2012). English as a transcultural language in Swedish policy and practice. *TESOL Quarterly*, 46(2), 230-257.
- Hydén, L. C., & Bülow, P. H. (2003). Who's talking: drawing conclusions from focus groups—some methodological considerations. *International Journal of Social Research Methodology*, 6(4), 305-321.
<https://doi.org/10.1080/13645570210124865>
- Hyland, K. (2003). *Second language writing*. Cambridge University Press.
- Hyland, K. (2016). *Teaching and researching writing*. Routledge.

- Högberg, B., & Horn, D. (2022). National high-stakes testing, gender, and school stress in Europe: A difference-in-differences analysis. *European Sociological Review*, 38(6), 975-987.
- Jessner, U. (2006). *Linguistic awareness in multilinguals : English as a third language*. Edinburgh University Press.
- Kang, Y.-S., & Pyun, D. O. (2013). Mediation strategies in L2 writing processes: A case study of two Korean language learners. *Language, Culture and Curriculum*, 26(1), 52-67.
- Karabulut, A., & Dollar, Y. K. (2022). The use of translanguaging pedagogy in writing classes of Turkish EFL learners. *Participatory Educational Research*, 9(6), 41-65.
- Karlsson, A., Nygård Larsson, P., & Jakobsson, A. (2019). The continuity of learning in a translanguaging science classroom. *Cultural Studies of Science Education*, 15(1), 1-25. <https://doi.org/10.1007/s11422-019-09933-y>
- Klapp, T., Klapp, A., & Gustafsson, J.-E. (2023). Relations between students' well-being and academic achievement: evidence from Swedish compulsory school. *European Journal of Psychology of Education*, 39(1), 275-296.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage publications.
- Kvale, S., Brinkmann, S., & Torhell, S.-E. (2009). *Den kvalitativa forskningsintervjun*. Studentlitteratur.
- Küçük, T. (2023). Factors Leading to Writing Anxiety in EFL Classes. *International Journal of Social Sciences & Educational Studies*, 10(1), 1-12. <https://doi.org/https://doi.org/10.23918/ijsses.v10i1p1>
- Källkvist, M., Gyllstad, H., Sandlund, E., & Sundqvist, P. (2017). English only in multilingual classrooms? *LMS-Lingua*, 2017(4), 27-31.
- Källkvist, M., Gyllstad, H., Sandlund, E., & Sundqvist, P. (2022a). Towards an in-depth understanding of English-Swedish translanguaging pedagogy in multilingual EFL classrooms. *HumaNetten*(48), 138-167.
- Källkvist, M., Gyllstad, H., Sandlund, E., & Sundqvist, P. (2022b). Towards an in-depth understanding of English-Swedish translanguaging pedagogy in multilingual EFL classrooms [Elektronisk resurs]. In (Vol. 48, pp. 138-167). HumaNetten. <https://doi.org/https://doi.org/10.15626/hn.20224807>
- Källkvist, M., Sandlund, E., Sundqvist, P., & Gyllstad, H. (2024). Translanguaging in multilingual EFL lower-secondary classrooms : Practices and beliefs among experienced teachers in Sweden. *The European Journal of Applied Linguistics and TEFL*, 13(1), 23-44. <https://ludwig.lub.lu.se/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,uid&db=edsswe&AN=edsswe.oai.lup.lub.lu.se.c0a64362.7573.4a01.8fe9.0ba35a829315&site=eds-live&scope=site>
- Lee, Y. (2013). Collaborative concept mapping as a pre-writing strategy for L2 learning: A Korean application. *International Journal of Information and Education Technology*, 3(2), 254.
- Lei, X. (2008). Exploring a sociocultural approach to writing strategy research: Mediated actions in writing activities. *Journal of Second Language Writing*, 17(4), 217-236.
- Leont'ev, A. N. (1978). *Activity, consciousness, and personality*. Prentice-Hall.

- Li, J., & Cumming, A. (2001). Word processing and second language writing: A longitudinal case study. *International Journal of English Studies*, 1(2), 127-152.
- Li Wei. (2011). Multilinguality, multimodality, and multicompetence: Code-and modeswitching by minority ethnic children in complementary schools. *The Modern Language Journal*, 95(3), 370-384.
- Lin, B. (2006). Genre-based teaching and Vygotskian principles in EFL: The case of a university writing course. *Asian EFL journal*, 8(3).
