

Language awareness and multilingualism in lower and upper secondary school in Norway

An empirical study of 8th grade, 10th grade and Vg2 students' use of
their multilingual knowledge in language learning

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Summary in Norwegian

Elever i den norske skolen må lære minst to språk, norsk og engelsk, mens de aller fleste lærer i tillegg et fremmedspråk og mange elever har også lært andre språk utenfor skolen. Flertallet av norske elever er dermed flerspråklige. Å bygge flerspråklig kompetanse har vært et satsingspunkt i utdanningsreformer både i Norge, så vel som i flere andre europeiske land. Den norske læreplanen, *Kunnskapsløftet*, gjenspeiler denne satsningen. Interesse for flerspråklighet har samtidig vært økende innenfor flere akademiske disipliner hvor det har blitt påpekt en sammenheng mellom flerspråklighet og språkbevissthet (Jessner 2006; 2008a).

Vektlegging av flerspråklighet og språkbevissthet gjenspeiles ikke nødvendigvis i språkundervisningen i skolen i like stor grad som det vektlegges i læreplanen. Forskning på læreres holdninger til språklæring, blant annet av Haukås (2016), viser at mange språklærere ikke nødvendigvis ser muligheten for å sammenligne språk som en del av undervisningen.

Denne masteravhandlingen tar utgangspunkt i elevenes perspektiv på egen språklæring for å studere hvordan elevene forholder seg til å ha kunnskap om flere språk og hvorvidt de bruker denne kunnskapen aktivt i egen språklæring. Ved bruk av en spørreundersøkelse kartlegges elevenes språkerfaring, deres motivasjon for å lære språk, samt deres bevissthet om muligheten for å sammenligne språk, bruk av metaspråk og språklæringsstrategier. Elever i undersøkelsen har kunnskap om norsk, engelsk og fransk, samt eventuelle andre språk. Undersøkelsen gjennomføres i 8.klasse, 10.klasse og Vg2. Hypotesene i undersøkelsen er at (1) elever med flere språk enn norsk, engelsk og fransk vil ha en høyere språkbevissthet, (2) at elever som har lært språk over lenger tid vil vise høyere språkbevissthet, og (3) at elever med større motivasjon for språklæring vil vise høyere språkbevissthet. Funnene i undersøkelsen viser at elever sammenligner språk og trekker linjer mellom språkene de har kunnskap om, men med hensyn til hypotesene, at kun en sterk sammenheng er synlig mellom motivasjon og språkbevissthet, mens de to førstnevnte hypotesene viser mer varierende funn. Det konkluderes at en større bevisstgjøring av potensialet for å bruke språkkunnskap på tvers av språk i språkundervisning vil kunne bidra til en høyere språkbevissthet blant flerspråklige elever.

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List of abbreviations

- L1** primary language
- L2** secondary language
- L3** tertiary language
- Vg1** first year of upper secondary school
- Vg2** second year of upper secondary school
- Vg3** third year of upper secondary school
- ALA** Association for Language Awareness
- CEFR** Common European Framework of Reference for Language
- LK06** *Kunnskapsløftet*, Norwegian curriculum
- SLA** Second Language Acquisition

1. Introduction

The attention to multilingualism has increased significantly during the last few decades. This increase has been particularly noticeable in Europe where the European Union has taken a leading role in advocating multilingualism. To ensure a multilingual European identity, the EU proposed in 1995 that all European citizens should be proficient in three European languages (Jessner 2008b: 15). Although Norway is not a member of the European Union, aspirations for multilingualism have also formed Norwegian public policy.

The initiative to encourage multilingualism is most notably seen in the area of education. In 2001, the Council of Europe published *the Common European Framework of Reference for Languages: Learning, teaching, assessment* (CEFR) to establish a shared grounding for the elaboration of syllabuses and language teaching practice across Europe. The CEFR advocates a plurilingual approach that describes a perspective that reaches across the specific languages:

The plurilingual approach emphasises the fact that as an individual person's experience of language in its cultural contexts expands, from the language of the home to that of society at large and then to the languages of other peoples (whether learnt at school or college, or by direct experience), he or she does not keep these languages and cultures in strictly separated mental compartments, but rather builds up a communicative competence to which all knowledge and experience of language contributes and in which languages interrelate and interact (Council of Europe 2001: 4).

In a Norwegian context, the CEFR had a significant influence on the development of the Norwegian language curricula put into effect in 2006, *Kunnskapsløftet*. The English and foreign language curricula specify that the learner should be able to reflect on their own language learning as well as 'be able to see similarities and differences between the target language and earlier acquired languages' (Haukås 2014: 1).

Although the initiatives for multilingualism have been substantial in recent decades, some scholars have voiced concerns about a misunderstood notion of multilingualism where the multilingual's languages are measured against a monolingual ideal (see, e.g. May 2014, Lightbown & Spada 2013, De Angelis 2007).

Vivian Cook points out that the real goal of learning several languages is *multicompetence*, which implies the ‘knowledge of multiple languages that inform and enrich one another’ (in Lightbown & Spada 2013: 96). The multilingual language learner should, therefore, be viewed in their own right, and not compared to a monolingual ideal. Cook is primarily concerned with the learners of two languages, though De Angelis (2007: 15) points out that the notion of multicompetence is as applicable to learners of additional languages. Kecskes & Papp (2000: 30), researching foreign language instruction, note, however, that multicompetence is not an automatic trait of learning several languages, but that it needs to be taught actively as part of the instruction.

In order to build multicompetence as part of the multilingual language instruction, many scholars have pointed to language awareness as an essential factor. The term language awareness will be defined and discussed in section 2.2 below. Anticipating this discussion, it can be said, in line with Herdina & Jessner, that language awareness constitutes ‘the conscious manipulation of and reflection on the rules of a language’ (in Jessner 2008a: 276).

In a study of Norwegian language teachers’ beliefs about multilingualism and a multilingual pedagogy, Haukås (2016) shows that teachers’ notions of language teaching not always coincide with the focus on multilingualism featured in the curriculum. A general tendency in the study is that the teachers thought that their multilingual competence was beneficial for their language learning, but that they did not see the same benefit for their students.

Teachers are likely to see the language learning experience of their students from their language subjects. Many teachers teach more than one language subject, yet they rarely teach subjects for all the languages their students know. The students, on the other hand, are more likely to experience a plurality of languages in a single day. A thought example of this the following: a student in an English lesson may have started the day speaking Farsi to their parents at breakfast, spent the first two lessons at school analysing poetry in Nynorsk during Norwegian lesson, thereafter, learnt about different food traditions in France in their French lesson, before arriving in the English lesson ready to discuss the outbreak of the American Civil War. Although each of these situations may demand the student only to use one language at a time, it is highly likely that the student will draw on their multilingual competence across the various situations. Drawing on different language knowledge appears highly useful as

it can help the student structure their understanding of their different languages, as well as using this knowledge to learn and use their languages more efficiently. Returning to the previous example, the same student may conduct such language transfer in the following manner: Farsi has no grammatical gender for nouns, a point in common with English, but not Norwegian and French. Strategies for learning the masculine and feminine nouns in French can be useful for learning the masculine, neutral and feminine nouns in Nynorsk or Bokmål. With regards to syntax, English, being a Germanic language, is atypical in that it has an SV structure (Subject-Verb) for declarative sentences, similar to French, but dissimilar to Norwegian that has a V2 structure (Verb in the second position). Comparisons of phonetics, vocabulary and morphology are also possible, and good examples of how this can be included in a multilingual instruction are found in Hauge (2014). Languages can in this way be comparable even though the languages may at first glance appear very different. Seeing both similarities and differences between one's languages can aid the understanding of how languages are structured and build language awareness.

In this thesis, the emphasis is on the student as a multilingual learner. The aim is to investigate to what extent multilingual learners in Norway are aware of their potential for using their multilingual competence in further language learning, although they may not be actively taught how they can draw on this competence. By conducting an empirical study in lower and upper secondary school in Norway of language learners of Norwegian, English and French and possible additional languages, the thesis investigates the learners' attention to features of language awareness.

The thesis is structured as follows: chapter two develops the theoretical background of the thesis with section 2.1 focusing on multilingual language development and section 2.2 on language awareness. Chapter three addresses the educational context of multilingualism and language awareness. The Norwegian language curricula are at the heart of section 3.1, while language teaching practice is central in chapter 3.2. Chapter four outlines the methodology of the empirical study. Chapter five presents the findings, followed by a discussion of the findings in chapter six. Chapter seven concludes the thesis.

2. Theoretical background

This chapter gives an overview of some of the theoretical issues that concern the study of multilingual learners. The primary focus is towards the concept of language awareness, for which the second part of the chapter is allocated. However, language awareness alone cannot cover the complexity of the multilingual learning process. Thus, the first part of the chapter is directed toward outlining some of the multiple issues that particularly stand out when addressing multilingual learners, as opposed to monolingual or bilingual learners. Still, the issues discussed in this chapter are not exhaustive of concerns within the study of multilinguals and attention is directed toward issues that are of particular importance for the topic of this thesis and that will form the later discussion.

2.1 A multilingual development

The more languages a learner acquires, the more complex the learning situation becomes. Cenoz (2003) demonstrates this complexity by presenting the temporal diversity of language acquisition for multilinguals. A learner who acquires two languages, she points out, may learn their languages in two different ways, either by acquiring the two languages simultaneously, referred to as *early bilingualism*, or consecutively, where one language is obtained before the other language, termed sequential bilingualism. With three languages there are four possibilities for how the languages are acquired (Cenoz 2003: 72):

The three languages can be acquired consecutively ($L1 \rightarrow L2 \rightarrow L3$); two languages could be acquired simultaneously before the $L3$ is acquired ($Lx/Ly \rightarrow L3$) or after the first language ($L1 \rightarrow Lx/Ly$) or the three languages could be acquired simultaneously in early trilingualism ($Lx/Ly/Lz$).

The multiple ways in which three languages can be acquired shows the complexity involved when studying multilingualism. The possible acquisition of even more languages adds to this complexity. This leads to several additional points of interest to address within studies of multilingualism that may be less prominent, although not necessarily insignificant, when studying monolinguals or bilinguals. These interests are, among others, related to the terminology used when describing the languages involved in the learning process, language proficiency and effect on other languages,

and language contact and transfer between languages. Each of these issues is addressed in succession below.

2.1.1 Language terminology

The increasing attention to multilingualism within the study of languages has led to the development of more precise terminology to address multilingual issues. A primary issue to address is the term *multilingualism* itself. De Angelis (2007: 8) observes that in the literature the terms *bilingual/bilingualism* and *multilingual/multilingualism* often are used synonymously. When considering learners of several languages, this mixing of terms appears unfortunate. In this thesis, the term *multilingual* is used in line with Kemp's (2007: 241) definition, that 'multilinguals are experienced language learners who use three or more languages without necessarily having equal control of all domains in all their languages'. Conversely, *multilingualism* is used to describe the presence of multilingual learners in a language environment. *Bilingual/bilingualism* is reserved for learners who use two languages, and *monolingual/monolingualism* is used for learners who only use one language.

This thesis is concerned with learners of three or more languages. However, the youngest learners that partake in the study are novice learners of French, having studied the language for only six months. One may argue that such a limited learning time is insufficient for the learners to be described as multilinguals. Still, for the purpose of this thesis, these learners will be referred to as multilingual where emphasis can be placed on *learner*, as opposed to user.

A second terminological issue to address is the labelling of the individual speaker's languages. Hall & Cook (2012: 274) describe that in a bilingual educational setting the terms *first language*, *mother tongue* and *native language* are most often used when describing the previously attained language, whereas *second language*, *foreign language* and *target language* are used to describe the new language. They see several problems with these terms, though the main objection is that the terms give imprecise connotations concerning the addressed language. For example, the term *mother tongue* implies that the language is the language of the speaker's mother, though this may not be the case.

Hall & Cook propose using the terms *own language* and *new language*, where *own language* is used to describe the language or languages that the learner already

holds, whereas *new language* is that which the learner is in the process of learning (2012: 274). In a multilingual context, however, these terms also appear imprecise. When several languages are to be discussed, the two terms only describe a binary relation, where in fact the learning process may be more complex and include three or more languages at the same time. The user may draw on her or his languages differently when developing their language knowledge.

A common resolution when addressing the languages of multilinguals is to label the languages in a chronological manner where each of the languages is numbered according to chronological acquisition. In this way, *first language* or *L1* is the first language the learner acquires. Thereafter, *second/third/fourth language* or *L2/L3/L4*, and so on, are used to describe the subsequently acquired languages. Hammarberg (2010: 93) terms this form of labelling *the linear model*. This may appear as a good solution; nevertheless, there are problems with the linear model, Hammarberg (2010) argues, since to arrange the languages of a multilingual learner according to a linear scale of acquisition is not necessarily useful for understanding the language user's competence in the given languages. Cenoz' temporal diversity of acquisition outlined above also shows the possible difficulty of arranging languages chronologically. A learner may have started to learn a language at a young age, but not developed it further due to lack of exposure or need for communicating in that language. The same learner may have learnt another language later on and developed this language to a higher proficiency. Labelling the former language L2, and the latter L3 gives little insights into the competence of the language learner.

Instead of chronological labelling, Hammarberg (2010) proposes that a three-order hierarchy is more precise in distinguishing between the languages of the learner. In this way, the three levels of the hierarchy are as follows 'acquiring a language as L1 (with no prior language acquisition experience), as L2 (with knowledge and acquisitional experience of L1) and as L3 (with knowledge and acquisitional experience of L1 and L2)' (Hammarberg, 2010: 102). Hammarberg's distinction is based on a cognitive perspective where the three levels of the hierarchy outline different cognitive starting points for language learning. To learn a language for the first time (an L1) is cognitively different from learning a second language (L2). The learning processes for the different levels of Hammerberg's hierarchy are distinct, though not entirely different. Cenoz (2013: 73) conveys this relation with a neat metaphor of transportation:

We could compare this experience to walking (L1), then learning to drive a car (L2) and then facing the challenge of driving a bus (L3). The experience of driving a car, despite involving different skills and strategies, can nevertheless be extremely useful when driving another type of vehicle: the starting point is not the same as for an absolute beginner.

It is possible to have knowledge of more than three languages, but according to Hammarberg's hierarchy, these would be labelled in relation to when they are learnt. A person who is raised bilingually from birth would be said to have two L1s. For the further discussion, Hammarberg's hierarchy of languages is used.

An additional contention that Hammarberg (2010) raises is the terminology *first/second/third language* to describe the L1/L2/L3. This terminology is set within a monolingual ideal where the term 'second' implies second in a sequence of attained languages. The term has also been used for all additional languages to the L1, as the acquisition of an additional language to L1 has generally been seen as something extra. This further makes the use of the term 'third language' unclear. To avoid the association with the previous usage of these terms, Hammarberg proposes to instead employ the terms *primary*, *secondary* and *tertiary language* for L1/L2/L3 (Hammarberg 2010: 98-99). The effect of this change is minimal as the languages are generally termed in their shortened form, e.g. L1, though a conceptual difference is achieved. This thesis will also follow Hammarberg in this usage, though the shortened forms will generally be preferred.

2.1.2 Language proficiency and effect on other languages

Children who are immersed in a language environment in early childhood and are provided adequate time to use the language(s) will 'almost always be successful in acquiring the language or languages that are spoken (or signed) to them' (Lightbown & Spada 2013: 75). Multilinguals, however, cannot be assumed to acquire all their languages in the same way, and will, most likely, develop varying proficiency within each language depending on the duration of language immersion, the way of learning and the learner's use of the language in their daily life. A speaker needs not have L1 proficiency in order to communicate in a given language, and for many situations (e.g. travel, business, or study), a basic proficiency can be sufficient for the communication needs of the user. In addition, as Kemp (2009: 22) points out, some

multilinguals may have proficiency at a literate level within one or more languages, but they may not have spoken proficiency. For this reason, as mentioned earlier, it appears inadequate to assume a monolingual ideal for every language as achieving such a high proficiency within all languages is likely to be unachievable, in addition to unnecessary for the communication needs.

The amount of time it takes to reach a certain level of proficiency also varies depending on when and how the language is learnt. A study in the Netherlands by Snow & Hoefnagel-Höhle from 1978 (in Lightbown & Spada 2013: 96) tested the rate of acquisition of Dutch as an L2 in different age groups. They found that in the short run (learning L2 Dutch for less than a year), adolescent learners were the most successful learners, adults the second most successful and thereafter children. After a year of study, the children had caught up, although adolescent learners retained the highest proficiency overall. As a consequence, Lightbown & Spada (2013: 97) note that ‘those who start later (for example, at age 10, 11, or 12) often catch up with those who begin earlier’. The study shows that rate of learning differs, whereby it is difficult to assess proficiency only by the amount of time learning a language. Other factors in addition to the age of acquisition, such as motivation, amount of exposure and possibility for language practice, also play a part in developing language proficiency.

In addition to proficiency within a given language, language learning can also affect the ability and speed with which one can learn other languages. De Angelis (2007: 6) proposes that ‘even as little as one or two years of formal instruction in a non-native language can affect the acquisition of another non-native language to a significant extent’. However, only a few studies have been conducted to assess proficiency threshold levels for non-native language acquisition, and for this reason, De Angelis conveys some precautions about these findings.

Some proficiency in another language may as well develop without formal instruction within the given language. Dirven & Verspoor (2004: 232–233) claim that there is no complete distinction between different languages and that the separation between different languages is more often political as opposed to linguistic. For this reason, they elaborate, understanding is more often a matter of degree rather than an absolute, and that comprehension is affected by exposure, familiarity and willingness. By consequence, it is more appropriate to describe a continuum between languages and dialects than upholding them as entirely separate entities. Dirven & Verspoor

(2004: 233) suggest that such a continuum could be seen in Europe from the North Sea as far south as Tyrol. More susceptible attention to language relatedness can in this way encourage some proficiency and comprehension across related languages. Bles & ten Thije (2017: 334) refer to such competence as *receptive multilingualism*, which they describe to be ‘a language mode where speakers employ receptive knowledge of each other’s languages during interaction, using their respective preferred languages within the same conversation’. Speakers of Norwegian can therefore often understand and be understood when communicating with speakers of other Scandinavian languages. Such proficiency can also be seen to be encouraged in the education system, as Haukås (2016: 5) points out, where the subject curriculum for Norwegian L1 promotes receptive multilingualism by exposure to texts in Danish and Swedish.

Even though low proficiency in a language can aid a multilingual ability, it may not always be used. Lindqvist’s (2010) study of advanced learners’ use of inter- and intralingual lexical influences in French L3 oral production found that the participants only used their knowledge of languages in which they were highly proficient (Swedish L1 and English L2) and not languages in which they only had some proficiency, even though these were Romance languages (Italian and Spanish) with more formal similarities to French. Thus, receptive multilingualism may not be activated by the learner and seen as a resource in which to draw on.

Other studies suggest that for some language situations, speakers may refrain from relying on their most proficient language for transferring knowledge. Williams & Hammarberg (1998) observe that English L1 speakers learning Swedish L3 more often rely on their L2 German than their L1 as a supplier language. Williams & Hammarberg suggest two reasons for this: first, learning an L2 represents a learning process which is more similar to learning an L3 than an L1., and second, the L1 may be suppressed due to a desire not to sound foreign whereby the L1 is perceived more clearly as ‘wrong’. Such a preference for the L2 they refer to as *the L2 status*. A further development in line with this research is found by Falk & Bardel (2010) who observed that Swedish L1 speakers acquire L2 English to such a high proficiency level that it resembles L1 proficiency. As a consequence, they suggest that the L2 status factor may diminish and not be as apparent when learning an L3, as the learners perceive the learning processes to be too distinct. A similar claim could be made for L1 Norwegian speakers as English has much the same status in Norway and Sweden.

All in all, the above examples show some of the complexity in which multilingual proficiency can occur and how it may affect broader language competence. Language interaction is complicated and the learner may or may not draw on her or his existing language knowledge in acquiring an additional language. I will come back to this issue in connection with language awareness (cf. section 2.2). The following section continues the discussion with regards to the related topic of language interaction.

2.1.3 Language contact and transfer between languages

A multilingual language learner may draw on different types of language knowledge when learning languages. Yet, the choice of language knowledge is not necessarily a conscious action. Herdina & Jessner (2002: 28) uphold that ‘language systems do not coexist without influencing each other’. If this is the case, then multilinguals will inevitably be affected by their multilingual knowledge, and neither of their languages will remain stable or unaffected over time (Herdina & Jessner 2002; Jessner 2008a). Research on the languages of multilinguals has not reached an agreement about whether the multilinguals’ languages should be understood as separate languages, or as part of a holistic system, in either case, Kemp argues, drawing clear boundaries between each of the multilingual’s languages is very difficult (2009: 18).

Two terms are generally used to describe the influence different languages have on each other: *crosslinguistic influence* and *transfer*. De Angelis (2007: 19) sees no reason to distinguish between the two terms and uses both interchangeably. The following discussion will follow her example.

In a multilingual system, transfer can take place from L1 to L2/L3, from L2 to L1/L3, and from L3 to L1/L2 (Jessner 2008a: 271). Thereby, transfer is not unidirectional, where a high proficiency language influences a less proficient language, but bidirectional where also languages of less proficiency may influence high proficient languages. Further, Herdina & Jessner (2002: 26) point out that transfer can ‘occur on all linguistic levels, that is both on a phonological, syntactic, semantic and [...] on a pragmatic level’.

In the 1960s and the 1970s, transfer between languages was seen primarily as a negative attribute to language learning (Jessner 2008b: 17). However, if we recognise that language interaction between language systems is inevitable, then transfer should be seen as a natural part of multiple language learning and a trait that

also has positive effects. Jessner (2008a: 279) describes that crosslinguistic influence can lead to crosslinguistic awareness, which she defines as ‘awareness (tacit and explicit) of the interaction between the languages in a multilingual’s mind’. Along with language awareness, as is discussed in the following section, Jessner (2008a) argues that crosslinguistic awareness can strongly benefit L3 acquisition.

What language knowledge multilinguals use as transfer can differ depending on each individual language learner. Multilinguals may perceive similarities between languages that share the same language family, thus drawing on their receptive multilingualism, but they may also see such similarities between languages that share no historic language ties. Kellerman (1977; 1983) terms a learner’s perceived language relation as *psychotypology* and argues that psychotypology is a more powerful grounding for transfer compared to the actual linguistic distance (in Butler 2012: 128). Bardel & Falk see psychotypology as a benefit for building language awareness: ‘apprehension of similarity does in fact imply some degree of metalinguistic knowledge of the involved languages, and declarative memory will therefore be involved in processes related to psychotypology’ (2012: 74).

The above discussion has sought to shed light on some of the complexity when studying multilinguals. Terminology, proficiency and language contact are all important aspects of describing and studying multilingual language learners.

2.2 Language awareness

Whereas the first part of this chapter has given an overview of many of the important aspects related to multilingualism, this section is concentrated specifically on language awareness. The section is divided into three subsections: 2.2.1 discusses varying terminology used when addressing issues of language awareness and also defines language awareness for the purpose of this thesis. 2.2.2 addresses how language awareness feature in language learning and 2.2.3 points to some circumstances in which language awareness is or is not activated to its full potential.

2.2.1 Defining language awareness

The central interest of this thesis is to investigate the extent to which multilingualism encourages learners to gain language awareness. This is a topic of interest that has gained attention within several different academic fields. The interest in multilingualism is spread across several disciplines, of which the principal strands are

sociolinguistics, psycholinguistics, neurolinguistics, pragmalinguistics, applied linguistics, teaching/instructing/learning and ‘applications to the concrete learning events with initiatives such as CLIL [content and language integrated learning], immersion, and the common curriculum’ (Aronin & Hufeisen 2009: 4). Likewise, there is attention to language awareness across academic borders. As a consequence, different disciplines employ varying terminology to specific domains of study. The previous section has already addressed some of the terminological issues within multilingualism. Nonetheless, a further terminological minefield is yet to be addressed with regards to language awareness. This endeavour will, however, be brief, as the primary objective of this section is to describe the characteristics of language awareness itself. An extensive discussion can be found in James (1999).

