

Vocational students: Strategy use and motivation for reading in English

A quantitative study of self-reported comprehension strategy use and interest for reading

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IV

Abstract

This master (MA) study is part of the Vocational and General students' Use of English (VOGUE) project, led by Associate Professor, Lisbeth M. Brevik. My MA study investigates the following research question: *How important is it for vocational students to be good readers of English compared to Norwegian, and to what extent do they report using reading comprehension strategies when reading in the two languages?*

To investigate this question, I have used a quantitative approach based on secondary survey data collected among students in upper secondary school across Norway, immediately after participating in national mapping tests in English and Norwegian. Specifically, from a nationwide population of 5,347 vocational students, I have included all who answered the questionnaire about reading in English ($N=1,185$). Additionally, I have zoomed in on a sub-group, who also answered the questionnaire about Norwegian reading ($n=471$). These questionnaire data have enabled me to identify their self-reported motivation/interest for reading, and their strategy use when reading factual texts in either language. The results indicate that the vocational students overall are motivated for reading in both English and Norwegian, and they report regular use of reading comprehension strategies. In addition, they seem to have a repertoire of four main strategies, consisting of a combination of deeper-level and surface-level strategies. The results indicate a conscious awareness of their strategy use, regardless of gender or language of reading (English or Norwegian). However, the vocational students' strategy repertoire appears to change based on their motivation/interest for reading in English, and the frequency of their strategy use.

An implication of my MA study is that reading comprehension instruction might profit from building on vocational students' motivation and interest for reading, and what they find to be of relevance. Similarly, reading theory (e.g. Bernhardt, 2011; RAND, 2002) implies that students' motivation/interest and use of strategies can compensate for a certain lack of reading proficiency. Another implication involves the importance of instructing and scaffolding deeper-level strategies, particularly to focus on students' development of a conscious awareness in strategy use. Finally, the results in this MA study indicate a positive attitude towards reading among vocational students. They report that it is important to them to be good readers of both English and Norwegian, and they report using reading comprehension strategies quite frequently, despite the fact that vocational students are commonly considered poor readers who are theory weak and lack motivation for reading (e.g., Brevik, 2016b; OECD, 2016).

Sammendrag

Denne masterstudien er en del av prosjektet Vocational and General students' Use of English (VOGUE), ledet av førsteamanuensis Lisbeth M. Brevik. Masterstudien undersøker følgende forskningsspørsmål: *Hvor viktig er det for yrkesfaglige elever å være gode lesere av engelsk sammenlignet med norsk, og i hvilken grad rapporterer de at de bruker lesestrategier når de leser på de to språkene?*

For å undersøke dette spørsmålet, brukte jeg et kvantitativt design basert på spørreundersøkelser. Dette er sekundærdata som ble samlet inn blant elever i videregående skole over hele landet, umiddelbart etter at de hadde gjennomført nasjonale kartleggingsprøver i engelsk og norsk. Blant et nasjonalt utvalg på 5.347 yrkesfagelever, har jeg inkludert alle elevene på yrkesfag som besvarte spørreundersøkelsen om lesing i engelsk ($N=1,185$). I tillegg har jeg sett nærmere på et delutvalg som også svarte på spørreundersøkelsen om lesing i norsk ($n=471$). Tilsammen har dette datamaterialet gitt meg mulighet til å identifisere yrkesfagelevers selvrapporterte motivasjon/interesse for lesing, og strategibruk når de leser faktatekster på de to språkene. Resultatene indikerer at yrkesfagelever er motiverte og interesserte i lesing i engelsk og norsk, og de rapporterer å bruke lesestrategier ofte. I tillegg ser de ut til å ha et repertoar på fire hovedstrategier, som består av både dybdestrategier og overflatestrategier, og dette ser ut til å være uavhengig av både kjønn og språket de leser på (engelsk eller norsk). De yrkesfaglige elevenes bruk av strategier ser imidlertid ut til å endre seg basert på deres motivasjon/interesse for lesing i engelsk, og hvor ofte elevene bruker strategier.

En implikasjon av min masterstudie er at undervisning som omhandler leseforståelse med fordel kan planlegges med utgangspunkt i yrkesfaglige elevers motivasjon og interesse for lesing, i tillegg til hva de opplever som relevant. Dette er i tråd med lese-teori (f.eks. Bernhardt, 2011; RAND, 2002), som sier at elevers motivasjon/interesse for lesing, og bruk av lesestrategier, kan kompensere for manglende lesekompetanse. En annen implikasjon handler om betydningen av å undervise i og tilby støttestrukturer for dybdestrategier, spesielt med tanke på å skape økt bevissthet blant yrkesfaglige elever om deres strategibruk. Til slutt vil jeg argumentere for at resultatene i denne masterstudien uttrykker en positiv holdning til lesing blant yrkesfagelever. De rapporterer at det er viktig for dem å være gode lesere i både engelsk og norsk, og de rapporterer å bruke lesestrategier relativt ofte. I tråd med Brevik (2016b) er dette et viktig bidrag for å nyansere et ofte unyansert syn på yrkesfagelever som svake lesere som mangler motivasjon for (teoretisk) lesing (se også OECD, 2016).

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Oslo, May, 2018

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1 Introduction

My interest in vocational students' reading and reading comprehension strategies in English as a second language started during my practice in the Practical Pedagogic Teaching (PPU) program. It continued to grow throughout my field placements in vocational studies. In the course of my field placements, I learned that the vocational students seemed to know much about reading strategies. However, their engagement in using strategies, and comments on their use, made me realize that they did not use strategies regularly, and that the teaching of reading comprehension strategies was usually not part of their English lessons. From this day onwards, I also became interested in the fact that the vocational students' reading syllabus contained reading material attached to their vocational program. What I wondered was whether the reading material related to the vocational program increased the students' motivation to read, whether they used reading comprehension strategies, and if so, whether they were consciously aware of their strategy use.

Moreover, I observed an interesting contrast between boys' and girls' motivation for reading in English. Boys seemed more engaged in reading tasks, whereas many girls seemed unmotivated and avoided doing the given reading tasks. Thus, my interest for reading comprehension further increased my interest in focusing on reading in vocational studies for my MA study.

Vocational students have often been considered poor learners and poor readers compared to students in general study programs (Brevik, 2016b). Indeed, test results from mapping tests in upper secondary school confirm this picture on a national level (Brevik, Olsen, & Hellekjær, 2016). In order to reduce this gap, several initiatives have been implemented. For instance, the core subjects curriculum is adapted to be more vocationally oriented. This has been a priority, particularly as vocational students are at risk dropping out of school (Brevik, 2016b). In fact, 41% of the students who attend a vocational program drops out of school, compared to 3% of the students in general study programs, a phenomenon that is neither new or exclusive for Norway (Hernes, 2010; OECD, 2016). The OECD average shows that the dropout rate is ten times higher (20%) in vocational programs, compared to general study programs (2%) (OECD, 2016). Moreover, a quarter of all 15-year-olds (the year before they start upper secondary school) have poor reading skills, and students who perform poorly at the age of 15 face a risk of dropping out of school altogether (OECD, 2016; World Bank,

2013). Furthermore, the typical student at risk of early school drop out is a boy under the age of 25, who attends vocational education and training (OECD, 2016). Thus, based on this information about vocational students as at-risk students, I decided to look at these students' self-reported interest in reading and whether they report to use reading comprehension strategies when reading in English in a Norwegian context.

1.1 English in Norway

In vocational studies, English is expected to be used in many occupations. Therefore, it is important to look at the status and history of the English language in Norway. English is spoken as a first, second, or foreign language throughout the world, and a quarter of the world's population speak English either fluently or competently (Crystal, 2012). In Norway, English is in transition, as it has traditionally been considered a foreign language and is not an official language, but is used more or less as a second language (Rindal, 2014). For example, Norwegian adolescents are exposed to English in numerous situations, both in and out of school. Because of the prominent role English plays in the Norwegian society, in which Norwegian children are exposed to English through the media and the internet, listening to music, watching television, using English for work, travels, and communication (Brevik, 2016a; Graedler, 2012; Rindal, 2014). This has led to Norwegians becoming proficient in English (Bonnet, 2004; Education First, 2015; Rindal, 2013, 2014). Furthermore, because of the massive exposure, English is used as a lingua franca among Norwegians to communicate with both native and non-native speakers in Norway and other countries (Rindal, 2014). Therefore, the English language seems to be used as a resource in the construction of the individual's sociocultural identity (Jenkins, 2007; Rindal, 2014).

In Norway, English became a school subject towards the end of the 19th century (Rindal, 2014; Simensen, 2011). Further, it became a compulsory subject in 1959, and is today a mandatory school subject over 11 years (Rindal, 2014; Simensen, 2010). In the current national curriculum, English is portrayed as a necessary skill (Norwegian Ministry of Education and Research [KD], 2006 2013). The language is used as a tool for work and everyday life in Norway, in addition to communicate with English speaking people and attend higher education (Rindal, 2014). The curriculum states that, "English is a world language", and that students need to acquire proficient English skills in order to communicate

internationally (KD, 2006, 2013, p.2). In the text section, I present the school system in Norway, and what role English plays in the subject curriculum.

1.2 The school system in Norway

The school system in Norway is divided into years 1–13. Elementary school (years 1-4), middle school (years 5-7), and lower secondary school (years 8-10) are mandatory. Further, three years of upper secondary school (years 11-13) are voluntary (KD, 2006, 2013). At this level, the students may choose between General Studies programs, and Vocational Education and Training programs, from now on referred to as GS and VET. An overview of the upper secondary school system is presented in Figure 1:

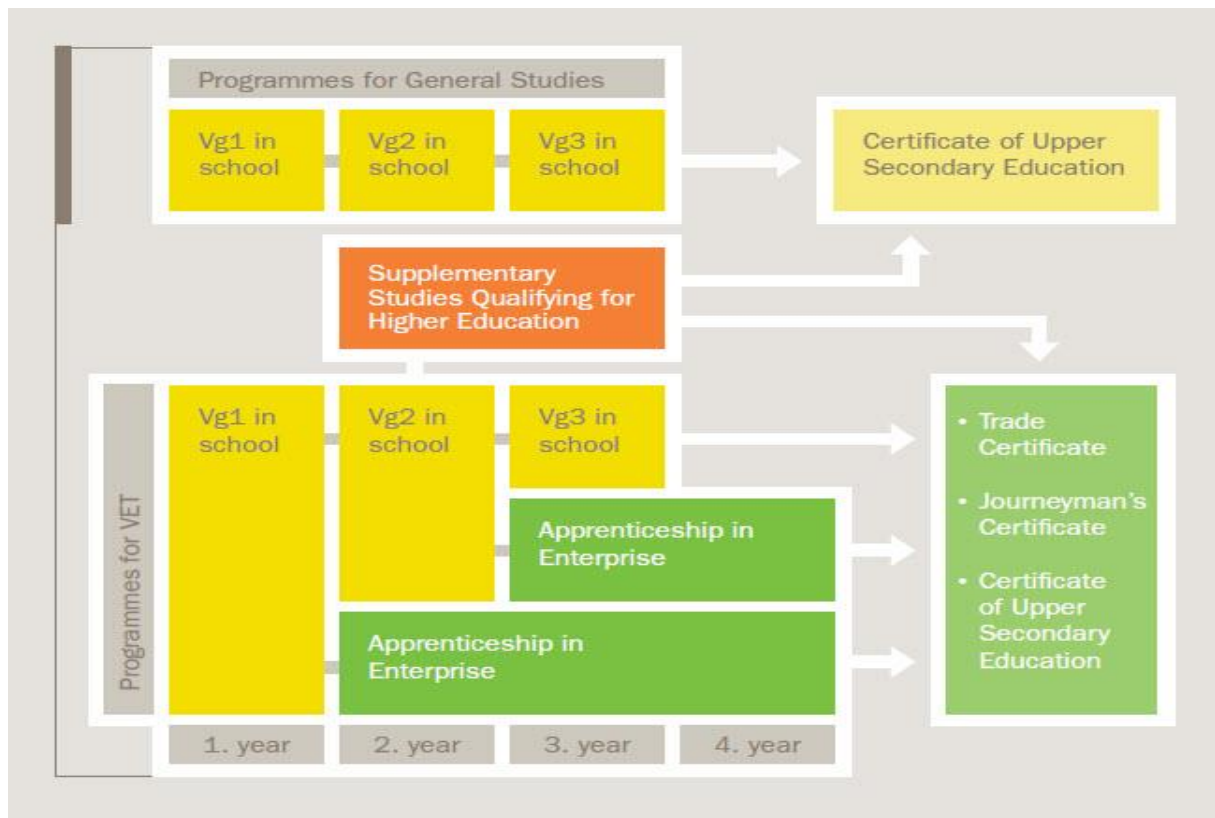


Figure 1. Illustration of the school structure of upper secondary school; Programmes for General Studies (GS) and programmes for Vocational Education and Training (VET) (Norwegian Directorate of Education and Training [UDIR], 2016a).

Figure 1 shows that GS takes three years to complete, which leads to a certificate of upper secondary education, which qualifies to university admission. VET first combines three years in-school study (yellow boxes), with two years of apprenticeship (green boxes). The apprenticeship is often extended with an additional year with productive work (not shown in

the figure), resulting in four years in total, and with a trade or journeyman's certification. In addition, students in VET also have the opportunity to do the one-year supplementary studies course (orange box), leading to the certificate of upper secondary education, which then qualifies for higher education (green box).

Upper secondary school contains thirteen different study programs; five for GS and eight for VET. The different programs comprise of sub-programs, in which the students choose specialization after completing Vg1. VET offers between nine and 67 specializations, whereas GS offers up to three. Consequently, there is great diversity in VET, and the content of the specializations affects the apprenticeships and the in-school education. In addition to this specialization, several common core subjects are mandatory school subjects in VET, with English being one of these. The English subject in VET is presented in further detail below. The gender distribution in several VET programs are quite homogenous, in terms of that some programs are male dominated (e.g., Electricity and electronics) and others are female dominated (e.g., Health, childhood and youth development) (SSB, 2017). In general, SSB calculated in 2016 that approximately 70% of the students in VET are boys (SSB, 2017).

1.2.1 English as a school subject in vocational studies

English as a school subject is taught from year 1 (6 years old) to year 11 (16 years old). In VET, the year-11 course is commonly taught over two school years, in year 11 and 12. However, the teaching of English is based on the subject curriculum. As English is taught over two years in VET, this is commonly distributed with three lessons per week in Vg1 and two lessons-per-week in Vg2, while in GS the English curriculum is covered in Vg1 by five lessons-per-week. The English subject curriculum includes a purpose, and four main subject areas: (1) language learning, (2) oral communication, (3) written communication, and (4) culture, society, and literature. In addition, it includes information about teaching hours and implementation of basic skills within the subject (oral skills, writing, reading, numeracy and digital skills), competence aims based on study program and year, and finally assessment of the subject. For the English subject curriculum, competence aims are connected to each main subject area, which aim to measure the students' competence after second, fourth, seventh, and tenth years in primary and lower secondary school, and after the first year for GS (Vg1), or after the second year for VET (Vg2) (KD, 2006, 2013).

In the English subject curriculum, reading is considered relevant for all four main areas. For language learning, knowledge and use of reading comprehension strategies are central. Concerning written communication, the students need to acquire knowledge about both reading and writing, and the use of proper reading comprehension strategies. For oral communication, the students are expected to discuss and present what they have read, and for culture, society and literature, the students are expected to read various texts to acquire knowledge and competence in these topics. The English subject curriculum further emphasizes that the students should be able to relate the subjects to their educational program (KD, 2006, 2013).

Adapting the English curriculum to the vocational students' specializations is therefore of relevance, which is the reason why the Norwegian Directorate for Education and Research (hereafter UDIR) in 2011 initiated the FYR project. The abbreviation represents *Fellesfag* (common core subjects), *Yrkesretting* (vocational orientation) and *Relevans* (relevance), and is a project that lasted from 2011-2017 (UDIR, 2017a). However, although the project ended as a national initiative in 2017, the idea behind it is still incorporated in Norwegian upper secondary school, both locally and regionally. The goal of the FYR project is to reduce the dropout rate, and to increase the educational motivation of vocational students, which aligns with international reports stating that students who lack interest in school or lack reading skills drop out of school more frequently than others (OECD, 2016; Word Bank, 2013). The intention of the FYR project is to better link the common core subjects (such as English) to the personal life and future goals of the vocational students, first and foremost by making the teaching of the common core subjects, more relevant to the students' vocational program. As a result, the topics in the English common core subject, with its learning methods and contexts, are intended to be transferrable to apprenticeships and future professions as vocational students might experience work-related situations that oblige them to read and interact in English (UDIR, 2017a¹).

Although the FYR project mainly focuses on the implementation of vocational orientation in the common core subjects, other aspects of relevance are also of major importance. Literature on this field is scarce, although two national reports from the FYR project have analyzed

¹ For more information, see: <https://www.udir.no/utdanningslopet/videregaende-opplaring/yrkesretting-av-fellesfagene/>

various implementations of and views on the relevance of vocational orientation (e.g., Iversen, Haugset, Wendelborg, Martinsen, Røe, Nossum & Stene, 2011; Stene, Haugset & Iversen, 2014). In these reports, it is concluded that even though vocational students experienced the teaching in their common core subjects to be vocationally oriented, they did not necessarily experience it as relevant (Iversen et al., 2011; Stene et al., 2014). Another FYR report indicates that vocational orientation that is not experienced as successful may have negative impact on students' attitudes towards school and future life (Haugset & Stene, 2016). Although vocational orientation has received a lot attention since 2011, and has been emphasized in VET research (Iversen et al., 2011; Stene et al., 2014), at the end of the FYR project, six different "concepts of relevance" were emphasized as highly important for vocational students, in which vocational relevance is only one (Akershus Fylkeskommune, 2013; Eskielsen, Andersland, Øyen, Nielsen & Ytre-Arne, 2015). The notion is that the six relevancies are important for students in VET: individual relevance, youth relevance, relevance to society, vocational relevance, utility value, and timeliness (Akershus Fylkeskommune, 2013). Based on available documentation in the FYR project (Akershus Fylkeskommune, 2013; Eskielsen et al., 2015; Iversen et al., 2011; Stene et al., 2014), these relevancies are understood as follows:

(1) *Individual relevance* indicates that the teaching should meet the individuals' needs, talents and life expectancy, which among other things are related to the development of reading proficiency. The individual perspective is also called the inside-out perspective, and involves individuals' adaptation to life outside school. (2) *Youth relevance* regards typical characteristics concerning the youth culture that adolescents today identify with. Here, the individual perspective is prominent in the sense of identifying with the youth culture and the social environment. This means that youth relevance is usually more collective than individually oriented. (3) *Relevance for society* relates to what is important to know and master in order to take part in society in general, and influence democratic processes in particular, referring to what is defined as relevant knowledge and competence. For this relevancy, the outside-in principle is central, meaning how society's expectations, requirements, and cultural norms affect the students. Hence, whom or what the students are is somewhat irrelevant. What matters is the knowledge and competence needed within the profession. (4) *Vocational relevance* concerns which competence is demanded and needed in the different professions. In other words, how the content of the common core subjects, such

as English, is linked with the content of the students' vocational study program. (5) The *utility value* considers how useful it is to the vocational students, which concerns the students' preparedness, through knowledge and competence, to face challenges and take advantage of opportunities that occur or present themselves. Finally, (6) *timeliness* considers if the vocational students need this now, which concerns whether the vocational students should activate their knowledge and competence here and now. In sum, the six relevancies are all central to creating interest or motivation for school in general, and specifically for the common core subjects, such as English, and how the relevancies may contribute to the students' learning process in or out of school.

This intention aligns with the basic skills being integrated in the competence aims, to contribute to the interrelation between skills and competence. The idea is that if reading in English is to be relevant for VET students, a minimum is that it should be related to their vocational program. In the English subject curriculum, reading as a basic skill (KD, 2006; 2013), is defined as follows:

Being able to read in English means the ability to create meaning by reading different types of text [...]. This further involves preparing and working with reading English texts for different reasons and of varying lengths and complexities. The development of reading proficiency in English implies using reading strategies that are suited to the objective by reading texts that are advancingly more demanding. Furthermore, it involves reading English texts fluently and to understand, explore, discuss, learn from and to reflect upon different types of information (p. 5).

As this quote shows, developing reading proficiency in English is important with respect to at least three aspects; first, being able to understand *different types* of text, of various lengths and complexities; second, being able to use *different reading comprehension strategies* to understand increasingly more demanding texts; and third, reading and understanding for *different purposes*, including exploring, discussing, and reflecting on information. This might include texts relevant for the students' vocational program, but it also includes other texts the students read, which is affected by for instance their culture or the expectations of the society. In other words, reading in English is not only limited to vocational reading or reading at

school, but extends to reading English texts in general, whether reading in or out of school. For my MA thesis, this means that the vocational students are my unit of analysis, not reading as such. This means that I aim to study vocational students' interest for reading in English, and when they prioritize reading, and whether they use reading comprehension strategies to help them understand. The focus of the thesis will be further described below.

1.3 Research questions

One effect of the high dropout rates among vocational students (OECD, 2016), is that expectations towards these students proficiency in common core subjects are often low (Brevik, 2016a; Brevik & Hellekjær, 2017). Prior research has indeed shown vocational students in Norway to be poorer readers than students in general studies, (Brevik, Olsen & Hellekjær, 2016). However, as these expectations are mainly based on statistics, we know little about how the vocational students view themselves as readers, nor do we have much information about whether they use reading comprehension strategies. Therefore, my study fills an important gap in the research on vocational students' self-reported perspectives and attitudes on themselves as readers and their reading process.

In one of my master's courses in English didactics, I conducted a pilot study on the importance of being a good reader in English compared to Norwegian, which I described as 'motivation and interest for reading in vocational studies'. According to my pilot study, boys reported being more motivated for reading in English than girls did. My findings further indicated that boys found reading in English more interesting than reading in Norwegian, while girls answered the opposite. However, an aspect I did not cover in my pilot, but nevertheless find very interesting related to this concern, is the aspect of reading comprehension strategies. This leads to the topic of my MA thesis, where I focus on vocational students' views on reading in English, compared to reading in Norwegian. Specifically, I examine how important it is for these students to be good readers of English in general, whether they use reading comprehension strategies in English, and if so, which strategies they report using. For comparison, I examine the same aspects for reading in Norwegian.

Based on the above considerations, the main research question for my MA thesis is the following: *How important is it for vocational students to be good readers of English*

compared to Norwegian, and to what extent do they report using reading comprehension strategies when reading in the two languages? To answer this, I have developed three sub-questions (RQ1–3):

RQ1: To what extent do vocational students report being motivated and interested for being good readers of English compared to Norwegian?

RQ2: To what extent do vocational students report using reading comprehension strategies when reading in the two languages?

RQ3: To what extent does the use of reading comprehension strategies differ among students who find it more or less important to be good readers of English?

The terms and concepts in the RQs will be defined in Chapter 2 – Theory and Prior Research.

1.4 The VOGUE project

To investigate the research question, I was invited to participate in the ongoing research project *Vocational and General students' Use of English in and out of school (VOGUE)*². VOGUE investigates the link between students' use of English in and out of school – in vocational and general (academic) programs. The VOGUE project combines analyses of student scores on national mapping tests, student questionnaires, interviews with students and teachers, and classroom observations. VOGUE thus relies on quantitative and qualitative data from teachers and students in 90 upper secondary schools across Norway. The project is led by Associate professor Lisbeth M. Brevik, who is my supervisor, and is positioned at the Department of Teacher Education and School Research (ILS) at the University of Oslo. So far, three master students have written their MA theses related to VOGUE (Garvoll, 2017; Pentrella, 2017; Sagli, 2017), and myself and one other master student are currently writing our MA thesis related to the project. For my MA study, I chose to use available student questionnaires collected from vocational students across Norway, as the questionnaires included relevant questions concerning the students' motivation and interest for reading, and reading comprehension strategy use, which will be further elaborated in Chapter 3 – Methodology.