- Lin, G. H. C., & Ho, M. M. S. (2009). An Exploration into Foreign Language Writing Anxiety from Taiwanese University Students' Perspectives. *Online Submission*.
- Lin, M.-Y. D. (2023). The effects of mediation tools on online collaborative and individual writing. *The Asia-Pacific Education Researcher*, 32(1), 65-78.
- Lundahl, B. (2012). *Engelsk språkdidaktik : texter, kommunikation, språkutveckling*. Studentlitteratur.
- Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing*, 18(1), 30-43.
- Lyman, F. T. (2022). *100 Teaching Ideas that Transfer and Transform Learning: Expanding your Repertoire*. Routledge.
- Macaro, E. (2005). Codeswitching in the L2 classroom: A communication and learning strategy. In E. Llurda (Ed.), *Non-Native Language Teachers: Perceptions, Challenges and Contributions to the Profession* (pp. 63-84). Springer.
- Marková, I., Linell, P., Grossen, M., & Salazar Orvig, A. (2007). *Dialogue in focus groups : exploring in socially shared knowledge*. Equinox Publishing.
- McLaughlin, B. (1984). *Second-language acquisition in childhood Vol. 1 Preschool children*. LEA.
- Mercer, N. (1995). *The guided construction of knowledge: Talk amongst teachers and learners*. Multilingual matters.
- Mercer, N. (2000). *Words and minds : how we use language to think together*. Routledge.
- Mercer, N. (2004). Sociocultural discourse analysis. *Journal of applied linguistics*, 1(2), 137-168.
- Mercer, N., & Littleton, K. (2007). *Dialogue and the development of children's thinking : a sociocultural approach*. Routledge.
<http://www.loc.gov/catdir/toc/ecip076/2006101162.html>
- Mercer, N., Wegerif, R., & Dawes, L. (1999). Children's talk and the development of reasoning in the classroom. *British educational research journal*, 25(1), 95-111.
- Murphy, L., & de Larios, J. R. (2010). Searching for words: One strategic use of the mother tongue by advanced Spanish EFL writers. *Journal of Second Language Writing*, 19(2), 61-81.
- Neokleous, G. (2017). Closing the gap: Student attitudes toward first language use in monolingual EFL classrooms. *TESOL journal*, 8(2), 314-341.
- Newman, D. (1989). *The Construction Zone: Working for cognitive change in school*. Cambridge University Press.
- Nordman, C. (2024). *När blir flerspråkighet en resurs? : en aktionsforskningsstudie om pedagogiskt transspråkande i ämnesundervisning*. Malmö University Press.

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), 1609406917733847.
- O'Regan, B., Mompean, A. R., & Desmet, P. (2010). From spell, grammar and style checkers to writing aids for English and French as a foreign language: Challenges and opportunities. *Revue française de linguistique appliquée*, 15(2), 67-84.
- OECD. (2015). *Immigrant Students at School*.
<https://doi.org/doi:https://doi.org/10.1787/9789264249509-en>
- Oh, S. (2020). Second language learners' use of writing resources in writing assessment. *Language Assessment Quarterly*, 17(1), 60-84.
- Ollerhead, S. (2018). Teaching across semiotic modes with multilingual learners: translanguaging in an Australian classroom. *Language and Education*, 33(2), 106-122. <https://doi.org/10.1080/09500782.2018.1516780>
- Oxford, R. L. (2017). *Teaching and researching language learning strategies : self-regulation in context*. Routledge, Taylor and Francis Group.
- Ozkose-Biyik, C., & Meskill, C. (2015). Plays well with others: A study of EFL learner reciprocity in action. *TESOL Quarterly*, 49(4), 787-813.
- Pacheco, M. B. (2016). *Translanguaging in the English-centric classroom: A communities of practice perspective*. Vanderbilt University.
- Pacheco, M. B., David, S. S., & Jiménez, R. T. (2015). Translating pedagogies. *Middle Grades Research Journal*, 10(1), 49-63.
- Padang, J. S. M. (2014). *IMPROVING STUDENTS ACHIEVEMENT IN WRITING DESCRIPTIVE TEXT THROUGH MIND MAPPING STRATEGY* UNIMED].
- Poehner, M. E. (2008). Both sides of the conversation: The interplay between mediation and learner reciprocity in dynamic assessment. *Sociocultural theory and the teaching of second languages*, 33-56.