The term *language awareness* shares association with several other terms, such as *metacognition*, *linguistic awareness*, *metalinguistic awareness* or *metalinguistic knowledge* and *knowledge about language*. These terms are sometimes distinguished, sometimes used as synonymous. For example, according to James (1999: 98), there is much support in the literature for *knowledge about language* and *language awareness* to be used to mean the same. Alderson et al. (1997: 95) see both *metalinguistic knowledge* and *knowledge about language* to be part of *language awareness*. The terms are also used with varying meaning depending on who uses them. For instance, DeKeyser points out that there are at least three varying perspectives of what constitutes *metalinguistic knowledge/awareness* in the literature (in Haukås 2014: 3). In other languages, *language awareness* finds several affiliated terms, although a one to one relation is difficult to assert. James (1999: 97) describes that some of these are *Sprachbewußtsein*, *Sprachbewußtheit*, *Sprachbetrachtung* and *Sprachreflexion* in German, *conscientização* in Brazilian and *l’éveil au langage* and *la mise en conscience* in French.

As this brief exploration shows, the terminology is dependent on who uses it and in which context it is applied. Psycholinguistics generally explores more nuanced competences within language acquisition compared to Applied Linguistics, and this is mirrored in the use of terminological distinction. For the purpose of this thesis, the term *language awareness* will generally suffice, though a distinction is made between *language awareness* and *metalinguistic awareness*. Here I follow Jessner (2006; 2008a), who has a major influence on the theoretical basis of this thesis.

For defining language awareness, a good place to start is to consult the definition given by the Association for Language Awareness (ALA) that was founded in the UK in 1992. They define language awareness as ‘explicit knowledge about language, and conscious perception and sensitivity in language learning, language teaching and language use’ (Association for Language Awareness 2018). ALA’s definition is broad in scope and comprises multiple aspects of language learning. In the definition, the two terms *explicit* and *conscious* are particularly noteworthy. Both terms signal that language awareness is an active process in which the language learner has to go beyond the mere acquisition of a language, and engage with how the language is structured and what constitutes the building blocks of the language.

In an attempt to clarify the definition of language awareness further, James (1999: 102) defines language awareness to be ‘broadly constituted of a mix of knowledge of language in general and in specific, command of metalanguage (standard or ad hoc), and the conversion of intuitions to insight and then beyond to metacognition’. James’ definition, in contrast to that of ALA, specifies the use of metalanguage and presupposes that the attention to metalanguage is essential in transforming implicit knowledge to explicit knowledge. Note that, according to Spellerberg, metalanguage refers to linguistic terminology (2016: 21).

When Jessner (2006; 2008a) distinguishes between *language awareness* and *metalinguistic awareness*, it appears to be more a question of degree than diametrically opposed concepts. This can, for example, be seen in Herdina & Jessner’s book *A Dynamic Model of Multilingualism: Perspectives of Change in Psycholinguistics* (2002: 106) where language awareness is described as ‘a factorial specification of what has been discussed as metalinguistic awareness’.

Herdina & Jessner define language awareness as ‘conscious manipulation of and reflection on (the systematicity of) a language’ (2002: 106). Jessner (2008a: 277) defines metalinguistic awareness as ‘the ability to focus on linguistic form and to switch focus between form and meaning’. The distinction between the two positions appears to be similar to that of James’ specification of the ALA’s definition of language awareness.

For the purpose of this thesis, *metalinguistic awareness* is used when specific emphasis is put to the use of metalanguage, whereas *language awareness* is used when a broader attention and perception of the structure of a language is implied that

may include metalanguage, but may also compare and contrast language features without the explicit use of metalanguage.

2.2.2 Language awareness in language learning

At a basic level, language awareness will always be an integral part of language learning. As Melzi & Schick (2013: 338) make clear, the early school years will inevitably bring about a level of language awareness: ‘the awareness of language as a system is necessary for literary development, [and] exposure to reading and writing fosters greater awareness of language per se’. Learning how oral language is represented in writing is in this way not an automatic endeavour in the learning process, but rather knowledge that require specific attention to explicit learning of rules and structures. The process of learning how to read and write will have a cyclical reinforcing effect on language awareness, where greater skill in reading and writing will also bring about a higher level of language awareness. Other parts of language learning at a young age will also bring about language awareness, where the process of learning will lead to an awareness of phonological, semantic, syntactic and pragmatic elements of language (Melzi & Schick 2013: 338–342).

Although language awareness will feature in language development of monolinguals, several scholars have proposed that the interaction of several language systems will enhance language awareness. Bialystok (2009: 5) refers to studies that compare monolingual and bilingual children in completing metalinguistic tasks where the bilingual children were better at locating sentences that were grammatically well-formed, though semantically problematic. Cenoz (2013: 75) assumes that L3 learners ‘can develop a higher level of metalinguistic awareness on the basis of their previous experience of the task of learning a language and their knowledge of two linguistic systems’. Jessner (2006: 61) goes a bit further and proposes that L3 learning will not only add an additional language system that can enhance language awareness but also enable the multilingual user to develop a metasystem of organising languages. Jessner describes the ability of the multilingual learner in the following manner:

The metalinguistically aware multilingual learner explores and analyzes points of commonality between her or his language systems to obtain the target language item. [...] Multilinguals do this in an enhanced way since they have more resources they can draw on. As a consequence the more experienced language learner develops certain learning and communicative skills and abilities in language acquisition and use, which has been shown in research

into learning strategies and the relationship between the choice of language learning strategies and the kind of prior linguistic knowledge which affects that choice (2006: 70–71).

Jessner's description encompasses more than the mere use of metalanguage in language learning where the multilingual more actively sees similarities between languages and compares them. They also use learning strategies more attentively which suggests that multilinguals are more likely to see their language learning processes of different languages as more intertwined than learners of only two languages. Multilinguals may thus transfer not only specific language knowledge but also skills for how to acquire languages. Kemp (2007: 243) assumes that as 'multilinguals learn more languages, their use of strategies may increase in number, frequency, complexity and appropriateness, including strategies related to grammar learning'.

When considering bilinguals, Bialystok & Kroll (in press: 9) assert that the acquisition of two languages does not merely result in the transfer of knowledge from the L1 to the L2 but that knowledge transfer also works in the opposite direction, from L2 to L1. However, this is not a new claim as Vygotsky postulated in his book *Thought and Language*, published posthumously first time in English in 1962, that 'a child's understanding of his native language is enhanced by learning a foreign one. The child becomes more conscious and deliberate in using words as tools of his thought and expressive means for his ideas' (2012: 169). The same must be assumed to be the case for multilinguals, where the L3 is not only influenced by the L1 and L2, but that the L3 also builds further language knowledge that can benefit the learner's knowledge of their L1 and L2. Thereby, gaining language awareness is not a language specific competence, neither is it a unidirectional one, but a truly dynamic competence.

In order to explain the dynamic relation between the languages of a multilingual, Jessner (2008a) borrows the theoretical framework of Dynamic Systems Theory (DST) and adopts it to a multilingual context. What she terms a Dynamic Model of Multilingualism (DMM) describes the 'development of a multilingual repertoire or multilingual development [that] changes over time; is nonlinear; is reversible, resulting in language attrition and/or loss; and is complex' (Jessner 2008a: 272). The complexity of the language learning process entails that none of the languages a person knows remains stable over time.

Jessner's DMM is constituted by the individual languages the multilingual learner has knowledge of, crosslinguistic interaction, and what is referred to as the *M(ultilingual) factor*. The M factor can contribute to a catalytic or accelerating effect in L3 learning, and its key factor is metalinguistic awareness, which 'is made up of a set of skills or abilities that the multilingual user develops owing to her/his prior linguistic and metacognitive knowledge (Jessner 2008a: 275). Language awareness and metalinguistic knowledge is in this way not only an added benefit of multilingualism but also an important aspect in organising and structuring language knowledge.

2.2.3 The activation of language awareness

In the previous section, language awareness is described as an integral part of language learning and that multilingualism may further enhance it. Although this is the case, language awareness is not automatically encouraged to the same degree for all language learning. Particularly with the teaching of languages, the way in which languages are taught may affect the recognition of the possibilities for drawing comparisons between languages, seeing structural similarities and building meta-language. Curricula design and teacher's beliefs about language learning are the topics for the following chapter. This section discusses research specifically related to language awareness activation.

In their study of the influence of L3 on earlier languages with the effect of the L3 or L2 (Russian, French and/or English) on L1 Hungarian 16-year-olds, Kecskes & Papp (2000: 29) found that 'intensive and successful FL [foreign language] learning can facilitate L1 development significantly'. However, their study also shows that infrequent L3 learning, less than three hours a week, does not have the same positive effects. They, therefore, state that 'not all kinds of FL learning lead to the development of multicompetence. FL studies can bring about changes in the monolingual system only if the language learning process is intensive enough and can rely on significant learner motivation' (Kecskes & Papp 2000: 30).

That less intensive language learning settings do not result in the same positive effect on language awareness across languages is likely to be related to the observation made by Hufeisen & Marx that 'learners tend not to make use of their previous knowledge on a systematic basis, however, as only the lexicon is evident to them as a transfer base' (2007: 315). The transfer basis for a grammatical, phonetic

and pragmatic system is thus more difficult to acquire for the learner. For the learner to draw comparisons and draw from resources between languages, therefore, entails that the learner becomes aware of the potential of beneficial transfer of language knowledge. Yet, this is not necessarily an automatic process, as Hufeisen & Marx (2007: 315) point out:

It seems that learners do not use their previous language and strategy knowledge automatically, but rather have to be made aware of parallels and transfer possibilities between languages, as well as be introduced to potentially useful techniques of how to use and employ previous foreign language knowledge and language learning strategies.

It may be that multilinguals use strategies and draw on other language knowledge more than monolinguals and bilinguals, but for them to discover the full potential of language awareness, it seems as though it needs to be actively encouraged through instruction. This entails seeing the learner's other languages as positive resources for learning during language instruction.

The following chapter studies the extent to which language awareness and multilingualism are part of the Norwegian educational system.

3. Educational context

Several different avenues can be explored in researching to what extent multilingualism and language awareness are focused on the Norwegian educational system. Studies can be conducted on the content of textbooks used for language instruction or the beliefs held by language teachers about how languages are best learnt. More direct approaches to observing language teaching in practice can also be conducted. All these different avenues can shed light on how multilingualism and language awareness feature in language teaching. Without discarding any of these research methods, this thesis will approach the topic from a different angle, namely by examining the language curricula for each of the taught languages. This is an indirect approach, yet it shows what the language teaching for each subject should contain as according to the Education Act § 2-3 (for primary and lower secondary school) and § 3-4 (for upper secondary school), all instruction should be conducted in accordance with the curriculum (Lovdata 2018). Section 3.1 below outlines the Norwegian language subject curricula for L1, L2 and L3 instruction with specific attention to multilingualism and language awareness. Section 3.2 discusses the curriculum design in relation to research conducted on language teaching practice and teachers' beliefs about language learning.

3.1 The Norwegian language subject curricula

The current Norwegian curriculum was introduced in 2006 with the educational reform *Kunnskapsløftet* (LK06). With the LK06 followed new subject curricula for each subject. Each subject curriculum is divided into the following six subsections: 'purpose', 'main subject areas', 'teaching hours', 'basic skills', 'competence aims' and 'assessment'. These subsections all constitute important parts of the subject curriculum, yet the section on competence aims is of particular interest for the present study, as the competence aims specifically state the competence the student should have acquired within a set period. In this way, the competence aims are more concrete compared to the other sections of the curriculum and specify more directly what the instruction should contain.

The competence aims are stated for the following periods; 'after Year 2', 'after Year 4', 'after Year 7' and 'after Year 10' for primary and lower secondary school. At upper secondary school the competence aims are generally specified each

year, with the exception of L3 Foreign Language instruction. Students at the upper secondary level can choose a specialisation where the main distinction is between vocational and general studies. The present study is concerned with general studies, curricula for vocational studies are therefore not discussed, nor outlined in the description of the curriculum hereafter. For students pursuing general study programs at upper secondary, competence aims are set for each year of study for the subjects ‘Norwegian’ and ‘English’. The subject ‘English’ is only mandatory up until Vg1. ‘Foreign Language’ is divided into two periods ‘Period I’ and ‘Period II’. Typically, ‘Period I’ is after lower secondary, thus ‘after Year 10’, and ‘period II’ is after two years of upper secondary, thus ‘after Vg2’ (Utdanningsdirektoratet 2006a).

Table 3.1: Norwegian curriculum competence aims for languages

primary school			lower secondary school	upper secondary school		
year 1-7			year 8-10	year 11-13		
after Year 2	after Year 4	after Year 7	after Year 10 / period I	after Vg1	after Vg2 / period II	after Vg3
L1 Nor. L2 Eng.	L1 Nor. L2 Eng.	L1 Nor. L2 Eng.	L1 Nor(wegain) L2 Eng(lish) L3 F(oreign) L(anguage)	L1 Nor. L2 Eng.	L1 Nor. L3 FL.	L1 Nor.

New in the LK06 was the introduction of an L3 instruction at lower secondary school. Previously, an L3 had been offered as an optional subject at many schools, but with the LK06 the L3 instruction became mandatory for all.

The L3 subject is termed *Foreign Language* in the curriculum. At least one of the following languages should be offered for L3 instruction: German, French, Spanish or Russian, but schools are also free to offer other additional languages (Fremmedspråksenteret no date). A common additional language course to be offered is ‘English as an in-depth study’. Students at lower secondary school have to follow L2 English instruction, so ‘English as an in-depth study’ is not technically an L3 although it is allocated the teaching hours as an L3 subject.

A report conducted by the Norwegian Directorate for Education and Training (Utdanningsdirektoratet) from 2009 found that approximately 75% of lower secondary students study an L3, where Spanish is the most popular choice, German second and French third. The approximately 25% remaining primarily study ‘English as an in-depth study’ (Utdanningsdirektoratet 2009: 32–33).

An information document on the LK06 published by the Norwegian Ministry of Education and Research specifies that the L3 instruction should be practical. In the elaboration of practical focus of the L3 instruction, it is stated that ‘in the new curriculum it is emphasized that the intention of the subject is to give the students practical skills *in* language, not theoretical knowledge *about* language’ (italics in original, my translation, HH) (Utdannings- og forskningsdepartementet no date). The document establishes an apparent dichotomy between practical language skills and theoretical language knowledge where the latter appears undesired. Language awareness, which has been defined by explicit knowledge about language and conscious attention to language use in section 2.2, appears not to feature strongly within the L3 curriculum based on this description. Whether this indeed is the case has to be studied more closely. In the following sections, each language subject curriculum is outlined with specific attention to language awareness and multilingualism.

3.1.1 L1 Norwegian curriculum

The subject ‘Norwegian’, the L1 instruction subject, is the subject with the highest number of hours allocated for instruction. Norwegian is taught as a mandatory subject from year 1 of primary school up until Vg3 at upper secondary school. The time allocation is distributed as follows: 931 hours at year 1-4, 441 hours at year 5-7, 398 hours at year 8-10. For students pursuing general study programs at upper secondary school, the time allocation is 113 hours at Vg1, 112 hours at Vg2 and 168 hours at Vg3 (Utdanningsdirektoratet 2006b).¹

Table 3.2: Time allocation for L1 Norwegian

primary		lower secondary	upper secondary		
year 1-4	year 5-7	year 8-10	Vg1	Vg2	Vg3
931 hours	441 hours	398 hours	113 hours	112 hours	168 hours

The subject curriculum for Norwegian comprises an array of different topics, such as, among others, attention to language awareness and multilingualism. In the subsection ‘purpose’ both can be seen in the following extract:

¹ There are separate time allocations for students who have Sami as L1 or Finnish as L2.

Norwegian and Sami are the two official languages in Norway, while the written language forms Bokmål and Nynorsk enjoy equal status. Norwegians speak a wide variety of dialects and vernaculars, but also languages other than Norwegian. Linguistic diversity is an asset in the development of linguistic competence in children and young people. In view of this language situation, children and young people should develop awareness of linguistic diversity and learn to read and write both Bokmål and Nynorsk. The aim of the tuition is to reinforce the pupils' linguistic self-confidence and identity, to develop their language comprehension, and to provide them with a good starting point for mastering the two written language forms both socially and in the workplace (Utdanningsdirektoratet 2006b).

The extract highlights the linguistic diversity of the Norwegian society, both in written and in spoken language, and gives an account of the fertile grounds it presents for building language competence. The endeavour to explore similarities and differences between written languages as well as spoken languages undoubtedly entails building language awareness. In addition to this, to describe the linguistic differences, a certain level of metalanguage needs to be understood, which again benefits language awareness.

The attention to language awareness outlined in the purpose statement is also apparent in the other sections of the curriculum. Under the 'main subject areas' for the subject, it is stated that 'the pupils should acquire knowledge of the language as a system and of the language in use'. Under 'basic skills', the writing skills include the use of linguistic terminology. This is elaborated in the competence aims that gradually build on each other. For the competence aims after year 10, it is stated that the student should 'master grammatical terminology describing how the language is constructed' and 'use grammatical terms to compare Nynorsk and Bokmål'. After Vg1, this comparison is also spread to other languages: 'describe grammatical characteristics of the Norwegian language and compare them with other languages'. After Vg2, the student should also have required a historical perspective of the Norwegian language, as is pointed out in the following competence aim: 'give an account of key similarities and differences between Old Norse and modern Norwegian'. The cross-language comparison is another point that also is addressed: 'give an account of key similarities and differences between the Nordic languages'; the same point is repeated for the competence aims for Vg3 (Utdanningsdirektoratet 2006b).

When considering the Norwegian subject curriculum as a whole, there is ample opportunity for the student to build in-depth language awareness of Norwegian,

as well as of Norwegian in relation to other languages. That aspects of language awareness are specified for all parts of the curriculum and feature substantially also in the competence aims, is a positive sign.

The subject curriculum also specifies a multilingual perspective in the competence aims. The multilingual aspect is mainly directed towards other languages native to Scandinavia, and, as discussed in section 2.1, with the intention of building receptive multilingualism. For example, in the competence aims for after year 10, oral competence comprises to be able ‘listen to, comprehend and reproduce information from Swedish and Danish’ and ‘give an account of the prevalence of the Sami languages and of Sami language rights in Norway’. The same competence aims also stress attention to variation within Norwegian: ‘give an account of some characteristics of common vernaculars in Norway and discuss attitudes towards different vernaculars and towards the written language forms Nynorsk and Bokmål’. After Vg1, the student should also have wider multilingual knowledge (as stated in the competence aims) and be able to ‘give examples of multilingualism and discuss the benefits and challenges of a multilingual society’ (Utdanningsdirektoratet 2006b). Although the curriculum for Norwegian has a multilingual focus, no explicit reference is made to encourage students to use their knowledge of an L2 and/or L3 is found in the curriculum.

3.1.2 L2 English curriculum

The subject ‘English’ is taught as a mandatory L2 language at primary, lower secondary and upper secondary school. At primary school, the allocated teaching hours is 138 in year 1-4 and 228 in year 5-7. It is up to the individual school if they want to start instruction in year 1 or to delay this until year 2. At lower secondary school, year 8-10, 222 teaching hours are allocated to English instruction. For general study programs at upper secondary only the first year, Vg1, is mandatory. The teaching hours allocated to English in Vg1 are 140. Optional courses in English are generally offered at Vg2 and Vg3 (Utdanningsdirektoratet 2006c).

Table 3.3: Time allocation for L2 English

primary		lower secondary	upper secondary		
year 1-4	year 5-7	year 8-10	Vg1	Vg2	Vg3
138 hours	228 hours	222 hours	140 hours		

As with the Norwegian subject curriculum, a focus on language awareness can be seen in the subject curriculum for English. This attention is most clearly seen in the ‘Purpose’ section and ‘Main subject areas’ section of the curriculum. The purpose section states the following:

We need to develop a vocabulary and skills in using the systems of the English language, its phonology orthography, grammar and principles for sentence and text construction and to be able to adapt the language to different topics and communication situations (Utdanningsdirektoratet 2006c).

The ‘main subject areas’ section also reveals a focus on language awareness in English instruction:

The main subject area Language learning focuses on what is involved in learning a new language and seeing relationships between English, one's native language and other languages. It covers knowledge about the language, language usage and insight into one's own language learning. The ability to evaluate own language usage and learning needs and to select suitable strategies and working methods is useful when learning and using the English language (Utdanningsdirektoratet 2006c).

According to the competence aims for after year 10, the student should be able to ‘identify significant linguistic similarities and differences between English and one’s native language and use this knowledge in one’s own language learning’. A similar comparison is found in the competence aims after year 4 and after year 7, adjusted in difficulty to the educational level. However, the competence aims after Vg1 have no corresponding aim. Instead, the competence aim appears to be replaced by the aim to ‘evaluate and use different situations, working methods and learning strategies to further develop one’s English-language skills’. Thus, at Vg1, the comparative feature of the competence aims is not present, and none of the competence aims mentions any relation to other languages. The more general description given in the ‘main subject areas’ of seeing relations between languages is not present in the competence aims at upper secondary (Utdanningsdirektoratet 2006c).

In comparison with the Norwegian subject curriculum, the English subject curriculum specifies not how grammatical terminology is acquired. The student should ‘use central patterns for orthography, word inflection, sentence and text construction to produce texts’ after year 10, but no reference is made to this to

terminology acquired in L1 instruction. The competence aims for English are thus more general compared to those for Norwegian. Where the Norwegian curriculum specifies that the learner should *acquire* and *master* grammatical terminology, as well as *describe* grammatical occurrences, the English curriculum employs the verbs *use*, *develop* and *identify*, which are indicative of less active student engagement.

Another noticeable difference between the Norwegian and the English curriculum is the attention to the use of learning strategies. In the Norwegian curriculum, attention to learning strategies is only found in the purpose statement and the basic skills, and altogether, there are only four occasions on which learning strategies are mentioned. In comparison, the English curriculum has a much more significant focus on learning strategies where learning strategies are mentioned in all the different parts of the curriculum and are altogether mentioned 17 times. The high frequency of references of learning strategies in the English curriculum is due to its specification on use of learning strategies in the competence aims. Learning strategies, as discussed in section 2.2.2, constitute an important part of language awareness, and are particularly used by multilinguals in language learning. Thus, attention to learning strategies should also be seen as a positive attribute to the curriculum in building language awareness.

There is to some extent a multilingual perspective also in the English curriculum, as seen in the main subject areas extract above ‘seeing relationships between English, one’s native language and other languages’, yet in the competence aims this is mainly described with attention to the learner’s L1. Language comparison features in the competence aims up until year 10, as described above, but primarily with relation to *one’s native language* where other languages the learner has knowledge of are not indicated. Otherwise, the curriculum for English specifies variation within English and the spread of English worldwide, but without direct reference to other languages. A more multilingual perspective is only to be seen in the purpose section where it is stated that ‘[l]earning English will contribute to multilingualism and can be an important part of our personal development’ (Utdanningsdirektoratet 2006c).

3.1.3 L3 Foreign language curriculum

The L3 subject curriculum is taught at lower and upper secondary school. As noted above, since the educational reform of 2006, it has been mandatory for students to

take an L3, which is the case at lower secondary, as well as for those who specialise in general study programs at upper secondary. At lower secondary school, year 8-10, the total volume of instruction is 227 hours. At upper secondary school, the hour allocation is given for each year. The first year of upper secondary, Vg1, is allocated 113 hours, whereas, the second year, Vg2, is allocated 112 hours. Students who have not completed period I of their L3 instruction at lower secondary have to complete both periods I and II at upper secondary school. For these students, a third year, Vg3, is also mandatory with 140 allocated teaching hours (Utdanningsdirektoratet 2006d).