² For more details about the VOGUE project, see: <http://www.uv.uio.no/ils/english/research/projects/vogue/>

1.5 Outline of the MA thesis

In this chapter, I have presented my MA topic and research questions, and briefly introduced the context for reading English in Norway in VET. In the following, I will first present a literature review, including the theoretical framing I have used, and prior research (Chapter 2). Next, in the methodology chapter (Chapter 3), I present the research design, data and methods used in this thesis, in addition to a discussion of research credibility and ethical issues concerning the use of secondary data. I then present the results (Chapter 4), and a discussion of these (Chapter 5). Finally, I offer a conclusion, commenting on the contributions of my study, future research, and implications (Chapter 6).

2 Literature Review: Theory and Research

In this chapter, I will present a literature review, including the theoretical framing I have used, and prior research. As the main focus in this thesis concerns vocational students' motivation and interest for reading in English, in addition to their potential use of reading strategies, I draw on different models and frameworks. First, I present the commonly used Rand Reading Study Group (2002) model of reading comprehension, which captures the text, the reader, the reading activity, and the sociocultural context in which the reading takes place (2.1). Second, I discuss some theoretical aspects of motivation and interest for reading (2.2). Third, I present Elizabeth Bernhardt's (2011) Compensatory Model of Second Language Reading, which suggests that how we read in a second language stems from how we read in our first language (2.3). Next, I offer two models addressing the process of reading comprehension strategy use. The first is Brevik's (2014) Mode of Reading Continuum, which focuses on the influence of reading comprehension strategies to close the gap when readers face a comprehension problem. The second is Pearson and colleagues' (2018) Gradual Release of Responsibility Model, which explains the 'how to' use strategies, and how the readers have become strategic users of reading comprehension strategies. Finally, a presentation of reading comprehension strategies with relevance to this MA study will be presented (2.4). Throughout these subchapters, I include prior research where relevant, in addition to a final presentation of relevant prior research and MA theses (2.5).

2.1 RAND - Reading comprehension model

Reading is a fundamental part of education, academia, and life in general. Being a student at secondary school and onwards requires the ability to learn and understand new, complex, and abstract concepts from reading various text types of increasing difficulty (Grabe, 2009). The definition of reading comprehension varies among different discourses. Teachers commonly find reading comprehension to be something students are taught during the early school years, and are expected to accomplish during middle and high school (RAND 2002). Employers commonly think of it as something students should have acquired during their years in school, while university faculty view reading comprehension as a requirement to a student's academic success (RAND 2002). Despite these different views on reading comprehension, it is seen as a necessary and important competence in today's society as well as in the future.

Reading comprehension is a long-term process that might be divided into different elements. The RAND reading study group (hereafter RAND), defines the term ‘reading comprehension’ as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language” (RAND, 2002, p. 11). The RAND group explains that they “use the words extracting and constructing to emphasise both the importance and the insufficiency of the text as a determinant of reading comprehension” (RAND, 2002, p. 11). This means that in their view, reading comprehension depends not only on the text to be read, but also on the reader, the activity, and the sociocultural context. This interrelationship is illustrated in Figure 2.

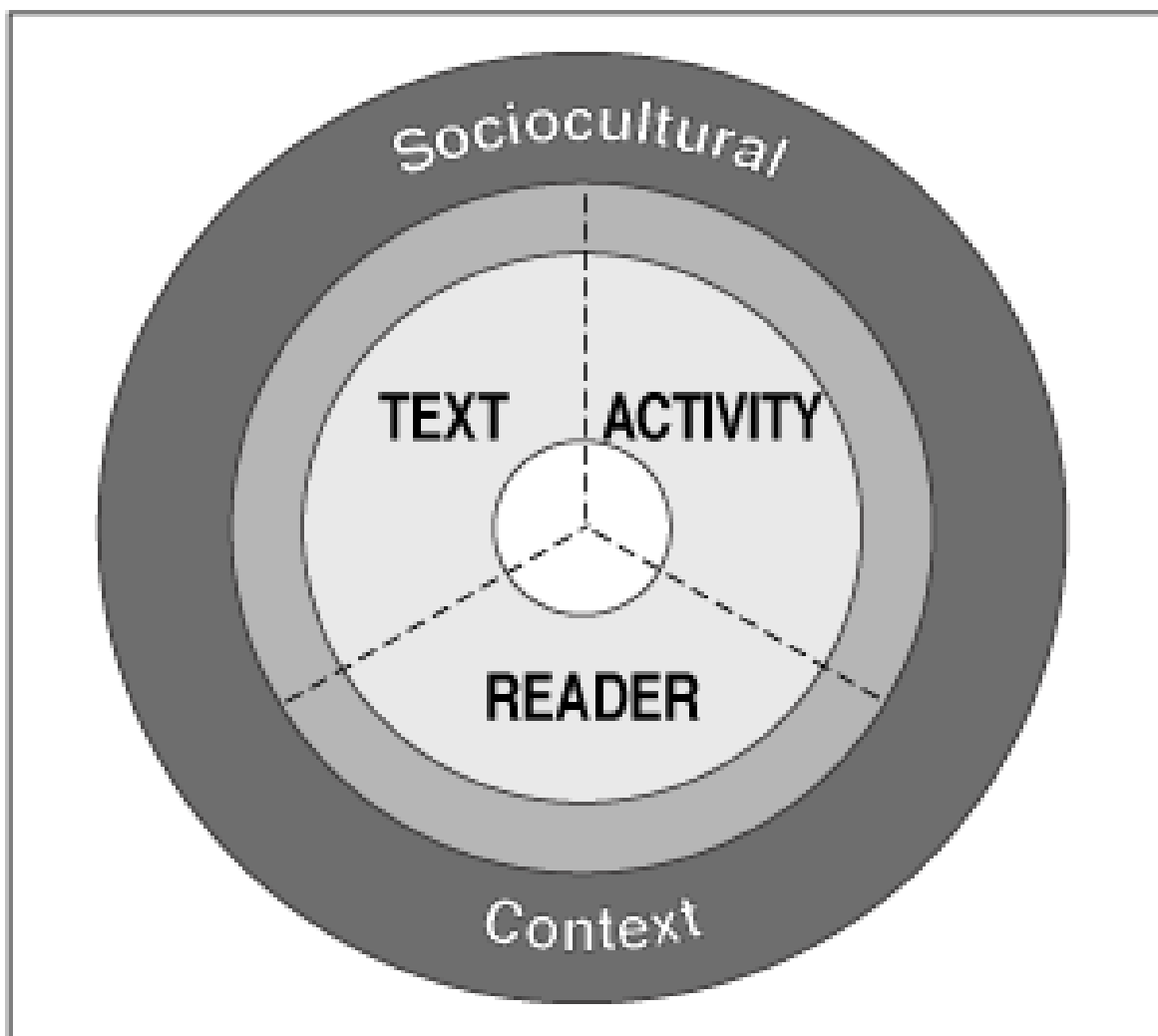


Figure 2. RAND Reading Study Group (2002) model of reading comprehension

The RAND (2002) model consists of three core elements: the reader who is doing the comprehending, the text that is to be comprehended, and the activity or purpose of reading, in

which comprehending is a part. It further explains how reading comprehension is incorporated in a larger sociocultural context, and how “the sociocultural context mediates students’ experiences, just as students’ experiences influence the context” (RAND, 2002, p. 12). The above definition of reading comprehension shows how it is dependent of all four elements in the model.

As this MA study researches vocational students’ reading strategies and motivation or interest for reading, the RAND model is relevant. The readers are the vocational students, and the text comprises any written sources they are exposed to both in and out of school. The activity represents the different tasks or situations related to the text they read, and the sociocultural context refers to where, when, and under which conditions the students read these texts and conduct the reading activities. Each of the four elements will be elaborated below.

2.1.1 The reader

A reader’s comprehension is based on different skills, depending on the text being used (RAND, 2002). The RAND model (2002) claims that in the act of reading, the reader brings its cognitive capabilities (such as attention and critical analytic ability), motivation (a purpose for reading and interest in the content), knowledge (like vocabulary and topic knowledge), and experiences. Fluency in reading may be seen as both a prerequisite and a consequence of the reader’s comprehension. The fluency is important, considering understanding of a text, however, in recognizing words, some kind of syntactic analysis is necessary to creating comprehension (RAND, 2002). By practicing reading, the fluency might increase, consequently changing the reader’s comprehension.

What the reader brings to reading and what he or she takes from reading is seen through “micro periods” of pre-reading, reading and post-reading (RAND, 2002). The different acts of reading may change the reader characteristics, which are related to the other elements in the model. Examples may be the knowledge and capabilities that the reader brings to a reading activity, and by completing the activity at hand, the reader might increase his or her domain knowledge during reading (RAND, 2002). Additional reader characteristics, such as vocabulary knowledge, linguistic and discourse knowledge might also increase, and with motivational factors like self-concept or interest in the topic, the reading experience might be

successful or unsuccessful (RAND, 2002). As reading motivation and interest is at the core of my MA thesis (RQ1), the element of the reader is of utmost importance.

Appropriate instruction is also said to foster reading comprehension, through changes in the reader's knowledge and capacities (RAND, 2002). After instruction there are commonly two goals for the individual reader; comprehending the specific text in question, and developing greater reading comprehension in general. The focus of the teacher should be to incorporate these goals to meet reading comprehension goals, both short-term and long-term (RAND, 2002). Although some teachers tend to "focus their content area instruction on helping students understand the material, an important concurrent goal is helping students learn how to become self-regulated, active readers who have a variety of strategies to help them comprehend" (RAND, 2002, p. 14). As this MA study also investigates the extent to which the vocational students report to use reading comprehension strategies (RQ2), the importance of the reader is strengthened. Reading comprehension strategies are further presented in section 2.4.

2.1.2 The text

According to the RAND model, the text is referred to as what the students read, including what type of text it is. The abundance of computers and electronic text has developed the definition of text to include electronic texts, multimedia documents, and conventional print-based texts. However, not only different types of text, but also the different features of a text will influence the reader's comprehension while reading (RAND, 2002). As a reader reads a text, he or she constructs various representations of the given text, meaning that information extracted from the text affects reading comprehension. As meaning does not exist in the text alone, the readers will have to monitor their comprehension while reading a text, with the following representations embedded in the text: "The surface code (the exact wording of the text), the text base (idea units representing the meaning of), and a representation of the mental models (the way in which information is processed for meaning)" (RAND, 2002, p. 14).

Electronic texts present further challenges to comprehension, such as dealing with non-linear nature of hypertext (RAND, 2002). Expanding electronics has resulted in texts that incorporate multimedia and electronic options, resulting in adjustments to a variety of

cultures and groups. However, extra support may be given through hyperlinks to definitions, or difficult words or explanations in the text (RAND, 2002).

Many factors have to match to obtain comprehension from a text. In order to understand a text, the reader's domain knowledge has to interact with the content of the text, including content, the vocabulary of the text and linguistic structure. However, the opportunity for optimal comprehension to occur is low when many of the factors are not matched to a reader's knowledge and experience, specifically when the "explosion of alternative texts vary widely in content, reading levels and genre" (RAND, 2002, p. 13). If such comprehension problems arise, knowing and using reading comprehension strategies might be a solution. Thus, the element of the text is a crucial aspect of my MA study.

2.1.3 The activity

The element of activity in the RAND model concerns the purpose of reading a certain text. The reading activity can include more than one purpose, or different operations in order to process single or multiple texts, and the consequences of performing the reading activity (RAND, 2002). It should come as no surprise that the purpose of the activity influences the reader as he or she processes the text, for example the purpose of reading for a text compared to reading for pleasure. Moreover, as new information about the reading activity is given, this may raise new questions and consequently change the purpose of reading throughout the reading activity (RAND, 2002).

Depending on the reading activity, skimming for information, or studying with the intention of remembering the information will influence not only the reader's comprehension of the content, but also the potential need to use strategies in order to understand (RAND, 2002). The reading activity can also have different consequences, for example increasing the reader's knowledge, offering a solution to a problem, or engaging with the text (RAND, 2002). In other words, not only will the activity influence the reader's need for or use of reading comprehension strategies, but also the reader's motivation and interest for the text or the reading activity as such. Thus, the activity is also of relevance to my MA study.

2.1.4 Sociocultural context

The process of reading comprehension is dependent on various contexts far beyond the classroom (RAND, 2002). Adolescents' reading contexts include situations and places in and out of school, as a result of different relationships with reading. The variation among readers concerning their reading comprehension may to some extent be found in the varying sociocultural surroundings in which they live and learn (RAND, 2002). A close connection between cultural and historical activities influences the reader in the reading activity, and for my MA study, the view of vocational students as poor readers might influence their view of themselves as readers, their interest in and motivation for reading, and the situations created for their reading experiences. One such example is the requirement in the English subject curriculum that the texts should be of relevance for the students' vocational program. The reading activities are obtained through social interactions, and symbolize how a particular cultural group or discourse community interprets and acquire information (RAND, 2002). Therefore, the act of reading is viewed as an activity learnt in sociocultural contexts. Sociocultural differences are often related to group differences like income, race, ethnicity or native language (RAND, 2002). For this MA study, many groups or discourse communities may be of relevance, but the main commonality is that the students are vocational students. Therefore, the sociocultural context is of importance for my MA study, as it might cause that these readers develop different reading comprehension of a text, comprehension problems and need for strategies, and their view of themselves as readers. Further, I present some theoretical aspects of motivation and interest in English reading.

2.2 Motivation and interest in English reading

In line with the importance of motivation and interest outlined in the RAND model (2002), I have chosen to address this aspect specifically in this subsection. Indeed, Ellis (1997) refers to motivation as the main cause of second language (L2) achievement. However, as motivation also involves attitudes and contexts, this does not necessarily regard all students (Ellis, 1997). Therefore, while certain people who experience success when reading and understanding a text can obtain motivation, others might find reading motivation to be related to other variables. For example, Bernhardt (2011) indicates that variables such as motivation and interest influences our reading comprehension, along with strategy use and engagement, suggesting that motivation and interest might be key to reading comprehension.

Motivation has been defined in many ways, and Grabe (2009) argues that requirements for motivation involve a set of notions, intentions and attitudes to be in place, such as commitment and the reader's determination to fulfilling a goal. These notions, intentions and attitudes are usually determined by the self-efficiency or self-regulation of the student, also referred to as intrinsic factors, or by social and contextual settings, referred to as extrinsic factors (Grabe, 2009). Therefore, positive motivation is important regarding learning comprehension (Ellis, 1997; Grabe, 2009), such as L2 reading. Guthrie and colleagues (e.g., Guthrie & Wigfield, 1999, 2000) propose that students may possess intrinsic and extrinsic motivation simultaneously, to satisfy their own interests or school requirements (Brevik, Pearson, & Brantmeier, in progress).

Students are more likely to read material they are interested in, or have chosen themselves (Day & Bamford, 2002). This supports the value of interest as an important factor for the L2 reading process, and personal interest is described as linked to the reader's background knowledge and intrinsic motivation (i.e. motivation from internal willingness rather than external factors) (Brantmeier, 2006). In addition, students' self-reported interest is considered an important aspect for their L2 reading proficiency (Brevik, 2016b, 2017), which indicates that interest is important in developing strategic L2 readers (Brantmeier, 2006; Duke, Pearson, Strachan & Billman, 2011). Day and Bamford (2002) also argue that students tend to be more motivated when reading in a second language if it concerns a topic of interest, in contrast if they are not interested in the topic. In line with the major exposure to English in Norway, many adolescents express positive attitudes to the language, in addition to extensive interest and motivation for using English out of school (Brevik, 2016a, 2016b; Garvoll, 2017). Although literature considers motivation and interest as two separate constructs, prior studies where vocational students have been interviewed suggest that it is difficult to separate between motivation and interest for reading in English (Brevik, 2016b; Brevik & Hellekjær, 2017; Garvoll, 2017). Moreover, Grabe (2009) argues that people become skilled in L2 reading, partly because they "engage" in L2 reading willingly and have high "interest" and "motivation" for doing so (p. 14). In other words, the potential relationship between interest and motivation for English reading is uncertain, which is the main reason why I juxtapose the two terms in my MA study.

The importance of creating a connection between English and the chosen vocational program, as well as life, jobs and their out-of-school use of English are important factors for the students' inner motivation (Iversen et al., 2014). These are factors that can result in a higher motivation and reading proficiency in English. If the vocational students do not experience relevance through their common core subjects, this can affect their attitudes towards school and their plan to finish school, negatively (Haugset & Stene, 2016; Iversen et al., 2014). In line with the view that common core skills and competences, such as reading comprehension matters, Brevik et al., (in progress) discuss if it matters whether students are reading in a first language (L1) or a second language (L2). They specifically discuss whether reading is the same phenomenon in L2 as it is in L1, which I address in the following section.

2.3 Reading in the L1 and the L2

The main difference between reading in L1 and L2 is that reading in an L2 is more complex, since it involves more than one language (Koda, 2007). There also seems to be consensus on the topic that reading skills in the L1 can be transferred to reading in the L2 (Bernhardt, 2011; Cummins, 2000). This relationship between reading in L1 and L2 is explored in the compensatory model of second-language reading by Elizabeth B. Bernhardt (2011, p. 35).

Based on studies that have conducted regression analysis, Bernhardt (2011) suggests that 20% of how we read in L2 relates to how we read in our L1. Furthermore, she suggests that 30% of our L2 reading comprehension is explained by our knowledge about vocabulary and grammar in the L2. The final 50% of our L2 reading comprehension is related to what she labels an 'unexpected variance'. She suggests this unexpected variance may include the reader's use of reading comprehension strategies, the reader's content and domain knowledge of the topic in the text, as well as the reader's interest and motivation for reading.

Furthermore, the model implies that deficiencies in L2 reading comprehension can be compensated by drawing on reading skills and competencies in the L1.

For my MA-thesis, this means that it might be useful to consider vocational students' reading interest and motivation both in L1 and L2, to compare across the two languages. The same concerns their uses of reading strategies in the two languages. Although I do not intend to perform advanced statistical analysis, such as regression analysis, it might be relevant to compare vocational students' views on reading and the reading process in both languages and

compare these views. The study therefore aims to focus especially on motivation and interest for reading and reading comprehension strategies both in L1 (Norwegian) and L2 (English).

2.4 Reading comprehension strategy use

When understanding a text, readers do not need to use reading comprehension strategies to gain comprehension. However, during the reading comprehension process, most readers face comprehension problems at one point, and using reading comprehension strategies might then be considered as tools to help the reader close the gap between what they understand and what they are expected to understand (Brevik, 2014). Reading comprehension strategies have a strong influence on the reader's ability to understand a text. Readers are assumed to use strategies in order to reduce a perceived difference between a desired outcome and their current state of understanding. Hence, comprehension strategies are also conceived as reflective and goal-oriented processes used to extract and construct meaning from texts (Bråten & Anmarkrud, 2012). This is a conscious process presented in the "Mode of Reading continuum", illustrated in Figure 3.

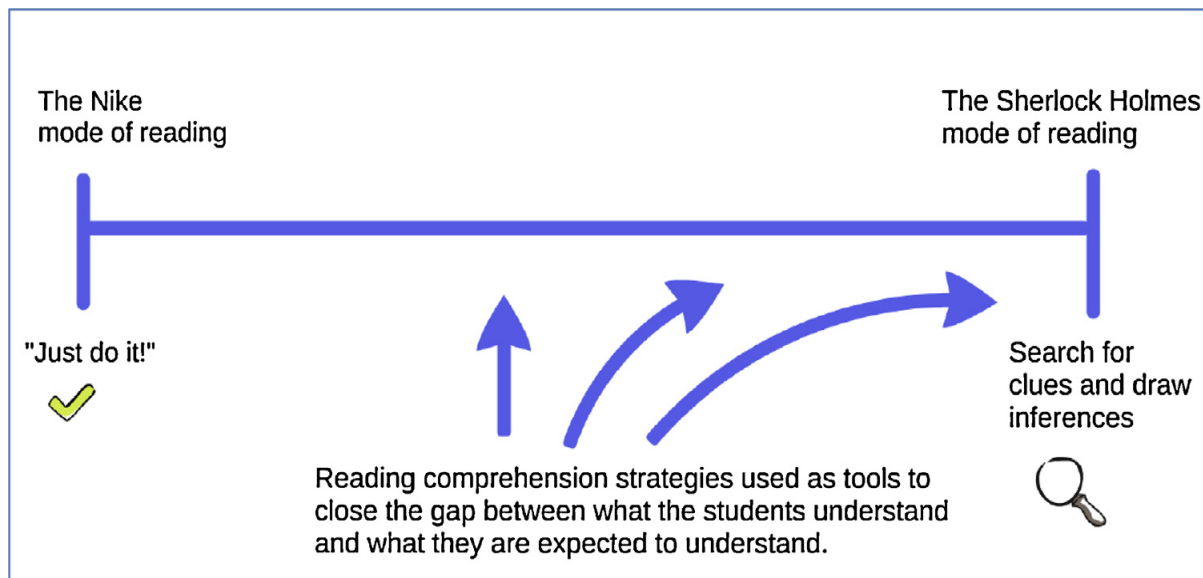


Figure 3. Mode of reading continuum (Brevik, 2014).

The figure illustrates two modes of reading, which the readers' might choose: The Nike mode of reading, and The Sherlock Holmes mode of reading. *The Nike mode of Reading* is based on the "Just do it!" principle, meaning that the readers "just" read without analyzing the task or considering how to read. This also suggests that if they experience comprehension problems, they will disregard these, and "just" continue reading or give up trying. At the other end, *the Sherlock Holmes mode of reading* indicates a "broader vision of analyzing the

task, choosing and applying potentially effective strategies, searching for clues, drawing inferences based on textual evidence, monitoring comprehension progress, and modifying the choice of strategies when necessary” (Brevik, 2014, p. 55). In the latter situation, the readers consciously choose to use reading comprehension strategies to help them understand, as illustrated by the arrows in the figure. In this continuum, the readers identify the need for using reading comprehension strategies, which again might help them become strategic readers. Consequently, the Mode of Reading continuum shows the importance of independently being able to decide when to use reading comprehension strategies in the reading process to attain comprehension from different texts.

If readers choose to use reading comprehension strategies, theory suggests that they have become independent strategy users, also known as strategic readers (e.g., Duke et al., 2011; McVee, Shanahan, Hayden, Boyd, Pearson, with Reichenberg, 2018; Pearson & Gallagher, 1983). This is illustrated in the Gradual release of responsibility model developed by Pearson and colleagues over the past 30 years. Figure 4 shows the development of reading comprehension strategies from the teacher’s direct instruction and modeling, via guided practice, scaffolding and facilitated use of strategies to the student’s use of strategies independently.