- Prilutskaya, M., & Knoph, R. (2020). Research on three L2 writing conditions: Students' perceptions and use of background languages when writing in English. *Cogent Education*, 7(1), 1832179.
- Rajendram, S. (2019). *Translanguaging as an agentive, collaborative and socioculturally responsive pedagogy for multilingual learners* University of Toronto (Canada)].
- Rosén, J., & Wedin, Å. (2015). *Klassrumsinteraktion och flerspråkighet : ett kritiskt perspektiv*. Liber.
- Rosiers, K. (2018). Translanguaging revisited. *Translation and Translanguaging in Multilingual Contexts*, 4(3), 361-383. <https://doi.org/10.1075/ttmc.00018.ros>
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment & evaluation in higher education*, 35(5), 535-550.
- Sadler, D. R. (2015). Backwards assessment explanations: Implications for teaching and assessment practice. In *Assessment in music education: From policy to practice* (pp. 9-19). Springer.
- Saville-Troike, M. (2008). *The ethnography of communication: An introduction*. John Wiley & Sons.
- Schmidt, R. W. (1990). The role of consciousness in second language learning1. *Applied linguistics*, 11(2), 129-158.

- Scott, A. (2005). Preservice teachers' intentions to provide good examples and help children replicate them. *Building connections: Research, theory and practice*, 656-663.
- SFS 2010:800. Skollag (2010: 800). https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/skollag-2010800_sfs-2010-800/
- Simeon, J. (2016). Learner writing strategies of Seychellois ESL (English as a second language) secondary school students: A sociocultural theory perspective. *Learning, Culture and Social Interaction*, 8, 1-11.
- Sinclair, J. M., & Coulthard, M. (1975). *Towards an analysis of discourse : the English used by teachers and pupils*. Oxford U.P.
- Skolinspektionen. (2010). *Språk- och kunskapsutveckling för barn och elever med annat modersmål än svenska* (2010:16).
- Skolverket. (2011a). Kommentarmaterial till kursplanen i engelska. In. Stockholm: Skolverket .
- Skolverket. (2011b). *Läroplan för grundskolan, förskoleklassen och fritidshemmet 2011*. (SKOLFS 2010:37). Stockholm: Skolverket Retrieved from <https://gupea.ub.gu.se/handle/2077/31382>
- Skolverket. (2022a). *Jämför kursplanerna: Engelska Lgr22-Lgr11*. Retrieved 2023-01-23 from https://www.skolverket.se/download/18.66960151804bed21fd33b2/1657714103440/jamforelsedok_Engelska.pdf
- Skolverket. (2022b). *Kommentarmaterial till kursplanen i engelska – grundskolan [Elektronisk resurs]* <http://www.skolverket.se/publikationer>
- Skolverket. (2023a). *Samtliga elever i grundskola med undervisning i modersmål läsåret 2023/24*. Sveriges Officiella Statistik. Retrieved 2024-08-23 from <https://www.skolverket.se/skolutveckling/statistik/sok-statistik-om-forskola-skola-och-vuxenutbildning?sok=SokC&omrade=Skolor%20och%20elever&lasar=2023/24&run=1>
- Skolverket. (2023b). Skolverkets bedömning av läget i skolväsendet 2023. In. Solna: National Agency for Education.
- Skolverket. (2024a, 2024-10-02). *Gemensam europeisk referensram för språk*. Retrieved 2025-02-11 from <https://www.skolverket.se/skolutveckling/inspiration-och-stod-i-arbetet/stod-i-arbetet/gemensam-europeisk-referensram-for-sprak-gers>
- Skolverket. (2024b, 2024-08-15). *Nationella prov*. Retrieved 2024-11-19 from <https://www.skolverket.se/innehall-a-o/landningssidor-a-o/nationella-prov>
- Skolverket. (2024c, 2024-09-27). *Provdatum i grundskolan*. Retrieved 2024-11-18 from <https://www.skolverket.se/undervisning/grundskolan/nationella-prov-i-grundskolan/provdatum-i-grundskolan>
- Skolverket. (2024d, 2024-11-14). *Provinformation*. Retrieved 2024-11-18 from <https://www.skolverket.se/undervisning/grundskolan/nationella-prov-i-grundskolan/nationella-prov-pappersformat-grundskolan/provinformation-grundskolan>
- Skolverket. (2024e, 2024-10-02). *Provresultatets betydelse för betyget*. Retrieved 2024-11-19 from <https://www.skolverket.se/undervisning/grundskolan/nationella-prov-i->

- grundskolan/detta-galler-alla-nationella-prov-grundskolan/provresultatets-betydelse-for-betyget-grundskolan
- Skolverket. (2025, 2025-01-13). *Antagning till gymnasieskolan*. Retrieved 2025-02-07 from <https://www.skolverket.se/regler-och-ansvar/ansvar-i-skolfragor/antagning-till-gymnasieskolan>
- Smithson, J. (2000). Using and analysing focus groups: Limitations and possibilities. *International Journal of Social Research Methodology*, 3(2), 103-119. <https://doi.org/10.1080/136455700405172>
- Swain, M., Kinnear, P., & Steinman, L. (2015). *Sociocultural theory in second language education : an introduction through narratives*. Multilingual Matters.