Table 3.4: Time allocation for L3 Foreign Language

primary		lower secondary	upper secondary		
year 1-4	year 5-7	year 8-10	Vg1	Vg2	Vg3
		227 hours	113 hours	112 hours	(140 hours)

A focus on language awareness can be observed in parts of the subject curriculum. As in the subsection ‘purpose’ for the L3 subject curriculum where it is stated that:

Learning a new foreign language builds on experience from previous language learning both in and outside school. When we are aware of the strategies we use to learn a foreign language, and the strategies that help us understand and be understood, the acquisition of knowledge and skills will be easier and more meaningful [...] Developing the ability to learn a foreign language may lead to greater insight into our native language, and thus become an important element in individual personal development. Competence in foreign languages shall promote motivation for learning, and insight into several languages and cultures, contribute to multilingual skills and provide an important basis for lifelong learning (Utdanningsdirektoratet 2006d).

Here, the use of learning strategies in building language knowledge is highly emphasised, which is also found in the competence aims where it is stated for period I that the student should ‘use listening, speaking, reading and writing strategies adapted to the purpose’. A similar competence aim is formulated for period II. In similarity with the English subject curriculum, a strong emphasis is seen in the attention to using learning strategies.

Another interesting focus of attention in the purpose statement for foreign languages is the emphasis that learners can draw on knowledge from other languages

(L1/L2 → L3), but also that learning an L3 can benefit L1 insight (L3 → L1). The latter point could have been made with respect to L2 as well, yet this is not the case. This same attention is found in the competence aims for period I where it is stated that:

- The aims for the education are that the pupil shall be able to
- exploit his or her own experience of language learning in learning the new language
 - examine similarities and differences between the native language and the new language and exploit this in his or her language learning (Utdanningsdirektoratet 2006d)

Again the following relation between the languages can be seen (L1/L2 → L3), yet only the L1 and L3 are mentioned for direct comparison (L1 ↔ L3), where the L2 is not mentioned. However, in the competence aims for period II, this aim is altered as to include all the learner's languages: the student shall 'exploit his or her experiences of language learning to develop his or her multilingualism' (Utdanningsdirektoratet 2006d). Inclusion of all the learner's languages in both periods would arguably strengthen the learner's language awareness and multilingualism further, yet the attention to language comparison and use of language knowledge emphasised in the curriculum should be seen as fruitful grounding for building language awareness.

In comparison to the English curriculum, it can be noted that the verbs used in the competence aims for the Foreign language curriculum encourage more student engagement wherein the L3 the learners should *exploit* and *examine* their language knowledge.

3.1.4 The combined language curriculum

When comparing the three curricula with attention to language awareness and multilingualism, it is clear that the L1 Norwegian curriculum is designed to lay the foundations for the student's language awareness and reflection on multilingualism. Here, the student should develop explicit knowledge of grammar and grammatical terminology and use this knowledge actively in comparing and analysing different languages and different vernaculars. Attention to language awareness and multilingualism is also apparent in the curricula for L2 English and L3 foreign language, yet the explicit mention is not made to developing metalanguage and using

this knowledge for comparing and contrasting languages, where a stronger emphasis is instead put on the use of learning strategies.

Ideally, students will use their knowledge developed in their L1 to develop their language awareness in their L2 and L3 further. This seems to be the intention behind the curriculum, which is ‘strongly influenced by the Common European Framework of Reference for Languages (Council of Europe, 2001), which emphasises the value of multilingualism’ (Haukås 2016: 4). It should, however, be noted that the different subject curricula specify not what the student should have learnt from other language courses and it is up to the teacher to choose how explicit this connection is made. In the following section research on teachers’ attitudes towards language awareness and multilingualism in teaching is presented.

3.2 Language Teaching Practice

The subject curricula observed in the previous section address language awareness and multilingualism in accordance with the definitions of the two terms in chapter 2. However, this is carried out to a varying degree within each of the language curricula, and no explicit instruction is specified in any of the individual language curricula of what knowledge the student can transfer from the other language courses.

Moore (2006: 135) argues that both syllabus design and classroom methodology are educational choices that ‘have a considerable influence on children’s readiness to rely on previous linguistic resources, to experiment with new alternatives and to transfer knowledge from one context to another’. Thus far, it has been shown that the curriculum incorporates both an attention to multilingualism and language awareness, though some improvements could be made to strengthen these points further. In line with Moore’s claim, attention should also be directed towards classroom methodology.

Jessner (2006: 39) states that, from an international perspective, the traditional classroom generally has kept language subjects entirely apart as ‘contact between the languages in the curriculum is forbidden since it is considered a hindrance to successful language learning’, and this results in that ‘teachers keep knowledge about other languages, including the L1, out of the classroom in order not to confuse students’. Similarly, Horst, White & Bell (2010: 331) state that although learners are likely to benefit from activities that build on L1 knowledge in their L2 lessons, the

cooperation between teachers often breaks down as ‘teachers typically work in isolation and are uncertain how to proceed’.

Haukås (2016) compares several recent studies conducted in various countries on teachers’ beliefs about multilingualism in teaching. A general trend that Haukås (2016: 4) found is that:

teachers in all countries have positive beliefs about multilingualism and think that multilingualism should be promoted, but they do not often foster multilingualism (i.e. make use of learners’ previous linguistic knowledge) in their own classrooms. Teachers do not feel competent at doing so, and many are concerned that it could disrupt further language learning.

Haukås points out that the studies did not focus on two important aspects on multilingualism in teaching, namely, ‘teachers’ beliefs about the awareness and transfer of previous language learning strategies to enhance multilingualism and their beliefs about cross-curricular collaboration among language teachers’ (2016: 4). Haukås’ study (2016) focuses on the beliefs Norwegian language teachers have about multilingualism and the extent to which they use a multilingual pedagogy in their classrooms. The study carries out group discussions with twelve language teachers at lower secondary school in Norway. The teachers taught an L3 and all but one also taught either English L2 or Norwegian L1. The study is of particular interest as it is conducted relatively recently, in 2014, which means that the new curriculum elaborated on in section 3.1 already had featured in the educational setting for several years. The study also takes place in a Norwegian context, similar to that of the study of this thesis.

Haukås’ study (2016: 9 ff.) reveals several interesting aspects that show a divergence between what is stated in the curriculum and teaching practice. One of these aspects is that the teachers that participated thought that they themselves had benefitted from multilingualism when learning languages, but that they generally did not see the same benefit for their students. Another aspect is that the teachers generally agreed that the students had very little grammatical knowledge when starting L3 instruction. The teachers all claimed to frequently use the students’ linguistic knowledge of their L1 and L2 in their L3 instruction, but L3 textbooks had at best only a few activities that invited the students to use their L1 or L2 language

experience in learning their L3. None of the teachers had ever collaborated with other language teachers across languages.

In her conclusion, Haukås (2016: 14) notes that the teachers have come some way towards a multilingual pedagogic approach in that they recognise that the students can benefit positively from establishing links between their L3, L1 and L2. However, the recognition is only moderate, as the teachers generally reflect not on this knowledge with the students in the classroom and no cross-language collaboration seemed to exist.

Comparing Haukås' findings and the curriculum outlined in section 3.1, it is apparent that there is a discrepancy between what the curriculum dictates and what occurs in the language classroom. The teachers reported that they found the students to have very little grammatical knowledge at the onset of L3 instruction in 8th grade. Consulting the curriculum, there seems to be little reason for the lack of grammatical knowledge. In the competence aims after year 7 for the Norwegian curriculum, it is specified that the students should 'carry out basic sentence analysis and demonstrate how texts are constructed using grammatical terminology and textual knowledge' (Utdanningsdirektoratet 2006b). In the English curriculum, the competence aim after year 7 builds on this knowledge and state that the students should 'identify some linguistic similarities and differences between English and one's native language' (Utdanningsdirektoratet 2006c). Thus, the students should have a basic grasp of grammar in both Norwegian and English when starting to learn an L3. Ideally, the teachers should be able to build on this language experience to relate the L3 instruction to the students' L1 and L2.

Another challenge consists in that the subject curricula for languages rely on building on earlier language experience. However, if there is no collaboration between language teachers of different languages, then coordinating the subject curricula becomes difficult, if not impossible. For collaboration to occur, L1 and L2 teachers need to recognise the benefits of L3 collaboration. This two-way recognition is one several scholars of language awareness argue for as 'talk that makes comparisons across languages has the potential to develop learners' metalinguistic awareness in ways that may also benefit knowledge of the L1' (Horst, White & Bell 2010: 331). As we have seen in section 2.2, Vygotsky made a similar claim already in a translation to English published in 1962; this shows that L2/L3 acquisition benefiting L1 is not a new observation, though a perception of the contrary appears to

be engrained among many language teachers. Jessner & Kramersch (2015: 4) also see the inclusion of the other languages the learners have knowledge of as a way of increasing student participation in language instruction, this they also assume to affect learning positively. Language comparison also features in the competence aims for all the three language curricula; yet, if teachers will not see this as beneficial, they may downplay it in their language instruction.

The teachers found few relevant activities for cross-language comparison in the textbooks either. Bachmann (2004 in Haukås 2016: 14) notes that teachers often view the textbooks as the curriculum. It is, therefore, worrying that very little material in the textbooks reflected the competence aims in the curriculum building on language awareness and multilingualism.

All in all, Haukås' study reveals that attention to language awareness and multilingualism as described in the subject curricula for L1, L2 and L3 are not necessarily featured (as prevalent) in the language classroom.

My study described in the following chapters, do not assume that students have to follow language instruction that explicitly shows them how to compare and contrast languages in order to build language awareness. Such experience would undoubtedly be beneficial, yet the students may see relevant connections and build language awareness from learning several languages, even though this may not be actively encouraged in the classroom.

4. Research methodology

The following chapter gives an overview of the model used for researching language awareness among multilinguals in lower and upper secondary school in Norway. Section 4.1 outlines the model and presents some precautions regarding the limitations of the study. A questionnaire was developed to investigate the topic, and section 4.2 describes how the questionnaire is built up and the theoretical background behind its design. Section 4.3 gives an account of how the data is collected and the method of data analysis, whereas, section 4.4 accounts for the participants in the study. At the end of the chapter, the hypotheses for the study are presented in section 4.5.

4.1 Model

The Norwegian school system provides an interesting basis for investigating language awareness among multilinguals. As outlined in section 3.1 on the Norwegian language curriculum, students learn Norwegian L1 and English L2 in an educational setting starting in their first years of primary school. Most students begin learning an L3 in 8th grade when they start lower secondary school and study the L3 for three years. Those who choose to pursue general studies at upper secondary school (or other specialisations that also qualify for general university admissions certification) will continue to study the L3 for two additional years. For this group of students, L3 instruction will in total be five years.

My study aims to incorporate the entirety of the L3 learning process alongside the simultaneous L1 and L2 development. The study was thus conducted at three different educational levels, in 8th grade (the first year of L3 instruction), in 10th grade (the third year of L3 instruction), and in Vg2 (the fifth year of L3 instruction). For the students at the lowest level to have some experience of learning the L3, the study was conducted in the second semester, mid-January – mid-February. This meant that the students at the lowest level had studied the L3 for roughly 5-6 months. Likewise, the study conducted in 10th grade and Vg2 was also carried out in the students' second semester; thus they had followed L3 instruction for respectively 2,5 years for the 10th grade students and 4,5 years for the Vg2 students. The data is

collected from two different L3 classes at two different Norwegian schools for each educational level to obtain some diversity in the study.

This approach demands a few precautions concerning the collected data. Firstly, this is not a longitudinal study whereby the same students participate in the study at the different educational levels. Individual variation in the language learning process can be substantial, and the student participants at the various levels cannot thus be uncritically considered equivalent. A study conducted over a more extended period would be able to follow the individual learning processes and would undoubtedly be able to supply interesting data. Secondly, and much in line with the first consideration, students at lower secondary school may choose not to pursue general studies at upper secondary school. Thus, the Vg2 students (unless they have recently moved to the country, or due to other reasons) will have attended L3 instruction at lower secondary school. The L3 students at lower secondary school represent thus a more heterogeneous student population than that of those at upper secondary school. Students at Vg2 may be more motivated for L3 learning as they have chosen an educational path that focuses on multilingual competence. Thirdly, the data collection only to a limited degree incorporates class and school variation by including two schools for each educational level. A study that examines closer how languages are taught in the different learning environments could illustrate more clearly if the way languages are taught has a significant effect on language awareness. A comparison of classes at each educational level falls outside the scope of this study.

The Norwegian language curriculum specifies L1 Norwegian and L2 English to be required subjects for instruction up until Vg1 for English and Vg3 for Norwegian. Thus, it is assumed that all the participants have knowledge of these two languages. Which L3 the students study varies much more where German, French and Spanish are all commonly offered languages for instruction. Thus, in L1 and L2 courses the students can have different L3s as well as not following L3 instruction. To conduct the study in an L1 or an L2 course was not deemed ideal due to the possibility of a high variation of languages for data collection. Instead, the study was conducted in L3 classrooms and only one L3, French, was chosen to control the languages involved in the research.

French is an interesting language to incorporate, as it is a Romance language and thus contrasts with the Germanic languages Norwegian and English. The L3 provides in this way some language distance. At the same time, French has had a

significant influence on English and awareness of this relation can provide a fruitful basis for learning French. In fact, English is profoundly influenced by Romance languages as ‘approximately 60% of all the words (3–4 syllables long) in written English are of Greco-Latin origin’ (Corson 1995 in Jessner 2008b: 42). The students may, of course, know additional languages that are not controlled and that are included in the study.

As a final note of precaution, the choice of which language subject the study was conducted in may affect the result of the research. Before completing the questionnaire, the participants were informed by the researcher that the study involved all their language experience. However, the setting of an L3 classroom may affect the participants to reflect more on their L3 experience compared to their L2 or L1 experience. A similar effect would be expected if the study were to be conducted in an L1 or L2 classroom, and influence of the setting seems inevitable. However, such an influence should not be disregarded.

4.2 Questionnaire

A questionnaire is developed to conduct the study. Few similar questionnaires were found in the relevant literature on the topic, but two studies have influenced the form of the questionnaire. Kemp’s (2007) study of learning strategies in grammar learning influenced section 9 (on learning strategies) in the questionnaire and Neuser’s (2017) study of lexical transfer in multilingual learners has influenced the language background sections, section 8 (on language) and the overall format of the questionnaire.

Participants in the study are asked to answer according to their own language experience. Thus, the study does not test the students’ language knowledge, and the study is not able to correlate participant replies with participants’ language mastery.

The questionnaire is constructed bilingually with each question or statement stated in both Norwegian and English. As many of the participants are quite young, 8th grade students are either 12 or 13 years old in their second semester, the questions and statements are framed in a register that aims to account for readability also for this group of participants. Terminology such as L1 is thus changed to ‘mother tongue’. Grammatical terminology is exemplified in brackets ‘(such as subject, verb, noun, adjective etc.)’.

The questionnaire consists of a total of 40 questions/statements and is divided into ten categories. The first five categories address the participants' (1) educational level and gender, (2) Norwegian language background, (3) English language background, (4) French language background and (5) other language background. After that follow topical sections on language learning where (6) inquires the participant about their motivation for language learning, (7) addresses the participants' interaction with English and French in their spare time, (8) addresses language awareness and (9) the use of learning strategies. The final category (10) 'comparing languages in class' target how much of the class instruction uses other languages when teaching one specific language. Most of the questions are framed using a five-point Likert scale, some are nominal questions, and a few of the questions request the participants to write a response.

The questionnaire is primarily intended to gather quantitative information from the participants through the use of Likert scales, although a few questions are included with a more qualitative emphasis requesting the participants to account for the languages they compare and the learning strategies they use. In the findings presented in chapter 5, only the quantitative information gathered from the study is presented due to the share amount of data to discuss.

In the following sections, each of the segments of the questionnaire will be described.

4.2.1 Language background

The language background sections aim to outline the students' previous language experience. An essential element in this section is to identify students who have more than three languages, either due to having another L1 than Norwegian or having learnt an L2 or L3 for a period of time.

The English section, in addition to examining how long the participants have learnt English, asks if the participants have English as a school subject. This latter question is directed at Vg2 students who do not take English as a mandatory subject, as English instruction is mandatory for 8th grade and 10th grade students, but not for Vg2 students. Choosing to continue to study languages can be related to a higher motivation for language study, and/or greater language awareness.

The French section asks the students for how long they have been studying French.

Section five on other languages provides insight into whether the participant has learnt other languages than Norwegian, English and French, and if so, for how long they have learnt the additional language(s).

4.2.2 Motivation and language contact

A section on motivation is included in the questionnaire, as literature within SLA (Second Language Acquisition) has found much support for the relation between motivation and language learning. Masgoret & Gardner (2003) conducted a meta-analysis of 75 studies where they found strong support for the connection between motivation and successful language acquisition. In a study that investigate more specifically multilingual learners, Sanz (2008), in studying bilinguals (Spanish and Catalan) learning an L3 (English), found that the most important factors for predicting L3 acquisition success in bilinguals were motivation and exposure. Having controlled for these variables, Sanz also found that the level of biliteracy, the ability to read and write in L1 and L2, also had a positive effect on L3 acquisition. Motivation should in this way be seen as an essential component of language learning.

Motivation is difficult to assess, and due to other concerns regarding the total length of the questionnaire and guarding adequate space for the remaining sections, there is only limited space directed towards the topic in the questionnaire. The questions that address the issue try to incorporate several facets of motivation. These will be outlined below, but first, it is useful to consider Masgoret & Gardener's (2003: 128) definition of motivation:

The motivated individual expends effort, is persistent and attentive to the task at hand, has goals, desires, and aspirations, enjoys the activity, experiences reinforcement from success and disappointment from failure, makes attributions concerning success and/or failure, is aroused, and makes use of strategies to aid in achieving goals.

All these facets of motivation are difficult to include in the section on motivation, therefore attention is given to the following: enjoying the activity of language learning (in statement 6.1 'I think it's fun to learn a new language' and statement 6.2 'I like to read in other languages than my mother tongue'). The following two statements address what aspirations the participants have for their language learning in the future (6.3 'I think my knowledge of English will be useful when I finish school' and 6.4 'I think my knowledge of French will be useful when I finish

school'). The final statement in the motivation section is concerned with further interest in language learning through the arousal of the language learning process and the desire for further learning (6.5 'I would like to learn other languages than those I already know'). The use of strategies in language learning mentioned in the definition is addressed in section 9 of the questionnaire on learning strategies. If we follow the definition above, then we can expect to see a correlation between the motivation section and the use of learning strategies.

The section on motivation is structured using a five-point Likert scale where the five values are: 'Strongly agree', 'Somewhat agree', 'Neither agree nor disagree', 'Somewhat disagree' and 'Strongly disagree'.

The section six, language contact outside teaching, should be seen in relation to motivation and accounts for the participants' exposure to the language outside instruction. This is in line with Sanz' study outlined above that saw exposure, along with motivation, as important for language learning. A more extensive focus on various forms of language contact could here have been studied, but it has here been decided to focus on reading and speaking in both English and French. The section uses a five-point Likert scale of frequency where the five values are given as follows: 'every day', '2-3 days a week', 'once a week', 'every other week' and 'never'.

4.2.3 Language

The section labelled 'Language' (section 8) is the central section of the questionnaire. This section uses the same five-point Likert scale as in section 6 on motivation from 'Strongly agree' to 'Strongly disagree' with the exception of question 8.8 that requests the participants to state the languages which they compare.

This section investigates how the participants view their existing language knowledge in further language learning. The statements in the questionnaire have been formed from the theoretical background of language awareness set out in section 2.2. Here, it is useful to recall Jessner's (2006: 70) characteristic of the multilingual learner: 'the metalinguistically aware multilingual learner explores and analyses points of commonality between her or his language systems to obtain the target language item'. The section also highlights the clear benefit of multilingualism in building language awareness. Jessner's description is a central theme to several of the statements in the questionnaire (8.1 'I often compare different languages', 8.2 'I think that the languages I know are very different', 8.3 'I often notice similarities between

the languages I'm using', 8.4 'I try to use what I've learnt from other languages when I'm learning a new language', 8.5 'My experience of learning English makes it easier to learn French' and 8.7 'I use the language knowledge that I gain from learning French to improve my understanding of other languages I know, such as Norwegian and English').

Statement 8.1 inquires if the participants compare any languages. Comparing languages can be fruitful ground for building language awareness, as Hauge (2014: 90 (my translation, HH)) points out:

To compare languages and actively look out for what is similar and different increases our knowledge about language generally and individual languages specifically, and it aids in increasing the attention concerning the processes linked to language learning.

To compare two or more languages is quite an active process that generally requires a reasonably conscious thought process. To address a less active process of seeing similarities between languages, statement 8.3 is devised to see if the participants are more inclined to notice similarities and not necessarily using them more directly for comparison. This is in line with Bardel & Falk who argue that psychotypology, perceiving similarities between languages, also shows some level of language awareness (2012: 74). Statement 8.2 aims at establishing whether the participants see their languages as very different. The replies to this statement should be viewed in relation to the language background of the participants. Those who know non-Indo-European languages, or more specifically Germanic or Romance languages, are probably more likely to reply in favour of the statement of the difference between known languages. This being said, there may be instances of psychotypology, an individual's perception of language relatedness, where similarities are perceived between languages with no shared language family. Those who only know Germanic/Romance languages may see fewer differences between the known languages, though there may be a threshold-level of proficiency in a sufficient number of languages for this similarity to be perceived by the learner.

Statements 8.4 and 8.5 aim to see if the participant draws on earlier languages when learning a new language. The relation of transfer is here $L1/L2 \rightarrow L2/L3$. 8.5 focuses the question more specifically on the connection between English and French

(L2 → L3). It is also interesting to see if knowledge transfer is mainly unidirectional or if it is also bidirectional, where L3 → L2/L1. This is addressed in statement 8.7.

Statement 8.6 addresses the participants' attention to metalinguistic vocabulary ('I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I'm studying languages'). The use of such meta-language can aid the learner to compare languages and to gain a greater awareness of how languages are structured. Specific attention to meta-language is referred to as metalinguistic awareness in section 2.2.2.

4.2.4 Learning strategies

As already mentioned in section 4.2.2 (on motivation), motivation is associated with the use of strategies for language learning. Kemp (2007) also points to a relation between the use of learning strategies and multilingualism, as discussed in section 2.2.2. Mißler (2000) has found that those who had learnt or were learning several foreign languages were more likely to use language-learning strategies (in Haukås 2015: 387). Whereas, Psaltou-Joycey and Kantaridou (2009 in Haukås 2015: 388) point particularly to trilinguals in the usage and frequency of usage of metacognitive and cognitive strategies. They also found the use of such strategies to correlate with proficiency in language learning. Kemp (2007) found that bilinguals used fewer strategies compared to multilinguals, and postulates some of the reason for this to be ascribed a lack of procedural knowledge with lack of experience in discovering what works in communication, as well as declarative knowledge with less knowledge about grammar as a system and its variation. Kemp assigns the difference between bilinguals and multilinguals to a threshold effect that is not generally reached until the learner has some knowledge of more than two languages, similar to Jessner's DMM model (Dynamic Model of Multilingualism) (cf. 2.2.2). Thus, there seems to be a good reason to study the use of language learning strategies when studying language awareness among language learners and see if these increase with time of learning.