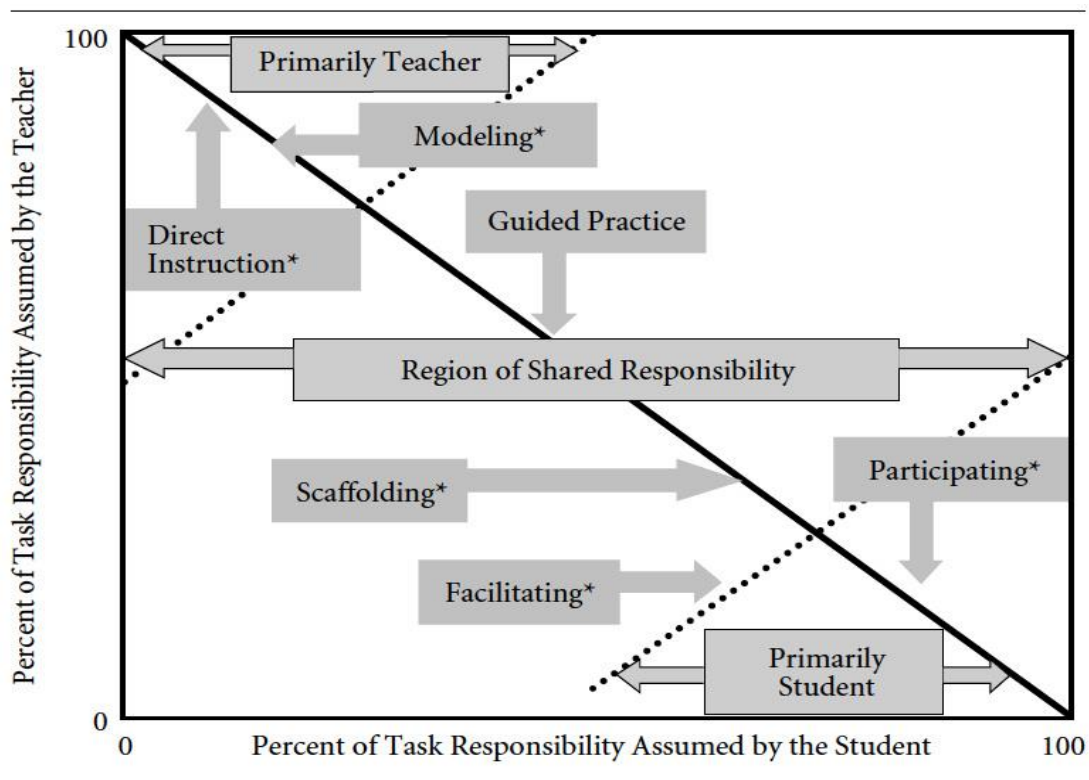


Figure 4. Gradual release of responsibility model (Duke et al., 2011).

In other words, the responsibility for the use of a strategy gradually transfers from the teacher to the student through these three stages. In the third stage, the responsibility is transferred completely to the students to completing the key tasks (Pearson & Cervetti, 2017). The model shows that reading comprehension strategies are something the students use consciously and have learned to use independently, often through the instruction and modeling of a teacher within the classroom discourse. According to the “Gradual release of responsibility model”, the teacher is a necessity through the two first stages. Grabe (2009) argues that reading instruction tends to focus on teaching the most successful strategies, in the attempt to make more students become better readers. The RAND group also argues that good instruction is the “most powerful means of promoting the development of proficient comprehenders and preventing reading comprehension problems” (RAND, 2002, p. xvii).

Towards the last stage of the model, becoming conscious and independent users of reading comprehension strategies is ideal. Whether a student has reached reading comprehension through using comprehension strategies can only be observed indirectly (Pearson & Cervetti, 2017). In addition, it is considered to be the process where students improve their comprehension of a text by adjusting their reading behavior (Brevik et al., 2016; Grabe, 2009). Indeed, when a reader uses reading comprehension strategies strategically, it can be related to their “awareness, monitoring, control, and evaluation” (Pearson & Cervetti, 2017, p. 26).

2.4.1 Reading comprehension strategies

Although all readers tend to use many strategies, good readers tend to use these more effectively than poor readers (Grabe, 2009), and they do also tend to use a smaller repertoire of strategies (Duke et al., 2011; Pressley, 2008). Moreover, research on reading comprehension strategies over the past two decades has revealed that the same strategies to a large degree are used in L1 and L2 (Grabe, 2009). In addition, we know that some strategies have been considered more effective than others. A study conducted from 1980 to 1998 by The National Institute of Child Health and Human Development [NICHD] on reading comprehension strategies found that there are seven specific strategies that may help improve reading comprehension of regular readers (NICHD, 2000). The so-called “effective” strategies are: collaborative learning, generating questions, answering questions, organizing ideas visually/graphically, focus on story structure, making inferences or reflecting, checking

comprehension, and summarization (e.g., Duke et al., 2011; Grabe, 2009; NICHD, 2000; Tengberg, Olin-Scheller & Lindholm, 2015). Other studies have found other strategies to be helpful, although they have not necessarily been measured as ‘more effective’ than others. These are for example, in-depth reading, reading aloud, focusing on important parts of a text, re-reading, and concentrating on the easy parts of the text.

Bråten and Anmarkrud (2012, p. 2) have divided such specific strategies into surface-level strategies (used for memorization), and deeper-level strategies (used for elaboration, organization, or monitoring). They are further described by Bråten and Anmarkrud as follows (2012, p. 2, italics added):

Surface-level strategies (p. 2):

Readers use *memorisation strategies* to select and rehearse information, without transforming or moving beyond what is given in the text itself (e.g. highlighting or repeating sentences to select and remember them).

Deeper-level strategies (p. 2):

Organisation strategies are used to relate, group or order information and ideas given in the text (e.g. summarizing, outlining or diagramming text information).

Elaboration strategies are used to make content more meaningful by building connections between information given in the text and information located in other sources (e.g. associating with relevant prior knowledge or linking content to the content of other available reading material). [...] *monitoring strategies* involve readers assessing or regulating their comprehension (e.g. comprehension confirmation, problem detection and problem solving).

According to Bråten & Anmarkrud (2012), the use of deeper-level strategies of organization, elaboration and monitoring, are strategies particularly important for reading comprehension, as they involve drawing inferences to construct coherent mental representation and explanations of situations. In line with their categorization of reading comprehension strategies, a presentation of relevant strategies used in this MA thesis is presented below.

Table 1. Overview of different reading comprehension strategies, and additional descriptions.

Surface-level strategies	
Skimming and scanning	Skimming is normally used to search for information and the main idea of a text. Scanning is often used to find specific details (Grabe, 2009; Brevik, 2014). Skimming and scanning are so-called surface-level strategies (Bråten & Anmarkrud, 2012).
Underlining/ highlighting	Underlining involves mark important information in the text, and identifying the main ideas, without moving beyond what is given in the text itself (Brevik, 2014; Bråten & Anmarkrud, 2012). Underlining/ highlighting is considered surface-level strategies (Bråten & Anmarkrud, 2012).
Reading aloud	Reading aloud involves the reader to use his or her voice to sound out the words in the text, either for him or herself, or somebody else (NICHD, 2000; Willingham, 2006). The strategy is labelled inconclusive, because when it is used by older readers it means that there is an issue with how the text is interpreted (NICHD, 2000; Willingham, 2006). In line with Bråten and Anmarkrud (2012), reading aloud is considered a surface-level strategy.
Contextual reading	Contextual reading regards using the context to determine the meaning of unfamiliar words and concepts (Brevik, 2014; Duke et al., 2011; Grabe, 2009). In line with Bråten and Anmarkrud (2012), contextual reading is considered a surface-level strategy.
Skipping unfamiliar words	Skipping unfamiliar words means to avoid or skip reading the words and phrases that are unknown to the reader (Brevik, 2014). In line with Bråten and Anmarkrud's (2012) definition, skipping unfamiliar words might be considered a surface-level strategy.
Deeper-level strategies	
Summarization	Summarization involves students' summing up important information by identifying the main ideas and improving memory as they read (Brevik, 2014; Duke et al., 2011; Grabe, 2009; NICHD, 2000; Tengberg et al., 2015). Summarization is considered a deeper-level strategy (Bråten & Anmarkrud, 2012).

Activating prior knowledge	<p>Activation of prior knowledge concerns the reader's connecting the text content with what they already know, and integrating the two in the text comprehension (Brevik, 2014; Duke et al., 2011; Grabe, 2009).</p> <p>Activation of prior knowledge is considered a deeper-level strategy (Bråten & Anmarkrud, 2012).</p>
Cooperative learning	<p>Cooperative learning is used when a group of students work together to read a complex text (Duke et al., 2011). The strategy is seen especially useful because comprehension often is a collaborative process where meaning can be made through interaction with others (Duke et al., 2011), where they focus and discuss reading materials (NICHD, 2000).</p> <p>Cooperative learning is considered a deeper-level strategy.</p>
Close-reading	<p>Close-reading means to read the text carefully word by word (Duke et al., 2011). The strategy is used to understand the content, details and nuances that are expressed explicitly in the text (Brevik, 2014). In line with Bråten and Anmarkrud's (2012) definition, close reading might be considered a deeper-level strategy.</p>
Setting purposes	<p>Setting purposes means having clear comprehension goals in mind when reading a particular text (Brevik, 2014; Duke et al., 2011; Grabe, 2009).</p> <p>In line with Bråten and Anmarkrud's (2012) definition, setting purposes might be considered a deeper-level strategy.</p>
Re-read	<p>Re-reading is described as to re-focus the working memory on important information and words required to complete the reading task (OECD, 2010). The strategy is typically used by poorer readers when trying to make inferences from the text, and is therefore seen as a deeper-level strategy.</p>
Key words	<p>Taking key words is a strategy which the reader uses by collecting important words (Brevik, 2014; Grabe, 2009). In line with Bråten and Anmarkrud's (2012) definition, taking key words might be considered a deeper-level strategy to help identifying main ideas.</p>
Important parts	<p>Focusing on important parts is a strategy used for organization and elaboration where the reader outlines the content, which is most meaningful and relevant to the task (Bråten & Anmarkrud, 2012). The strategy is a so-called deeper-level strategy.</p>

Internet use for vocabulary and using glossary	Internet use for vocabulary and using glossary are strategies readers use to learn word meanings and improve their comprehension (NICHD, 2000). In line with Bråten and Anmarkrud's (2012) definition, the strategies might be considered surface-level strategies if readers simply look up a word, or deeper-level strategies, if they are initiated by the readers themselves as a result of monitoring (a lack of) comprehension (Bråten & Anmarkrud, 2012).
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As we can see, students may choose between a range of strategies, for different texts, activities, and sociocultural contexts, and not least depending on themselves as readers. This study will therefore explore the vocational students' reported use of reading comprehension strategies. The intention of doing so will hopefully provide new research to the field of vocational students and their reading process.

2.5 Prior research and MA theses

In Norway, literature exploring vocational students' reading comprehension strategy use in English and/or English reading motivation and interest is scarce. Thus, in the following, I will present four of these studies, which are of particular relevance for my thesis, in addition to MA studies of relevance.

Brevik (2014) studied upper secondary teachers and how they described their own reading comprehension strategy instruction. In this qualitative study, she analyzed 21 upper secondary teacher's self-reports of which strategies they taught, how they explicitly or implicitly developed their reading strategy instruction through professional development, and how the teaching provided students with tacit knowledge. Her results indicate that first, teachers might not have been explicitly aware of their strategy instruction. Second, that teachers compensated between knowledge sources, meaning that they did not necessarily acquire new strategic knowledge, but rather experiences new strategic awareness.

In a follow-up study, Brevik (2017) did observations of English lessons in the classrooms of five of the 21 teachers in the Brevik (2014) study. In addition, she collected teacher narratives and student interviews to examine reading comprehension strategy use in upper secondary schools. One of her main findings concerns that teachers use a repertoire of strategies learnt

during a professional development course, which suggests an impact on the course. A second finding indicates a difference between general and vocational programs. As vocational students used strategies of personal relevance to them as learners, students in general programs used strategies if these were assessed by the teacher. Brevik (2017) suggests that teachers might pay attention to the relevance of using strategies as tools in the lives of these upper-secondary learners to foster active strategic reading.

In another study, based on data material from the VOGUE project, Brevik (2016a) examined the connection between reading results in school, and students' out-of-school reading of English. She studied a group of boys in vocational school that she labelled 'Outliers', who were poor readers of their first language (L1) and proficient readers of English as a second language (L2). Specifically, the Outliers acknowledged playing online games more than three hours a day, which requires them to make inferences and reflect based on information in the game. They explained their markedly better English reading results by their use of English during such online gaming.

Brevik & Hellekjær (2017) followed up the Brevik (2016a) study and identified a group of Outliers who scored below 20 percent on a national mapping test in Norwegian (L1), and at the same time above 60 percent in English (L2) ($n=463$). Based on arguments about the L2 reading process being influenced by L1 literacy (Koda, 2007), Brevik and Hellekjær (2017) identified variables that accounted for the Outliers being better readers of L2. Using questionnaire data, the variables discussed are the Outliers' reported use of relevant reading comprehension strategies, and interest for reading in English. Brevik and Hellekjær's (2017) findings indicate that the participating vocational boys outnumbered and outscored the girls, which challenges the perceived gender gap that girls are more proficient readers compared to boys. They concluded that the combination of interest for English reading, and the use of comprehension strategies, might influence their development into more strategic L2 readers.

In addition to looking at relevant prior research related to the field of reading comprehension strategies and VET, I have identified eight MA theses of relevance, written between 2009 and 2017, within the field of vocational education, interest and motivation for reading, and reading comprehension strategy use. I have divided the MA theses into the following areas: MA studies concerning English in vocational studies (Nødtvedt, 2017; Saggi, 2017), MA

studies concerning reading motivation or interest in English (Garvoll 2017; Pentrella, 2017), and MA studies concerning reading comprehension strategies in English (Hjeltnes, 2016; Johansen, 2009; Merchan, 2010; Skogen, 2013).

MA studies concerning English in vocational studies

Nødtvedt (2017) and Sagli (2017) have explored vocational orientation, and its relevance in teaching of the common core subjects Norwegian and English. Sagli (2017) studied vocational orientation in the English subject. The study is part of the VOGUE-project, and aimed to explore whether English lessons are vocationally oriented, and how teachers and students perceive such vocational orientation. In his qualitative study, he used semi-structured interviews of nine vocational students, and three teachers. His findings showed that both teachers and students experience challenging issues in the implementation of vocational orientation, and although the teaching was vocationally oriented, the students did not necessarily find it relevant. Furthermore, the vocational students experienced the English teaching not being relevant for their future jobs. Also, the teachers experienced a deficiency of competence in the vocational field, resulting in instruction that is not perceived relevant by the students.

Nødtvedt (2017) investigated a related topic within the Norwegian common core subject, through classroom observations and qualitative interviews of two teachers, and six students in VET. In contrast to Sagli (2017), her findings indicated that students to a large extent experienced vocational orientation as motivating, and increased the communication between students and teacher. However, in line with previous research, the students report vocational orientation not being a prerequisite for experiencing relevance in Norwegian, leading towards a discussion of what the Norwegian subject should include.

Both of these MA studies confirm previous findings, referring to the relevance of vocational orientation not necessarily being the most important relevance for vocational students (Iversen et al., 2014; Stene et al., 2014). Their findings suggest a need to focus on other aspects of relevance within VET, not only on the relevance of vocational orientation (Akershus Fylkeskommune, 2013; Eskielsen et al., 2015).

MA studies concerning reading motivation, interest and strategy use in English

Johansen's (2009) examined the use of reading comprehension strategies, in one general and one VET class. Her findings showed that there was a strong focus on and knowledge about reading strategies among both students and teachers, especially in VET. Furthermore, she argued that reading strategy instruction is important in upper secondary school.

Merchan (2010) investigated the use of reading comprehension strategies both in and out of school among students in upper secondary school. The results indicated that the students were active readers, although there was a lack of strategy repertoire. She argued that a use of strategies to comprehend texts is needed to be able to meet the requirements of the national curriculum (Merchan, 2010).

Garvoll (2017) studied the in-and out-of-school use of English among vocational students, and her MA study is also part of the VOGUE project. Through a mixed methods study (qualitative interviews and quantitative logs and surveys), her study provides information about reading habits for a group of vocational students. Her study includes five students, four boys and one girl, who match the Outlier profile (scoring below 20% in Norwegian and above 60% in English, see Brevik & Hellekjær, 2017). Her findings portray the Outliers' extracurricular use of English, such as using English for social media activities, watching movies, listening to music, reading the news, and other texts online, as well as online gaming. She argues that their extracurricular English use explains why these vocational students are more proficient readers of English than Norwegian, although Norwegian is their first language. In her study, Garvoll (2017) also explored what these students read in a 20-minute reading session at school every morning. Even though the students could choose what to read, they did not choose a vocationally oriented reading material. Consequently, Garvoll's (2017) MA study aligns with previous research, showing that vocationally related texts are not necessarily the topic of interest when vocational students choose what to read (Iversen et al., 2011; Haugset & Stene, 2016; Stene et al., 2014).

Another MA study (Pentrella, 2017) has explored motivation for reading and reading comprehension strategies in VET in Norway. Pentrella's (2017) MA study is also part of the VOGUE project, exploring a group of poor readers, both in GS and VET ($n= 314$).

Somewhat surprisingly, her findings indicate that poor readers are highly interested in becoming good readers of English as the L2, and that they are consciously aware of the need to use different reading comprehension strategies in order to comprehend informational texts. She suggests that a focus in the instruction of poor L2 readers, could be to teach them those strategies that have proven to be effective for good readers, since the participants of her study were not able to distinguish between more or less effective reading comprehension strategies.

Based on the above review, two prior studies, Brevik and Hellekjær (2017), and Pentrella (2017), have used questionnaire data from the VOGUE-project. Both studies found great interest towards being good readers of English, and both studies indicate a certain metacognitive awareness of strategy use among the participants. Thus, what the students find interesting within reading, very much shows the importance of what they find to be of relevance. Since Pentrella (2017) analyzed the questionnaires among the general and vocational students scoring below 20 percent in the English mapping test, while Brevik and Hellekjær (2017) studied general and vocational students who scored above 60 percent in the English mapping test, a large number of questionnaires among vocational students remained to be analyzed, a data material my MA project exploits. Therefore, prior research indicates a dearth of research into vocational students' self-reported interest for reading in English or self-reported reading comprehension strategy use, making the current MA study important.

MA studies concerning reading comprehension strategies in English at lower levels

Hjeltnes (2016) investigated in her MA study, how to identify good English teaching when the students worked with different texts. She combined video observations of English instruction in lower secondary school, with students' views on their English instruction, and their results from national reading tests in English, as part of the Linking Instruction and Student Experiences (LISE) project. Her findings showed that a greater quality of teaching occurred when working with texts for a longer period of time. Also, the teacher used the L1 to support text comprehension, even though the students were proficient L2 readers. Very few reading comprehension strategies were used or instructed, and the teacher varied how he provided support in the form of strategies. Hjeltnes (2016) argues that the teaching quality related to strategy use and instruction may increase by the teacher being more explicit in the reading strategy instruction, by instructing the students in how to use strategies.

Finally, Skogen (2013) explored reading proficiency and reading strategy use in lower secondary school. By investigating how Content and Language Integrated Learning (CLIL) and English as a Foreign Language (EFL) differ, she found that teachers varied their teaching of reading and reading strategies, and that the difficulty level of texts used in class was different, and affected the extent to which the students were challenged when reading.

Even though several of these MA studies have looked at one of the areas that I am interested in exploring, in order to answer my research question, none have studied all three areas (vocational students, motivation/interest, and reading comprehension strategies).

Additionally, only one of the mentioned MA theses (Pentrella, 2017) has contributed with quantitative research on the field. Thus, investigating the reported answers of over a thousand vocational students through questionnaires, will hopefully make the methodology of my MA study a contribution to this field of research. In the following, I present the methodology I have used to be able to investigate motivation and interest for being good readers in English, and reported reading comprehension strategy use among vocational students.

3 Methodology

In this chapter, I present the methodology for my MA study, in order to investigate *how important it is for vocational students to be good readers of English compared to Norwegian, and to what extent they report using reading comprehension strategies when reading in the two languages.* First, I present the research design (3.1), including reflections on secondary data use (3.1.1) and my quantitative approach (3.1.2). Next, I present the procedures I have used (3.2), including information about the sample (3.2.1), and the data analysis (3.2.2). Finally, I discuss the research credibility of my MA study (3.3), including research validity (3.3.1), reliability (3.3.2), and ethics and limitations (3.3.3).

3.1 Research design

As an MA student, it was an advantage to join the VOGUE project, and be able to use secondary questionnaire data collected by members of the research project. VOGUE was initiated in 2012, with a nationwide survey consisting of student questionnaires collected from 90 upper secondary schools across Norway, with a total of 10,331 students. A total of 5,347 of these were vocational students. The questionnaires were collected in connection with two national mapping tests in reading, one in Norwegian (L1) and one in English (L2). When I was invited to the project, some of the questionnaires had already been used in two prior studies; a research study (Brevik & Hellekjær, 2017) and an MA study (Pentrella, 2017). Secondary data use allows for re-analysis of the material, with the opportunity to examine aspects that were not explicitly focused on in the original study (Dalland, 2011). However, the two prior studies had only used a small ratio of the questionnaires, while I was allowed access to all questionnaires from the vocational students, both those in L2 and those in L1.

Specifically, Brevik and Hellekjær (2017) used English questionnaires only ($n=164$), identified among students in GS and VET, who had scored 20% or less in the Norwegian mapping test and simultaneously 60% or more in the English test ($n=463$). Pentrella (2017) used both Norwegian and English questionnaires ($n=314$) in her MA study, also among students in GS and VET, identified among those who had scored 20% or less in the English test ($n=2,208$). My MA study is the first study to use all questionnaires in both English and Norwegian that were identified among all the vocational students ($n=5,347$) in the VOGUE

project. The procedure I used and the resulting number of questionnaires is presented in section 3.2 - Procedure.

3.1.1 Secondary use of questionnaire data

The two questionnaires were originally given to upper secondary school students in year 1 (Vg1) immediately after they had participated in the two national mapping tests. At this level, the mapping tests were voluntary and aimed to identify students who scored below an intervention baseline, which is set at 20%. However, I did not use the tests in my MA study, only the questionnaires distributed to the students immediately after taking the tests. The VOGUE project leader, Lisbeth M. Brevik, developed and piloted both questionnaires.

The questionnaires were estimated to take ten minutes. Each questionnaire comprised eight questions: one on reading motivation and interest in general (question 1), one about motivation for doing well on the tests (question 7), five questions about the students' reading process and use of reading comprehension strategies in the tests (questions 2–6), and a final question about the use of reading comprehension strategies when reading informational texts in general (question 8).

After designing and piloting the surveys, they were emailed to all upper secondary schools in Norway prior to the students conducting the two national mapping tests, asking staff members to administer the surveys in conjunction with the tests. The students were asked to use the same student ID number for both surveys (English and Norwegian) as they did for the mapping tests. Consequently, this allowed for identification between survey answers (for details, see Brevik & Hellekjær, 2017). The survey responses were then sent from the schools to Lisbeth M. Brevik immediately after they were conducted, and are now part of the data material in the VOGUE project. The questionnaires are cross-sectional, collected at one point in time (Creswell, 2014) in September 2012.

For my MA study, I have used the questionnaire items concerning the vocational students' reading motivation and interest in general (question 1), and their use of reading comprehension strategies in general (question 8). As my research questions were not related to the reading tests, I only used these two questions relating to the students' general reading activity. Question 1 is presented in Figure 5, and Question 8 is presented in Figure 6, with an

additional row including information about which strategies that are referred to in 8.1-8.17.

Question 1							
Is it important for your to be a good reader? Choose the answer that is best for you.							
<input type="checkbox"/>	1.1 Very important	<input type="checkbox"/>	1.2 Important	<input type="checkbox"/>	1.3 A little important	<input type="checkbox"/>	1.4 Not important at all

Figure 5. Survey question 1 (interest/motivation), comprising Item 1 of the data material.