- Swain, M., & Lapkin, S. (1998). Interaction and second language learning: Two adolescent French immersion students working together. *The Modern Language Journal*, 82(3), 320-337.
- Swedish Schools Inspectorate. (2010). *Språk- och kunskapsutveckling för barn och elever med annat modersmål än svenska. Skolinspektionens rapport 2010:16*. (2010:16). <https://www.skolinspektionen.se/beslut-rapporter/publikationer/kvalitetsgranskning/2010/sprak--och-kunskapsutveckling-for-barn-och-elever-med-annat-modersmal-an-svenska/>
- Säljö, R. (2013). *Lärande och kulturella redskap : om lärprocesser och det kollektiva minnet*. Studentlitteratur.
- Tholin, J. (2012). "Swedishness" as a Norm for Learners of English in Swedish Schools: A Study of National and Local Objectives and Criteria in Compulsory Schools. *Scandinavian Journal of Educational Research*, 58(3), 253-268. <https://doi.org/10.1080/00313831.2012.725096>
- Thomson, P. (2002). *Schooling the rustbelt kids : making the difference in changing times*. Trentham.
- Ticheloven, A., Blom, E., Leseman, P., & McMonagle, S. (2021). Translanguaging challenges in multilingual classrooms: scholar, teacher and student perspectives. *International Journal of Multilingualism*, 18(3), 491-514.
- Topping, K. J., Smith, E. F., Swanson, I., & Elliot, A. (2000). Formative peer assessment of academic writing between postgraduate students. *Assessment & evaluation in higher education*, 25(2), 149-169.
- Toth, J. (2018). *English-medium instruction for young learners in Sweden: A longitudinal case study of a primary school class in a bilingual English-Swedish school* [Department of Language Education, Stockholm University].
- Tsagari, D., & Diakou, C. (2015). Students' and teachers' attitudes towards the use of the first language in the EFL State School Classrooms. *Research Papers in Language Teaching & Learning*, 6(1).
- Tullock, B. D., & Fernández-Villanueva, M. (2013). The role of previously learned languages in the thought processes of multilingual writers at the Deutsche Schule Barcelona. *Research in the Teaching of English*, 47(4), 420-441.
- Uddling, J., & Reath Warren, A. (2023). A newcomer's spontaneous translanguaging in lower-secondary physics education. *International Multilingual Research Journal*, 17(3), 270-288.

- Uljen, M. (1997). *School didactics and learning : a school didactic model framing an analysis of pedagogical implications of learning theory*. Psychology Press.
- Van der Aalsvoort, G., & Lidz, C. (2002). Reciprocity in dynamic assessment in classrooms: Taking contextual influences on individual learning into account. *Learning potential assessment and cognitive training: Actual research and perspectives in theory building and methodology*, 7(1), 111-144.
- van Lier, L. (2004). *The ecology and semiotics of language learning: A sociocultural perspective*. Springer.
- van Lier, L. (2008). Agency in the classroom. In J. P. Lantolf & M. E. Poehner (Eds.), *Sociocultural Theory and the Teaching of Second Languages* (Vol. 1, pp. 163-186). Equinox.
- Van Weijen, D., Van den Bergh, H., Rijlaarsdam, G., & Sanders, T. (2009). L1 use during L2 writing: An empirical study of a complex phenomenon. *Journal of Second Language Writing*, 18(4), 235-250.
- Velasco, P., & García, O. (2014). Translanguaging and the writing of bilingual learners. *Bilingual Research Journal*, 37(1), 6-23.
- Verger, A., Parcerisa, L., & Fontdevila, C. (2019). The growth and spread of large-scale assessments and test-based accountabilities: A political sociology of global education reforms. *Educational Review*, 71(1), 5-30.