Much has been written about learning strategies, though there is no clear consensus as to how to define the various strategies, or how to distinguish them. Macaro (2006: 333) suggests that an approach of not grouping strategies could lead to a number as high as a hundred or more different strategies. The questionnaire aims to address a broad aspect of learning strategies, but a selection had to be made. To account for the possibility that the participants may use additional strategies to those

that are included in the statements of the questionnaire, a further question was added to allow the participants to add learning strategies that were not addressed (9.6 ‘If you use learning strategies that are not mentioned above, please list them below and at the backside of the last sheet if you need more space’). In the questionnaire, the researcher gives a short explanation of learning strategies to aid the participants in understanding the questionnaire. This is termed as follows: ‘Learning strategies are ways of organising own learning. By using learning strategies you can work more structured and learn more efficiently’.

The five statements on learning strategies in the five-point Likert scale section target the following areas: 9.1 reading strategy transfer (‘I use reading strategies that I have learnt in one language, also in other languages’), 9.2 lexical transfer (‘If I come across a word that I don’t understand, I try to compare it to a word I know in a different language’), 9.3 grammatical analysis (‘I look for grammatical patterns in the language I’m learning’), 9.4 research strategy (‘If I encounter a word that I don’t recognize, I look it up in a dictionary or online’) and 9.5 context strategy (‘I try to work out what a sentence means even though I don’t recognize the meaning of all the words in the sentence’).

4.2.5 Comparing languages in class

The last section of the questionnaire is based on Hufeisen & Marx’s (2007) observation that learners generally will not use previous language knowledge or strategies without being made aware of such possibilities, as discussed in section 2.2.3 on language awareness. Language comparison is also specified as one of the learning goals in the curriculum, outlined in chapter 3.1, although this varies between subjects as to how the languages are compared mainly focusing on L1 ↔ L2 or L1 ↔ L3 comparisons in the competence aims. It is therefore interesting to see to what extent comparisons are made between different languages in different language classrooms. The statements in this section are directed at how the instruction is conducted in the various language classes, and not how each participant compares the languages.

The statements on comparing languages in class are organised with a five-point Likert scale of frequency where the five scales are ‘every lesson’, ‘every other lesson’, ‘sometimes’, ‘rarely’ and ‘never’.

Question 10.1 studies comparisons between Norwegian and English in the Norwegian classes. Question 10.2 investigates the same two languages, but here as

part of the English instruction. Question 10.3 addresses comparisons made between English and other foreign languages as part of the English instruction. The two last questions investigate teaching in the French classes where question 10.4 accounts for Norwegian and French and question 10.5 the comparison of English and French.

A question concerning comparisons made in Norwegian classes between Norwegian and other foreign languages is not included in the study. The curriculum states that comparison should be made across the Scandinavian languages in the Norwegian curriculum, but no other languages are mentioned. I, therefore, decided to omit a statement concerning Norwegian and other foreign languages as part of the Norwegian instruction as the rest of the section focuses on the comparisons between Norwegian, English and French. It is assumed that participants would perceive the statement to regard these three languages unless further clarifications were made. The comparison of Norwegian and non-Scandinavian languages in Norwegian classes may occur but was deemed unlikely.

4.3 Data collection and method of analysis

To get in contact with potential participants at the three educational levels, I contacted French teachers at lower and upper secondary schools in Norway to ask if their classes wanted to participate in the study. The teachers who agreed to partake in the study were asked to inform their students a week or two in advance of what the research involved. Students in 8th grade, due to their low age, had to get parental permission to participate, following personal data collection procedures. For 10th grade and Vg2 students, individual oral consents by the students were sufficient. Before handing out the questionnaires, the students were informed about the study and what participation entailed. The researcher was also present during the study to answer questions regarding the research and the questionnaire.

After collecting data in the different French classes, the data is registered in SPSS, a software program for statistical analysis. To use the program, the gathered information is given numerical values. The five-point Likert scale statements have been numbered 1 for 'Strongly agree', 2 for 'Somewhat agree', 3 for 'Neither agree nor disagree', 4 for 'Somewhat disagree' and 5 for 'Strongly disagree'. Statements on frequency, sections 7 and 10, also use a five-point Likert scale and are numbered from 1-5 where 1 is 'Every day'/'Every lesson' and 5 is 'Never'. As a result, for all

sections that use the five-point Likert scale format, low numbers imply more agreement with the statement or a higher frequency in use.

When analysing the data, I noticed that some participants preferred to place a tick between two boxes to show agreement between two alternatives, say between ‘Strongly agree’ and ‘Somewhat agree’. These responses have been registered as in-between scores where the registered score for a tick between ‘Strongly agree’ and ‘Somewhat agree’ is 1.5. Where a participant has made two ticks for the same statement, without clear crossing out or attempts at erasing one of the ticks, neither of the ticks are counted.

For comparing different groups, a mean score is calculated, either by examining one section as a whole (e.g. the section on motivation) and calculating a summary mean score of the participants in each group or by studying the individual statements in isolation. In the following chapter, graphs are used to show the relation between two or more groups. Tables of the data are either given in the running text or the appendix.

A further tool for comparing different groups is a test of significance. Since the gathered data is collected from Likert scales, a non-parametric test is used, as the data is not expected to show a normal distribution. The test used is the Mann-Whitney U test. In the text, the p -value from the Mann-Whitney U test is referred to, either in the running text or footnotes. The other test results for the Mann-Whitney U test are given in the appendix.² The p -value is deemed significant when it is lower than the .05 level of significance. When a very high level of significance is found, at the .01 level, this is also indicated.

When comparing the correlation between statements or the summary of sections in the questionnaire, the Spearman’s rank-order correlation (or Spearman’s rho) is used. The correlations between two statements or sections are deemed significant at the .05 level of significance for the p -value. When the correlation is particularly strong, at the .01 level of significance, this is also indicated.

4.4 Participants

When conducting the data collection at lower and upper secondary school, the number of participants in each class and at each educational level varied somewhat. The combined number of participants in 8th grade is 30, in 10th grade, it is 38, and in Vg2

² The p -value is shown by the asymptotic significance (Asymp. Sig. (2-tailed)) in the tables.

it is 28. A substantial part of the study involves comparing across educational levels, so to avoid uneven grounding for comparison, the number of participants in 8th grade and 10th grade is reduced by random selection to 28 (total number of participants in the study = 84). There is an uneven number of participants in the two classes at each educational level, but as the study will not compare classes, this asymmetry is not adjusted. Asymmetries in group sizes when examining topics of additional languages and gender is not accounted for, however, when the groups are deemed to have too few participants, they are excluded for comparison. Table 4.1 shows the distribution of participants in the study after correcting number at each educational level.

Table 4.1: *Distribution of grade and gender of participants*

	Gender		Total
	Female	Male	
8th grade	21	7	28
10th grade	13	15	28
Vg2	18	10	28
Total	52	32	84

4.5 Hypotheses

The questionnaire outlined above opens up several avenues for investigation, yet the focus of this thesis is on language awareness, and this will be the focus for the findings that will be presented in the following chapter. The three hypotheses are drawn up below and guide the discussion on the findings of the study.

4.5.1 Hypothesis 1: Number of languages and language awareness

The number of languages a participant knows has a positive correlation with the participant's level of language awareness.

This hypothesis is based on De Angelis who states that although there have been few studies that have examined the effects of the number of languages, those that have, show a positive correlation between this and the learner's language awareness abilities (2007: 6).

It is further hypothesised that there will be a stronger correlation between the number of related languages and language awareness. In section 2.1.2, the notion of receptive multilingualism is discussed. From this discussion, it is predicted that

participants who have additional close-related languages, will more likely perceive the possibility for transferring knowledge between their languages and thereby building greater language awareness.

Williams and Hammarberg (1998: 322) claim however that relatedness is not the only relevant factor for the learner's source of information in language learning as L2 status, proficiency level, typology and recency of use also influence what language knowledge is used for transfer. Due to the limited information gathered on the participants in the study, it may be difficult to address all these factors, though a stronger correlation is hypothesised to feature between the proficiency level of the number of known languages and language awareness. To test the proficiency, the findings explore the amount of time the participants have learnt an additional language to see if there is variation within this group.

4.5.2 Hypothesis 2: Duration of language contact and language awareness

The participants with longer experience of studying three or more languages show more language awareness.

This hypothesis entails an expectation that 10th grade participants will show a higher level of language awareness compared to 8th grade participants, and in turn, Vg2 participants are expected to show the same relation to 10th grade participants. Hence, the duration of L1, L2 and L3 learning is thought to lead to a higher proficiency in the known languages, where a higher proficiency also supposes a higher level of language awareness.

4.5.3 Hypothesis 3: Motivation and language awareness

The participants that report a higher level of motivation for language learning also show a higher level of language awareness.

Research on motivation in language learning discussed earlier in this chapter show strong correlation between motivation and language awareness and the same is expected to be the case for the results of this study. As language awareness is closely tied to the use of learning strategies, it is also likely that a positive correlation is seen between motivation and learning strategies.


To sum up the chapter, the methodology described aims to investigate the entirety of the participants' language knowledge and experience to reach across language boundaries to assess a multilingual competence. The method chosen for this purpose

is primarily a quantitative one. This enables a broad view of the language experience, yet there are limitations to the method of gathering information about the intention of why the participants answer the way they do. The hypotheses are the focus of the following discussion, but it is also useful to see beyond the hypotheses to see whether the participants, in general, agree to the statements about comparing languages, transferring knowledge, using metalanguage and using learning strategies.

5. Findings

The findings of the study are presented mirroring the order of the hypotheses set out in chapter 4. After the hypotheses have been addressed, a section on additional findings of interest will follow. Sections of the questionnaire are added alongside the findings for ease of reference. The complete version of the questionnaire is found in the appendix.

Table 5.1: Section 8 on language of the questionnaire

Språk / Language					
Sett kryss i boksen du er mest enig med / Tick the box you agree the most with					
					
Enig – uenig / Agree - disagree	Svært enig / strongly agree	Nokså enig / somewhat agree	hverken eller / neither agree nor disagree	Nokså uenig / somewhat disagree	Svært uenig/ strongly disagree
Påstand / Statement					
8.1 Jeg sammenligner ofte forskjellige språk / <i>I often compare different languages</i>					
8.2 Jeg synes språkene jeg kan er veldig forskjellige / <i>I think that the languages I know are very different</i>					
8.3 Jeg legger ofte merke til likheter mellom språkene jeg bruker / <i>I often notice similarities between the languages I'm using</i>					
8.4 Jeg prøver å bruke det jeg har lært i andre språk når jeg lærer et nytt språk / <i>I try to use what I've learnt from other languages when I'm learning a new language</i>					
8.5 Min erfaring med å lære engelsk gjør det lettere å lære fransk / <i>My experience of learning English makes it easier to learn French</i>					
8.6 Jeg synes det er nyttig å fokusere på grammatikk og grammatiske begrep (som subjekt, verb, substantiv, adjektiv m.f.) når jeg lærer språk / <i>I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I'm studying languages</i>					
8.7 Jeg bruker språkkunnskapen jeg lærer i fransk til å få en bedre forståelse av andre språk jeg kan, som norsk og engelsk / <i>I use the language knowledge that I gain from learning French to improve my understanding of other languages I know, such as Norwegian and English</i>					

5.1 Hypothesis 1: Number of languages and language awareness

The number of languages a participant knows has a positive correlation with the participant's level of language awareness.

To test this hypothesis, the respondents who answer to have an additional language to Norwegian, English and French in the questionnaire either in section 2 on having another L1 or section 5 accounting for additional languages to Norwegian, English and French, are grouped in one group. Table 5.2 shows the distribution of participants with additional languages in total and at the individual educational levels.

Table 5.2: Educational level and additional languages

	Other languages than Norwegian, English and French?		Total
	Yes	No	
8th grade	9	19	28
10th grade	4	24	28
Vg2	8	20	28
Total	21	63	84

The distribution of participants with additional languages varies across the different educational levels where 10th grade is an outlier with notably fewer than 8th grade and Vg2.

To assess the reported language awareness by the participants a mean summary score of statements 8.1 and 8.3-8.7 is calculated. The participants that see similarities between their languages are likely to disagree with the statement 8.2 as this statement has a reverse score for showing signs of language awareness. This statement is therefore not included in the summary scoring of section 8.

Firstly, the group of participants with additional languages (Norwegian, English, French and one more) is compared to those with no additional languages without distinguishing educational level. Table 5.3 shows the results for the two groups. The lower the mean scores, the more the participants agreed to the statements.

Table 5.3: Additional languages and summary of language section

	Other languages than Norwegian, English and French?	N	Mean	Std. Deviation	Std. Error Mean
Summary Language	No	63	2.38	.831	.105

The distribution of the participants' mean scores in the language section is shown in Figure 5.1. This demonstrates that the individual participants' responses are more spread than what the total mean score may suggest. The scale on the x-axis from 1-5 indicates the Likert scale categories from 'Strongly agree' as 1, and 'Strongly disagree' as 5 in the questionnaire. The frequency on the y-axis accounts for the number of participants. The figure presents the mean scores for each participant, for this reason, their scores are often between two values.

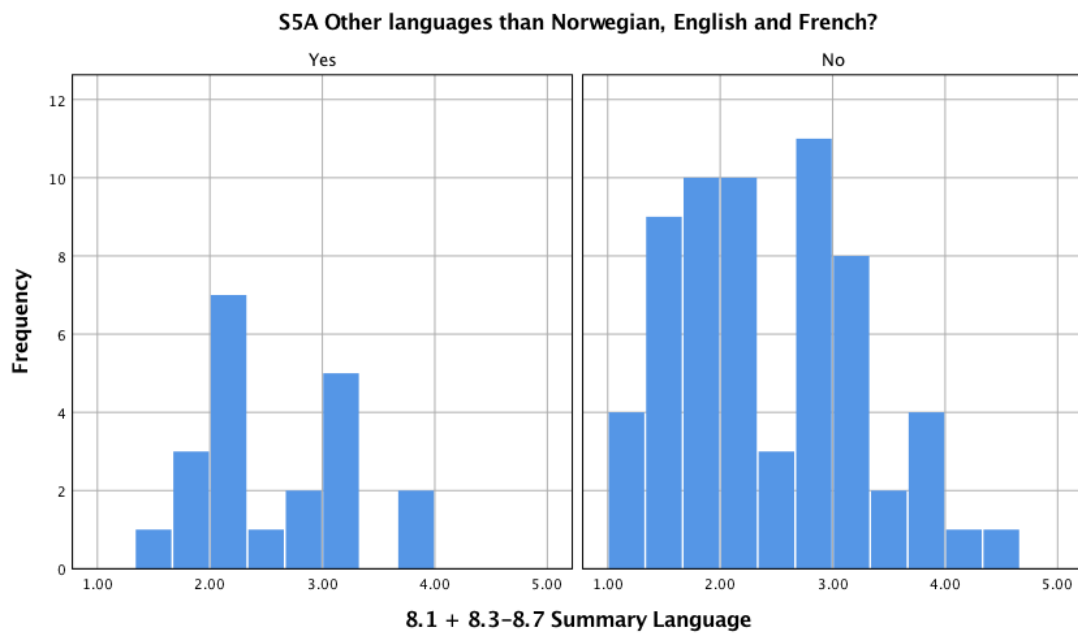


Figure 5.1: Additional languages and summary of language section distribution

The results of comparing the two groups show that those who report having knowledge of additional languages have a mean score of 2.52, whereas those without have a mean score of 2.38, for section 8. Thus, those without additional languages generally agree more with the statements on language in the questionnaire. The score of 2 in the Likert scale indicates 'Somewhat agree', whereas, the score 3 signify 'Neither agree nor disagree'. Both mean scores are between these two categories, which suggest that in general there is a slight positive response to the statements. There is, however, considerable individual variation in the responses shown in the distribution of Figure 5.1.

The distribution of the mean scores of the participants shows that those without additional languages have a more spread distribution, but that this group also have the participants who agree the most with the statements. Using the Mann-

Whitney U test to calculate if there is a significant difference between the two groups shows that the p -value is .393 ($p > .05$), so no significant difference is seen between the two groups. As a consequence, the first results do not indicate that knowledge of additional languages leads to higher language awareness.

To further investigate the difference between the two groups, each educational level is considered separately. Table 5.4 shows the same comparisons as Table 5.3 divided into educational levels.

Table 5.4: *Additional languages and summary of language section by educational level*

		Other languages than Norwegian, English and French?	N	Mean	Std. Deviation
8th grade	8.1 + 8.3-8.7 Summary Language	Yes	9	2.41	.773
		No	19	2.38	.824
10th grade	8.1 + 8.3-8.7 Summary Language	Yes	4	2.88	.629
		No	24	2.46	.791
Vg2	8.1 + 8.3-8.7 Summary Language	Yes	8	2.46	.533
		No	20	2.28	.912

Participants with additional languages at each educational level disagree more on average with the statements in section 8. Although all the educational levels show the same tendency, the difference is greatest and most apparent at 10th grade. All the summary scores are between 2 and 3, which indicates a slight positive response on average at all educational levels. The Mann-Whitney U test calculation of p -value shows that there is no significant difference between the two groups at each educational level (8th grade: p -value .902 ($p > .05$), 10th grade: p -value .263 ($p > .05$), Vg2: p -value .490 ($p > .05$)).

5.1.1 Which additional languages?

The data addressed thus far have not taken into account which additional languages to Norwegian, English and French the participants know. According to Hypothesis 1, there would be a stronger correlation between the number of related languages and language awareness. Norwegian and English belong to the Germanic language family, whereas French belongs to the Romance language family. However, English is strongly influenced by Romance languages (cf. section 4.1). Additional languages that

belong to either of these language families may have a more positive effect on the participants' language awareness.

Table 5.5 below shows the additional languages by whether the additional languages are Romance/Germanic or of other language families. Three participants reported more than one additional language. No participant has reported more than two additional languages. Since so few of the participants have reported more than one additional language, no further investigation into the effect of the number of additional languages is made. Figure 5.2 shows the distribution of language families of additional languages.

Table 5.5: *Additional languages by language family and educational level*

		Frequency
8th grade	No additional language	19
	Romance/Germanic	6
	Non-Romance/Germanic	3
	Total	28
10th grade	No additional language	24
	Romance/Germanic	3
	Non-Romance/Germanic	1
	Total	28
Vg2	No additional language	20
	Romance/Germanic	3
	Non-Romance/Germanic	5
	Total	28

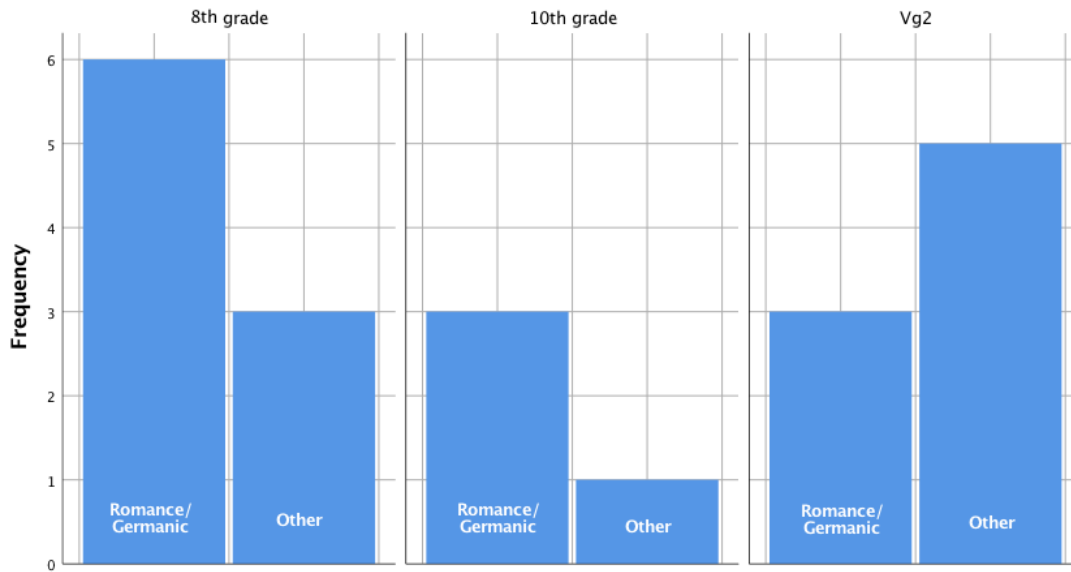


Figure 5.2: *Language family of additional language by educational level*

In 8th grade, six out of nine participants with additional languages have reported having an additional Romance/Germanic language. In 10th grade, three out of four, and in Vg2 three out of eight have reported the same. If participants are assigned by whether their additional language is from a closely-related language family or distant language family, is there a difference in how they answer in section 8 between the two groups? The following Table 5.6 shows this distribution.

Table 5.6: *Romance/Germanic additional languages and summary of language section by educational level*

		Romance/Germanic language family?	N	Mean	Std. Deviation
8th grade	8.1 + 8.3-8.7 Summary Language	Yes	6	2.22	.524
		No	3	2.78	1.182
10th grade	8.1 + 8.3-8.7 Summary Language	Yes	3	2.61	.419
		No	1	3.67	.
Vg2	8.1 + 8.3-8.7 Summary Language	Yes	3	2.56	.536
		No	5	2.40	.585

In 8th grade, the difference between the two groups is substantial where those with additional Romance or Germanic languages are more in agreement with the statements in section 8. The mean of 2.22 is also lower than that of the group with no additional languages in 8th grade (2.38) in Table 5.4. The number of participants to

compare in 10th grade is very small, yet the same tendency is seen where those with an additional Romance/Germanic language tend to agree more with the language section statements. Unlike the 8th grade participants, the 10th grade participants with an additional Romance/Germanic language show no lower mean than those who report not to have an additional language. In Vg2, the opposite tendency is seen compared to the other two educational levels where those with distant language families agree slightly more with the statements compared to those with Romance/Germanic additional languages. As with 10th grade, the Vg2 participants with an additional Romance/Germanic language agreed less with the statements compared to those who reported not to have additional languages. The Mann-Whitney U test shows that there is no significant difference between the two groups at each educational level.³

Overall, the results show no clear advantage of knowing an additional Romance/Germanic language.

5.1.2 Meta-language

The statements in section 8 in the questionnaire address primarily the use of other languages in language learning, though statement 8.6 ('I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I'm studying languages') stands out in this respect. The statement addresses the use of meta-language that may aid the learner to conceptualise the structure of the language and to talk about the language in more specific terms. When comparing the mean scores of section 8 between participants with additional languages and those without, the statement on meta-language shows a different tendency than the other statements. Figure 5.3 shows how the mean scores for each of the statements compare assigned by whether participants have an additional language or not. The figure does not separate between educational levels. Scores closer to 1 are lower on the y-axis, and entail a score closer to 'Strongly agree'. The score 2 describes a mean score equal to 'Somewhat agree', and 3 indicate an average score of 'Neither agree nor disagree'. The x-axis displays statements 8.1-8.7 in the language section.

³ Mann-Whitney U test Romance/Germanic and other additional languages and summary of language section: 8th grade: p -value .604 ($p > .05$), 10th grade: p -value .180 ($p > .05$), Vg2: p -value .764 ($p > .05$).