Question 8 How often do you use these strategies to understand and remember factual texts?					Data analysis: Strategy categorization
	Almost never	Now and then	Often	Almost always	
8.1 I start within finding out why I will read the text (what the aim is).					Setting purpose
8.2 I reflect on what I already know about the topic.					Prior knowledge
8.3 I skim through the headings and pictures, to get an idea of the main content.					Skimming
8.4 I concentrate on easy parts of the text that are easy to understand.					Focusing on easy parts
8.5 I read through the text twice quickly.					Re-read
8.6 After I have read the text, I discuss the content with others.					Cooperative learning
8.7 I underline the important parts of the text.					Underlining
8.8 I sum up the text in my own words.					Summarization
8.9 I read the text out loud for someone else.					Reading aloud
8.10 I jump back and forth to find the right answer.					Scanning
8.11 I take notes from the text while I read.					Key words
8.12 I read the whole text, from the first word to the last.					Close-reading
8.13 I make sure that I have understood the most important things.					Important parts
8.14 I look up unfamiliar words in the dictionary.					Glossary use
8.15 I search for unfamiliar words on the internet.					Internet use for vocabulary
8.16 I skip over unfamiliar words in the text and try to understand around the text.					Skipping unfamiliar words
8.17 I do something else (describe):					Other

Figure 6. Survey question 8 (reading comprehension strategy use), comprising 17 different items. I have included an additional row (right column) for my categorization of strategies (data analysis), in line with theory presented in Chapter 2.

The two questions I use in this MA study make up the two constructs referred to in Figures 5 and 6 above. Construct 1 comprises Question 1: “*Is it important for you to be a good reader?*”. This item is identical in English and Norwegian (see Figure 5). Construct 2³ comprises Question 8: “*How often do you use these strategies to understand and remember factual texts?*” This question includes 17 items in the English survey, which asks the students whether and to what extent they use specific reading comprehension strategies. The Norwegian survey included 14 of these only, and the remaining three refer to L2 strategies (see Figure 6). Also, Figure 6 includes an additional row (right column), with categorization of the questionnaire strategies based on acknowledged strategies used in the PISA test and research studies (see Table 1). This row is not included in the original survey. All constructs use a four-point Likert scale, which builds on degrees of sensitivity and intensity of responses (Cohen, Manion & Morrison, 2011). The Likert-scale is formulated as statements, which the participants are asked to choose among: from ‘very important’ to ‘not important at all’.

3.1.2 Quantitative research approach

For my MA study, I have used a quantitative research design, including two questionnaires among vocational students, one for English (L2) reading and one for Norwegian (L1) reading (see Figure 5 and 6). Quantitative research is characterized as being an approach “for testing objective theories by examining the relationship among variables” (Creswell, 2014, p. 4). Furthermore, using numbers and closed-ended questions is employed in the method of collecting data quantitatively on instruments (Creswell, 2014), such as survey research, which is used in this study. Survey research often provides a quantitative or numeric description of a population’s trends, attitudes, or opinions by studying a sample of that population (Creswell, 2014). This definition corresponds to my research questions, as I have used the questionnaire data to analyze self-reported information among a nationwide sample of vocational students.

³ I have considered whether to refer to the questions as items or constructs. As question 8 comprise a set of items, it seemed appropriate to refer to this as a construct. However, as question 1 only comprises one item, I have been concerned that ‘construct’ will not be a correct label. At the same time, it seems awkward to use different labels for the two, and I have therefore in the following chosen to refer to Item 1 and Item 8, well aware that this is not consistent use of terminology.

Figure 7 below presents the quantitative research design of my MA study, comprising the two Items used in my MA study, which as already explained, used two identical questionnaires concerning reading in English and Norwegian, respectively. Finally, I also use the questionnaire data to examine the relationship between the two Items, ‘motivation and interest for reading’ and ‘reading comprehension strategy use’.

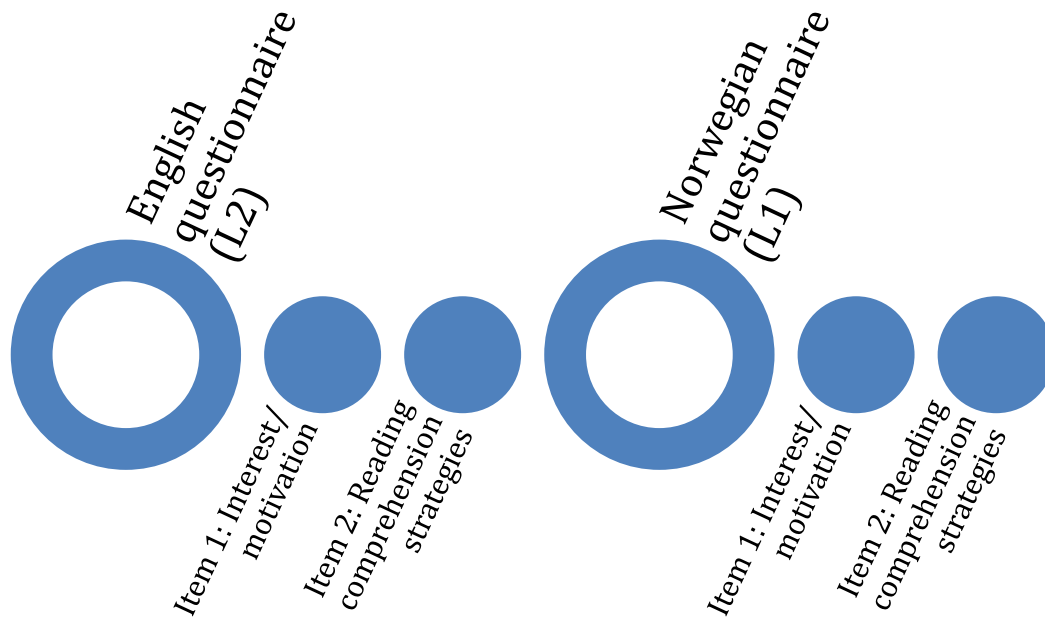


Figure 7. Quantitative research design based on two student questionnaires from the VOGUE project.

3.2 Procedure

In this section, I describe the procedure I used to identify how many of the 5,347 vocational students who participated in the nationwide study, had conducted the two questionnaires in English and Norwegian. Except for the questionnaires used by Brevik and Hellekjær (2017) and Pentrella (2017), the remaining questionnaires consisted of the original paper-based student responses, which had not been processed in any way. Thus, I spent a large amount of time sorting and identifying all the surveys from vocational students until I was finally able to analyze them in SPSS (Statistical Package for the Social Sciences). I started this procedure in January 2017, as shown in Figure 8.

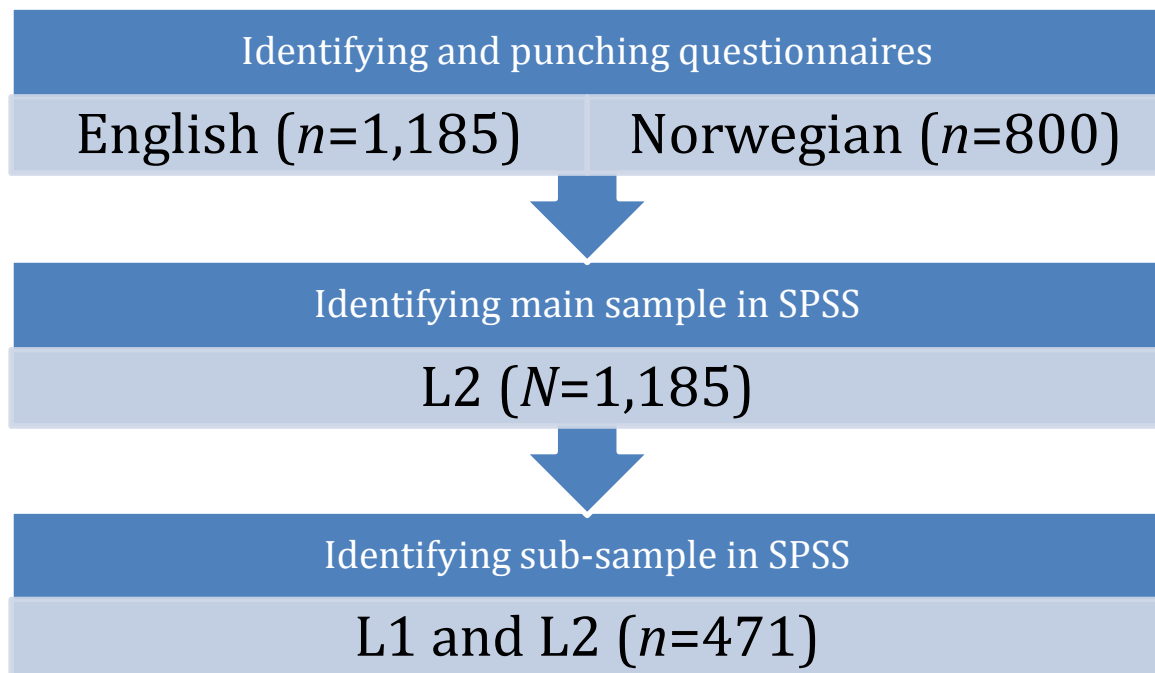


Figure 8. Data collection procedure: Steps 1–3 (Identifying and punching questionnaires, identifying main sample, and sub sample).

Figure 8 shows the procedure I used for this MA study, from identifying all relevant Norwegian and English questionnaires from vocational students and punching these into Excel, transferring these to SPSS to identify the size of the main sample, and finally merging the two datasets in SPSS to identify the sub-sample, who had answered both the English (L2) and the Norwegian (L1) questionnaires. The procedure is explained in more detail below.

January–March 2017: I first retrieved a list from the VOGUE project with the student ID numbers of all the vocational students ($n=5,347$) who had participated in the national surveys in English and Norwegian. As I gained access to all the paper-based questionnaires received from students both in vocational and general studies, I looked through these manually, as most of these had not been processed before. Based on the students' ID numbers, I first identified all the questionnaires concerning reading in English from the vocational students ($n=1,185$). Next, I identified all the questionnaires concerning reading in Norwegian from the vocational students ($n=800$). The difference between the potential number of participants ($n=5,347$) and the identified participants in the English survey ($N=1,185$) and the Norwegian survey ($n=800$) shows a response rate of 22.5% in English and 15% in Norwegian.

March–August 2017: I scanned the identified surveys in English ($N=1,185$) and Norwegian ($n=800$) and transferred these to my computer, before punching these into Excel spreadsheets. I used one row for each student, and the columns to register background variables (student ID, school, gender), their responses to each survey question in each of the two surveys (Norwegian and English, respectively). The answers to both Item 1 and 8 were given on a four-point Likert scale from 'Very important' to 'not important at all', I gave these values from 1 to 4. To be able to get proper statistics in SPSS, I reversed the scores, beginning with 'not important' =1 to 'very important' =4. Finally, since two prior studies in VOGUE had already used parts of the data material (Brevik & Hellekjær, 2017; Pentrella, 2017), I got access to their Excel spreadsheets, identified the vocational students, and controlled for missing questionnaires. In this manner, I double-checked that my Excel spreadsheet consisted of all surveys received from the vocational students in the nationwide sample ($n=5,347$). I added their data whenever I identified a student that was not included in my data.

September 2017: I transferred all the data from Excel into SPSS for data analysis, identified all vocational students who had conducted the English survey ($N=1,185$), and decided to use the entire group as my main sample.

September 2017: Then, I identified the students who had answered both the English and Norwegian surveys. I merged the two data sets in SPSS, by eliminating the students that had only participated in one of the surveys, by using the 'select cases' option in SPSS. Among the 1,185 who had responded to the English survey, and the 800 who had responded to the Norwegian one, 471 had responded to both. I decided to use these as my sub-sample. Finally, to make sure I treated the two samples completely separate, I created two separate SPSS files; one for the students who answered the English survey, which represent my main sample ($N=1,185$), and one for the vocational students who had responded to both the English and the Norwegian surveys, which represent my sub-sample ($n=471$).

3.2.1 Sample

The main sample ($N=1,185$) and sub-sample ($n=471$) in my MA study were identified among a nationwide sample of 10,331 Norwegian upper secondary school students (16 years old), of

which 5,347 were vocational students. My main sample thus makes up 52% of the nationwide population. Table 2 provides an overview of both samples.

Table 2. Overview of my main sample ($N=1,185$) and sub-sample ($n=471$)

English surveys (main sample)		English and Norwegian surveys (sub-sample)	
$N=1,185$		$n=471$	
41 schools across 16 counties		20 schools across 12 counties	
Boys	Girls	Boys	Girls
46% ($n=544$)	54 % ($n=641$)	48% ($n=227$)	52% ($n=244$)

As shown in Table 2, my main sample ($N=1,185$) includes 46% ($n=544$) boys, and 54% ($n=641$) girls from 41 schools, across 16 out of 19 Norwegian counties. My sub-sample ($n=471$) includes 48% ($n= 227$) boys and 52% ($n=244$) girls from 20 schools across 12 counties.

3.2.2 Data Analysis

After identifying and organizing my material, the data was further analyzed by using the statistical software SPSS version 24.0. Figure 9 (*Steps 1-5*) provides an overview of the data analyses I have performed in this MA study: Step 1 was a descriptive analysis on Item 1, reading motivation/interest for the main sample ($N=1,185$) and the sub-sample ($n=471$); Step 2 was a descriptive analysis for Item 8, reading comprehension strategy use, among the main sample and sub sample; in Step 3 I used ‘select cases’ to investigate the relationship between the independent variables of Items 1 and 8; In Step 4 I developed graphs and visual representations of the item results; and finally, In Step 5 I performed correlation analyses for all findings.

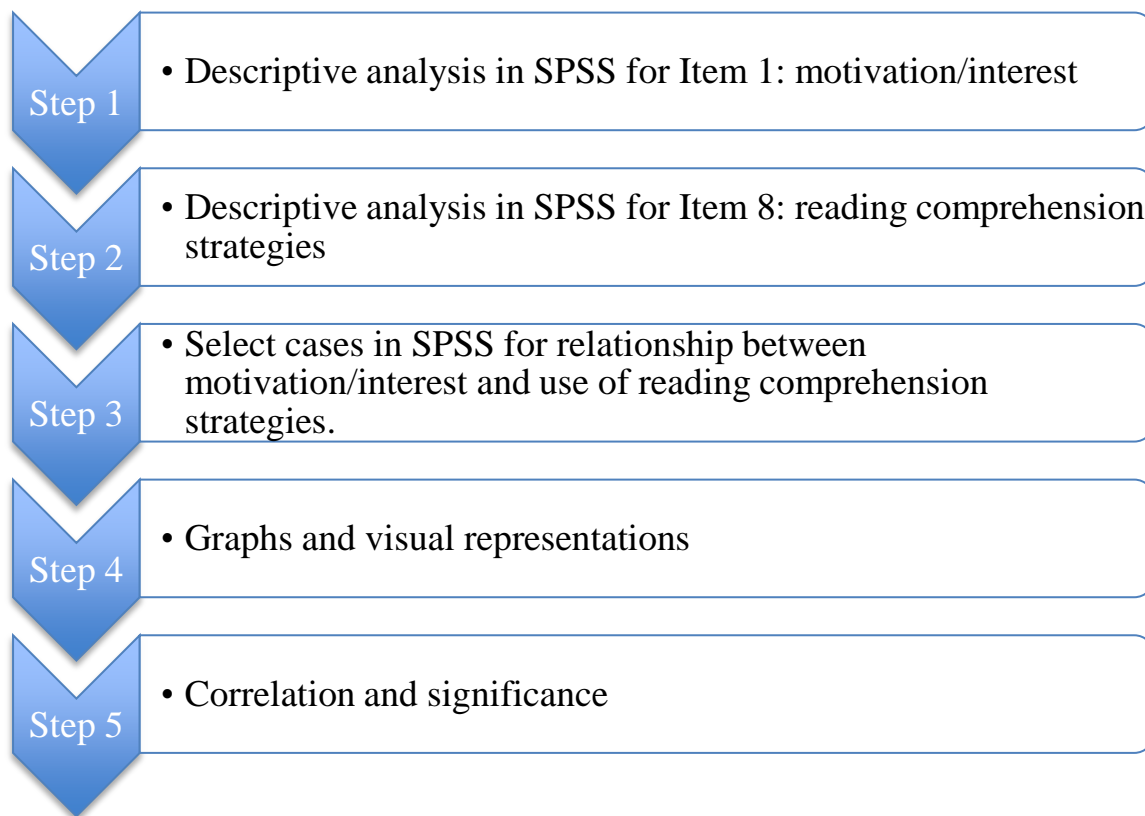


Figure 9. Overview of data analysis, and explanation of the procedure

Step 1: First, I measured mean values for the main sample ($N=1,185$) in the English survey, also divided by gender. I used ‘select cases’ to examine boys and girls separately. I analyzed the distribution of answers and percentages for the four alternative responses to Item 1: *Is it important for you to be a good reader in English?* Second, I turned to my sub-sample ($n=471$), and repeated the descriptive analysis for Item 1 in the English survey for the sub sample, and divided by gender. Third, to examine the relationship between the vocational students’ reported motivation/interest for reading in English and Norwegian, I repeated the descriptive analysis for the sub-sample, and divided by gender, for Item 1 in the Norwegian survey.

Step 2: I used frequency analysis to analyze the reported usage of each reading comprehension strategy use, within the main sample ($N=1,185$). Here, I also selected cases to focus on the entire group as well as each gender. I then turned to my sub-sample ($n=471$). Using frequency analysis, I first measured the means for the reported use of each reading comprehension strategy in English; second, in Norwegian. Finally, I measured the reading comprehension strategy use for each language across gender within the sub-sample.

Step 3: When I had analyzed the main sample ($N=1,185$) and sub-sample ($n=471$) descriptively, I began looking at the relationship between variables. In SPSS, I used the function ‘select cases’, to focus on two variables at the same time. First, I selected the students who had reported that it was “very important” to them be good readers of English, and identified frequency means of reading comprehension strategy use within this group of students. I have labelled this group of students ‘highly motivated’. Furthermore, I repeated this analysis for each of the student cases; “important” (labelled ‘motivated’ students), and “somewhat important” and “not important” (labelled ‘least motivated’ students) to be good readers of English. Consequently, I compared the three motivational groups to their reported reading comprehension strategy use, to examine whether these groups provided information that answered my research questions in such a way as to portray the students in the results chapter.

Step 4: To compare and contrast the vocational students concerning their reported motivation/interest, and their reported use of reading comprehension strategies, I created bar charts, tables and visual representations in SPSS and in Excel.

Step 5: To investigate whether there was any statistical relationship between the different variables, I conducted correlation analysis and significance tests in SPSS.

First, I conducted a bivariate correlation across the variables ‘gender’ and ‘motivation L2’ in the main-sample ($N=1,185$). Furthermore, I used the ‘select cases’ function in SPSS to focus on one gender at a time, and correlated ‘motivation L1’ with ‘motivation L2’ for gender=0 (girls), and then I repeated the procedure for gender=1 (boys), within the sub-sample ($n=471$).

Concerning reading comprehension strategies, I conducted a bivariate correlation between ‘gender’, and the top four strategies in the main sample ($N=1,185$). Then, I conducted the same correlation for the top four strategies in L2 (scanning L2, close-reading L2, skimming L2, important parts L2) correlated with the top four strategies in L1 (scanning L1, close-reading L1, skimming L1, important parts L1) within the sub-sample ($n=471$).

Consequently, I used the ‘select cases’ function, and correlated the top four strategies across both languages, first for gender=0, finally, for gender=1. *Note*: Low correlations of for example 0.03 are in most cases completely uninteresting, even though they are significant.

3.3 Research credibility

Research credibility emphasizes the concept of defensible research (e.g. Johnson & Christensen, 2013). Validity may be defined as correctness or truthfulness of the inferences drawn from the data, and reliability refers to the accuracy and transparency needed to enable a replication of the study (Johnson & Christensen, 2013). I discuss the validity (3.3.1) and reliability (3.3.2), in addition to explaining ethics and limitations related to my secondary data use (3.3.3).

3.3.1 Validity

Validity refers to the trustworthiness of the inferences drawn from the data, rather than the data itself. In the current study, it is relevant to discuss both the internal and external validity. Internal validity refers to how I as a researcher am able to make valid and reasonable interpretations of the data material, while external validity refers to the degree to which the results can be generalized to the wider population, also described as transferability and comparability (Cohen et al., 2011).

Internal validity

In my study, internal validity refers to how likely it is that I can assign a variable X (for example the vocational students’ motivation or interest for reading) to the observed change in variable Y (for example their reported reading comprehension strategy use). Johnson and Christensen (2013) argue that internal validity also can be called ‘causal’ validity, and relates to the aptitude to imply that a causal relationship exists between two variables, in other words, to what extent the results are valid concerning the investigated population (here: vocational students) and phenomena (here: motivation/interest and strategy use) (Creswell, 2014). The VOGUE team has already validated the surveys, and two prior studies have used these. First, Brevik and Hellekjær (2017) used 164 of the English questionnaires in their study of poor readers of Norwegian and proficient readers of English, and combined test data with the surveys. Second, Pentrella (2017) used 314 of the surveys in both languages in her

MA study of poor readers of English. Therefore, the internal validity of this project is considered acceptable.

However, there are certain threats to be aware of regarding internal validity. For example, survey questions may be interpreted differently by different participants (Creswell, 2014), therefore, there is always a certain risk that the participants will not answer the questions honestly or correctly. Kleven (2014) describes the need for a degree of agreement between a theoretical concept, and how the concept is measured in research. Since the context of the surveys was answered immediately after the mapping tests, students might interpret the questions only to regard these tests, and not relating to their reading in other situations, concerning both interest/motivation and strategy use. This threat was met by the survey questions explicitly referring to either their reading in the test, or their reading in general, which was specified for each question. Further, regarding the Likert scale, students can interpret the meaning of words differently. The alternatives “important” and “somewhat important” may have a different meaning to different respondents. Also, the students might want to answer something in between, which is not an alternative. Therefore, this might affect the internal validity between the instrument and the measurements. This threat was met as the surveys were piloted in advance, and found to be a valid instrument by Brevik and Hellekjær (2017). Although I am using the surveys as secondary data in this MA project, and could not influence the development of the survey instrument or oversee the data collection procedure, I have reason to trust the procedures established in the VOGUE project, and further reported in Brevik and Hellekjær (2017).

Another condition for internal validity is the investigation of extraneous variables, to be able to exclude or account for them. Extraneous variables refer to variables other than the independent variable that influences the dependent variable (Johnson & Christensen, 2013). Because the survey was conducted in relation to the mapping tests, I do not know if the students’ reported interest and motivation for reading was affected by other variables, such as their parents, or the context. Therefore, my MA project cannot guarantee for not having extraneous variables. Consequently, this may threaten the upcoming results about the students’ self-reported interest of reading and reading comprehension strategy use, and will question whether this also regards reading outside the survey context. I have met this threat by discussing my findings in light of such possible extraneous variables.

External validity

External validity regards the extent to which “the results of a study can be generalized to and across populations of persons, settings, times, outcomes, and treatment variations” (Johnson & Christensen, 2013, p. 291). However, to be able to generalize the results, there are several threats to external validity that must be accounted for, which I present, including how I have met these.

Population validity involves generalizing from a sample to a target population, and generalizing from a sample across the types of persons in the target population (Johnson & Christensen, 2013). The target population of my MA study involves vocational students in Norwegian upper secondary school, including sub-populations within the target population, such as males and females, and their geographical position. Random selection enlarges the probability that the sample will be representative of the population (Johnson & Christensen, 2013). First, I built on the nationwide sample ($n=10,331$) in Brevik et al. (2016), which they argue is representative of upper secondary students at this level in Norway (p. 168), and a result of all upper secondary schools in Norway being invited to participate. Second, to draw a sample from an accessible population ($n=10,331$), meaning the students who are available for participating in my research, may increase my MA study’s generalizability (Johnson & Christensen, 2013). Thus, I was confident that students at all upper secondary schools in Norway had been invited to participate in the survey. Consequently, as I wanted the largest possible sample within this representative sample, I used all available survey responses, resulting in 1,185 participants in the English survey (my main sample) representing 16 out of 19 counties.

Among the vocational students who participated in the national mapping tests ($n= 5,347$), there was an almost equal distribution of female (58,2%) and male (41,8%) participants (Brevik et al., 2016). Regarding my main sample ($N=1,185$), the distribution is almost the same (54% female and 46% male). Also, the gender distribution within the sub-sample ($n=471$) is quite similar (52% female and 48% male). This is one argument in favor of the gender distribution in my MA project being representative. This may increase the external validity, which involves generalizing to the subgroups within the target population (Johnson & Christensen, 2013).