- Vetenskapsrådet, & Åkerman, J. (2024). *God forskningssed*. Vetenskapsrådet.
- Von Worde, R. (2003). Students' Perspectives on Foreign Language Anxiety. *Inquiry*, 8(1), n1.
- Vygotskij, L. S. (1978). *Mind in society : the development of higher psychological processes*. Harvard U.P.
- Vygotskij, L. S. (2012). *Thought and language*. Martino Publishing.
- Vygotskij, L. S., & Cole, M. (1978). *Mind in society : the development of higher psychological processes*. Harvard U.P.
- Vygotsky, L. S. (1978). *Mind in society : the development of higher psychological processes* (M. Cole, Ed.). Harvard U.P.
- Vygotsky, L. S. (1987). *The collected works of LS Vygotsky: Vol. 1. Problems of general psychology*. Plenum Press. (1933-34)
- Vygotsky, L. S. (2012). *Thought and language*. MIT press.
- Vygotsky, L. S., Rieber, R. W., & Carton, A. S. (1987). *The collected works of L.S. Vygotsky Vol. 1 Problems of general psychology including the volume Thinking and speech*. Plenum P.
- Walter-Echols, E. (1990). Teaching writing by modeling genres through the teaching-learning cycle. CamTESOL Conference on English Language Teaching: Selected Papers Volume 5, 2009,
- Wang, W., & Wen, Q. (2002). L1 use in the L2 composing process: An exploratory study of 16 Chinese EFL writers. *Journal of Second Language Writing*, 11(3), 225-246.
- Wartofsky, M. W. (1979). *Models : representation and the scientific understanding*. Reidel.
- Wedin, Å. (2018). Flerspråkighet i klassrummet–Språklig mångfald som resurs. In: Stockholm: Skolverket.[Elektronisk resurs] <https://www.skolverket.se>

- Wegerif, R., & Scrimshaw, P. (1997). *Computers and talk in the primary classroom* (Vol. 12). Multilingual Matters.
- Weigle, S. C. (2002). *Assessing writing*. Cambridge University Press.
- Wertsch, J. V. (1991). *Voices of the mind : a sociocultural approach to mediated action*. Harvard University Press.
- Wertsch, J. V. (1998). *Mind as action*. Oxford University Press.
- Williams, C. (1994). *Arfarniad o Ddulliau Dysgu ac Addysgu yng Nghyddestun Addysg Uwchradd Ddwyeithog* [Unpublished Doctoral Thesis].
- Williams, G. (2004). Ontogenesis and Grammatics: Functions of Metalanguage in Pedagogical Discourse. In G. Williams & A. Lukin (Eds.), *The development of language: Functional perspectives on species and individuals* (pp. 241-267). Continuum.
- Winman, Spante, Willermark, Svensson, & Lundh Snis. (2018). *Digitaliseringen i skolan : möjligheter och utmaningar [Elektronisk resurs]*. Skolverket.
<https://www.skolverket.se/publikationsserier/forskning-for-skolan/2018/digitaliseringen-i-skolan---mojligheter-och-utmaningar>
- Wolfersberger, M. (2003). L1 to L2 writing process and strategy transfer: A look at lower proficiency writers. *TESL-EJ*, 7(2), 1-12.
- Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of child psychology and psychiatry*, 17(2), 89-100.
- Xu, W., & Zammit, K. (2020). Applying thematic analysis to education: A hybrid approach to interpreting data in practitioner research. *International journal of qualitative methods*, 19, 1609406920918810.
- Yang, M., Badger, R., & Yu, Z. (2006). A comparative study of peer and teacher feedback in a Chinese EFL writing class. *Journal of Second Language Writing*, 15(3), 179-200.
- Yunus, M. M., & Chien, C. H. (2016). The use of mind mapping strategy in Malaysian university English test (MUET) Writing. *Creative Education*, 7(04), 619.
- Zhang, Y. (2018). A Contrastive Study on the Application of Mind Maps in Argumentative Writing Instruction for EFL Learners. *English Language Teaching*, 11(12), 93-100.
- Zimmerman, B. J. (1995). Self-efficacy and educational development. *Self-efficacy in changing societies*, 1(1), 202-231.
- Zimmerman, B. J. (2000). Self-efficacy: An essential motive to learn. *Contemporary educational psychology*, 25(1), 82-91.