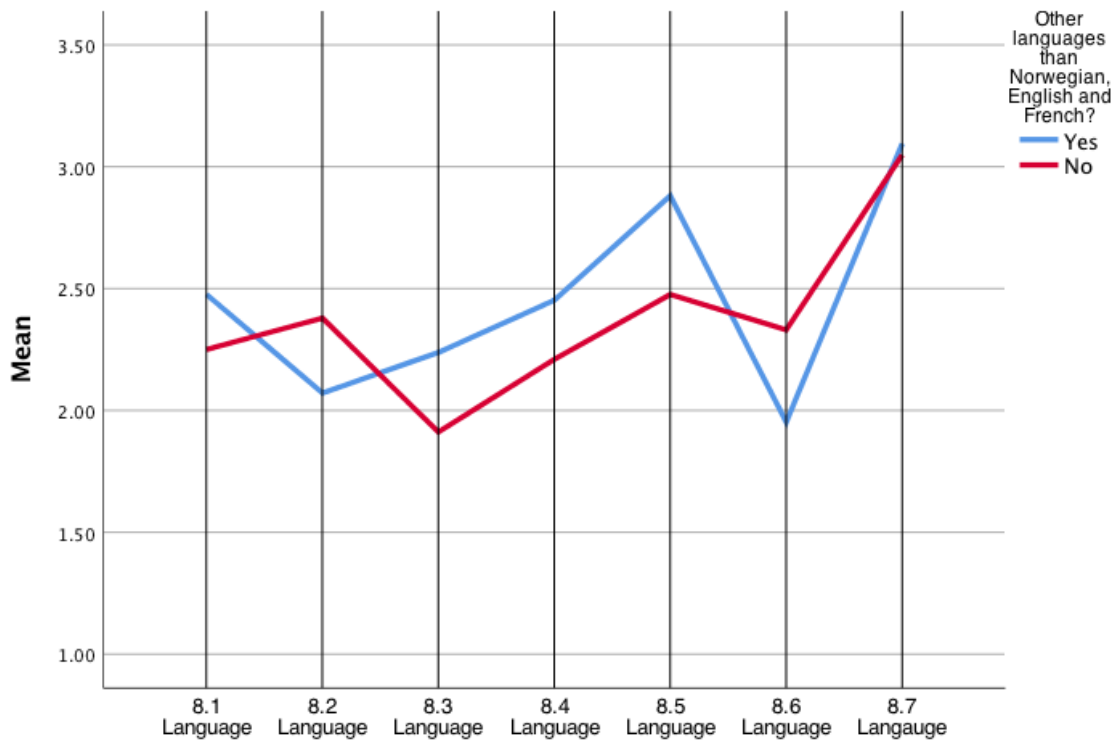


Figure 5.3: Participants with or without additional languages – language section

Figure 5.3 shows that those with an additional language have a higher mean score for almost all the statements except statement 8.2 on perceiving their languages as very different and 8.6 on the use of meta-language. This suggests that those with additional languages find it more useful to focus on meta-language. The difference between the two groups is not significant for any of the statements.⁴

The preference for meta-language among those with additional languages is seen at all educational levels, in 8th grade the mean score of those with additional languages = 1.78, those without = 1.97, in 10th grade the mean score of those with additional languages = 2.00, those without = 2.46 and in Vg2 the mean score of those with additional languages = 2.13, those without = 2.56. An interesting observation is, however, that when comparing these three educational levels, it is the youngest learners who find it most useful to use meta-language, whereas there is less agreement about this in 10th grade and Vg2. This appears to refute some of the groundings for Hypothesis 2 on the amount of time of language contact and language awareness, but

⁴ Mann-Whitney U test participants with or without additional languages – language section: 8.1: p -value .671 ($p > .05$), 8.2: p -value .270 ($p > .05$), 8.3: p -value .213 ($p > .05$), 8.4: p -value .489 ($p > .05$), 8.5: p -value .201 ($p > .05$), 8.6: p -value .324 ($p > .05$), 8.7: p -value .806 ($p > .05$).

this is investigated more closely when the second hypothesis is addressed below. The low scores in 8th grade between 1 and 2 indicate that the average response to the statement on meta-language is between ‘Strongly agree’ and ‘Somewhat agree’. The average scores for 10th grade and Vg2 are from ‘Somewhat agree’ towards ‘Neither agree nor disagree’.

It is also interesting to see if there is a difference between participants with an additional language to Norwegian, English and French from related language families and those without with regards to statement 8.6 (‘I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I’m studying languages’). Table 5.7 shows the mean scores for statement 8.6 by language families for those with additional languages assigned by educational level.

Table 5.7: Romance/Germanic additional languages and statement 8.6 on meta-language by educational level

		Romance/Germanic language family?	N	Mean	Std. Deviation
8th grade	8.6 Language	Yes	6	2.17	.753
		No	3	1.00	.000
10th grade	8.6 Language	Yes	3	2.00	.000
		No	1	2.00	.
Vg2	8.6 Language	Yes	3	1.67	.577
		No	5	2.40	.894

Table 5.7 shows that in 8th grade participants with a non-Germanic/Romance language all strongly agree with the statement on the use of meta-language as their average score equals 1. Those with a Germanic/Romance language have a significantly higher mean score. When a calculation of the relation between these two groups is conducted with the Mann-Whitney U test, the difference is shown to be significant where the p -value is .038 ($p < .05$). In 10th grade, all the participants with additional languages answered to somewhat agree with the statement so no variation can be seen between the two groups.⁵ In Vg2, those with Germanic/Romance languages agree notably more with the statement compared to those with non-Germanic/Romance languages. There is, however, not a significant difference as the p -value is .207 ($p > .05$). Consequently, the reverse tendency is seen in Vg2 compared to 8th grade. The higher preference for the use of meta-language among those with

⁵ This is also seen in the Mann-Whitney U test of significance where the p -value is 1.000 ($p > .05$).

non-Germanic/Romance languages in 8th grade is not seen at Vg2 as those with Germanic/Romance languages agree more with the statement than those with non-Germanic/Romance languages at Vg2. Drawing a clear line of whether additional related languages are more beneficial in building meta-language is therefore difficult based on the findings.

Returning briefly to Figure 5.3 of the mean scores for each of the statements in section 8, it is interesting to note that the most agreement (by any group) is given to the statement 8.3 (mean score = 1.91) on noticing similarities between languages. As discussed in chapter 5, statement 8.3 sought to investigate if participants perceived language resemblance without necessarily actively engaging with the similarity to compare different languages. The findings here suggest that the participants do see points of resemblance between their languages, which imply that there is ample opportunity to draw on student's perception of their languages in language instruction to build language awareness.

The statement that receives the least agreement in section 8, as shown in Figure 5.3, is 8.7 on using L3 French to improve L1/L2 ($L3 \rightarrow L1/L2$) that has a mean score above 3 (that corresponds to 'Neither agree nor disagree') for both groups. The statement 8.4 on $L1/L2 \rightarrow L2/L3$ and statement 8.5 on $L2 \text{ English} \rightarrow L3 \text{ French}$ both receives mean scores more in accordance with the assertion, with scores between 2 and 2.5. The difference between the responses to these statements implies that the transfer of language knowledge is more likely to occur in the relation $L1/L2 \rightarrow L2/L3$ than $L3 \rightarrow L1/L2$.

5.1.3 Amount of time learning an additional language

The learners with additional languages have not, thus far, shown an advantage of the additional language, apart for the preference for meta-language. Can the period the learners have learnt the additional language have an effect on the influence the additional language has on the language learning process? Those participants who have only learnt the additional language for a short period may not have reached a threshold level for the language to have a positive effect on the learners' language awareness. This section explores whether participants who have learnt an additional language for an extended period of time display greater language awareness. Table 5.8 shows the amount of time the participants with additional languages report to have been learning the additional language.

Table 5.8: *Duration of additional language learning*

Time of learning in years	Number of participants
.20	1
.40	1
1.00	2
1.30	1
4.00	1
5.00	2
9.00	1
13.00	3
13.90	2
14.20	1
15.00	1
17.00	4
18.00	1
Total	21

As can be seen, the amount of time a participant with an additional language reports to have been learning the additional language varies quite substantially. Five participants have learnt an additional language for less than two years. To explore if the participants with more extended experience of learning an additional language show greater language awareness, the five participants who have learnt an additional language for shorter than two years are excluded from the group of participants with additional languages.

Two levels are set to whether the amount of time has a noticeable effect on the way the participant replies to the statements. These are: learning an additional language for two years or more, and for ten years or more. Firstly, to test the possible threshold-level at two years or more, the participants with additional languages that have learnt a language for two years are grouped and compared to the rest of the participants. Secondly, to test whether the participants who have learnt an additional language for more than ten years show a higher level of language awareness, these are grouped and compared to the rest of the participants. The group of participants with additional languages for ten years or more consists of the participants that either have another L1 than Norwegian or who are bilingual from an early age. 10th grade, which only has four participants in the group with additional languages, is not included in the following discussion as there are only two participants who report to have learnt an additional language for more than two years, and one for more than ten years. These numbers are deemed too low to be used for comparison. Consequently, only

8th grade and Vg2 are investigated more closely in this section. Table 5.9 presents the mean scores for 8th grade and Vg2, whereas, Figure 5.4 displays the distribution of replies for 8th grade and Figure 5.5 shows the distribution for Vg2. The figures present the mean score from 1 ‘Strongly agree’ to 5 ‘Strongly disagree’ on the x-axis. The y-axis describes the number of participants for the distribution on the x-axis.

Table 5.9: Additional language 2 years+ for 8th grade/Vg2 and summary of language section

		Additional language more than 2 years?	N	Mean	Std. Deviation
8th grade	8.1 + 8.3-8.7 Summary Language	Yes	7	2.33	.828
		No	21	2.40	.802
Vg2	8.1 + 8.3-8.7 Summary Language	Yes	7	2.36	.485
		No	21	2.32	.910

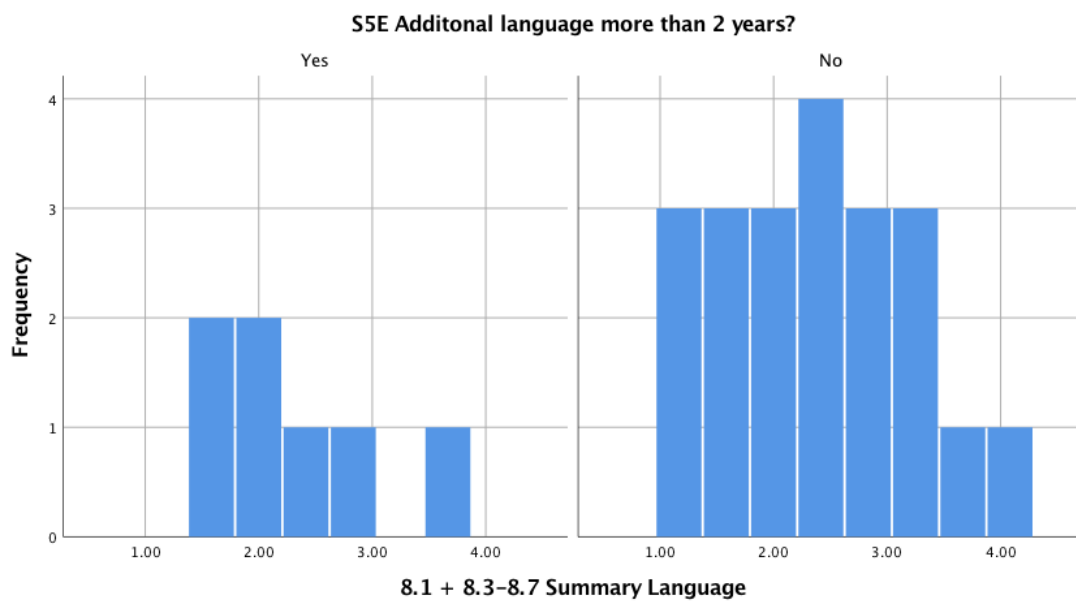


Figure 5.4: Distribution of mean scores for summary language section for participants with additional language for two years or more and those without – 8th grade

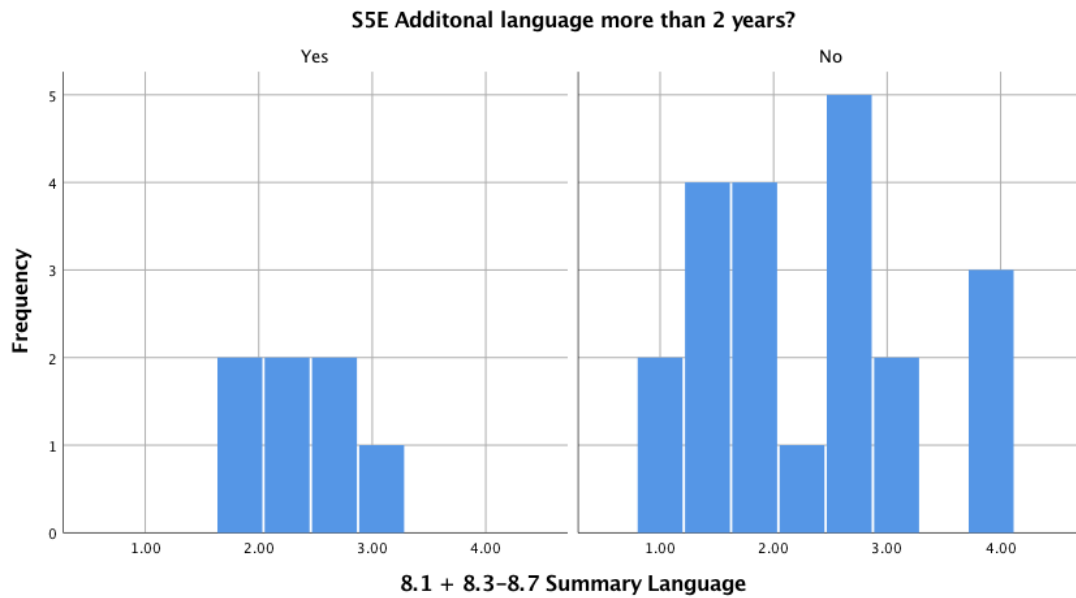


Figure 5.5: Distribution of mean scores for summary language section for participants with additional language for two years or more and those without – Vg2

The 8th grade participants who have learnt an additional language for two years or more have a slightly lower mean score than those who have not, indicating that their replies are marginally more in accordance with the statements. In Vg2, the same comparison shows that those who have learnt an additional language for two years or more have a slightly higher mean score than those who have not, indicating less agreement with the statements. The distributions demonstrate that the participants with additional languages are more gathered, while, those without additional languages are more spread out, showing more agreement as well as more disagreement. Nevertheless, in general, no apparent sign is seen in the findings of a clear benefit of the additional language with regards to language awareness.

The results thus far have not demonstrated a clear benefit of the additional language to Norwegian, English and French. To investigate if a difference is seen for those who have learnt another language than Norwegian, English and French for an extended period of time, those who report to have learnt an additional language for ten years or more are compared to the rest of the participants. Table 5.10 and figures 5.6 and 5.7 show whether there is a difference between those who have learnt a language for more than ten years.

Table 5.10: Additional language 10 years+ for 8th grade/Vg2 and summary of language section

		Additional language more than 10 years?	N	Mean	Std. Deviation
8th grade	8.1 + 8.3-8.7 Summary Language	Yes	5	2.17	.565
		No	23	2.43	.838
Vg2	8.1 + 8.3-8.7 Summary Language	Yes	6	2.39	.524
		No	22	2.31	.889

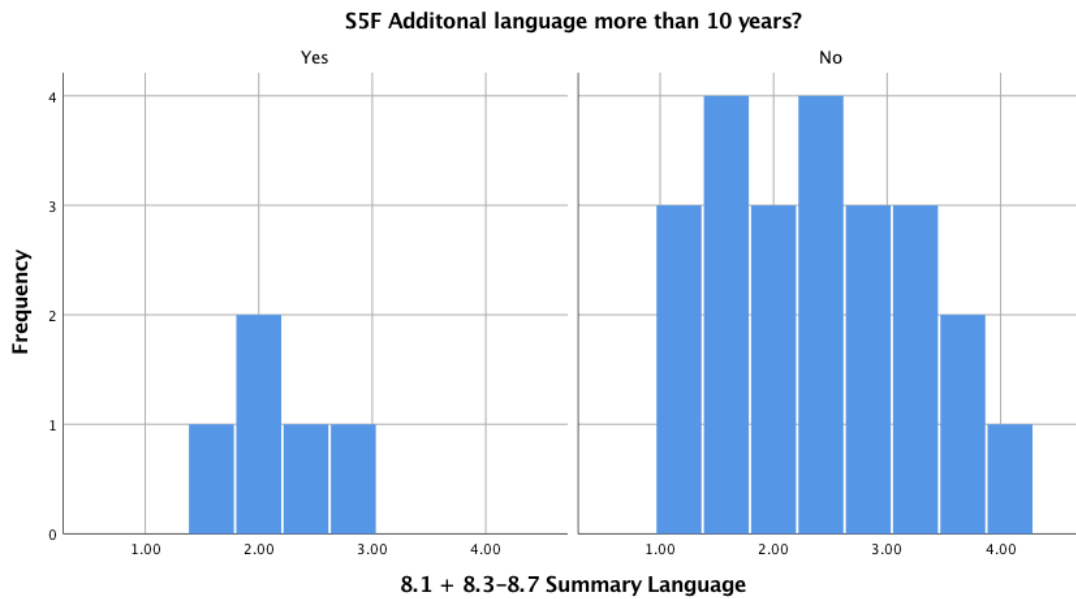


Figure 5.6: Distribution of mean scores for summary language section for participants with additional language for ten years or more and those without – 8th grade

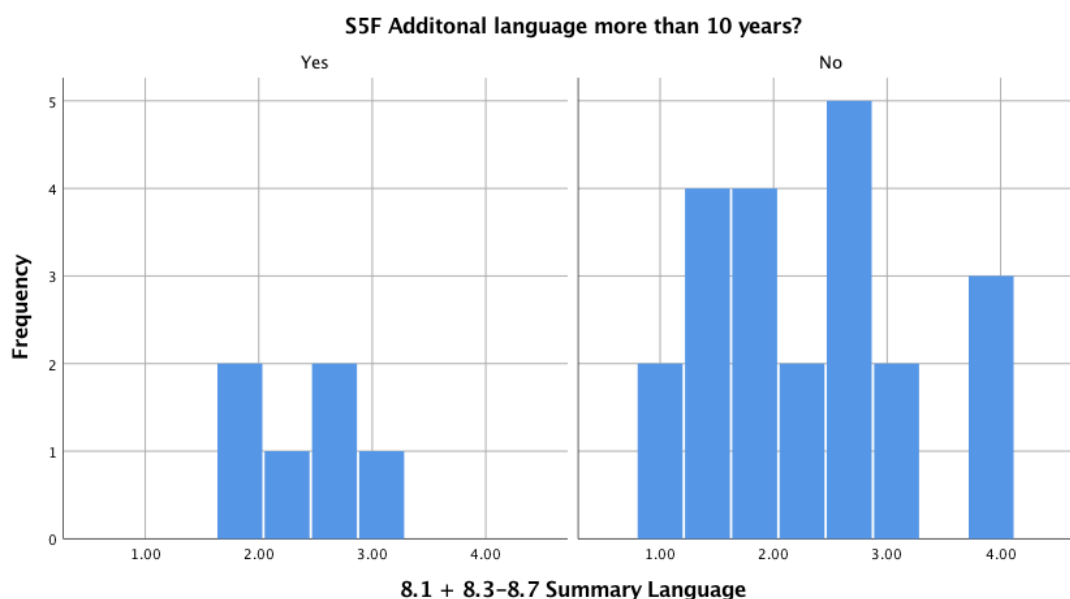


Figure 5.7: Distribution of mean scores for summary language section for participants with additional language for ten years or more and those without – Vg2

Having learnt an additional language for more than ten years shows a positive effect in replies to section 8 for participants in 8th grade compared to the rest, though this effect is not seen at Vg2. The difference between the two groups have increased for 8th grade participants compared to when testing for additional languages for two years or more, while, at Vg2 no significant change is seen.

In general, no apparent benefit for having learnt an additional level for an extended period can be interpreted from the mean scores for the summary of section 8 in the questionnaire. Neither for those who have learnt it for two years or more nor who have learnt it for ten years or more. A positive change is observed in relation to those who have learnt an additional language for a short period of time, for less than two years. Nonetheless, no explicit benefit is seen for the groups both in 8th grade and at Vg2 with additional languages in comparison to those who only know Norwegian, English and French. As a consequence, a threshold level is hard to establish.

The summary scores reveal little about how the participants answered in each of the statements for section 8. To explore the individual statements can, therefore, be useful to see if these are unison across the board, or if much variation is seen for the responses to the different statements. First, the comparison is made between those who have learnt an additional language for two years or more and the other

participants. This is shown in Figure 5.8 for 8th grade and Figure 5.9 for Vg2. Low scores closer to 1 on the y-axis in the figures describe a mean score closer to ‘Strongly agree’. The score 2 represents ‘Somewhat agree’, and 3 ‘Neither agree nor disagree’.

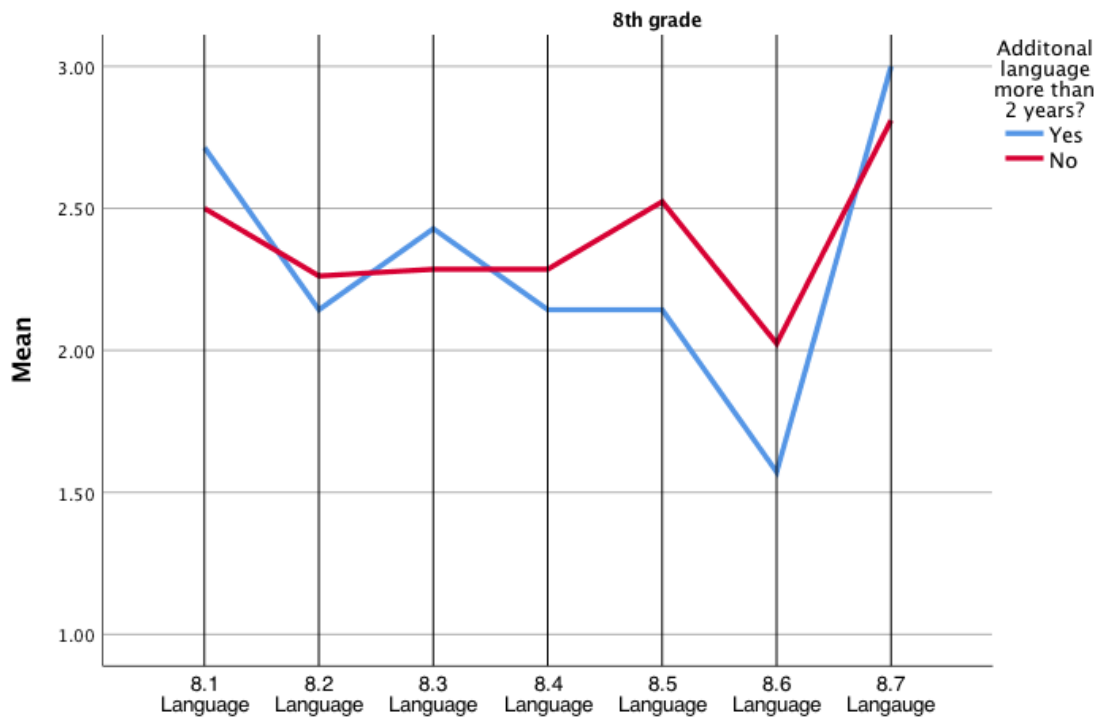


Figure 5.8: Participants with and without additional languages for two years or more and language section – 8th grade

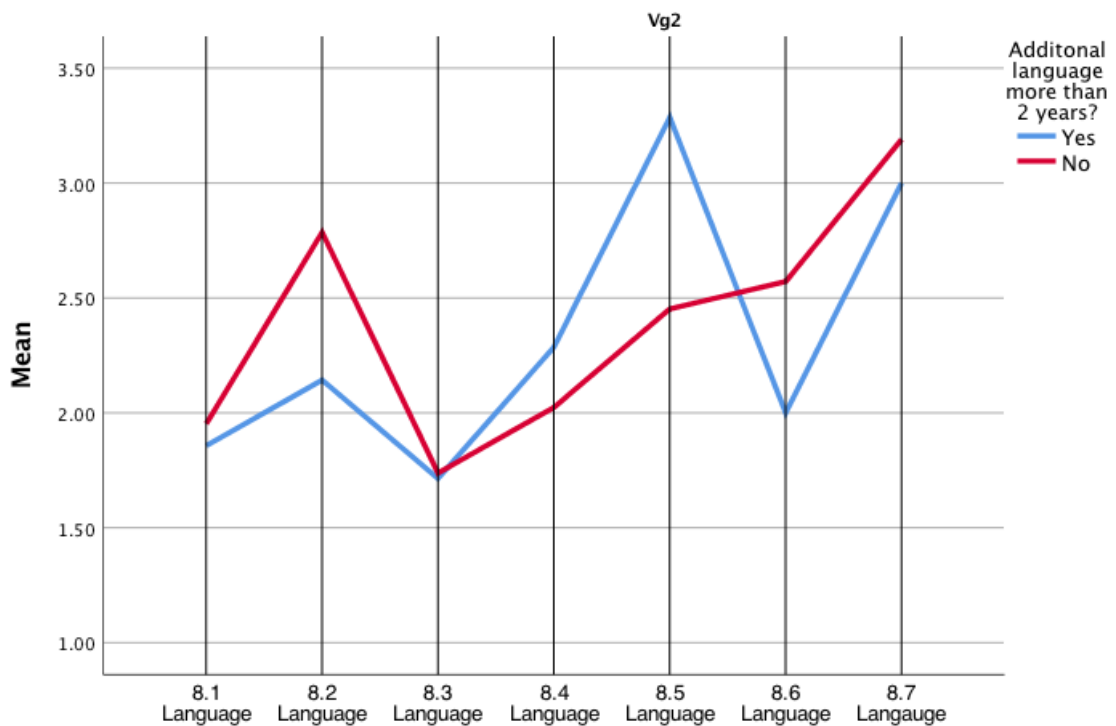


Figure 5.9: Participants with and without additional languages for two years or more and language section – Vg2

The 8th grade participants with additional languages for more than two years answer more in agreement with statements 8.2, 8.4, 8.5 and 8.6, whereas the Vg2 participants with additional languages for more than two years answer more in agreement with statement 8.1, 8.2, 8.3, 8.6 and 8.7. The differences are not always very marked, but it is interesting to see that only two statements feature in both groups, 8.2 and 8.6, whereas, they differ on the other statements.