3.3.2 Reliability

The reliability of a study relates to whether or not another researcher can replicate a study and obtain the same or similar results (Johnson & Christensen, 2013; Kleven, 2014). In other words, whether the results of my MA study can be reproduced. The fact that the VOGUE surveys are available for any researcher makes it possible to compare results across studies, such as my MA study compared to Brevik and Hellekjær (2017) and Pentrella (2017). In addition, I have tried to offer transparency concerning the survey instrument and my procedure to make it easy for peers to replicate the study (Cohen et al., 2011).

3.3.3 Ethics and limitations

When using data collected by others, it is important to discuss ethical considerations. Protecting the anonymity of the participants is one of these. Regarding the students' privacy, the use of student ID's in the questionnaire was meant to respect their privacy and ensure anonymity. The students can therefore only be identified through the key to the ID number that was used, which I have not had access to. Also, as part of the VOGUE project, the study is approved by Norwegian National Research Ethics Committee's Department for Social Sciences, Humanities, Law and Theology (NESH).

There are also some limitations to the use of secondary data. For example, I did not have the opportunity to influence the questionnaire development or distribution. In addition, I was not able to conduct any kind of follow-up of the participants, as the questionnaire was conducted in 2012. Therefore, to agree to use secondary data affected my opportunity to ask follow-up interview questions, which for example meant that a mixed methods approach was excluded already from the beginning of my MA study. However, quantitative data is distinguished as more independent of the researcher's position, making it more accepted to reuse quantitative data compared to qualitative data (Dalland, 2011). Moreover, when reusing data, as the researcher will not be able to create a personal relation to the informers (Dalland, 2011), this supports the ethical views of my MA study, by being able to ensure the anonymity of the participants.

Although the use of secondary data might not give sufficient information on the topic of interest (Dalland, 2011), a benefit for me, was the success of the one prior study (Brevik and

Hellekjær, 2017) and one MA study (Pentrella 2017), which reported that using the VOGUE questionnaires had provided them with sufficient and reliable data. Moreover, as they focused on smaller student samples, while my MA study focuses on the entire group of vocational students, the potential of being able to identify new findings increased my interest for the reuse of these secondary data, in line with Dalland's (2011) arguments. However, if I were to collect the student questionnaires myself, by designing and piloting these, emailing them to schools, and then begin the process of sorting and analyzing the material, the process would have been too time consuming for an MA study. Firstly, I would probably not have been able to collect the sample size I have now been able to include. Secondly, I would have had to begin the development and piloting of questionnaires long before I even started planning my MA study. Therefore, the reuse of secondary data collected by others was time efficient, and very much beneficial.

This chapter has presented the methodology of my MA study. In the next chapter, I present the results related to vocational students' motivation and interest for reading, and their reading comprehension strategy use.

4 Results

In this chapter, I present the findings of my MA project by examining the research question, “*What characterizes vocational students’ reading comprehension strategies in English, and to what extent are they motivated for reading in English?*”.

By analyzing the data from my main sample that answered the English questionnaire only ($N=1,185$) and from my sub-sample, which answered both the English and the Norwegian questionnaires ($n=471$), I identified three main findings that will be presented in this chapter. First, I found that the majority of the vocational students reported that it is important to be good readers in both English and in Norwegian (4.1). Second, results suggest that the vocational students have a small repertoire of reading comprehension strategies that they use in both English and Norwegian (4.2). Third, my analysis indicates that those who find it more important to be good readers of English use reading comprehension strategies more frequently than those who find it less important. In addition, those who find it important report using different repertoires of strategies than those who do not (4.3).

In the following, these results will be presented separately, to reflect and answer the three sub-questions. The results will be illustrated through visual representations, such as tables and figures.

4.1 The importance of being a good reader

In this section, I examine the motivation/interest for being good readers of English in comparison to Norwegian, in order to answer my first research question (*RQ1*): *To what extent do vocational students report being motivated and interested for being good readers of English compared to Norwegian?* To do so, I analyzed questionnaire Item 1 in both the English and the Norwegian questionnaires:

Item 1 (L2): Is it important for you to be a good reader in English?

Item 1 (L1): Is it important for you to be a good reader in Norwegian?

The analysis showed the general trend to be that the majority of vocational students consider reading to be important to them. First, I present the results for the main sample ($N=1,185$), and second, I turn to my sub-sample ($n=471$).

4.1.1 Motivation/interest for reading in English

Among the main sample ($N=1,185$), who answered the English questionnaire only, the vocational students' responses to Item 1 are shown in Table 1 below. The main finding is that while three quarter of the students (75%) report that it is very important or important to them to be good readers in English, while the remaining quarter (24%) find it to be less important ("somewhat important" or "not important at all").

Table 3. Numbers and percentage of the distribution in the main sample ($N=1,185$) for questionnaire Item 1: *Is it important for you to be a good reader in English?*

	Numbers	Percentage
Very important	352	30%
Important	531	45%
Somewhat important	255	22%
Not important at all	29	2%
Missing	18	1%
Total	1,185	100%

Specifically, Table 3 shows that among the entire sample, 30% ($n=352$) answered that it was "very important" to be a good reader in English, 45 % ($n=531$) answered "important", 22% ($n=255$) answered "somewhat important, and 2% ($n=29$) answered "not important at all". Unfortunately, 1% ($n=18$) of the responses to this question were "missing", resulting in no knowledge of the reading motivation/interest among these students.

In order to analyze the answers in further detail, to identify possible differences between the boys and the girls, I used 'gender' as a dependent variable. I analyzed the distribution

according to their reported motivation/interest for reading in English among the main sample ($N=1,185$). An overview is given in Figure 10.

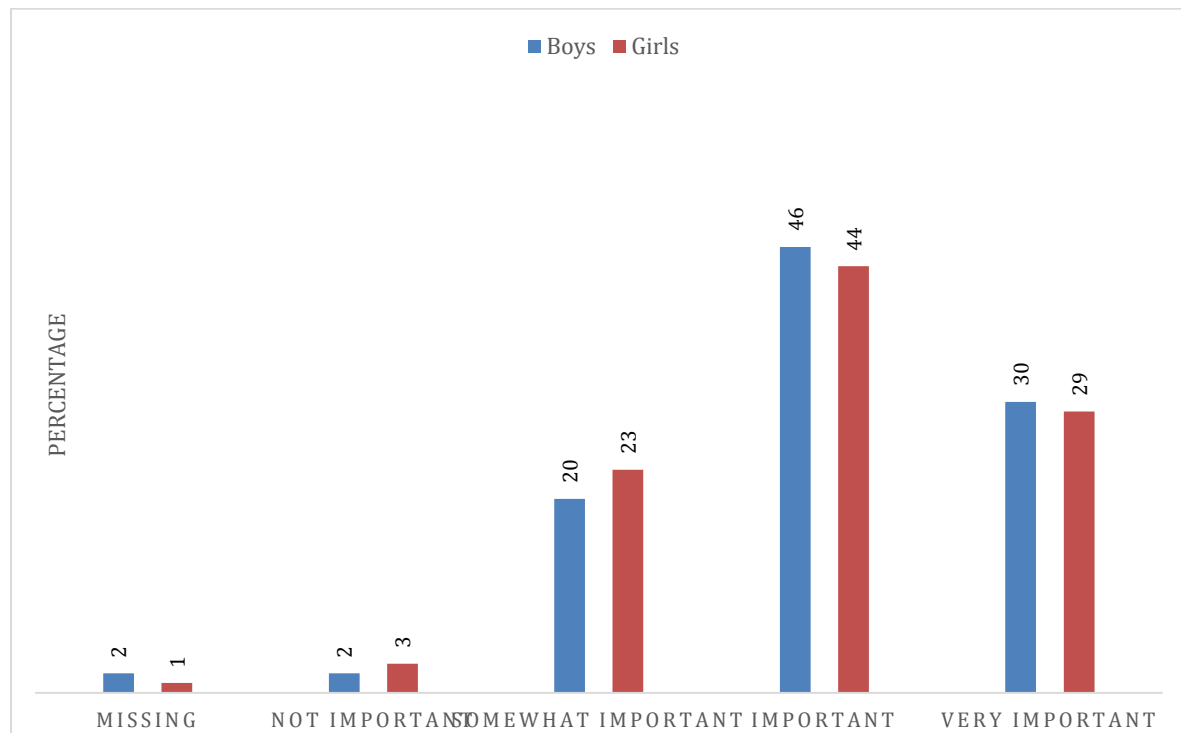


Figure 10. Percentage of the distribution of answers for each gender in the main sample ($N=1,185$) for questionnaire Item 1: *Is it important for you to be a good reader in English?*

Figure 10 presents the differences between the girls' and the boys' self-reported motivation/interest for being good readers of English. Specifically, the bar chart shows that there are more similarities than differences. First, 30% of the boys and 29% of the girls find it very important to be good readers in English. Second, 46% of the boys and 44% of the girls report that it is important to them. Third, 20% of the boys and 23% of the girls report that it is somewhat important, and finally, 2% of the boys and 3% of the girls find it to be not important at all. However, when merging the categories, a somewhat more nuanced picture emerges. While 73% of the girls report "very important" or "important", 76% of the boys report the same. Furthermore, 26% of the girls report "somewhat important" or "not important at all", compared to 22% of the boys.

These results indicate that although the majority of the vocational students report that it is important to them to be a good reader in English (75%), it is slightly more important to the boys (76%) than to the girls (73%). To consider whether this difference was significant, I did

a correlation analysis. However, the correlation analysis showed that the gender difference was not significant, which means that there is not necessarily a connection between gender and motivation/interest for reading, see Table 4.

Table 4. Correlation analysis between gender and motivation/interest in English reading in the main sample ($N=1,185$) for questionnaire Item 1: *Is it important for you to be a good reader in English?*

		Gender	Motivation L2
Gender	Pearson Correlation	1	,041
	Sig. (2-tailed)		,163
	N	1185	1185
Motivation L2	Pearson Correlation	,041	1
	Sig. (2-tailed)	,163	
	N	1185	1185

4.1.2 Motivation/interest for reading across English and Norwegian

Further analyses examined whether it was more or less important to the vocational students to be good readers of English compared to Norwegian. To do so, I turned to the sub-sample ($n=471$), who had answered the questionnaire for both Norwegian and English. I first examined the entire sub-sample, before looking at gender differences.

First, Table 4 shows that the sub-sample ($n=471$) is roughly comparable to the main sample, because their answers indicate that it is similarly important or very important for the majority to be good readers of English (75% of the main sample; 76% of the sub sample). A similar distribution of the students in both samples also answered that it is somewhat important or not important at all to be good readers in English (24% of the main sample; 23% of the sub sample).

When comparing the answers in the sub-sample across the two languages, it became clear that although they found it important to be good readers of both languages, it seemed somewhat more important to them to be good readers of English (76%) compared to Norwegian (72%). Similarly, a few more students reported that it was somewhat important or

not important at all to be good readers of Norwegian (27%) compared to English (23%). The distribution is shown in Table 5 below.

Table 5. Numbers and percentage of the distribution of answers in the sub-sample ($n=471$) for questionnaire Item 1 in both questionnaires: *Is it important for you to be a good reader in English/Norwegian?*

	Norwegian	English
Very important	22% (102)	30% (140)
Important	50% (233)	46% (219)
Somewhat important	25% (118)	20% (93)
Not important at all	2% (12)	3% (14)
Missing	1% (6)	1% (5)
Total	100% (471)	100% (471)

In sum, although a large majority of the vocational students in the sub-sample found it very important or important to be good readers in both languages, it is nevertheless more important to them to be good readers of English. To consider whether this difference between languages was significant, I repeated the correlation analysis. This time the difference was significant. Table 6 shows a significant correlation between motivation/interest in English and motivation/interest in Norwegian, indicating that the vocational students' motivation are related, and whether they are motivated in one language they are most likely to be motivated in the other.

Table 6. Correlation analysis on the significance between motivation/interest across English and Norwegian in the sub-sample ($n=471$) to questionnaire Item 1: *Is it important for you to be a good reader in English/Norwegian?*

		Motivation L2	Motivation L1
Motivation L2	Pearson Correlation	1	,494**
	Sig. (2-tailed)		,000
	N	466	460
Motivation L1	Pearson Correlation	,494**	1
	Sig. (2-tailed)	,000	
	N	460	465

** . Correlation is significant at the 0.01 level (2-tailed).

4.1.3 Gender distribution within the sub-sample

In the sub-sample ($n=471$), there is an almost equal gender distribution: 52% ($n=244$) girls and 48% ($n=227$) boys. To examine whether there were any differences between how important it is to each gender to be good readers in the different languages, I conducted a similar analysis as I did for my main sample. Figures 11 and 12 below show the distribution of the importance assigned by these girls and boys for being good readers in each language.

When analyzing the data for each gender, there is a clear difference between the importance girls and boys place on being good readers across the two languages. Results show that it is more important for the girls to be good readers in English than in Norwegian. However, it is equally important to the boys to be good readers in both languages. This is most clearly evident when comparing the categories “somewhat important” and “very important” (see Figures 11 and 12). First, Figure 11 shows this difference across languages for the girls.

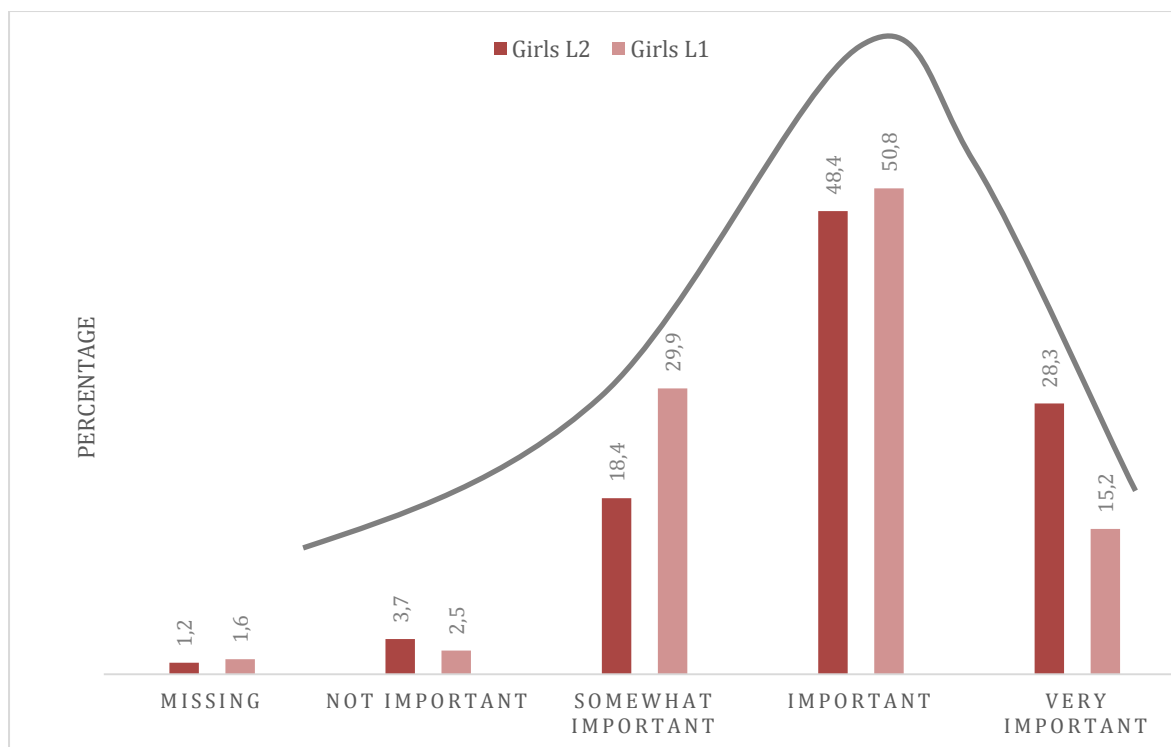


Figure 11. Percentage of the distribution for sub-sample girls (n=244) to questionnaire Item 1 in both questionnaires: *Is it important for you to be a good reader in English/Norwegian?*
Note. L1 = Norwegian. L2 = English.

According to Figure 11, the majority of girls find it almost equally “important” to be good readers in English (48%) and in Norwegian (51%). However, there is a clear difference between the girls’ responses to “somewhat important” and “very important”. While 30% answered “somewhat important” and 15% “very important” for Norwegian, only 18% answered “somewhat important” for English, with 28% answering “very important”. These responses show that the girls report that it is more important to them to be a good reader of English (76%) compared to Norwegian (66%). As expected, a correlation analysis showed that the seemingly large difference between the languages is significant, according to vocational girls, see Table 7.

Table 7. Correlation analysis on the significance between motivation/interest across English and Norwegian for girls the sub sample ($n=244$) to questionnaire Item 1: *Is it important for you to be a good reader in English/Norwegian?* Note. The number of participants ‘N’ differs from ($n=244$) since missing variables are not included in the correlation.

		Motivation L2	Motivation L1
Motivation L2	Pearson Correlation	1	,469**
	Sig. (2-tailed)		,000
	N	241	237
Motivation L1	Pearson Correlation	,469**	1
	Sig. (2-tailed)	,000	
	N	237	240

** . Correlation is significant at the 0.01 level (2-tailed).

Similar to the girls, the majority of the boys also find it important to be good readers in both languages. However, the difference between the languages is smaller than for the girls, which is illustrated in Figure 12.

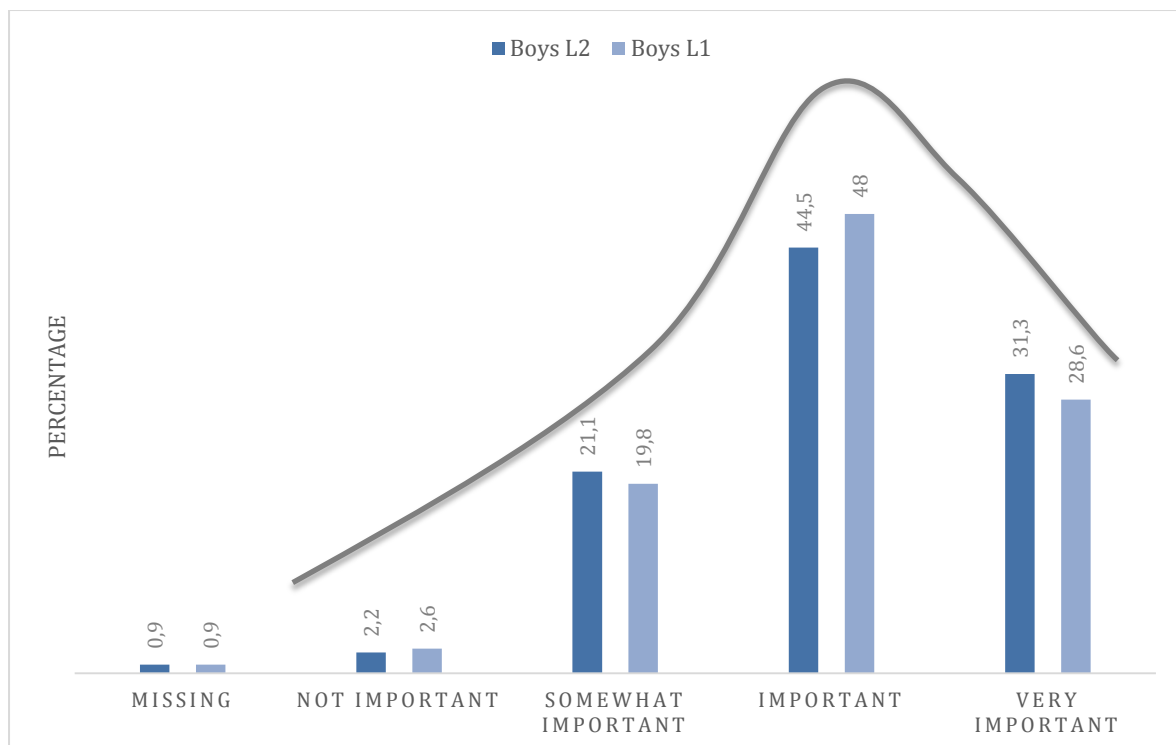


Figure 12. Percentage of the distribution for sub sample boys ($n=227$) to questionnaire Item 1 in both questionnaires: *Is it important for you to be a good reader in English/Norwegian?* Note. L1 = Norwegian. L2 = English.

Figure 12 shows that when comparing the two languages, the majority of boys find it “important” to be good readers in English (45%) and in Norwegian (48%). Looking at the responses of “somewhat important” and “very important” the distribution is not as skewed as for the girls. For English, 21% of the boys find it “somewhat important” to be good readers, while 31% report that it is “very important” to them. For Norwegian, 20% report that it is “somewhat important” to them to be good readers, while 29% report that it is “very important”. In other words, the boys report that it is just as important to them to be a good reader in English (76%) as in Norwegian (77%). As expected, correlation analysis showed that the connection between the languages also is significant. Additionally, the significance according to boys is higher, meaning a stronger connection between reading motivation/interest in the two languages.

Table 8. Correlation analysis on the significance between motivation/interest across English and Norwegian for boys in the sub-sample ($n=227$) to Item 1: *Is it important for you to be a good reader in English/Norwegian?* Note. The number of participants ‘ N ’ differs from ($n=227$) since missing variables are not included in the correlation.

		Motivation L2	Motivation L1
Motivation L2	Pearson Correlation	1	,528**
	Sig. (2-tailed)		,000
	N	225	223
Motivation L1	Pearson Correlation	,528**	1
	Sig. (2-tailed)	,000	
	N	223	225

** . Correlation is significant at the 0.01 level (2-tailed).

Thus, among the sub-sample ($n=471$) the majority of vocational boys and girls find it important to be good readers of both English and Norwegian. However, there is a difference across the genders, as boys find it equally important to be good readers of both languages (77% in Norwegian and 76% in English), while the girls report that it is more important to them to be good readers in English (76%) compared to Norwegian (66%).

4.1.4 Summary

In this section, I have aimed to answer *RQ1: To what extent do vocational students report being motivated and interested for being good readers of English compared to Norwegian*. In sum, based on Item 1 in both questionnaires, the vocational students are overall interested in being good readers of both English and Norwegian. However, while it is equally important to the boys to be good readers of both languages, it is more important to the girls to be good readers of English than of Norwegian.

4.2 Reading comprehension strategy use

In this section, I examine the vocational students' self-reported use of reading comprehension strategies, both in English and in Norwegian, when reading factual texts, in order to answer my second research question (*RQ2: To what extent do vocational students report using reading comprehension strategies when reading in the two languages?*). First, I examine strategy use in English for the main sample ($N=1,185$), adding the 'gender' as variable to be able to investigate potential differences between girls' and boys' use of strategies (4.2.1). Second, I turn to my sub-sample ($n=471$), to investigate similarities and differences across the two languages (4.2.2). Third, potential gender differences concerning reading comprehension strategy use is then examined across the two languages (4.2.3).

4.2.1 Reading comprehension strategy use in English

All the participants in the English survey ($N=1,185$) were asked to report their use of reading comprehension strategies when reading factual texts in English. Since I am interested in the strategies they use to comprehend informational texts in general, I analyze the vocational students' responses to Item 8 in the questionnaire.

Their responses are presented as mean scores in Figure 13. The Likert scale used the values 1=almost never, 2=now and then, 3=often, and 4=almost always. Figure 13 shows the distribution of reading comprehension strategy use in English for the main sample ($N=1,185$), divided by gender. The strategies are ranked from the most frequently used ones to the least frequently used ones, with the rank of boys' use.