Statement 8.2, which is not included in the summary score for the section, inquires whether the participants perceive their known languages as very different from each other. That those with additional languages score more in accordance with this statement can be because those with additional languages have more languages to consider and are therefore more likely to perceive one or more of their languages as different from the rest.

Statement 8.6 on meta-language has been addressed above, and it is not surprising that this also is marked out here as a tendency has already been shown for

the preference for meta-language among participants with other languages than Norwegian, English and French.

The 8th grade participants with additional languages for two years or more appear to compare their languages less (statement 8.1) and see fewer similarities between their languages (statement 8.3) compared to their other classmates. For Vg2 participants, both groups respond to these statements fairly evenly. The 8th grade participants with additional languages do, however, answer to see more possibility for transfer from L1/L2 → L2/L3 (statement 8.4) and from L2 English → L3 French (statement 8.5) than their classmates. For Vg2 participants, the same statements show surprising results. The participants in Vg2 with additional languages for two years or more respond somewhat less in agreement to statement 8.4 (L1/L2 → L2/L3), and much less in agreement for statement 8.5 ('My experience of learning English makes it easier to learn French'), where the mean score is 3.29, a mean score between 'Neither agree nor disagree' and 'Somewhat disagree'. This is surprising as in theory English provides fruitful ground for transfer to French, a potential that one would suppose to be more evident after having studied French alongside English for 4.5 years compared to 8th graders who only have studied French for half a year.

A test of significance between the participants with additional languages for two years or more and those without within the educational levels 8th grade and Vg2 show no significant difference between the two groups for any of the statements.⁶

The figures 5.10 and 5.11 presents the comparison between students with additional languages to Norwegian, English and French for ten years or more compared to the other participants for 8th grade and Vg2.

⁶ Mann-Whitney U test Additional language 2 years or more – 8th grade: 8.1: *p*-value .932 (*p* > .05), 8.2: *p*-value .843 (*p* > .05), 8.3: *p*-value .934 (*p* > .05), 8.4: *p*-value .565 (*p* > .05), 8.5: *p*-value .373 (*p* > .05), 8.6: *p*-value .381 (*p* > .05), 8.7: *p*-value .543 (*p* > .05).
Mann-Whitney U test Additional language 2 years or more – Vg2: 8.1: *p*-value .688 (*p* > .05), 8.2: *p*-value .188 (*p* > .05), 8.3: *p*-value .885 (*p* > .05), 8.4: *p*-value .615 (*p* > .05), 8.5: *p*-value .209 (*p* > .05), 8.6: *p*-value .335 (*p* > .05), 8.7: *p*-value .644 (*p* > .05).

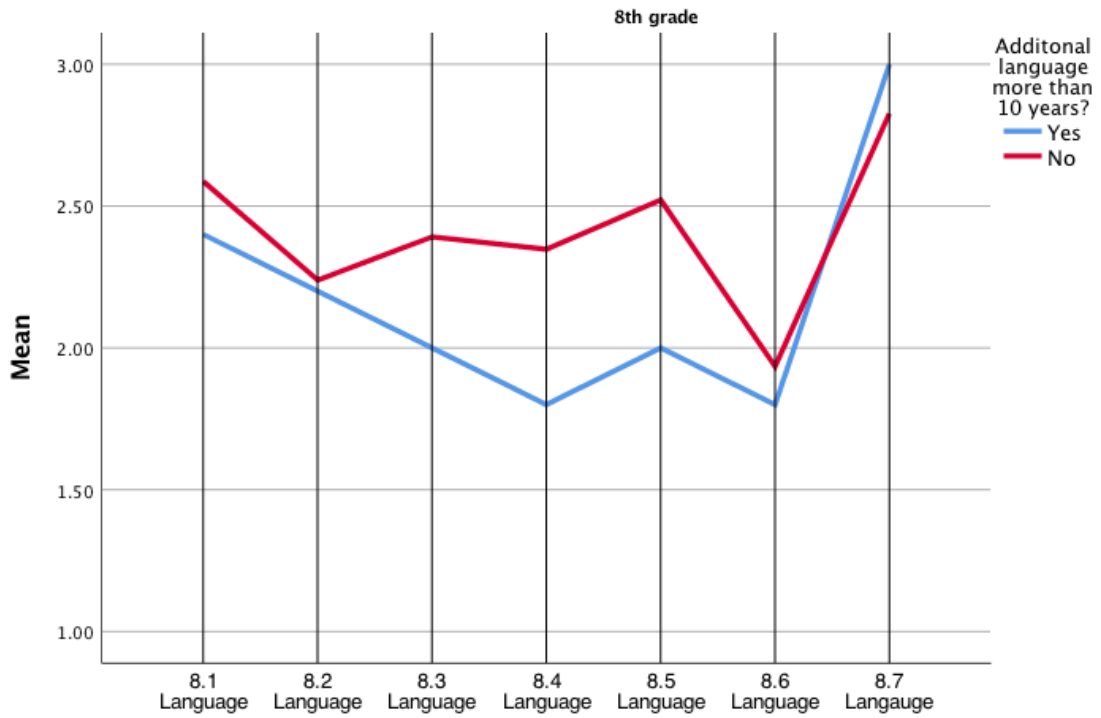


Figure 5.10: Participants with and without additional languages for ten years or more and language section – 8th grade

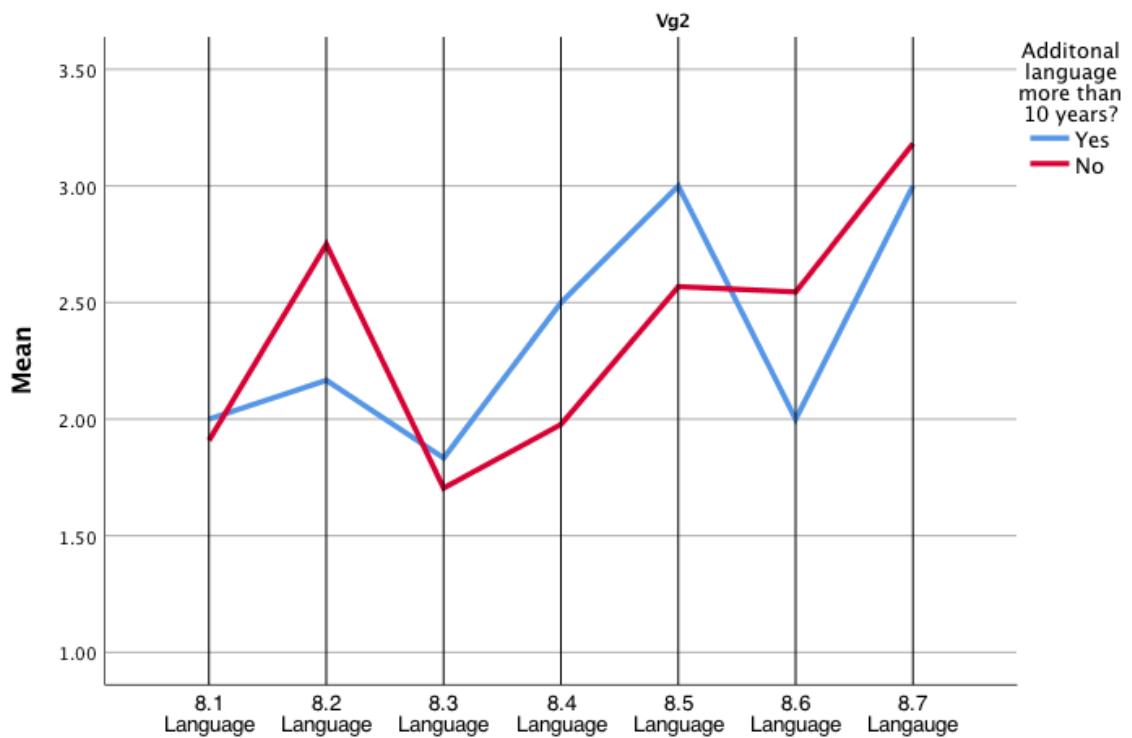


Figure 5.11: Participants with and without additional languages for ten years or more and language section – Vg2

When studying the responses for the participants who have learnt an additional language for more than ten years, it is clear that 8th grade and Vg2 contrast even more than when examining the participants who have learnt an additional language for more than two years. Compared to their fellow students, the 8th grade participants who have learnt an additional language for more than ten years agree more with all the statements apart from statement 8.7 on the use of L3 knowledge in L1/L2 learning. The Vg2 participants with additional languages for more than ten years agree more only with statement 8.2, 8.6 and 8.7. A test of significance between the participants with additional languages for ten years or more and those without within the educational levels 8th grade and Vg2 indicate no significant difference between the two groups for any of the statements.⁷

Overall, the differences in responses to the individual statements when comparing participants who have learnt an additional language to Norwegian, English and French for more than two or ten years in 8th grade and Vg2 makes it difficult to draw definite conclusions. 8th graders with additional languages, particularly for ten years or more, appear to show an advantage in language awareness compared to their classmates, but this tendency is not seen at Vg2. The only statement that shows the same trend for both groups is the preference for the use of meta-language. This pattern suggest that the preference for meta-language is independent from the other statements assigned to language awareness and that the number of acquired languages has a positive influence on considering the way in which languages are structured.

5.1.4 Additional language and learning strategies


Thus far, only section 8 on language has been addressed when comparing those students who have learnt an additional language and those who have not. When assessing language awareness, it is however also important to analyse strategy use. This is in accordance with Kemp (2007: 243) who found that the more languages a multilingual learns, the way in which they use learning strategies changes. Kemp mentions an increase in number, frequency, complexity, appropriateness and grammatical attention when addressing the use of learning strategies. The

⁷ Mann-Whitney U test: additional language 10 years or more – 8th grade: 8.1: *p*-value .678 (*p* > .05), 8.2: *p*-value .873 (*p* > .05), 8.3: *p*-value .534 (*p* > .05), 8.4: *p*-value .403 (*p* > .05), 8.5: *p*-value .270 (*p* > .05), 8.6: *p*-value .974 (*p* > .05), 8.7: *p*-value .574 (*p* > .05).

Mann-Whitney U test: additional language 10 years or more – Vg2: 8.1: *p*-value .904 (*p* > .05), 8.2: *p*-value .271 (*p* > .05), 8.3: *p*-value .522 (*p* > .05), 8.4: *p*-value .316 (*p* > .05), 8.5: *p*-value .489 (*p* > .05), 8.6: *p*-value .383 (*p* > .05), 8.7: *p*-value .667 (*p* > .05).

questionnaire used in this study is not designed to account for all these elements, yet some insight into varying use of learning strategies can be found in the data. For reference, the learning strategies section of the questionnaire is added below. This excludes question 9.6 on accounting for additional learning strategies not stated in the questionnaire. Some participants have answered question 9.6, yet the answers were highly varying where some responses could not be directly seen as learning strategies separate from those stated in the questionnaire. An analysis of responses to question 9.6 could give further insights into how the participants use learning strategies, but due to space concerns, this exploration will not be carried out in this thesis.

Table 5.11: Section 9 on learning strategies of the questionnaire

Læringsstrategier / Learning strategies					
Læringsstrategier er fremgangsmåter for å organisere egen læring. Med læringsstrategier strukturerer du måten du jobber på for å lære mer effektivt / <i>Learning strategies are ways of organising own learning. By using learning strategies you can work more structured and learn more efficiently</i>					
Sett kryss i boksen du er mest enig med / <i>Tick the box you agree the most with</i>					
					
Enig – uenig / Agree - disagree	Svært enig / strongly agree	Nokså enig / somewhat agree	hverken eller / neither agree nor disagree	Nokså uenig / somewhat disagree	Svært uenig/ strongly disagree
Påstand / Statement					
9.1 Jeg benytter meg av lesestrategier som jeg har lært i et språk, også i andre språk / <i>I use reading strategies that I have learnt in one language, also in other languages</i>					
9.2 Hvis jeg leser et ord jeg ikke vet hva betyr så prøver jeg å se om det ligner på et ord jeg kan på et annet språk / <i>If I come across a word that I don't understand, I try to compare it to a word I know in a different language</i>					
9.3 Jeg ser etter gramatiske mønstre i språket jeg lærer / <i>I look for grammatical patterns in the language I'm learning</i>					
9.4 Hvis jeg leser et ord jeg ikke gjenkjenner så slår jeg det opp i en ordbok eller på nettet / <i>If I encounter a word that I don't recognize, I look it up in a dictionary or online</i>					
9.5 Jeg prøver å forstå hva en setning betyr selv om jeg ikke forstår alle ordene i setningen / <i>I try to work out what a sentence means even though I don't recognise the meaning of all the words in the sentence</i>					

The following three figures show the mean scores for each statement in the learning strategies section of the questionnaire by educational level for those with additional languages and those without.

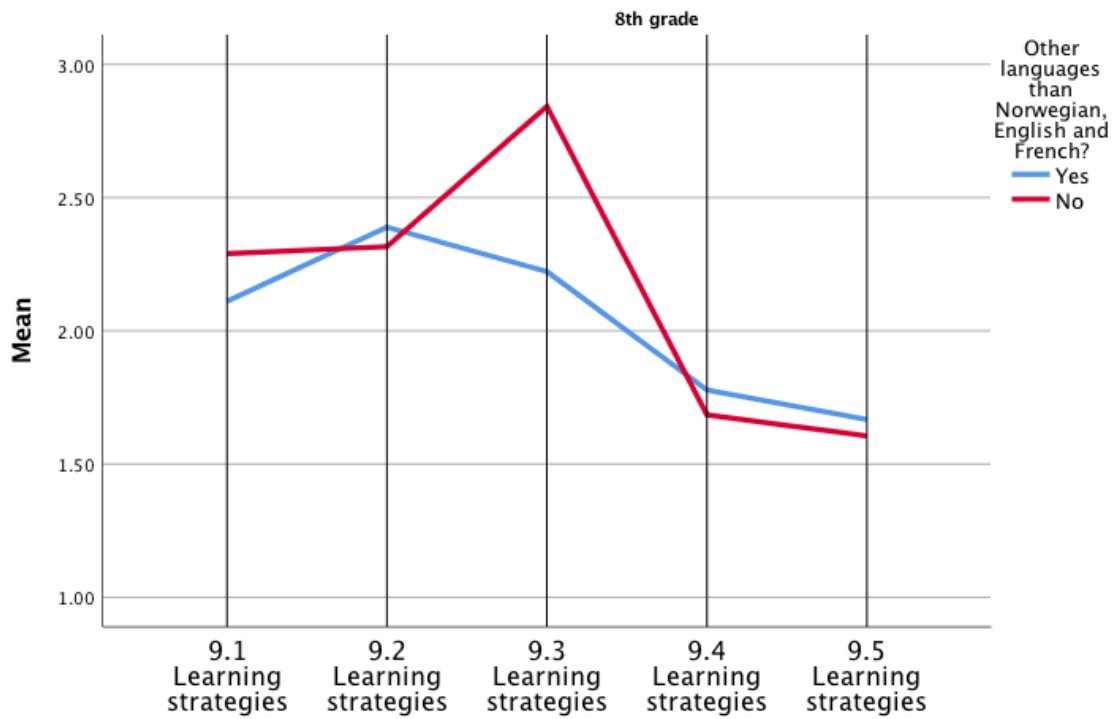


Figure 5.12: Participants with and without additional languages and learning strategies section – 8th grade

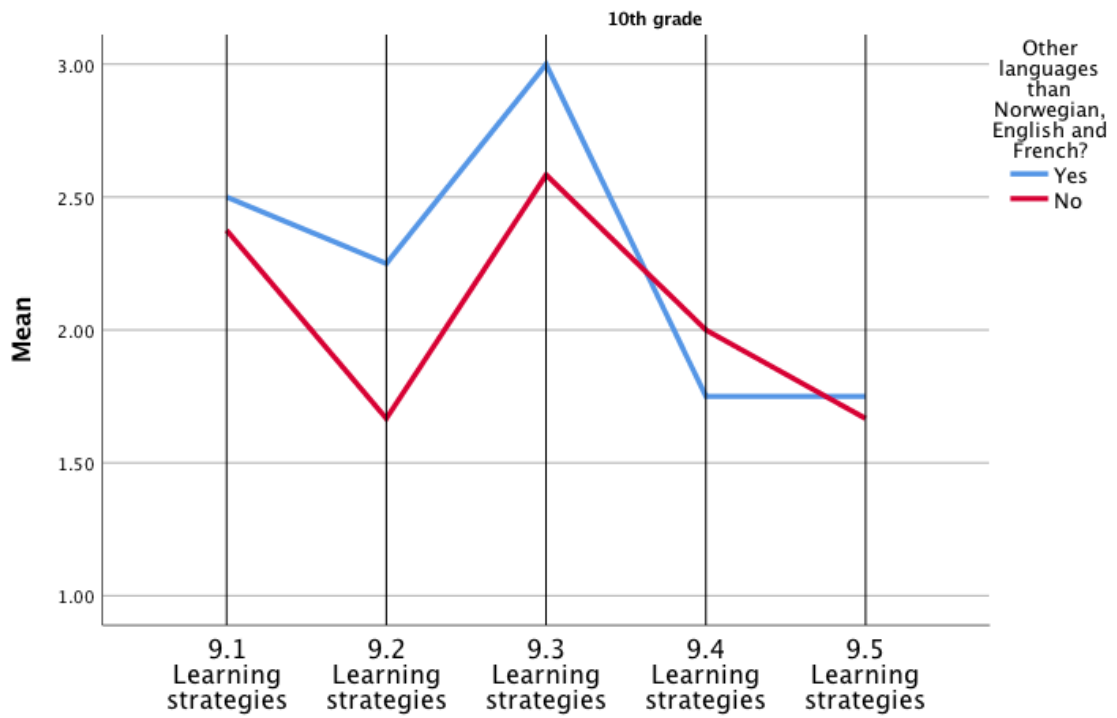


Figure 5.13: Participants with and without additional languages and learning strategies section – 10th grade

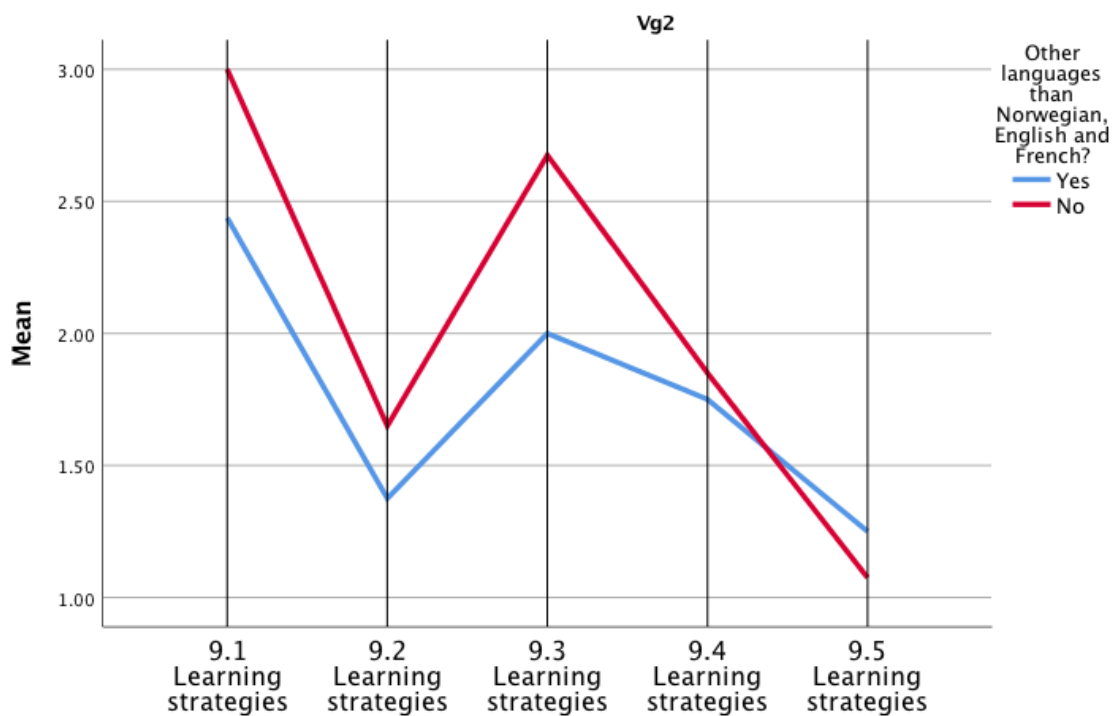


Figure 5.14: Participants with and without additional languages and learning strategies section – Vg2

Comparing these figures, we see quite substantial differences. The lower values signal a closer mean to ‘Strongly agree’ with the value 1. It is only those with additional languages at Vg2 who show a definite advantage when using learning strategies overall, where they agree more to four of the five statements. At 8th grade, those with additional languages only agree more to two of the five statements, and at 10th grade they only agree more to one of the statements.

Statement 9.3 shows the most considerable difference between the compared groups for 8th grade and Vg2. At these two educational levels, participants with additional languages answer to agree more with the statement than those without additional languages. This is not the case for 10th grade where the opposite tendency is seen. Statement 9.3 (‘I look for grammatical patterns in the language I’m learning’) is similar to that of the statement 8.6 on meta-language in the language section, and the tendency seen earlier with the preference among those with additional languages for meta-language is thus also seen when addressing learning strategies. This is however not the case for the 10th grade where those with additional languages agree less to statement 9.3.