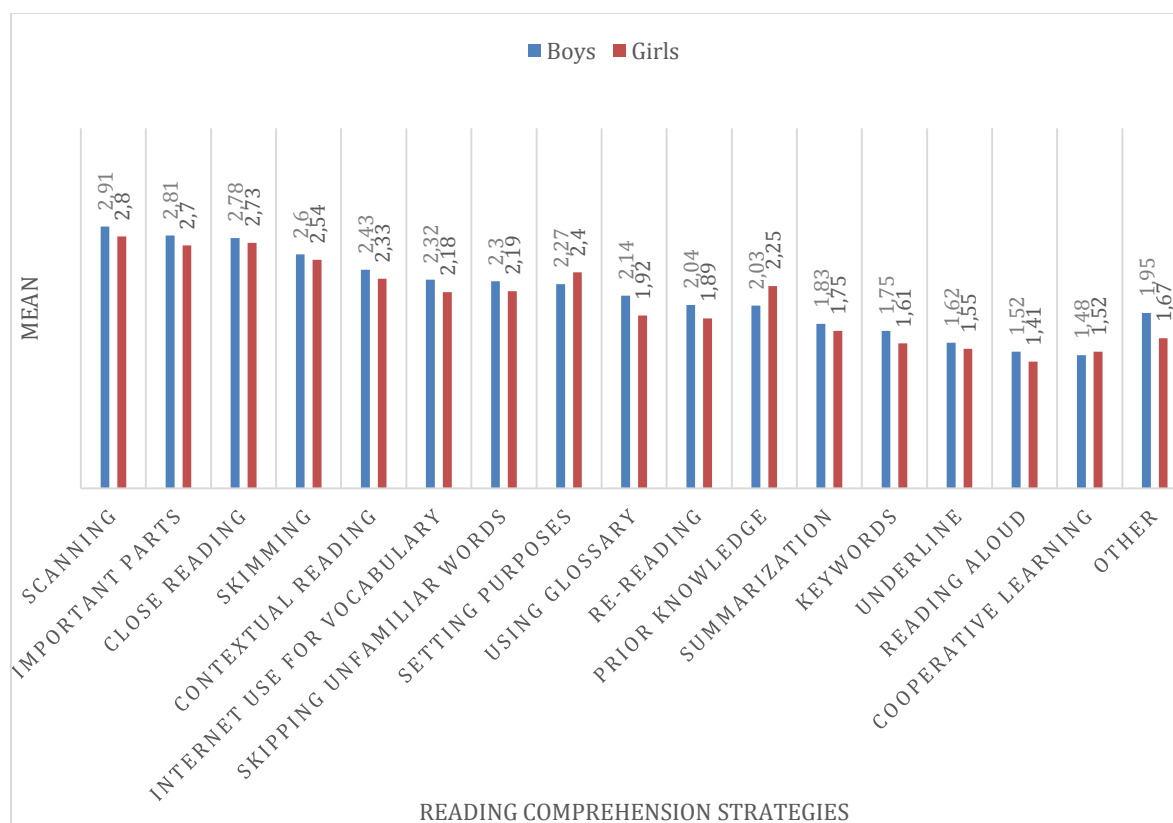


Figure 13. Mean distribution for the main sample ($N=1,185$), divided by gender, for questionnaire Item 8: *How often do you use these strategies to understand and remember factual texts in English?* on a scale from 1 (almost never) to 4 (almost always).

The most striking pattern shown in in Figure 13 is the small differences between the genders. However, the boys (overall mean 2.16) report using reading comprehension strategies slightly more frequently than the girls do (overall mean 2.09). In fact, the boys report using each of the strategies more frequently than girls do, with the exception of the following three; setting purposes (girls 2.4, boys 2.27), prior knowledge (girls 2.25, boys 2.03), and cooperative learning (girls 1.52, boys 1.48).

For the ‘other’ category, very few students gave additional information about which strategies these are. However, the answers to the open questions in the questionnaire are shown in Table 9. Some of these answers could be identified as one of the reading comprehension strategies in Figure 12; specifically, prior knowledge (answer 1), contextual reading (answer 3), skimming (answer 4), cooperative learning (answer 6), and scanning (answer 9). However, since these students chose to use the ‘other’ category for these answers, I have kept them as such.

Table 9. The ‘other’ category in the English questionnaire for Item 8: *How often do you use these strategies to understand and remember factual texts in English?*

Girls	1. Relaterer med ting jeg har lest før	I relate to things I have read before
	2. Jetter	I’m guessing
	3. Når det er ukjente ord finner er ut kva det betyr med å sjå samanhengen	When I find unknown words, I look at the context to understand the meaning
	4. Jeg skimleser	I skim read
	5. Fordi jeg ikke klarer engelsk	Because I do not know English
Boys	6. Jeg samarbeider med den jeg sitter ved siden av	I cooperate with the person I sit next to
	7. Snakker med lærer eller mamma om teksten	I talk to the teacher or with my mum about the text
	8. Tankekart	Mind map
	9. Lese spørsmåla så lese eg litt	I read the questions and then I read a bit

Note. All these students belong to different schools, except the last three boys (no. 7–9), who all belong to the same school.

The second pattern I identified, is that the top four reading comprehension strategies in English are the same for both genders, although the order is not identical. The top four strategies for boys are *scanning* (mean 2.91), *focusing on important parts* (mean 2.81), *close reading* (mean 2.78), and *skimming* (mean 2.6). For girls, the top four reading comprehension strategies are *scanning* (mean 2.8), *close reading* (mean 2.73), *focusing on important parts* (mean 2.7), and *skimming* (mean 2.54). While the most and least frequently used strategies among the four are the same for boys and girls (*scanning* and *skimming*), the order is changed for the second and third ones (*focusing on important parts* and *close reading*). This is particularly interesting, as scanning and skimming are so-called “surface-level strategies”, while focusing on important parts and close-reading are considered “deeper-level strategies” (see description of the categories in Bråten and Anmarkrud (2012), Chapter 2). In other

words, both genders report using a surface-level strategy most and least frequently among the four, with deeper-level strategies in second and third place.

Results (see Figure 13) showed some differences between girls' and boys' reported use of strategies. A correlation analysis confirms this picture. Using gender and reading comprehension strategies as variables, I found fairly weak, but significant correlations between the boys' and girls' reported use of two of the top four strategies, and no correlation for the remaining two strategies. I found a small correlation between the genders concerning their use of *scanning* ($r = 0.064^*$), and between genders and *focusing on important parts* ($r = 0.072^*$); the first one being a surface-level strategy and the latter one a deeper-level strategy. More important, however, is the weakness of the correlation. This is shown in Table 10.

Table 10. Correlation analysis between gender and the top-four reading comprehension strategies in English among the main sample ($N=1,185$), for Item 8: *How often do you use these strategies to understand and remember factual texts in English?*

		Gender	Scanning L2	Important parts L2	Close reading L2	Skimming L2
Gender	Pearson Correlation	1	,064*	,072*	,025	,037
	Sig. (2-tailed)		,032	,016	,393	,208
	N	1185	1139	1134	1137	1141
Scanning L2	Pearson Correlation	,064*	1	,083**	-,011	,298**
	Sig. (2-tailed)	,032		,005	,718	,000
	N	1139	1139	1126	1129	1131
Important parts L2	Pearson Correlation	,072*	,083**	1	,465**	,205**
	Sig. (2-tailed)	,016	,005		,000	,000
	N	1134	1126	1134	1124	1126
Close reading L2	Pearson Correlation	,025	-,011	,465**	1	-,014
	Sig. (2-tailed)	,393	,718	,000		,629
	N	1137	1129	1124	1137	1128
Skimming L2	Pearson Correlation	,037	,298**	,205**	-,014	1
	Sig. (2-tailed)	,208	,000	,000	,629	
	N	1141	1131	1126	1128	1141

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The third pattern I identified, is the correlation between the vocational students use of surface-level and deeper-level strategies, respectively. Table 10 shows that using the specific strategies as variables, I found moderate positive correlation between the surface-level strategies *skimming* and *scanning* ($r = 0.298^{**}$), and even stronger positive correlation between the deeper-level strategies *important parts* and *close reading* ($r = .465^{**}$). In

addition, there was moderate to weak correlation between the deeper-level strategy *important parts* and the surface-level strategies *skimming* ($r = 0.205^{**}$) and *scanning* ($r = 0.0.83^{**}$). There was, however, no correlation between the deeper-level strategy *close reading* and the two surface-level strategies.

In the following, I compare the boys' and the girls' reported use of the top four strategies, and further examine whether there are differences between their use of these strategies across the two languages.

4.2.2 Top four reading comprehension strategies across languages

To compare how these reading comprehension strategies were used in English compared to Norwegian, I turned to my sub-sample ($n=471$) of vocational students who had conducted both questionnaires. The same pattern as the one I identified for English, concerning the four most frequently used reading comprehension strategies appeared across the two languages, and they are ranked in the same order for both languages: *scanning*, *close-reading*, *important parts* and *skimming*. Figure 14 offers an overview of the top four reading comprehension strategies across English L2 and Norwegian L1 for these vocational students.

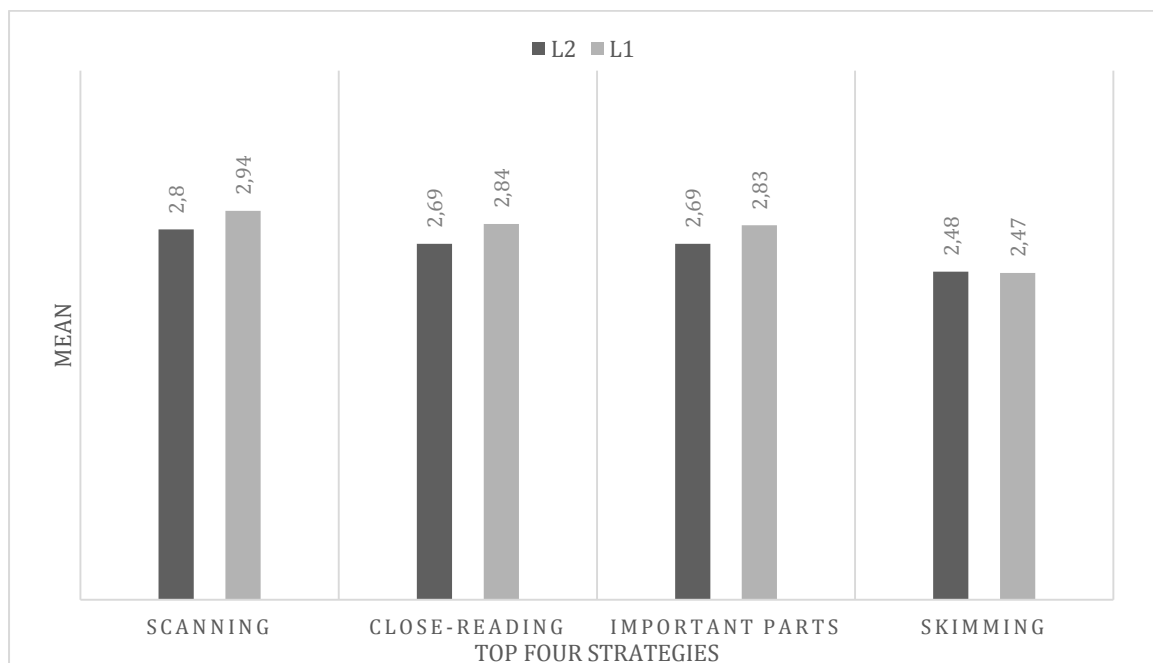


Figure 14. Mean distribution for the sub-sample ($n=471$), for Item 8 in English L2 and Norwegian L1, respectively: *How often do you use these strategies to understand and remember factual texts in English/Norwegian?* on a scale from 1 (almost never) to 4 (almost always).

Figure 14 shows small differences between the use of these four strategies in English and Norwegian, and the mean values show that the vocational students use these reading comprehension strategies just as frequently in English (mean 2.1) as in Norwegian (mean 2.08). Using reading comprehension strategies in L1 and L2 as variables, I found significant correlations between the top four strategies across languages, see Table 11.

Table 11. Correlations between the top four reading comprehension strategies across languages in the sub-sample ($n=471$) for Item 8 in English L2 and Norwegian L1, respectively: *How often do you use these strategies to understand and remember factual texts in English/Norwegian?*

		Scanning L2	Close-reading L2	Important parts L2	Skimming L2	Scanning L1	Close-reading L1	Important parts L1	Skimming L1
Scanning L2	Pearson Correlation	1	,012	,151**	,324**	,350**	-,022	,038	,119*
	Sig. (2-tailed)		,796	,001	,000	,000	,641	,422	,012
	N	451	446	445	446	444	442	439	446
Close-reading L2	Pearson Correlation	,012	1	,486**	-,010	-,046	,578**	,369**	,037
	Sig. (2-tailed)	,796		,000	,828	,331	,000	,000	,438
	N	446	448	443	444	441	440	437	443
Important parts L2	Pearson Correlation	,151**	,486**	1	,198**	,083	,362**	,476**	,157**
	Sig. (2-tailed)	,001	,000		,000	,083	,000	,000	,001
	N	445	443	448	444	442	439	437	444
Skimming L2	Pearson Correlation	,324**	-,010	,198**	1	,178**	-,030	,211**	,393**
	Sig. (2-tailed)	,000	,828	,000		,000	,530	,000	,000
	N	446	444	444	452	444	443	440	448
Scanning L1	Pearson Correlation	,350**	-,046	,083	,178**	1	-,067	,117*	,247**
	Sig. (2-tailed)	,000	,331	,083	,000		,153	,012	,000
	N	444	441	442	444	461	457	454	461
Close-reading L1	Pearson Correlation	-,022	,578**	,362**	-,030	-,067	1	,387**	-,069
	Sig. (2-tailed)	,641	,000	,000	,530	,153		,000	,139
	N	442	440	439	443	457	460	453	459
Important parts L1	Pearson Correlation	,038	,369**	,476**	,211**	,117*	,387**	1	,228**
	Sig. (2-tailed)	,422	,000	,000	,000	,012	,000		,000
	N	439	437	437	440	454	453	456	456
Skimming L1	Pearson Correlation	,119*	,037	,157**	,393**	,247**	-,069	,228**	1
	Sig. (2-tailed)	,012	,438	,001	,000	,000	,139	,000	
	N	446	443	444	448	461	459	456	466

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 11 shows a consistent pattern of moderate to strong correlation between the vocational students' reported use of the same reading comprehension strategies across the two languages; *scanning* L1–L2 ($r = 0.350^{**}$), *close-reading* L1–L2 ($r = 0.578^{**}$), *focusing on important parts* L1–L2 ($r = 0.476^{**}$), and *skimming* L1–L2 ($r = 0.393^{**}$). This means that if a vocational student uses one of these strategies when reading in English L2, the student most likely also uses the strategy when reading in Norwegian L1. Second, I found some correlation between the surface-level strategies in L1 and L2 ($r = 0.119^*$, 0.178^{**}), and moderate

correlation between the deeper-level strategies in L1 and L2 ($r = 0.362^{**}$, $r = 0.369^{**}$).

4.2.3 Reading comprehension strategy use in L1 and L2 across gender

In the previous section, I identified significant correlations between the vocational students' use of specific strategies in Norwegian and English, respectively. In this section, I analyze these top four strategies in further detail, using gender as variable. Figure 15 shows average means for each of the top four strategies, divided into gender and languages; boys L1, boys L2, girls L1, girls L2.

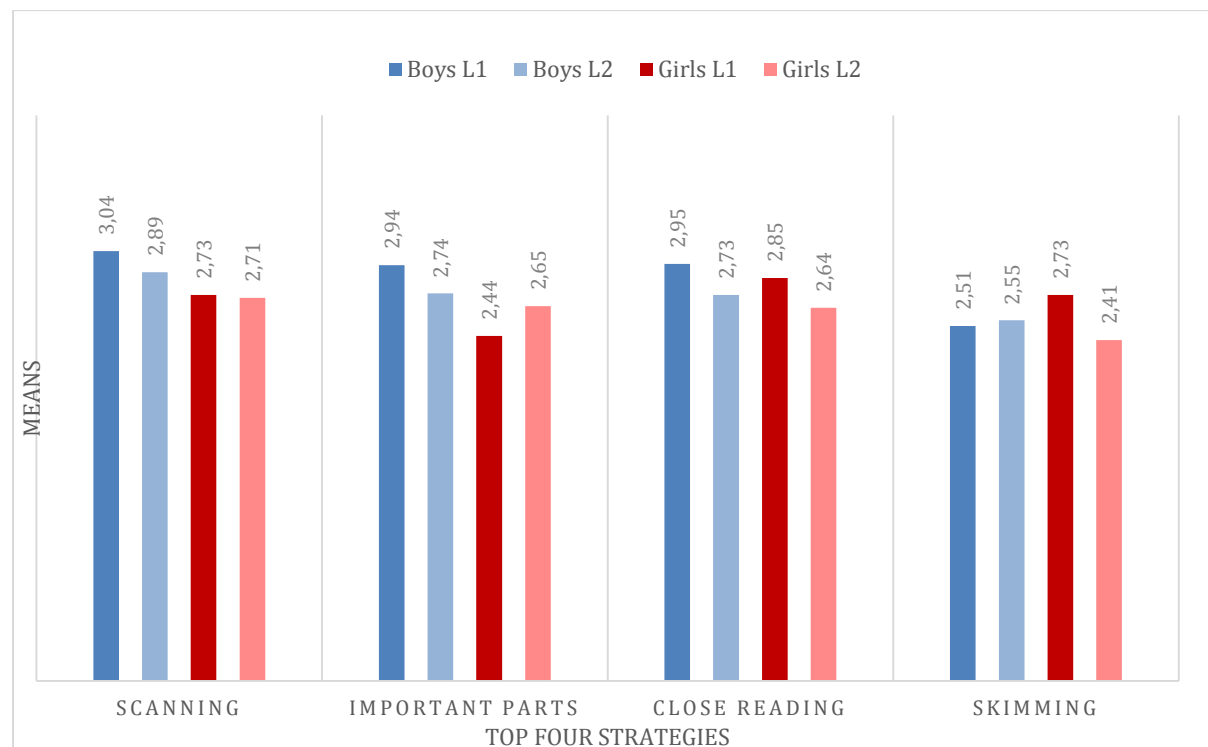


Figure 15. Mean distribution for boys ($n=227$) and girls ($n=244$) in the sub-sample for questionnaire Item 8 in English L2 and Norwegian L1, respectively: *How often do you use these strategies to understand and remember factual texts in English/Norwegian?* on a scale from 1 (almost never) to 4 (almost always).

Figure 15 gives an overview of the means of the top four reading comprehension strategies for the boys ($n=227$) and the girls ($n=244$) in the sub-sample ($n=471$). First, the boys consistently report using each of the strategies more frequently than the girls do, in both languages, except for skimming, which the girls use more often in L1 (mean 2.73) compared to the boys (mean 2.51). Also, both boys and girls use each strategy more frequently in L1

than in L2, except the boys' use of skimming, which they use more often in English (2.55) than in Norwegian (2.51), and the girls' use of close-reading, which they also use more often in English (2.65) than in Norwegian (2.44). Nevertheless, although there are some differences concerning the use of these strategies across the languages, correlation analysis shows that the boys' and the girl's use of each strategy across L1 and L2 is significant, see Table 12.

Table 12. Correlations between the top four reading comprehension strategies across languages for girls ($n=244$) and boys ($n=227$) within the sub-sample ($n=471$) for questionnaire Item 8 in English L2 and Norwegian L1, respectively: *How often do you use these strategies to understand and remember factual texts in English/Norwegian?*

	Girls ($n=244$)	Boys ($n=227$)	Total ($n=471$)
Close reading L1–L2	.581**	.575**	.578**
Important parts L1–L2	.438**	.511**	.476**
Scanning L1–L2	.309**	.387**	.350**
Skimming L1–L2	.412**	.366**	.393**

** = Correlation is significant at the 0.01 level (2-tailed).

Table 12 shows that correlations across languages for all top four strategies are significant at a 99% level, both for the entire sub-sample and for each gender separately. This means that girls who use one strategy in Norwegian use the same strategy in English, and boys who use one strategy in Norwegian, also use the same strategy in English.

4.2.4 Summary

The aim for this section was to answer *RQ2: To what extent do vocational students report using reading comprehension strategies when reading in the two languages?* Based on my main sample ($N=1,185$) and my sub-sample ($n=471$), all vocational students seem to have a repertoire of four top strategies, consisting of two surface-level strategies (scanning and skimming), and two deeper-level strategies (close-reading and focusing on important parts). This pattern seems to be significant for each gender and across languages.

4.3 Relation between motivation/interest and reading comprehension strategy use

In this section, I combine my findings from the two previous sections, to answer: *RQ3: To what extent does the use of reading comprehension strategies differ among students who find it more or less important to be good readers of English?*

I have used correlation analysis, including Item 1 on reading motivation/interest and Item 8 on reading comprehension strategies. Correlating the two, enabled me to look deeper into the vocational students' reading comprehension strategy use. First, I divided the main sample ($N=1,185$) into four groups based on the importance they place on being good readers of English (Item 1). On a scale from 1-4, I consider the highly motivated ones to be those who answered '4' ($n=352$), the motivated ones to be those who answered '3' ($n=531$), the somewhat motivated ones to be those who answered '2' ($n=255$), and the least motivated ones to be those who answered '1' ($n= 29$). Since the somewhat motivated (distractor 2) and the least motivated (distractor 1) comprise the smallest groups, I chose to merge them. Thus, I ended up with the following three motivational groups: Highly motivated ($n=352$), motivated ($n=531$), and least motivated ($n=285$).

Based on this group division, I identified the reported use of reading comprehension strategies of each motivation group as shown in Table 13.

Table 13. Mean distribution for each motivational group in the main sample ($N=1,185$), for the L2 questionnaire Item 8: *How often do you use these strategies to understand and remember informational texts in English?*

	Highly motivated ($n=352$)	Motivated ($n=531$)	Least motivated ($n=285$)
Close reading	3.11	2.77	2.29
Important parts	3.09	2.76	2.32
Scanning	2.87	2.88	2.78
Setting purposes	2.61	2.33	2.06
Skimming	2.60	2.62	2.42
Internet use for vocabulary	2.45	2.21	2.03
Prior knowledge	2.34	2.11	1.98
Using glossary	2.22	2.00	1.83
Skipping unfamiliar words	2.22	2.25	2.25
Contextual reading	2.20	2.42	2.31
Re-reading	2.09	1.96	1.79
Summarization	1.95	1.79	1.58
Keywords	1.79	1.74	1.43
Underline	1.68	1.63	1.39
Cooperative learning	1.53	1.53	1.41
Reading aloud	1.51	1.49	1.34
Other	2.00	1.65	1.49

Table 13 shows that based on the reported strategy use, the top four strategies vary between the motivational groups. The highly motivated students use close reading, important parts, scanning, and setting purposes the most. The motivated students use close reading, important parts, scanning, and skimming the most. The least motivated students use important parts, scanning, skimming, and contextual reading the most. This means that while two strategies are among the top four for all three groups (*important parts* and *scanning*), one additional strategy (*close reading*) is shared by the highly motivated and the motivated groups, and another strategy (*skimming*) is shared by the motivated and the least motivated group. The

remaining strategies are specific for the highly motivated group (*setting purposes*) and the least motivated group (*contextual reading*). This repertoire of top four strategies is illustrated in Figure 16.



Figure 16: Mean distribution (on a scale from 1-4) for the three motivational groups; the highly motivated ($n=352$), the motivated ($n=531$), and the least motivated ($n=285$) for L2 questionnaire Item 8: *How often do you use these strategies to understand and remember factual texts in English?* Note. D=deeper-level strategies. S=surface-level strategies.