Further comparisons between the different educational levels and learning strategies are explored when addressing Hypothesis 2 below. When testing the two groups at each educational level for significant differences in the use of learning strategies using the Mann-Whitney U test, no significant differences are found.⁸

5.1.5 Summary of findings for Hypothesis 1

To sum up the findings on the first hypothesis, participants who have learnt additional languages appear not to agree more with the statements on language compared to those without additional languages. The exploration of a possible threshold level for the time participants had learnt additional languages, and the sum of the section on language observed some positive tendencies for 8th grade participants, but not for Vg2 participants, making it difficult to detect a clear advantage of knowing another language in addition to Norwegian, English and French. The exception for this is, however, that participants with additional languages show a higher preference for the

⁸ Mann-Whitney U test: 8th grade: 9.1: p -value .718 ($p > .05$), 9.2: p -value .918 ($p > .05$), 9.3: p -value .289 ($p > .05$), 9.4: p -value .507 ($p > .05$), 9.5: p -value .892 ($p > .05$).
10th grade: 9.1: p -value .596 ($p > .05$), 9.2: p -value .185 ($p > .05$), 9.3: p -value .456 ($p > .05$), 9.4: p -value .889 ($p > .05$), 9.5: p -value .680 ($p > .05$).
Vg2: 9.1: p -value .233 ($p > .05$), 9.2: p -value .410 ($p > .05$), 9.3: p -value .187 ($p > .05$), 9.4: p -value .785 ($p > .05$), 9.5: p -value .277 ($p > .05$).

use of meta-language at all educational levels, though agreement is particularly strong at 8th grade. The preference for meta-language for those with additional languages can also be seen at 8th grade and Vg2 when examining the use of learning strategies. To know related languages appears to have a positive effect on language awareness in 8th grade and 10th grade, but not at Vg2. Participants with additional languages at Vg2 appear to use learning strategies more actively than those without additional languages. This tendency, however, cannot be observed at lower educational levels. An explicit support for Hypothesis 1 is thus difficult to detect in the findings.

5.2 Hypothesis 2: Amount of time of language contact and language awareness

The participants with longer experience of studying three or more languages show more language awareness.

To investigate this hypothesis several areas are examined: the summary scores for the language section, individual statements in the language section and the use of learning strategies.

5.2.1 Language

First, the mean scores for the summary of the language section are calculated, as with the exploration of the first hypothesis. If the hypothesis is supported by the data collected, a higher agreement rate should be seen in accordance with the number of years the participants have studied three or more languages. Table 5.12 displays the summary of the language section by educational level.

Table 5.12: Summary of language section by educational level

		N	Mean	Std. Deviation	Std. Error Mean
8th grade	8.1 + 8.3-8.7 Summary Language	28	2.39	.794	.150
10th grade	8.1 + 8.3-8.7 Summary Language	28	2.52	.774	.146
Vg2	8.1 + 8.3-8.7 Summary Language	28	2.33	.816	.154

Table 5.12 shows that students at 10th grade have the highest mean score, which implies that least agreement for the summary of the language section statements is found in 10th grade. 8th grade follows and Vg2 has the lowest score, which indicates the highest level of agreement. There is, however, not a very substantial difference

between 8th grade and Vg2. Nor is there a linear development where the duration of language contact appears to have a significant effect on language awareness. This makes a clear benefit for having learnt languages for longer hard to identify. The Mann-Whitney U test reveals that there are no significant differences between the summary scores for any of the educational levels.⁹

In the previous section, the perceived usefulness of meta-language by the participants in statement 8.6, assigned by additional languages or not, exposed more agreement to the statement at lower educational levels compared to higher. Without the distinction of additional languages, the mean score for statement 8.6 for 8th grade is 1.91, 10th grade is 2.39, and Vg2 is 2.43. According to the hypothesis of the amount of time of language contact and language awareness, there should be more agreement over time to the use of meta-language as a display of language awareness, not less. Thus, neither with specific attention to metalinguistic awareness through the use of meta-language is the second hypothesis supported by the findings. A test of significance shows no significant differences between the educational levels with regards to statement 8.6 on the use of meta-language.¹⁰

Marked differences are, nonetheless, seen between the educational levels when observing each statement in the language section. Figure 5.15 displays this distribution.

⁹ A Mann-Whitney U test can only test two groups against each other.

8th grade ↔ 10th grade: p -value .588 ($p > .05$)

8th grade ↔ Vg2: p -value .831 ($p > .05$)

10th grade ↔ Vg2: p -value .345 ($p > .05$)

¹⁰ See the following footnote.

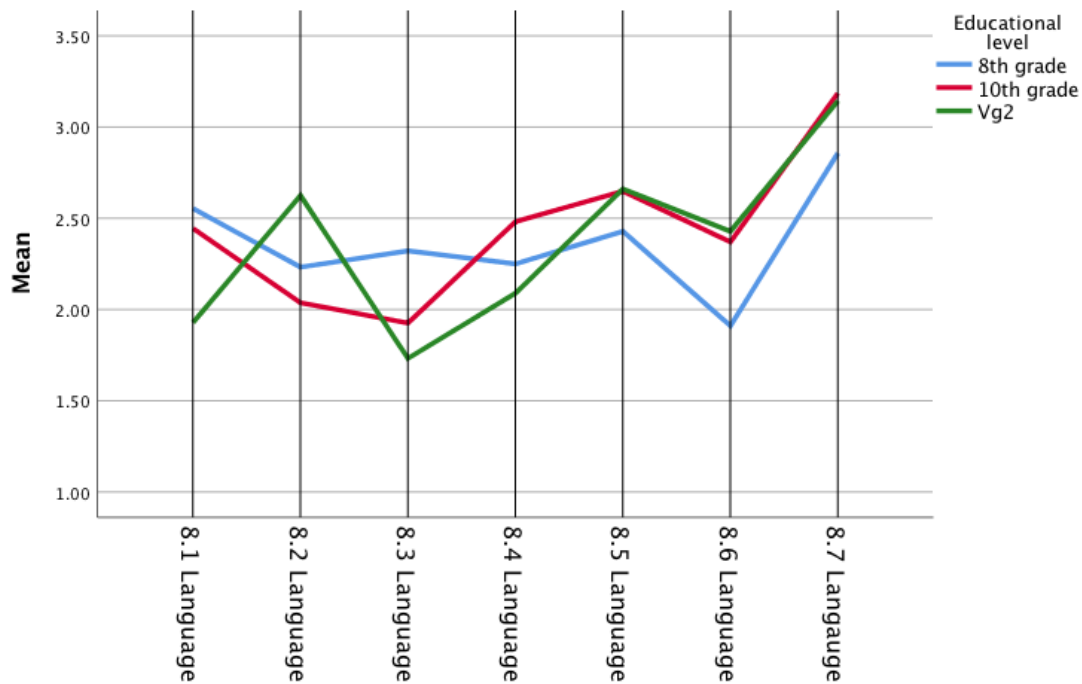


Figure 5.15: Language section and educational level

In figure 5.15, the first three statements are of particular interest. Vg2 participants answer to agree more than the other two educational levels to statement 8.1 on comparing different languages, and statement 8.3 on seeing similarities between different languages. Vg2 participants also answer less in agreement with statement 8.2 on perceiving their languages as very different. All these answers suggest that Vg2 participants show more signs of language awareness when the focus on meta-language is excluded. The Mann-Whitney U test comparing 8th grade and Vg2 reveals that there is a significant difference between the two educational levels for statement 8.1 (p -value: .008 ($p < .05$)) and statement 8.3 (p -value: .037 ($p < .05$)).¹¹

Statement 8.7 on using language knowledge gained from learning French to improve understanding of other known languages is the statement that all educational levels agree the least with. Agreement is somewhat higher for statement 8.4 on using

¹¹ Mann-Whitney U tests of section 8 on language:
 8th grade ↔ 10th grade: 8.1 p -value: .471 ($p > .05$), 8.2 p -value: .449 ($p > .05$), 8.3 p -value: .202 ($p > .05$), 8.4 p -value: .226 ($p > .05$), 8.5 p -value: .698 ($p > .05$), 8.6 p -value: .065 ($p > .05$), 8.7 p -value: .183 ($p > .05$).
 8th grade ↔ Vg2: 8.1 p -value: .008 ($p < .05$), 8.2 p -value: .161 ($p > .05$), 8.3 p -value: .037 ($p < .05$), 8.4 p -value: .523 ($p > .05$), 8.5 p -value: .852 ($p > .05$), 8.6 p -value: .090 ($p > .05$), 8.7 p -value: .362 ($p > .05$).
 10th grade ↔ Vg2: 8.1 p -value: .195 ($p > .05$), 8.2 p -value: .062 ($p > .05$), 8.3 p -value: .413 ($p > .05$), 8.4 p -value: .105 ($p > .05$), 8.5 p -value: .980 ($p > .05$), 8.6 p -value: .925 ($p > .05$), 8.7 p -value: .839 ($p > .05$).

prior language knowledge when learning a new language and statement 8.5 on using knowledge of English when learning French. These results suggest that transfer is more readily perceived from L1/L2 → L3, than from L3 → L1/L2.

5.2.2 Learning strategies

Another avenue to explore when investigating language awareness by educational level is the use of learning strategies. Figure 5.16 portrays how the participants answered for each of the Likert scale statements in the learning strategies section of the questionnaire.

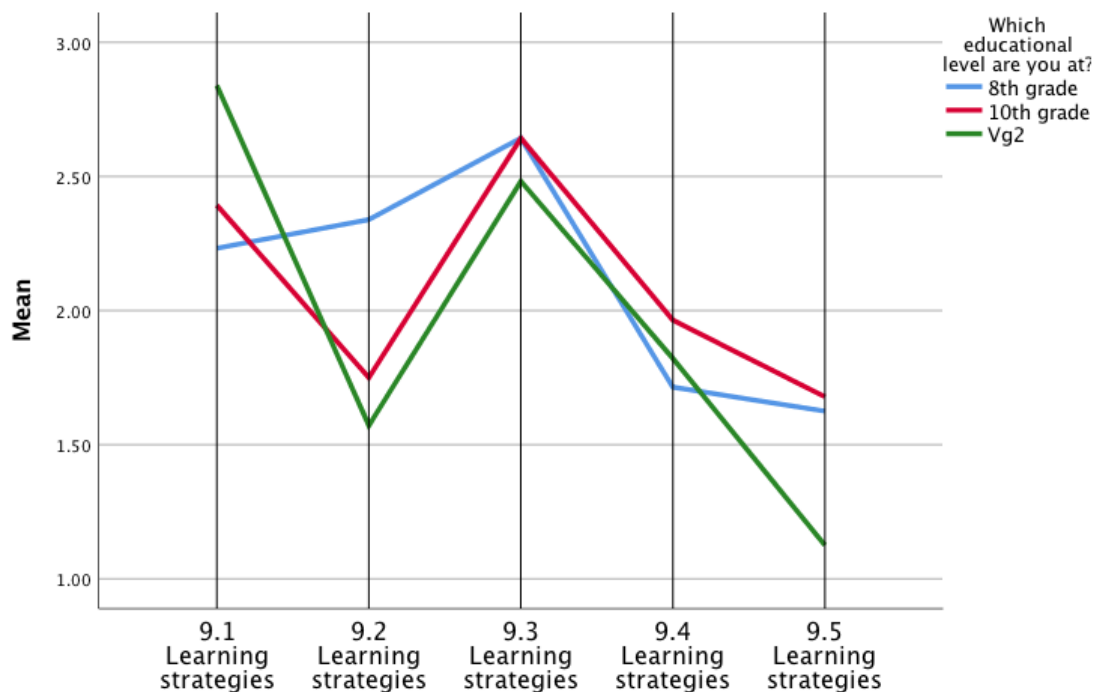


Figure 5.16: Learning strategies and educational level

In Figure 5.16, statements 9.1, 9.2 and 9.5 display the greatest difference between the educational levels. In statement 9.1 on use of reading strategies, Vg2 participants agree less with the statement compared to 8th grade and 10th grade participants. In statement 9.2 on comparing words in different languages, 8th grade participants agree less with the statement. In statement 9.5 on sentence comprehension, the mean score for all Vg2 participants is almost 1, suggesting that almost all strongly agree with the statement. Testing these differences by use of the Mann-Whitney U test indicates that

the differences between the educational levels are significant for statements 9.2 and 9.5. For statement 9.2, 8th grade agree significantly less with 10th grade (p -value .037 ($p < .05$)) as well as Vg2 (p -value .007 ($p < .05$ and $p < .01$)). For statement 9.5, Vg2 agree significantly more than 8th grade (p -value .006 ($p < .05$ and $p < .01$)) as well as 10th grade (p -value .019 ($p < .05$)).¹²

An interesting observation is that statement 9.3 on looking for grammatical patterns generally is the statement the participants agree the least with. Comparing the scores for statements 9.2 and 9.3, there appears to be a general preference by the participants, especially at higher educational levels, to compare vocabulary more than syntactical structures. This is in line with Hufeisen & Marx's observation that the lexicon is the most apparent transfer base for multilingual learners (2007: 315), discussed in section 2.2.3.

Due to the different answers for each of the statements, there is not a great difference in the summary mean scores for the learning strategies section, as seen in Table 5.13 below. There is, however, a trend that displays an increase in agreement for higher educational levels, as is not seen as clearly with the language section above.

Table 5.13: Summary of learning strategies by educational level

		N	Mean	Std. Deviation	Std. Error Mean
8th grade	9.1-9.5 Summary Learning Strategies	28	2.11	.791	.149
10th grade	9.1-9.5 Summary Learning Strategies	28	2.09	.636	.120
Vg2	9.1-9.5 Summary Learning Strategies	28	1.97	.575	.109


¹²Mann-Whitney U tests of section 9 on learning strategies:
 8th grade ↔ 10th grade: 9.1: p -value .514 ($p > .05$), 9.2: p -value .037 ($p < .05$), 9.3: p -value .953 ($p > .05$), 9.4: p -value .252 ($p > .05$), 9.5: p -value .818 ($p > .05$).
 8th grade ↔ Vg2: 9.1: p -value .061 ($p > .05$), 9.2: p -value .007 ($p < .05$), 9.3: p -value .698 ($p > .05$), 9.4: p -value .348 ($p > .05$), 9.5: p -value .006 ($p < .05$).
 10th grade ↔ Vg2: 9.1: p -value .151 ($p > .05$), 9.2: p -value .606 ($p > .05$), 9.3: p -value .605 ($p > .05$), 9.4: p -value .714 ($p > .05$), 9.5: p -value .019 ($p < .05$).

In sum, the findings for Hypothesis 2 are mixed. The decrease in agreement for the use of meta-language at higher educational levels and the reasonably even summary mean scores for the language section suggest that there is not an evident increase in language awareness when learners have been learning languages for a more extended period of time. However, other findings reveal that the higher educational levels, especially Vg2, see more similarities and compare languages to a higher degree, as well as use the assessed learning strategies more. A definite result for the hypothesis is therefore difficult to draw from the findings.

5.3 Hypothesis 3: Motivation and language awareness

The participants that report a higher level of motivation for language learning also show a higher level of language awareness.

Table 5.14: Section 6 on motivation of the questionnaire

Motivasjon / Motivation					
Sett kryss i boksen du er mest enig med / Tick the box you agree the most with					
					
Enig – uenig / Agree - disagree					
Påstand / Statement	Svært enig / strongly agree	Nokså enig / somewhat agree	hverken eller / neither agree nor disagree	Nokså uenig / somewhat disagree	Svært uenig/ strongly disagree
6.1 Jeg synes det er gøy å lære et nytt språk / <i>I think it's fun to learn a new language</i>					
6.2 Jeg liker å lese på andre språk enn morsmålet mitt / <i>I like to read in other languages than my mother tongue</i>					
6.3 Jeg tror engelskkunnskapene mine vil være nyttige når jeg er ferdig på skolen / <i>I think my knowledge of English will be useful when I finish school</i>					
6.4 Jeg tror franskkunnskapene mine vil være nyttige når jeg er ferdig på skolen / <i>I think my knowledge of French will be useful when I finish school</i>					
6.5 Jeg ønsker å lære flere språk enn de jeg allerede kan / <i>I would like to learn other languages than those I already know</i>					

To assess this hypothesis, a summary score is calculated for the mean of each participant's response to section 6 of the questionnaire on motivation, as is carried out with the summary score of the section 8 on language. The summary scores for

language and motivation are then correlated using the Spearman’s rank-order correlation that explores the correlation between two summary scores for each participant in the study. Table 5.15 below shows the correlation of the summary scores for the motivation and language section assigned by educational level. Strong correlations are marked with one asterisk indicating a significant correlation at the .05 level of significance. Very strong correlations at the .01 level of significance are marked with two asterisks.

Table 5.15: *Correlation of summary of language section and summary of motivation section by educational level*

			8.1 + 8.3-8.7 Summary Language	6.1-6.5 Summary Motivation
8th grade	8.1 + 8.3-8.7 Summary Language	Correlation Coefficient	1.000	.763**
		Sig. (2-tailed)	.	.000
		N	28	28
	6.1-6.5 Summary Motivation	Correlation Coefficient	.763**	1.000
		Sig. (2-tailed)	.000	.
		N	28	28
10th grade	8.1 + 8.3-8.7 Summary Language	Correlation Coefficient	1.000	.553**
		Sig. (2-tailed)	.	.002
		N	28	28
	6.1-6.5 Summary Motivation	Correlation Coefficient	.553**	1.000
		Sig. (2-tailed)	.002	.
		N	28	28
Vg2	8.1 + 8.3-8.7 Summary Language	Correlation Coefficient	1.000	.427*
		Sig. (2-tailed)	.	.023
		N	28	28
	6.1-6.5 Summary Motivation	Correlation Coefficient	.427*	1.00
		Sig. (2-tailed)	.023	.
		N	28	28

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

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

Table 5.15 reveals that there is a significant correlation between the section on motivation and language at all educational levels. The correlation is strongest in 8th grade (p -value = .000 ($p > .01$), and weakest in Vg2 (p -value = .023 ($p > .05$)). 8th grade and 10th grade are both significant at the .01 level, whereas Vg2 is significant at the .05 level.

The sections on motivation and language correlate significantly when the summary scores are tested, however; the individual statements may not all correlate to the same degree. Therefore, it is interesting to see how the different statements in the

motivation and the language section correlate with each other. Table 5.16 displays this distribution when participants are not assigned by educational level.

Table 5.16: Correlation language section and motivation section

		8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
6.1 Motivation	Correlation Coefficient	.228*	.055	.321**	.368**	.281**	.568**	.285**
	Sig. (2-tailed)	.037	.619	.003	.001	.010	.000	.009
	N	84	84	83	84	84	84	84
6.2 Motivation	Correlation Coefficient	.271*	.021	.298**	.447**	.252*	.367**	.425**
	Sig. (2-tailed)	.014	.852	.007	.000	.023	.001	.000
	N	82	82	81	82	82	82	82
6.3 Motivation	Correlation Coefficient	.127	-.064	.148	.079	.094	.199	.000
	Sig. (2-tailed)	.251	.568	.183	.476	.398	.071	.998
	N	83	83	82	83	83	83	83
6.4 Motivation	Correlation Coefficient	.171	.029	.250*	.349**	.345**	.457**	.304**
	Sig. (2-tailed)	.122	.795	.023	.001	.001	.000	.005
	N	83	83	82	83	83	83	83
6.5 Motivation	Correlation Coefficient	.208	-.021	.176	.271*	.242*	.320**	.232*
	Sig. (2-tailed)	.057	.848	.111	.013	.026	.003	.034
	N	84	84	83	84	84	84	84

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

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

Table 5.16 shows that, although the summary scores of each section on motivation and language have a significant correlation, the individual statements are not necessarily in correspondence.

Statement 6.3 regarding the perceived usefulness of English after ended education shares no significant correlations with any of the statements in the language section. This is most likely because the mean of all the participants for this statement is 1.1084, depicting a very high agreement regardless of the other statements, meaning more or less all the participants perceive English to be useful for them in the future. As those that have responded to strongly agree with the statement 6.3 often have responded less in agreement with the other statements in the questionnaire, few correlations are found.

Statement 6.4 regarding perceived usefulness of French, on the other hand, has a significant correlation at the 0.01 level with four of the statements in the language section: using knowledge learnt from other languages when learning a new language (8.4), perceiving the experience of learning English to aid the acquisition of French (8.5), use of meta-language (8.6) and using knowledge from French to aid the understanding of other known languages (8.7). It also has a significant correlation at the 0.05 level with statement 8.3 on perceiving similarities between languages. See Figure 5.17 below for the difference between respondents' motivation for English and French.

Statements 6.1 regarding finding it fun to learn a new language and statement 6.2 on enjoying reading in other languages are the two statements that share the most significant correlations with the language section at either the .01 or the .05 level of significance; the only exception is statement 8.2 on finding languages very different. The most robust correlations are overall found for statement 6.1 on finding language learning fun, which suggests that enjoying to learn languages is a crucial factor for gaining language awareness.

Interestingly, statement 6.5 on the wish to learn other languages has a robust correlation with statement 8.6 on meta-language at the .01 level, which may suggest that the use of meta-language encourages learning more languages. This indicates the same tendency as seen in Hypothesis 1 where those with additional languages have a higher preference for using meta-language. Learning languages appears to relate to understanding languages as a system. The use of meta-language makes it easier to get a rudimentary understanding of a new language, which can make it less daunting to embark on learning another language. Those who have learnt more than three languages, or who have gained high competence in their three languages, are likely to have experienced the possibility of applying meta-language in their conceptualisation of their known languages, and may, therefore, more easily see the ability to transfer this knowledge to yet another language. Statement 6.5 also correlates with statements 8.4, 8.5 and 8.7 at the .05 level of significant correlation.

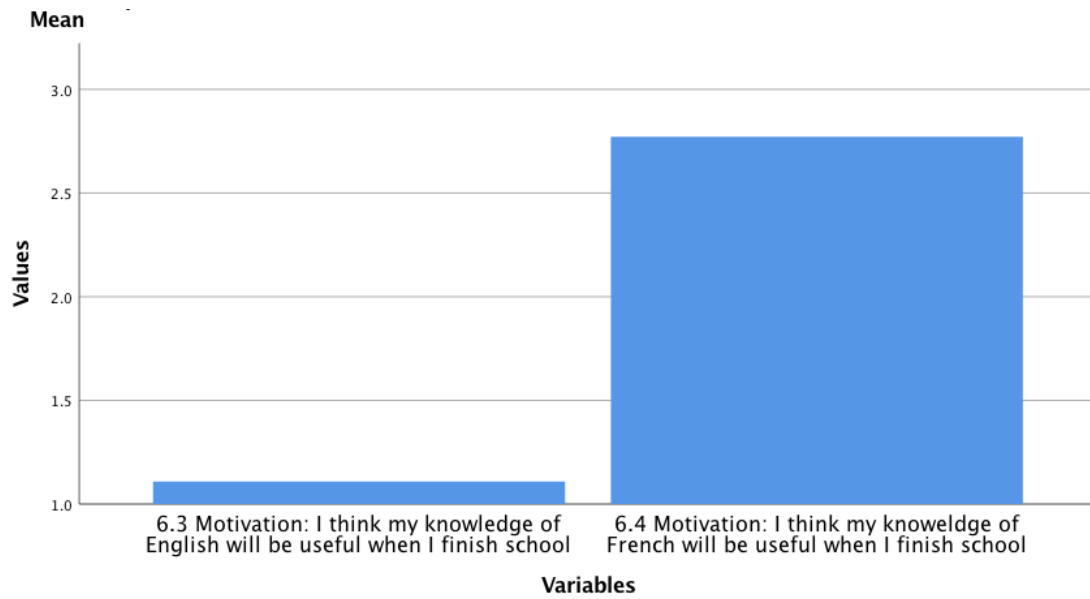


Figure 5.17: Motivation for learning English compared to French

The motivation for language learning, in general, appears to decrease over time. Figure 5.18 below shows the mean scores for the summary of the motivation section in the questionnaire by educational level. The lower the bar diagrams are, the closer the mean score is to the value 1, which is ‘Strongly agree’.