Figure 16 shows the mean frequencies for each of the top four reading comprehension strategies when reading English among the highly motivated ($n=352$), motivated ($n=531$), and least motivated ($n=285$) vocational students. As can be seen, the highly motivated vocational students report using reading comprehension strategies more frequently than the motivated ones, which again report more frequent use of strategies compared to what the least motivated ones do. Additionally, the most and least motivated vocational students do not use the same reading comprehension strategies. The green color illustrates deeper-level strategies, while the grey color illustrates surface-level strategies. Figure 15 shows that the highly motivated group uses three deeper-level strategies (close reading, focusing on important parts, and setting purposes) and one surface-level strategy (scanning), while the

motivated group uses two deeper-level strategies (close reading, and focusing on important parts) and two surface-level strategies (scanning and skimming), the least motivated students uses one deeper-level strategy only (focusing on important parts) and three surface-level strategies (scanning, skimming, and contextual reading).

4.3.1 Summary

To summarize, in this section, the aim was to answer *RQ3: To what extent does the use of reading comprehension strategies differ among students who find it more or less important to be good readers of English?* Thus, the analysis shows that although two of the top four strategies are used among all three motivational groups, the repertoire is markedly different considering the majority of deeper-level strategies among the highly motivated group, and a majority of surface-level strategies among the least motivated group.

5 Discussion

In this chapter, I will discuss the results of this MA study in light of relevant theory, prior research, and the main research question: *How important is it for vocational students to be good readers of English compared to Norwegian, and to what extent do they report using reading comprehension strategies when reading in the two languages?*

Throughout this chapter, I highlight what I hope to be my contribution to the field of vocational education and training, and also to the field of reading comprehension strategy research. I argue especially that the data that I have had the opportunity to use in this MA study brings a unique contribution to these fields. Indeed, – to the best of my knowledge – this is the first time the voices of more than a thousand vocational students across Norway are studied in regards to how they view themselves as readers, and what reading strategies they practice. Furthermore, the opportunity to look closely at more than a third of these (my sub-sample), and to compare their views on reading in English and Norwegian strengthens my contribution. In this chapter, I discuss my findings and make some suggestions for how these may implicate the teaching and learning of English in vocational study programs in Norway.

First, I discuss what it might mean for vocational students to be good readers in English compared to Norwegian, and potential implications for English teachers in VET in Norway (5.1). Second, I discuss the vocational students' reported use of reading comprehension strategies, and especially the main pattern of a top four strategy repertoire, and the potential relation between motivation/interest and strategy use (5.2). Third, I discuss some implications that add to the literature on creating relevance for vocational students (5.3), before I briefly discuss the anticipated gender gap in VET (5.4).

5.1 The importance of being a good reader of English

To me, the most important finding in this MA study, is that the majority of the vocational students reported that it is important to them to be good readers of English. Indeed, the results from the questionnaires show that three quarters (75%) reported that this was important or very important. Notably, the students who answered the questionnaires both in English and Norwegian, found it more important to be good readers of English (76%) compared to being good readers of Norwegian (72%).

This is a particularly positive finding, since vocational students are considered at risk of early school leaving (OECD, 2016), and since students who lack good reading skills risk dropping out of school (World Bank, 2013). Thus, what is important to these students might not necessarily concern whether they *are* good or poor readers, but rather that their self-reported motivation and interest suggests that they *want* to be good readers. Indeed, Bernhardt (2011) argues that variables such as motivation and interest may compensate for a certain lack of reading proficiency. Thus, the fact that vocational students wish to be good readers might be a motivational force, and suggests a certain importance of reading in their lives, which in turn might affect whether or not they use reading strategies when facing comprehension problems.

A recent study shows that students in vocational programs are statistically poorer readers in both English L2 and Norwegian L1 compared to students in general studies (Brevik et al., 2016). Their study suggests in line with reading theory that readers who struggle in the L1 will probably also struggle in the L2 (Bernhardt, 2011). However, other studies focusing specifically on vocational students in Norway challenge this assertion, as some readers have been identified as good readers in the L2 and at the same time poor readers in the L1 (Brevik, 2016a; Brevik & Hellekjær, 2017; Garvoll, 2017). Although I have not analyzed reading proficiency among the vocational students in my study, their reported motivation and interest for being good readers of English, adds an important nuance to these studies. In fact, since my results indicate that the majority of the vocational students find it important or highly important to be good readers of both English and Norwegian, interest might be key.

Both Brevik (2016a) and Garvoll (2017) have found a connection between vocational students' reading proficiency, reported motivation/interest, and English use out of school. Students who use English for out-of-school activities, such as online gaming, surfing on the internet, or social media use, have better test results in English reading proficiency than what might be expected based on their poorer reading results in Norwegian (Brevik, 2016a; Garvoll, 2017; OECD, 2016). Their findings imply that motivation and interest is important, which is supported by the positive findings in my MA study.

Furthermore, since vocational students in Norway statistically have a higher dropout rate (41%) than students in GS (3%), and since the poorest readers are more at risk of dropping

out of school (OECD, 2016), it is relevant to consider whether my findings might shed some light on this relation. As mentioned, high motivation and interest for reading, may compensate for a lack of reading proficiency (Bernhardt, 2011). Ellis (1997) also promotes this notion, and refers to motivation as the main cause of second language accomplishment. This means that although vocational students statistically are poorer readers than GS students (Brevik et al., 2016), reading interest and motivation may enhance the probability that they might finish upper secondary school instead of dropping out. Additionally, the FYR project has aimed at increasing the vocational students' motivation for school, hoping that this will contribute to reducing the number of dropouts and create higher probability to finish school (Iversen et al., 2014; Stene et al., 2014).

Thus, my findings not only contribute with an optimistic view of vocational students as motivated and interested readers of English in an increasingly complex information society. My findings also contribute with an optimism concerning reduced dropout, since international reports suggest that reading motivation and interest could be key to reducing dropout (OECD, 2016; World Bank, 2013). This empirical contribution needs to be disseminated to English teachers in VET in Norway, and to vocational students themselves, to contribute with a more nuanced view of these students than what might be the current situation (see Brevik, 2016b). I intend to take on an active role in contributing with such dissemination of my work.

My findings align with those of Day and Bamford (2002), who argue that students are more likely to read material of their own choice, and material in which they are interested in, regardless of language. Reading material of interest is also considered an important factor for the L2 reading process in general (Brantmeier, 2006), especially as it might cause intrinsic motivation if the reading material is related to the students' curiosity, involvement and preferences (Brevik et al., in progress). This view suggests that motivation and interest for reading is an important factor for creating strategic and proficient users of English as L2. These theories are in line with the studies mentioned earlier (Brevik, 2016a; Garvoll, 2017), suggesting that vocational students choose to read topics mainly with regard to what they are interested in. Therefore, based on the questionnaire answers in my study, it seems that the vocational students might benefit from being allowed to read texts of interest at school as well.

In the reading process, the reader is just as crucial in obtaining reading comprehension, as the text in question, or the reading activity (RAND, 2002). If the reader encounters a comprehension problem, motivation and interest for being a good reader may be a factor that contributes to enhancing reading comprehension, or the reader's willingness to try to understand. The RAND (2002) model also highlights the role of the sociocultural context to enhance reading comprehension. If we accept the notion that reading comprehension represents an interaction between the reader, the text, and the activity within a sociocultural context (RAND, 2002), we should also accept the notion that the vocational students' reading comprehension varies according to the text they read, the reading activity, and the knowledge, motivation and interest they bring to the context (McVee et al., 2018, p. 12). For example, if the Norwegian educational context is based on negative attitudes and myths towards vocational students as poor readers who frequently drop out of school (Brevik, 2016b; Hernes, 2010), the sociocultural context may have a negative impact on vocational students' efforts towards becoming better readers.

In contrast to Garvoll (2017), Pentrella (2017) has explored the views of poor readers in VET. She found that even though they are poor readers of English, they also report a high interest for being good readers of English reading. Similar to my findings, her study suggests that the aspect of relevance might be more important than scores on a reading test. If vocational students are poor English readers, but show high interest in becoming good readers of English, how should we then proceed? Should we treat them as poor readers, or as interested readers? The answer might concern attitudes among students and teachers alike, which suggests that the readers' intentions to fulfilling a goal often is determined by self-efficiency and self-regulation, intrinsic factors that causes internal willingness (Brevik et al., in progress; Grabe, 2009). The teachers must therefore provide the students with tools such as reading comprehension strategies, in addition to adapt the reading tasks connected to students' interest and experience of relevancy.

In the following, I will discuss the second result of my MA thesis, regarding the vocational students' frequent use of reading comprehension strategies, and what appears to be a top four strategy repertoire. Additionally, I will discuss the relationship between strategy use and their

reported motivation/interest, and elaborate on some potential implications for teachers in VET.

5.2 Vocational students as strategic readers

My second main result showed that vocational students report using reading comprehension strategies quite frequently, in addition to having a possible repertoire of four reading comprehension strategies. These consist of two surface-level strategies (*scanning* and *skimming*) and two deeper-level strategies (*close-reading* and *important parts*). This pattern is evident across the two languages.

The vocational students' responses indicate that many of them might be independent users of reading comprehension strategies, what are commonly referred to as strategic readers. This finding suggests that reading strategy instruction to some degree is implemented in classroom teaching. At least it suggests that the vocational students in my study have learnt about such strategies and choose to use these independently. The process of learning how to use reading comprehension strategies is explained through the Gradual Release of Responsibility model (e.g., McVee et al., 2018; Pearson & Cervetti, 2017). The model shows that to become an independent user of such strategies, students are first taught why, how, and when to use strategies to enhance reading comprehension when comprehension problems occur during reading. The teacher's role in the process is crucial through the two first stages; specifically, as the teacher in the classroom introduces and model the strategies (stage one), guides them in the use of different strategies through scaffolding and facilitating (stage two), before the strategies are used independently and consciously by the students (stage three). The vocational students' self-reported use of strategies may indicate that they have experienced at least aspects of such a gradual release of responsibility during their schooling, and through such processes have become independent users of reading strategies.

Being independent users of reading strategies suggest that the vocational students in my study use strategies when they need to close a gap in their reading comprehension. This echoes Brevik's (2014) Mode of reading continuum, which illustrates how students ideally use strategies when necessary for comprehension purposes. Aiming to close this comprehension gap, the notion is that students use the "Sherlock Holmes mode of reading" by applying potentially effective strategies, and modifying the choice of strategies when they are

necessary (Brevik, 2014). Since the vocational students in my study report using most of the strategies “often”, rather than “very often”, it may indicate that they have a conscious view of when to use reading comprehension strategies. They might indeed use strategies when there is a gap in their textual understanding.

Although the students report that they use some strategies more frequently than others, they report using many of the strategies that are presented in Figure 13 (see Chapter 4). Thus, I find it important to also be somewhat critical concerning their reported strategy use. On the one hand, the usage of many strategies can indicate that they have responded to the questionnaire in an unserious manner, and that the answers do not necessarily represent their actual strategy use. As a researcher, I must consider whether it is believable that the students actually do use 16 different reading comprehension strategies to fill potential gaps in reading comprehension, or if this is evidence of strategy knowledge rather than strategy use. There is a certain possibility that the students “just” read a text, which according to the “Nike mode of reading” makes them discard the comprehension problems that might occur, and give up reading instead of using the strategies they seem to have knowledge of (Brevik, 2014). Nevertheless, there is a certain optimism in seeing the variation in the students’ answers, and acknowledging that knowledge of reading comprehension strategies is indeed necessary for use of the strategies.

Furthermore, in my study there is a certain difference between the strategies that are used most and least frequently. A main pattern identified both in the main sample and in the sub-sample, is a top four repertoire of reading comprehension strategies. Although the strategies occur in different order and frequency, the same four strategies are on top across both languages and both genders, which again points to the vocational students making a conscious choice among available strategies. Also, my results confirm the notion of a related use of reading comprehension strategies across L1 and L2 (Grabe, 2009). Thus, this pattern I identified might indicate the already mentioned awareness of strategy use, and that the vocational students in my study have a small repertoire of strategies that they use when they experience reading problems, regardless of what text they read or which language they read in.

The top four strategy repertoire comprises of two strategies that are considered deeper-level strategies (*close-reading* and *important parts*), and two surface-level strategies (*scanning* and *skimming*) (Bråten & Anmarkrud, 2012). The students in my MA study might use *skimming* to get an overview of the text content; *scanning* to discover specific details in the text; *close-reading* to obtain a deeper understanding of the text by focusing both on details and the whole; and *important parts* to focus on specific parts of the text that should be read again due to comprehension problems, or that is considered particularly important.

Bråten and Anmarkrud (2012) argue that teachers should demonstrate the importance of a repertoire of deeper-level strategies integrated in the subject-matter teaching, when teaching reading comprehension strategies in the classroom. Importantly, using surface-level strategies does not necessarily affect reading comprehension negatively, as students often face tasks with the need to scan for information or find information. However, when they encounter reading tasks where they need to read on a deeper level, the highly motivated students have several deeper-level strategies in their repertoire to help them to fill the gap. Although surface-level strategies are found to be successful depending on the situation (Bråten & Anmarkrud, 2012; Duke et al., 2011), the least motivated vocational students in my study seem to lack competence of other strategies to help them fill potential gaps in their reading comprehension.

Whether the strategies vocational students use actually are effective, can be discussed. Prior research has described certain strategies as so-called “effective” (e.g., Duke et al., 2011; Grabe 2009; NICHD, 2000), and others to be “helpful”, although not “more effective” than others (e.g., Brevik & Hellekjær, 2017; Duke et al., 2011; Grabe, 2009; Tengberg et al., 2015). Within the top four strategy repertoire identified in my study, the only strategy that can be considered “effective” or “helpful” is focusing on important parts (OECD, 2016). However, other empirical studies suggest that the top four strategies used by the highly motivated, motivated, and least motivated readers in my study are all worth using. For example, adjusting reading to suite the reading purpose (e.g. skimming for main points and scanning for details), careful (close) reading, using context to understand difficult words, and setting purposes through comprehension goals related to the reading activity are also useful (Brevik, 2014; Brevik & Hellekjær, 2017; Bråten & Anmarkrud, 2012; Duke et al., 2011; Grabe, 2009). Good readers are also found to be using a small repertoire of strategies (e.g.,

Pressley, 2008), hence, the top four strategy repertoire of strategies might mirror strategy choices among good readers.

Therefore, in light of my results, the governing factor seems to be that the vocational students do use strategies for reading comprehension, and that they have a strategy repertoire that varies according to their reading motivation/interest. Hence, students' motivation and interest, which is said to be affected by extrinsic factors such as the sociocultural context (Brevik et al., in progress; Grabe, 2009) seem to influence the vocational students' strategy choices. This finding echoes the RAND model's (2002) notion that reading comprehension involves the active reader, and how the reader's comprehension might be influenced by other variables, such as motivation and interest.

An important implication for my future teacher instruction might be to ensure a wider repertoire of reading comprehension strategies, which provides the students with tools they can use when facing gaps in their reading comprehension of various texts. Additionally, my study shows that we need to change our view of vocational students as readers of English, acknowledging that they might be strategic readers and independent strategy users who choose strategies based on their motivation and interest. Therefore, I argue that teachers should investigate which strategies that already are included in the vocational students' repertoire, and build on these to develop more strategic readers.

Finally, the vocational students' reported reading comprehension strategy use, along with their interest in being good readers, may indicate that they would be likely to appreciate reading material they experience as relevant. For me as a future teacher in VET, this finding enables me to focus not only on strategy use, but also on the vocational students' interest and motivation, to enhance their reading comprehension in the L2 reading process. Hopefully, such an effort will help prevent student dropout. This intention echoes the efforts of the FYR project, and their notion that the English common core syllabus in VET should include reading material that the students find relevant and of interest, and that strategy instruction is an important aspect of relevance during the reading process. This is also in line with Brevik (2017), who found that vocational students used reading comprehension strategies in the English classroom when they experienced these to be of personal relevance to them in their comprehension process. Therefore, creating relevance when reading in the common core

subject of English might be key to successful reading instruction for vocational students, which I discuss in the following section.

5.3 Relevance trumps proficiency

When the national FYR initiative ended in 2017, reports showing that vocational orientation nor necessarily leads to a perception of relevance, neither among vocational students nor teachers in VET (Iversen et al., 2011; Stene et al., 2014). I therefore find it of utmost importance to discuss whether the other suggested ‘concepts of relevance’ should be focused on instead, or at least in addition to vocational orientation.

Based on the students’ in my MA study, concerning their expressed interest for being good readers of English, and their individual strategy repertoire, aspects of relevance proposed in the FYR project is pertinent. Relevance is suggested as a focus area in the continuation of FYR, both locally and regionally (Eskielsen et al., 2015). Knowing that vocational students do not necessarily find vocational orientation relevant to them (Iversen et al., 2011; Nødtvedt, 2017; Sagli, 2017; Stene et al., 2014), it is highly important to get their views on what they find to be relevant (Akershus Fylkeskommune, 2013) if we are to succeed in developing their reading comprehension and helping them finish school.

As previously mentioned, individual relevance is connected to talent, needs and life expectancies in life (Akershus Fylkeskommune, 2013). Since the vocational students in my study report that it is important to them to be good readers of English, relevance might be of utmost importance for their experience of success at school. This success can be connected to the students’ talents, such as being proficient readers, and the other way around, that motivation and interest for reading is caused by a certain L2 achievement (Ellis, 1997). Thus, since my findings suggest that being good readers is important for the vocational students, helping them achieve this goal may have an impact on their ‘individual relevance’.

Considering my role as a future teacher, I find it of great importance to examine what the students find relevant in their development as readers of English. This might provide me with important information concerning how to build on their attitudes towards the kind of English texts they would appreciate the most (e.g., Day & Bamford, 2002), and also develop the English common core subject. However, a central focus concerning individual relevance is

the individuals' adaptation to the outside. Therefore, what the vocational students consider as relevant to them might be affected by the sociocultural context, such as what is commonly considered relevant in the youth culture they identify with, or what is expected by the society (Akershus Fylkeskommune, 2013). Since Norwegian adolescents are exposed to English extensively in the media, the Internet, and communication (Brevik, 2016a; Graedler, 2012; Rindal, 2014), the prominent role of English within the youth culture in Norway today will surely have an impact on their views of what is relevant.

The notion of such relevance echoes Garvoll's (2017) MA study, where she found that vocational students during a twenty minute reading session at school each morning, chose reading material with regard to their interests, and not related to their vocational program. The students in Garvoll's (2017) study also used English to read on the Internet, online gaming, and social media use in general outside school, which characterize the youth society and thus may be relevant for young people today. Their interests provide the need to be updated on authentic texts. Additionally, when they utilize extracurricular use of English (such as gaming), their reading increases the students' skills in solving problems. Thus, reading interest is important in developing strategic L2 learners (Brantmeier, 2006; Duke et al., 2011). Similarly, Brevik's (2016a) study, points to interest as an aspect that may influence vocational students' reading choices, specifically English reading as part of their participation in online games. Hence, youth relevance might affect the vocational students' individual views on the relevance of reading, and consequently influence their choices of reading material. If this is the case, schools should focus on implementing reading material, activities and contexts that might be of relevance for the vocational students, hoping that they might experience intrinsic motivation for reading.

Additionally, vocational students' reading motivation and interest might also relate to what is considered relevant for society, to be able to take part in the community and to influence democratic processes (Akershus fylkeskommune, 2013). If the vocational students' interest for English reading is affected by cultural norms, expectations and requirements within the society, then being a part of this community may impact their views on the kind of texts they read outside school. If teachers offer similar texts, or allow students to bring texts of relevance for society into the classroom, such as current affairs, recent news, or informational texts about various topics, this might have a positive impact not only on the importance the

vocational students of my study place on being a good reader, but also developing their reading proficiency. Reading texts of relevance for society is also connected to what is referred to as timeliness; relating to how and when students activate their knowledge, and whether or not they find it useful to do so (Akershus Fylkeskommune, 2013). Therefore, it is essential for the students to find texts of relevance to be able to engage in the text.

Hence, if English teachers base their reading instruction on what is experienced as relevant for the vocational students in their classroom, this may enhance the students' willingness to engage in developing their reading proficiency. Being a part of an English-speaking world, in which many students potentially use English as a lingua franca (Rindal, 2014), might show that vocational students construct a sociocultural identity (Jenkins, 2007; Rindal, 2014) built on their interests, and through what is relevant to themselves and the society. Consequently, their views of relevance and interest might provide further interest and motivation for reading in the common core subject of English, and as already mentioned, their wish to be good readers might therefore be a stronger factor than being a proficient reader.

5.4 The anticipated gender gap

As a final point of discussion, I would like to consider the anticipated gender gap, which is difficult to ignore whenever reading comprehension of young people is discussed. Prior to conducting this MA study, I had expectations concerning this gender gap among students in VET. These expectations were mainly linked to the statistical “truth” that the typical student at risk of early school dropout is a boy under the age of 25, who attends vocational education and training (OECD, 2016). This picture is confirmed in a Norwegian context, with an extremely high dropout rate (41%) among VET students, the majority being boys, compared to a significantly lower dropout rate among students in GS (3%) (OECD, 2016). Furthermore, the national mapping tests in Norway (grades 5 and 8) and the international PISA reading test (15-years-old students, 10th grade), show that boys score significantly lower than girls when reading in Norwegian, although boys and girls perform more equally when reading in English (OECD, 2010; Brevik et al., 2016, UDIR, 2017b). Based on these statistics, I anticipated a gender gap concerning the importance of being good readers, and also concerning their reading comprehension strategy use. However, based on my findings, this is not necessarily the case.

First, there is little difference according to interest for reading in English between girls and boys in VET. The majority of both genders report high interest for reading of English. As mentioned, recent statistics have shown a smaller gender gap in L2 reading compared to the L1 (Brevik & Hellekjær, 2017; UDIR, 2017b). Moreover, Brevik and Hellekjær (2017) also found high interest for reading for both genders. Consequently, the reduced gender gap concerning English test scores is mirrored in the vocational students' equally high interest for reading in English in my study. Thus, this finding may indicate that the gender gap has become less prominent, a notion that is confirmed in my study through a large sample from the VOGUE project. Therefore, reading interest and motivation in the current MA study show a similar interest for reading in English for boys and girls alike.

However, I do find one aspect indicating a gender gap concerning motivation/interest across languages. The first main result of this MA study shows that vocational students overall are interested in English reading, and although both girls and boys find it important to be good readers of English (boys: 76%, girls: 73%) and Norwegian (boys: 77%), girls find Norwegian reading less important (66%). The vocational girls of my study report to be less interested in reading Norwegian than English, which shows a variation concerning the girls' motivation/interest in reading across languages, that is not found among the boys. The question is whether the girls' markedly higher motivation for English reading relates to proficiency or interest, or whether they have become more proficient readers of English, which consequently causes higher interest and motivation for reading in their L2. The other aspect of this finding concerns the boys. Since my findings suggest that boys are equally interested in reading in the two languages, it might indicate that interest trumps proficiency. However, such an interpretation challenges findings among boys who are markedly better readers of English than Norwegian, based on their interest for online gaming in English (Brevik, 2016a; Garvoll, 2017). It would however, be interesting to probe further into the gender gap revealed in my findings.

Regarding the vocational students' reported use of reading comprehension strategies, both girls and boys report a frequent use of these strategies. However, although the overall use of strategies seen through mean frequency is quite similar across genders, boys report using most of the strategies somewhat more frequently than girls do, in both English and Norwegian. Moreover, gender does not seem to influence whether the students use surface-

level strategies or deeper-level strategies, nor do boys and girls seem to have different strategy repertoires. Thus, gender is not a variable appearing to affect a possible difference in strategy use among the vocational students in my study. My findings contrast with those of Brevik and Hellekjær (2017), who found a small gender difference regarding reading strategy use; a difference concerning which strategies they used, and not strategy frequency or strategy use in general. On the one hand, my MA study seems to confirm the anticipated gender gap in one respect only, namely that the boys reveal equal motivation/interest for being good readers across languages, while the girls find it more important to be good readers of English than Norwegian. Otherwise, based on my findings I would argue that a contribution is the relative similarity between boys and girls concerning reading motivation/interest and strategy use, rather than the opposite.

Overall, what my study does show is that vocational students are interested and motivated for reading in both languages, and that they report using strategies in L1 and L2 across both genders. In line with prior research that warns us not to label vocational students as students with low motivation and low proficiency (Brevik, 2016b), my study aligns with this warning. What I find to be particularly interesting in my study, is that the vocational students show great interest in reading and report frequent use of strategies across genders. This may indicate that gender is not a crucial factor for motivation and interest in being a good reader in English or Norwegian, or for using strategies. Consequently, my results show a great importance of exploring other variables than gender. Especially, it is important to explore why vocational students want to be good readers, what they find of relevance, and how they have become potential strategic readers.

6 Conclusion

In the current MA study, I have examined the main research question: *How important is it for vocational students to be good readers of English compared to Norwegian, and to what extent do they report using reading comprehension strategies when reading in the two languages.* Specifically, I have investigated vocational students' self-reported motivation/interest for English reading (RQ1), their use of reading comprehension strategies (RQ2), and the relationship between level of motivation/interest and comprehension strategy use (RQ3).

To my surprise, the vocational students in my study report that they are highly interested and motivated for being good readers in both English and Norwegian. I found significant correlations between English L2 and Norwegian L1 among all vocational students ($r=0.494^{**}$), and also among girls ($r=0.469^{**}$) and boys ($r=0.528^{**}$). Thus, vocational students who are interested in being good readers in one of these languages are also likely to be interested in developing as readers in the other.

Second, the vocational students reported frequent use of reading comprehension strategies when reading informational texts, and they seem to use a repertoire of four strategies, consisting of two deeper-level strategies (close reading and focusing on important parts), and two surface-level strategies (scanning and skimming). Even though they reported using strategies somewhat more frequently in Norwegian L1 than in English L2, with boys reporting to use strategies slightly more frequently than girls did, there was very little difference. Nevertheless, I found a small, but significant correlation between the top four strategies across language and gender, in addition to a moderate correlation between the deeper-level strategies.

Finally, I found an interesting difference related the vocational students' reported levels of motivation/interest and their strategy use. I discovered a difference in strategy repertoire among the highly motivated, motivated, and least motivated groups of vocational students. The previously reported top four strategy repertoire changes somewhat when dividing vocational students into groups based on their level of motivation/interest; whereas the highly motivated students use three deeper-level strategies and one surface-level strategy, the

motivated ones use two deeper-level and two surface-level strategies, and the least motivated ones use three surface-level and one deeper-level strategy.

In the following, I suggest some contributions of my MA study, and ideas for future research, in addition to potential implications my findings may have for future teachers.

6.1 Some contributions of my MA study

My MA study builds on and elaborates previous research on the field of vocational students in upper secondary school (e.g., Brevik et al., 2016; Brevik, 2016a; Brevik & Hellekjær, 2017; Garvoll, 2017; Pentrella, 2017), and contributes with new research to the VOGUE project. I contribute with empirical results that confirm the notion in prior research that vocational students are interested in being good readers of English (Brevik, 2016a, 2017; Brevik & Hellekjær, 2017; Garvoll, 2017; Pentrella, 2017), and are active users of reading comprehension strategies (Brevik & Hellekjær, 2017; Pentrella, 2017). In contrast to prior studies, my study builds on answers from a large number of vocational students ($N=1,185$).

As vocational students seemingly are interested and motivated in English reading, this finding is closely related to the notion of relevance. Therefore, the second contribution of my MA study builds on reports from the FYR project (Iversen et al., 2014, Stene et al., 2014). My study discusses the importance of being aware of other relevancies in addition to vocational orientation. As previous research has argued that vocational orientation not necessarily is experienced as relevant (Iversen et al., 2014; Nødtvedt, 2017; Sagli, 2017), my study contributes to the future commitment of the FYR project, aiming to reduce student dropout, and increasing the educational motivation of students in VET.

A third contribution of my MA study, regards reading comprehension research across languages. According to my results, vocational students who are interested in and motivated for reading in English are most likely to be interested in reading in Norwegian, and vice versa. This result applies to reading comprehension strategy use, since the reported top four strategy repertoire has a significant correlation across both languages. Although there are differences regarding the extent and order of strategies that are used, my MA study contributes to the notion that reading in a first and second language is related (Bernhardt, 2011; Brevik et al., 2016), and that the gender gap seemingly is closing (Brevik & Hellekjær, 2017; OECD, 2016; UDIR, 2017b).

Finally, since motivation and interest for reading, and reading comprehension strategy use are elements that are difficult to observe and operationalize, my study contributes with information about vocational students' self-reported views. Whereas prior research has investigated different groups of vocational students, such as Brevik and Hellekjær (207) and Garvoll (2017) investigating good L2 readers (Outliers), and Pentrella (2017) investigating poor L2 readers, I have focused on a large group of vocational students, regardless of their reading proficiency. Hence, this MA thesis is the first study that has used all available questionnaires among vocational students in a nationwide sample ($n=10,331$). I have had access to all the questionnaires in this group, meaning that all vocational students who have answered the questionnaires related to national mapping tests in reading are included in this study, both in English and Norwegian. This means that I am the first one to explore the reported answers of more than a thousand vocational students. My quantitative research methodology has therefore provided me results based on a large sample, a scope of data I would not have been able to collect through a qualitative research design, or without being part of the VOGUE study.

6.2 Ideas for future research

In light of my results, there would be interesting to do several follow-up studies. I will now suggest some future research related to the field of vocational students, interest and motivation for reading, and strategy use.

First, I believe an interesting follow-up to my MA study would be to ask for access to the test results from national mapping test results, and use them for a comparison with the reported motivation/interest for English reading. These data are available in the VOGUE project, and I considered many times whether to include this data material during the process of writing my MA thesis. However, considering time constraints and the limited number of pages of the MA thesis, I decided not to include the data material of test results from the mapping tests. Nevertheless, comparing test results to vocational students' self-reported interest and motivation for reading and their reported use of reading comprehension strategies, may give important information regarding whether motivation/interest and proficiency can be related. I would argue that this is a relevant research topic for future MA students in English didactics.

Specifically, it is interesting looking at the three motivational groups in my third result, and examine whether high motivation is related to high test scores on the mapping tests.

A second relevant follow-up study could be to look further into what students in VET typically read, concerning the types of texts they prefer to read, and what kinds of texts they find most beneficial in school. Such a study might be connected to the vocational students' high interest/motivation for being good readers of English in my MA study. As my data only provided me with information concerning the students' interest for reading informational texts in general, in addition to strategy use in and out of school, I was not able to investigate this aspect. Such a study could be done for example through student interviews, or by creating a questionnaire focusing on this aspect.

Concerning the vocational students' reading comprehension strategy use, I believe an exciting study would be to examine why some strategies are used more frequently than others. The vocational students of my study showed a recurring top four repertoire of strategies for both genders and languages. The participants were also given the opportunity to give additional information concerning strategy use in the 'other' category in question 8. However, their answers to this option do not say much about their attitudes or reasons for choose other types of strategies. Therefore, why students choose certain strategies over other strategies could be fascinating to study.

Another follow-up study that is possible to conduct, is why vocational girls find it more important to be good readers of English than Norwegian, whereas boys find it equally important to be good readers of both languages. What causes this contrast? Could it be that girls in VET find reading of English and the English subject more relevant in relation to their vocational orientation than Norwegian, or might it be related to their use of English out of school? As already researched, boys' out-of-school uses of English seem to increase their proficiency in English reading (Brevik, 2016a; Brevik & Hellekjær, 2017; Garvoll, 2017). The unresearched field of vocational girls' use of English out-of-school related to reading proficiency may add interesting data to existing research. Perhaps girls actually use English outside of school to such an extent that it causes greater interest and motivation for the subject compared to Norwegian.

A current MA thesis do indeed investigate girls' in-and-out of school uses of English (Ahmadian, 2018). This study does not, however, focus on what types of texts the girls read, or in which specific extramural contexts they use English. Consequently, it would be interesting to examine in which sociocultural contexts vocational girls read, , as young people participate in numerous sociocultural contexts, both virtual and physical, where they get the ability to practice their language skills, and participate in authentic interactions, in English as a lingua franca.

6.3 Implications for teaching

Based on my results, this MA study contributes to creating positive attitudes towards vocational students, as my findings show that vocational students express high interest and motivation for being good readers both in English and Norwegian, although somewhat more in English. Hence, an implication of my study concerns sharing these findings, so that both students and teachers in VET, and researchers might become aware of and focus on these positive attitudes, rather than depending on statistics that indicate students in VET to be poorer readers than students in GS. In addition, an important implication connected to students' interest and motivation for English reading, suggests implementing what is relevant according to the students. It highlights the importance of individual relevance, youth relevance, relevance to society, utility value, timeliness, or vocational relevance, and how these relevancies might affect the individual self. Consequently, even though statistics showing vocational students to be poorer readers than GS students is correct, reading theory (e.g., Bernhardt, 2011) imply that students' motivation/interest for reading can compensate for a certain lack of reading skills, which I believe is more important than discouraging test results.

Another implication of my study concerns how to improve reading comprehension strategy instruction. Although some of the vocational students in my MA study showed signs of being consciously aware and independent users of such strategies, and thus have abilities characteristic of good readers, I argue that there is need for a bigger strategy repertoire among vocational students. My results show that the most motivated vocational students use three deeper-level strategies and one surface-level strategy, whereas the motivated students

use two strategies at each level, and the least motivated ones use three surface-level strategies and one deeper-level strategy.

My MA study may also impact the understanding of reading proficiency, if one can connect motivation and interest for reading to proficiency level (Bernhardt, 2011). The most proficient vocational readers use several deeper-level reading strategies, whereas poorer readers use more surface-level strategies. This may imply that their strategy use does not allow them to create a greater understanding for the text, resulting in their reading proficiency level not increasing. Therefore, an important implication of my MA study is for English teachers in VET to offer strategy instruction of several deeper-level strategies, including guided practice in line with the gradual release of responsibility model (e.g., Pearson & Gallagher, 1983), thus scaffolding deeper-level strategy use. Additionally, a combination of strategies in the repertoire should be useful for all vocational students. Most importantly, however, students should be offered tools to help them fill the gap in reading comprehension, to have knowledge about when to utilize strategies, which strategies to use for certain tasks or texts, and to be consciously aware of their strategy use. The main implication of my MA study might therefore be to encourage English teachers in VET to focus on and implement a conscious awareness of strategy use in their teaching, and to link reading comprehension strategy use, and reading in general, to the importance they place on being good readers of English.

References

- Ahmadian, S. (2018). *Girls in vocational studies: The academic voices in the classroom*. (Unpublished master thesis). University of Oslo, Oslo
- Akershus Fylkeskommune. (2013). *Veien gjennom videregående. FYR-prosjektet I Akershus. Innramming, relevansbegrepet og samarbeidsprinsipper*. Avdeling for videregående opplæring: Oslo.
- Bakke, M. H., (2010). *Teaching reading in EFL-instruction: What are teachers' attitudes towards reading in EFL-instruction and how is it taught in class?* (Unpublished master thesis). University of Oslo, Oslo.
- Bernhardt, E. B. (2011). *Understanding advanced second-language reading*. New York: Routledge.
- Block, C. C., & Duffy, G. G. (2008). Research on teaching comprehension. Where we've been and where we're going. In C.C. Block & S.R. Parris (Eds.), *Comprehension instruction. Research-based best practices* (2nd ed.) (pp. 19–37). New York: The Guilford Press.
- Brantmeier, C. (2006). Toward a multicomponent model of interest and L2 reading: sources of interest, perceived situational interest, and comprehension. *Reading in a Foreign Language, 18*(2), 89-115.
- Brevik, L. M. (2014). Making implicit practice explicit: How do upper secondary teachers describe their reading comprehension strategies instruction? *International Journal of Educational Research, 67*, 52–66.
- Brevik, L. M. (2016a). The Gaming Outliers: Does out-of-school gaming improve boy's reading skills in English as a second language? In E. Elstad (Ed.), *Educational Technology and Polycontextual Bridging* (pp. 39–61). Rotterdam: Sense Publishers.
- Brevik, L. M. (2016b). Tre myter om engelsk på yrkesfag. Betydningen av å se elevenes helhetlige kompetanse. *Bedre Skole, 2*, 82-88.
- Brevik, L. M. (2017). Strategies and shoes: Can we ever have enough? Teaching and using reading comprehension strategies in general and vocational programmes. *Scandinavian Journal of Educational Research, 61*(1), 76-94.
- Brevik, L. M. (2018). *Gamers, surfers and social media users: The role of interest to prevent dropout*. In G. Larsen (Ed.), *The COURAGE project - Handbook 2018* (pp. 10–13). EU: Erasmus+.

- Brevik, L. M., & Hellekjær, G. (2017). The Outliers: Upper Secondary School Students Who Read Better in the L2 than in L1. *International Journal of Educational Research*.
- Brevik, L. M., Olsen, R. V., & Hellekjær, G. (2016). The complexity of second language reading: Investigating the L1-L2 relationship. *Reading in a Foreign Language*, 28(2), 161–182.
- Bråten, I., & Anmarkrud, Ø. (2012). Does naturally occurring comprehension strategies instruction make a difference when students read expository text? *Journal of Research in Reading*, pp 1-16. DOI: 10.1111/j.1467-9817.2011.01489.x
- Cohen, L., Manion, L. & Morrison, K. (2011). *Research Methods in Education* (7ed.). New York: Routledge.
- Creswell, J. W. (2014) *Research design: Qualitative, Quantitative and Mixed Methods Approaches* (4th Ed.). Los Angeles: SAGE.
- Crystal, D. (2012). *English as a Global Language* (2nd edition). Cambridge: Cambridge University Press.
- Cummins, J. (2000). *Language, power and pedagogy: Bilingual children in the crossfire*. Clevedon, UK: Multilingual Matters.
- Day, R., & Bamford, J. (2002). Top ten principles for teaching extensive reading. *Reading in a Foreign Language*, 14(2), 136.
- Duke, N. K., Pearson, P. D., Strachan, S. L., & Billman, A. K. (2011). Essential elements of fostering and teaching reading comprehension. In S. J. Samuels & A. E. Farstrup (Eds.), *What research has to say about reading instruction (4th ed.)* (pp. 51–93). Newark: International Reading Association.
- Eikemo, T. A., & Clausen, T.H. (red.) (2012). *Kvantitativ analyse med SPSS. En praktisk innføring I kvantitative analyseteknikker*. (2nd ed.). Trondheim: Tapir Akademisk Forlag.
- Esekielsen, G., Andersland, E., Øyen, R., Nielsen, S. B., & Ytre-Arne, G. K. (2015). *FYR Fellesfag, yrkesretting og relevans*. “Innlegg på FYR-skolering”. Bergen. 11 May, 2015.
- Faye-Schjøll, L. H. (2009). *Reading in upper secondary* (Unpublished master thesis). University of Oslo, Oslo.
- Garvoll, K. K. (2017). *The Gamer, the Surfer and the Social Media Consumer. Vocational students' English use in and out of school*. (Unpublished master thesis). University of Oslo, Oslo.

- Grabe, W. (2009). *Reading in a Second Language: Moving from Theory to Practice*. Cambridge: Cambridge University Press.
- Haugset, A. S. & Stene, M. (2016). Hvordan yrkesretting og relevans praktiseres i fellesfagene. *Bedre skole*, 4, 27-31.
- Hernes, G. (2010). *Gull av gråstein: tiltak for å redusere frafall i videregående opplæring*. (Fafo-rapport 2010: 3). Retrieved from http://www.fafo.no/media/com_netsukii/20147.pdf
- Hjeltnes, I. (2016). *Quality teaching in text-based instruction: How can quality instruction be identified in a Year 9 English classroom, where the students are working with text?* (Unpublished master thesis). University of Oslo, Oslo.
- Iversen, J. M. V., Haugset, A. S., Wendelborg, C., Martinsen, A., Røe, M., Nossun, G., & Stene, M. (2014). *Yrkesretting og relevans i fellesfagene. Hovedrapport med sammenstillinger og analyser*. (Trøndelag Forskning og Utvikling 2014:16). Steinkjer: Trøndelag Forskning og Utvikling AS.
- Johansen, E. K. N. (2013). *Reading strategies in upper secondary school: How and to what extent are reading strategies taught and used in Norwegian upper secondary schools?* (Unpublished master thesis). University of Oslo, Oslo.
- Johnson, R. B., & Christensen, L. (2013). *Educational research: Quantitative, qualitative, and mixed methods approaches* (5th ed.). US: SAGE Publications Inc.
- Kleven, T. A. (2014). *Innføring i pedagogisk forskningsmetode. En hjelp til kritisk tolkning og vurdering* (2nd ed.). Oslo. Unipub Forlag.
- Koda, K. (2007). Reading and linguistic learning: Crosslinguistic constraints on second language reading development. *Language Learning*, 57(1), 1–44.
- Kvale, S. & Brinkmann, S. (2015). *Det kvalitative forskningsintervju*. Oslo: Gyldendal Akademisk
- Merchan, F. C. (2010). *Reading strategies in English Vg1: What kind of reading habits do students have in English Vg1 and which reading strategies do they use on their own and in the classroom?* (Unpublished master thesis). University of Oslo: Oslo
- National Institute of Child Health and Human Development [NICHD] (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.

- Norwegian Directorate of Education and Research [UDIR]. (2016a). *Norwegian vocational education and training (VET)*. Retrieved from: <https://www.udir.no/in-english/norwegian-vocational-education-and-training/>
- Norwegian Directorate for Education and Training [UDIR]. (2016b). *Rammeverk for FYR-prosjektet (2014-2016). FYR - Fellesfag, yrkesretting og relevans*. Retrieved from: <https://www.udir.no/globalassets/upload/fyr/rammeverk-fyr.pdf>
- Norwegian Directorate for Education and Training [UDIR]. (2017a). *Yrkesretting og relevans i fellesfagene*. Retrieved from: <https://www.udir.no/utdanningslopet/videregaende-opplaring/yrkesretting-av-fellesfagene/>
- Norwegian Directorate for Education and Training [UDIR]. (2017b). *Analyse av nasjonale prøver på 8. og 9. trinn 2017*. Retrieved from: <https://www.udir.no/tall-og-forskning/finn-forskning/tema/nasjonale-prover/resultater-fra-nasjonale-prover-pa-8.-og-9.-trinn/>
- Norwegian Ministry of Education and Research [KD]. (2006, 2013). *National curriculum for knowledge promotion in primary and secondary education and training*. Retrieved from: <https://www.udir.no/k106/ENG1-03?lplang=http%3A%2F%2Fdata.udir.no%2Fk106%2Feng>
- Nødtvedt, M. A. (2017). *Yrkesretting og relevans i norskfaget*. (Unpublished master thesis). University of Oslo: Oslo
- OECD. (2010). PISA 2009 results: *What students know and can do – Student performance in reading, mathematics and science* (Vol. 1). DOI: <http://dx.doi.org/10.1787/9789264091450-en>
- OECD. (2016). *Education at a Glance 2016: OECD Indicators*. Paris: OECD Publishing.
- Pearson, P. D., & Cervetti, G. N. (2017). The roots of reading comprehension instruction. In S. E. Israeli (Ed.), *Handbook of research on reading comprehension*, (2nd ed.) (pp. 12–56). New York, NY: The Guilford Press.
- Pearson, P. D., & Gallagher, M. C. (1983). The instruction of reading comprehension. *Contemporary Educational Psychology*, 8, 317–344.
- Pentrella, M. (2017). *Reading comprehension strategy use and motivation across the L1 and L2. Focusing on Norwegian poor L2 readers of English* (Unpublished master thesis). Norwegian University of Science and Technology: Trondheim
- RAND Reading Study Group. (2002). *Reading for understanding. Toward an R&D program in reading comprehension*. USA: RAND Education.

- Rindal, U. (2014). What is English? *Acta Didactica Norge*, 8(2).
- Simensen, A. M. (2010). English in Scandinavia: a success story. In Wyse, D., Andrews., R., & Hoffman, J. (Eds.), *The Routledge international handbook of English, language and literacy teaching* (pp. 472-483). London: Routledge.
- Sagli, S. (2017). *Teachers' and students' perceptions of vocational orientation in the English subject*. (Unpublished master thesis). University of Oslo: Oslo.
- Skogen, M. (2013). *Reading in CLIL and in regular EFL classes: To what extent do they differ in reading proficiency and strategy use? How do CLIL and EFL students differ with regard to reading proficiency? How do CLIL and EFL students differ with regard to reading strategy use?* (Unpublished master thesis). University of Oslo: Oslo.
- Statistisk Sentralbyrå. (2017). *90 per cent male pupils on some programs*. Retrieved from <https://www.ssb.no/en/utdanning/artikler-og-publikasjoner/90-per-cent-male-pupils-on-some-programmes>
- Stene, M., Haugset, A. S., & Iversen, J. M. V. (2014). *Yrkesretting og relevans i fellesfagene. En kunnskapsoversikt*. (Trøndelag Forskning og Utvikling 2014:1). Steinkjer: Trøndelag Forsikring og Utvikling AS.
- Tengberg, M., Olin-Scheller, C., & Lindholm, A. (2015). Improving students' narrative comprehension through a multiple strategy approach. Effects of dialogic strategy instruction in secondary school. *L1-Educational Studies in Language and Literature*, 15, 1-25.
- Willingham, D. T. (2006). The usefulness of brief instruction in reading comprehension strategies. *American Educator*, 30(4), 39-45.
- World Bank. (2013). *Inclusion Matters: The Foundation for Shared Prosperity*. New Frontiers of Social Policy. Washington, DC: World Bank.
<https://openknowledge.worldbank.org/handle/10986/16195> License: CC BY 3.0 IGO.

Appendix A: Declaration of project participation

UiO : **Institutt for lærerutdanning og skoleforskning**
Det utdanningsvitenskapelige fakultet

Erklæring ved deltakelse i prosjekt: *Vocational students' Use of English (VOGUE)* ved prosjektleder Lisbeth M Brevik, 2017/18.

Anja Ramfjord Isaksen er tatt opp i prosjektet i forbindelse med arbeid med masteroppgave i Lektorprogrammet. Forskningsprosjektet *VOGUE* er forpliktet til å følge personopplysningslovens retningslinjer ved all registrering, lagring og bruk av innsamlede datamateriale. Ved deltakelse i prosjektet er masterstudenten forpliktet til å gjøre seg kjent med og følge disse retningslinjene (se: <https://lovdata.no/dokument/NL/lov/2000-04-14-31>). Datamaterialet skal ikke deles med en tredjepart eller fremvises til andre.

Alle data som innhentes i prosjektet, eies av *VOGUE* (ved prosjektleder Lisbeth M Brevik), og kan brukes av prosjekteier i videre forskning. Det betyr at innsamlet data til masteroppgaven ikke eies av studenten, men av prosjektet. Studenten har tilgang til dataene så lenge arbeidet med masteroppgaven pågår, innenfor veiledningsavtalens periode.

Jeg bekrefter herved at jeg er innforstått med avtalens innhold, har gjort meg kjent med personopplysningslovens retningslinjer, og forplikter meg til å følge disse i mitt arbeid med datamaterialet tilhørende forskningsprosjektet *VOGUE*.

Jeg plikter også å referere eksplisitt til *VOGUE* prosjektet (ved prosjektleder Lisbeth M Brevik) i min masteroppgave, jf. Forskningsetiske komiteers krav til god forskningspraksis/henvisningsetikk (<http://www.etikkom.no/Forskningsetikk/God-forskningspraksis>). Enhver situasjon der datamateriale som tilhører *VOGUE* benyttes i analyser i publikasjoner, skal være kjent for prosjektleder Lisbeth M Brevik før publisering.

Sted: Blindern, 9. mai 2017



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