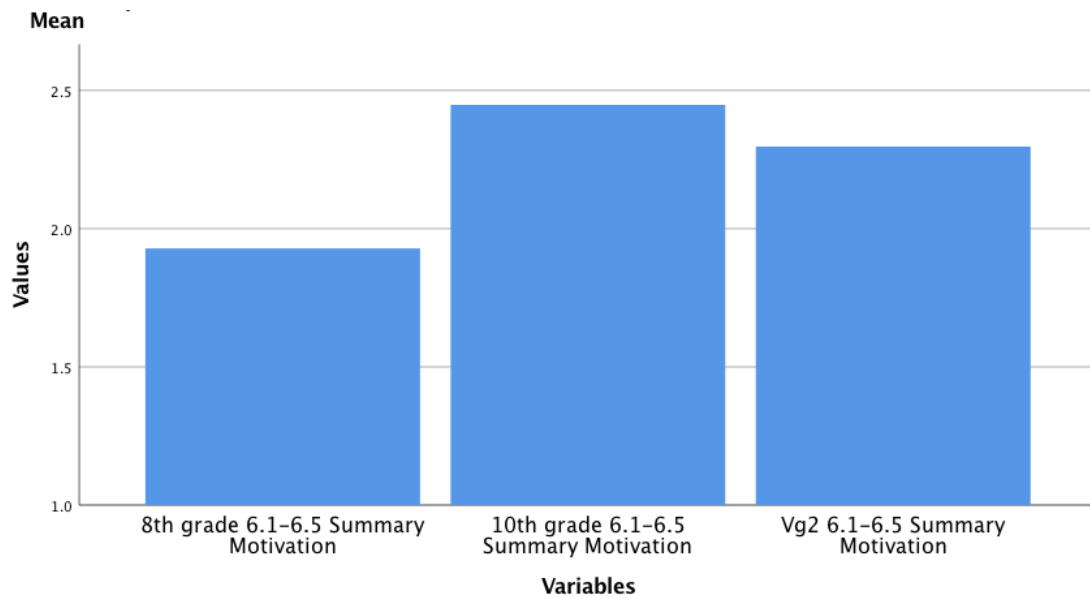


Figure 5.18: Summary of section 6 on motivation by educational level

The figure shows that the most motivated participants are found in 8th grade, yet the least motivated are in 10th grade. Vg2 students who have actively chosen to pursue general studies may be more motivated for precisely this reason.

It is also interesting to investigate the other sections of the questionnaire related to both motivation and language, notably learning strategies and language contact. Table 5.17 below presents the calculations of the correlations between these four summary sections for all participants as a group.

Table 5.17: Correlation of summary sections motivation, language contact, language and learning strategies

		6.1-6.5 Summary Motivation	7.1-7.4 Summary Language contact	8.1 + 8.3- 8.7 Summary Language	9.1-9.5 Summary Learning Strategies
6.1-6.5 Summary Motivation	Correlation Coefficient	1.000	.373**	.570**	.513**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	84	84	84	84
7.1-7.4 Summary Language contact	Correlation Coefficient	.373**	1.000	.295**	.389**
	Sig. (2-tailed)	0.000		0.007	0.000
	N	84	84	84	84
8.1 + 8.3-8.7 Summary Language	Correlation Coefficient	.570**	.295**	1.000	.553**
	Sig. (2-tailed)	0.000	0.007		0.000
	N	84	84	84	84
9.1-9.5 Summary Learning Strategies	Correlation Coefficient	.513**	.389**	.553**	1.000
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	84	84	84	84

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

As Table 5.17 shows, there is a very high correlation (at the .01 level) between the summary scores of sections 6, 7, 8 & 9 suggesting that motivation, exposure, language awareness and the use of learning strategies are interconnected in the language learning process.

Hypothesis 3, overall, is firmly supported by the findings. There is a strong correlation to support the relationship between motivation and language awareness.

Motivation for learning French appears to correspond with statements on language awareness, whereas, the same is not found for the motivation for learning English. The use of learning strategies and exposure to English and French are also seen as interrelated learning processes.

5.4 Other findings

This section presents findings that are of interest, even though they are not directly related to my hypotheses.

5.4.1 Gender

The questionnaire requests the participants to specify their gender. This allows for an inquiry into whether there is a noticeable difference by gender in the data set. The first figure, Figure 5.19, displays the mean scores for the total participant group assigned by gender.

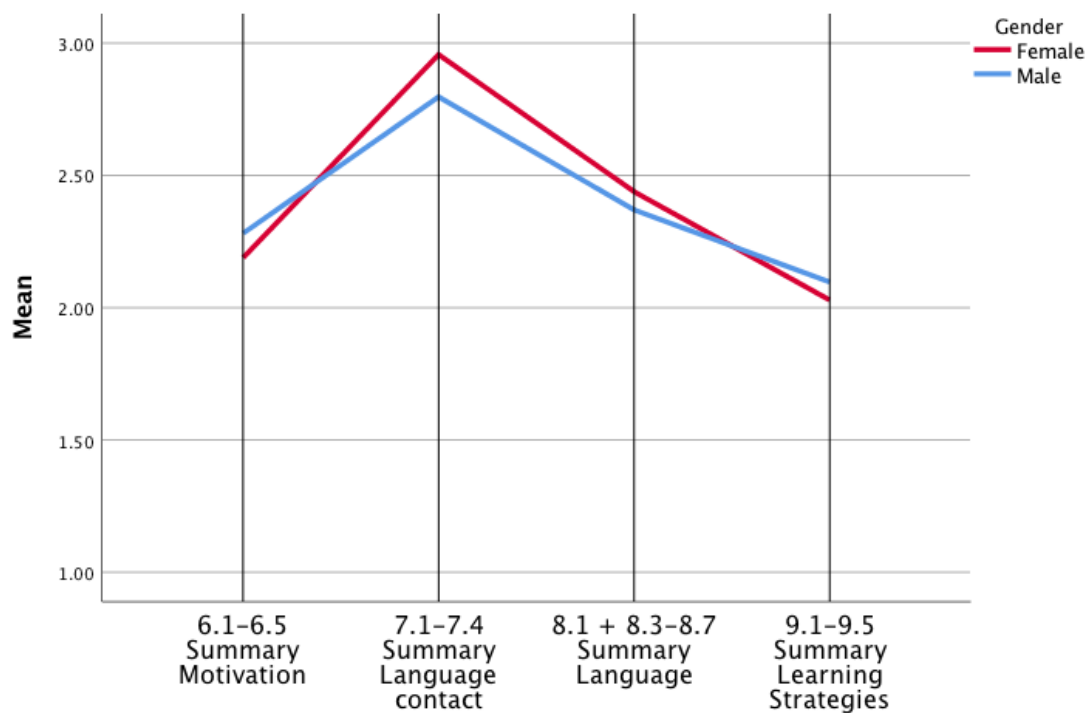


Figure 5.19: Summary of sections 6, 7, 8 & 9 by gender

There is little difference between the mean scores of the total participants assigned by gender. And, a significant difference is not seen by gender when comparing the two

groups with the Mann-Whitney U test.¹³ The female participants report slightly higher agreement with regards to motivation and the use of learning strategies. In contrast, the male participants report marginally higher agreement in the language section and the language contact section. It is, however, interesting to observe how the same comparison is distributed when the summary scores are given at each educational level. Figures 5.20–5.22 show this distribution.

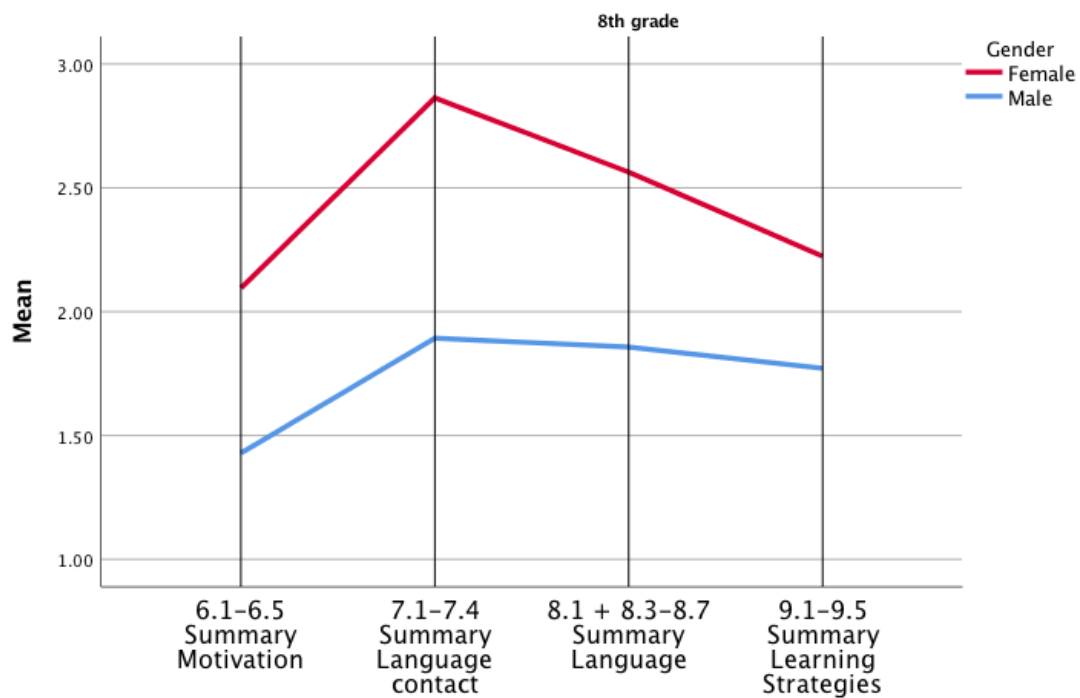


Figure 5.20: Summary of sections 6, 7, 8 & 9 by gender – 8th grade

¹³ Summary language: p -value .675 ($p > .05$), Summary motivation: p -value .675 ($p > .05$), Summary language contact: p -value .675 ($p > .05$), Summary learning strategies: p -value .675 ($p > .05$).

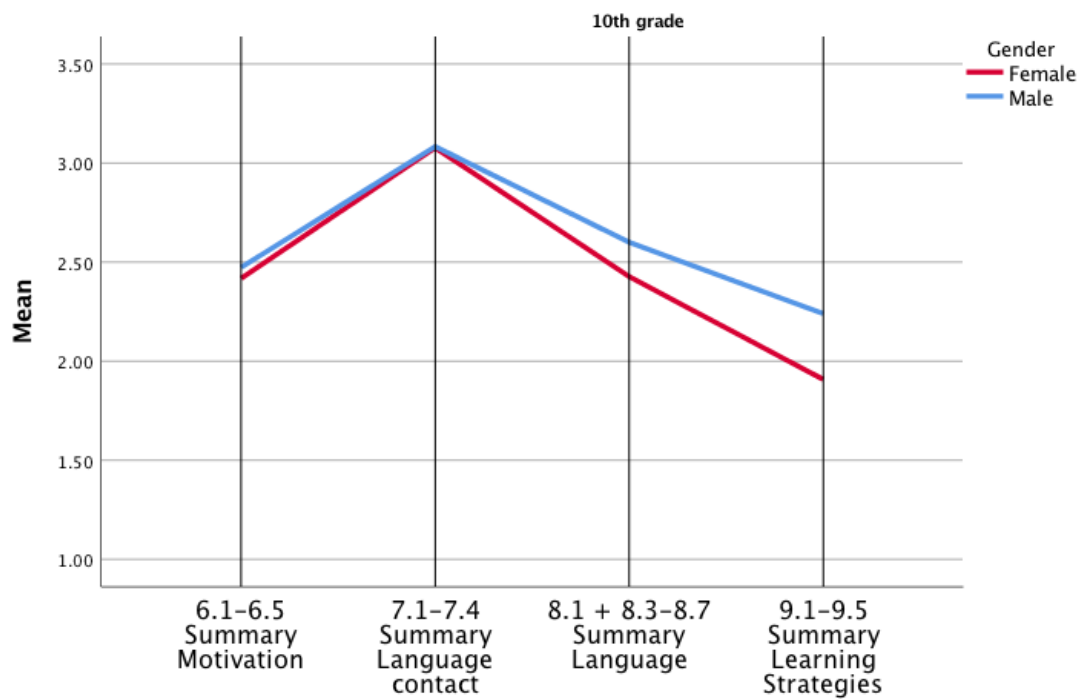


Figure 5.21: Summary of sections 6, 7, 8 & 9 by gender – 10th grade

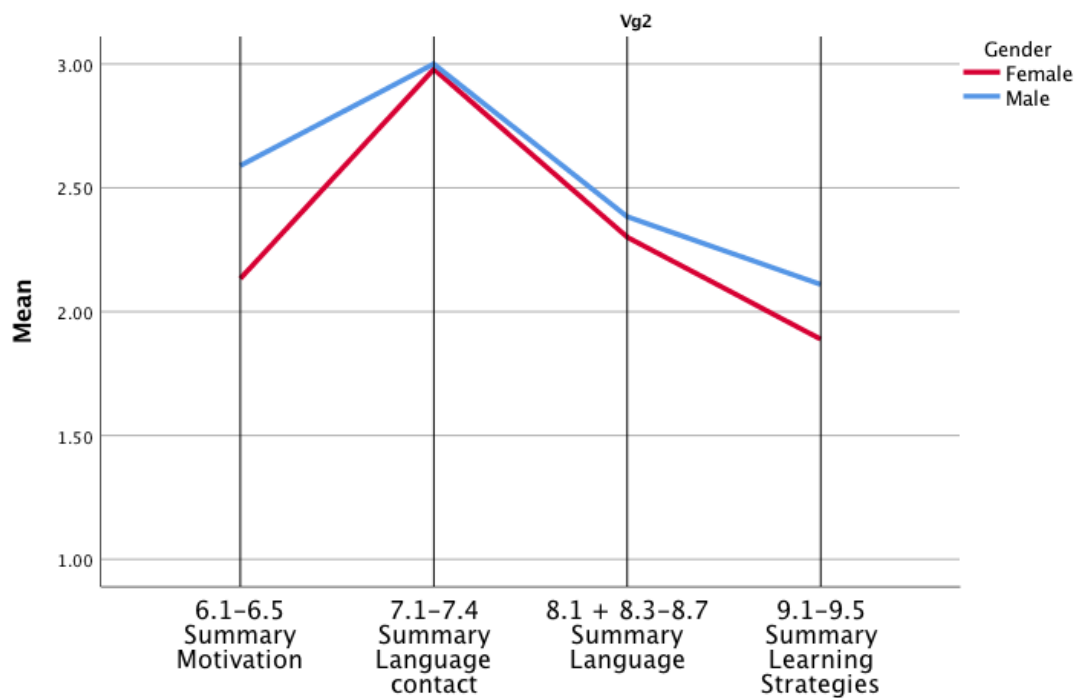


Figure 5.22: Summary of sections 6, 7, 8 & 9 by gender – Vg2

Whereas Figure 5.19 of the total number of participants reveals little difference by gender, Figures 5.20 – 5.22 show much more variation at the different educational levels. In 8th grade, male participants report notably lower mean scores compared to the female participants for all the summary categories. All the scores for the male participants average between ‘Strongly agree’ and ‘Somewhat agree’, while, all the scores for the female participants in 8th grade are between ‘Somewhat agree’ and ‘Neither agree nor disagree’. The same tendency is not present at 10th grade where the summary mean scores between the two groups are more even, though the female participants have a slightly lower mean score for all the summary sections and report to use more learning strategies than the male participants. At Vg2, it is again the female participants that report lower mean scores for all the summary sections. The highest difference between female and male participants is here seen between the use of learning strategies and the motivation for language learning, whereas language contact and language is reasonably even between male and female respondents.

A Mann-Whitney U test for significant differences between male and female participants at each educational level discloses that there is a significant difference between the two groups in 8th grade for all the summary sections at either the .01 or .05 level of significance, whereas, no significant difference is found by gender in 10th grade and Vg2.¹⁴

Overall then, female participants do have a lower mean score at the two highest educational levels, though young male participants have a lower mean score for all the summary categories.

5.4.2 Language comparison in instruction

Thus far, the findings have not investigated how the participants answered in the last section on how frequent languages are compared as part of the instruction. This is, however, also an interesting element to analyse to get an understanding of the way in which the participants perceive the multilingual learning process. The statements for

¹⁴ Mann-Whitney U test scores:

8th grade: Summary motivation: p -value .019 ($p < .05$), Summary language contact: p -value .006 ($p < .01$), Summary language: p -value .031 ($p < .05$), Summary learning strategies: p -value .042 ($p < .05$).
10th grade: Summary motivation: p -value .926 ($p > .05$), Summary language contact: p -value .908 ($p > .05$), Summary language: p -value .595 ($p > .05$), Summary learning strategies: p -value .285 ($p > .05$).
Vg2: Summary motivation: p -value .097 ($p > .05$), Summary language contact: p -value .735 ($p > .05$), Summary language: p -value .700 ($p > .05$), Summary learning strategies: p -value .412 ($p > .05$).

this section does not inquire how much the individual participant compares languages in class, but instead to what extent languages are compared in instruction. The participants themselves have no direct control over the use of several languages in instruction, though their perception may vary of how much it is given attention in class. It is here interesting to see how the different language classes score in relation to each other to get an impression of how often such comparisons are made.

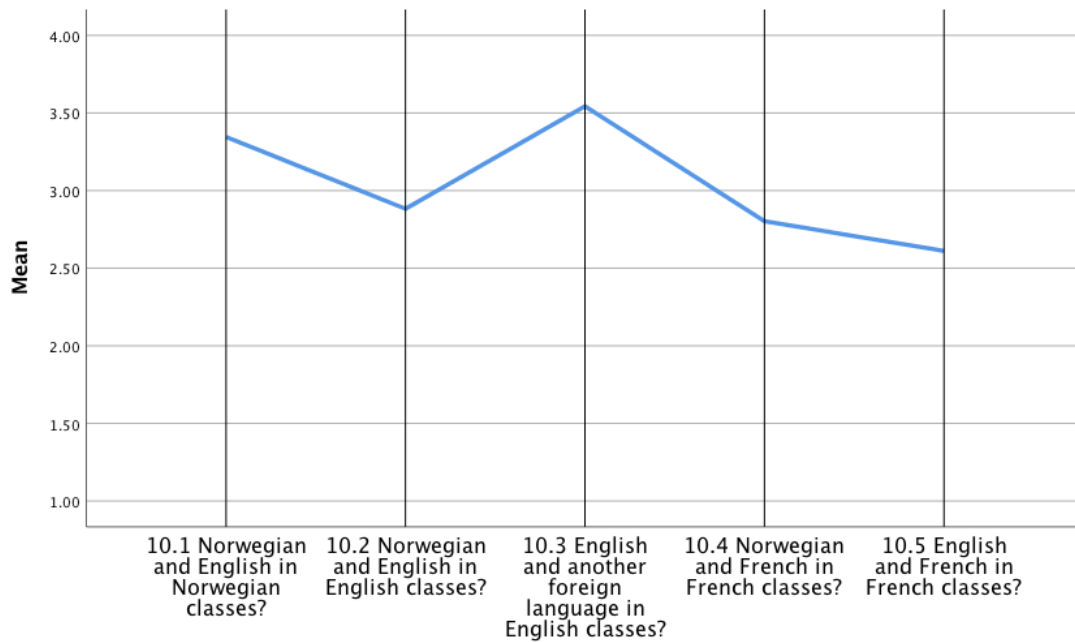


Figure 5.23: Comparing languages in class

The mean scores for the total number of participants show that French classes have the lowest mean scores for comparing French with both English and Norwegian. These results suggest that these languages are compared in between ‘every other lesson’ and ‘sometimes’, though the results are more in accordance with ‘sometimes’. The statement 10.2 on comparing Norwegian and English in English classes has a mean score similar to that of the French classes. The two languages are compared somewhat less in Norwegian classes according to statement 10.1 that has a mean score between ‘sometimes’ and ‘rarely’. The language comparison that is least practised in language classes presented in the questionnaire according to the mean is comparing English and another foreign language in English classes. Similar to language comparison in Norwegian classes, this statement is placed between ‘sometimes’ and ‘rarely’.

The language curricula discussed in section 4.2 outline different competence aims for the different languages. Some of these stated that languages should be compared as part of the instruction, whereas other competence aims at other levels did not indicate the same aims. It may, therefore, be relevant to compare the different educational levels in how they respond to the statements about language comparison in class to see if this may be in accordance with the competence aims of the language curricula. Figure 5.24 presents the distribution of the previous figure separated by educational level.

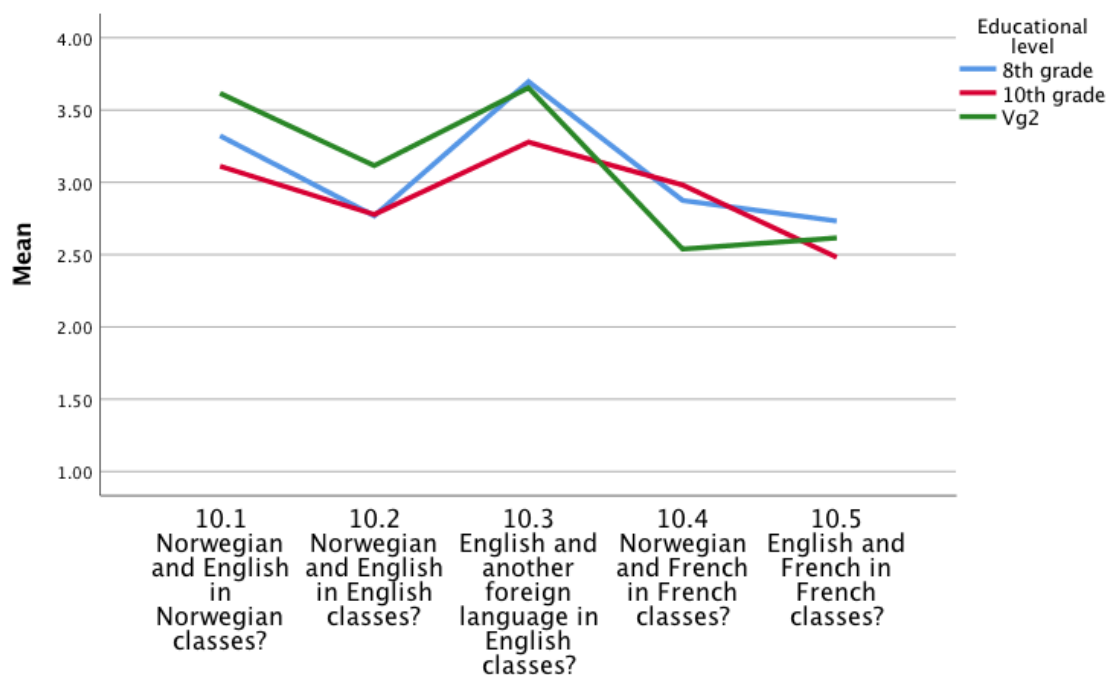


Figure 5.24: Comparing languages in class by educational level

The comparison of the different educational levels reveals that there is relatively little variance between them. The difference is never more than 0.5 between the highest and lowest score.

In sum, the participants respond that language comparison occurs to some extent in all language classes. Language comparison appears to be most frequent in French classes where French appears to be compared both to English and Norwegian. Comparison between English and Norwegian in English classes is also reported to be fairly frequent. The same comparison is also made in Norwegian classes according to

the respondents, but somewhat less frequent. Fewest comparisons are made between English and other languages that is not L1 Norwegian.

5.4.3 Vg2 participants choosing to study English alongside French

Participants from 8th and 10th grade have English as a mandatory subject at school, whereas at upper secondary school English is only compulsory in Vg2. Participants at Vg2 have therefore the option of continuing with studying English alongside French instruction for the second year of upper secondary school. This option invites the question whether there is a tendency for those who choose to continue with language instruction to show a higher level of language awareness? To investigate this question, the Vg2 students are grouped by their response to question 3.2 ‘Do you have English as a school subject now’ presented in Figure 5.23.

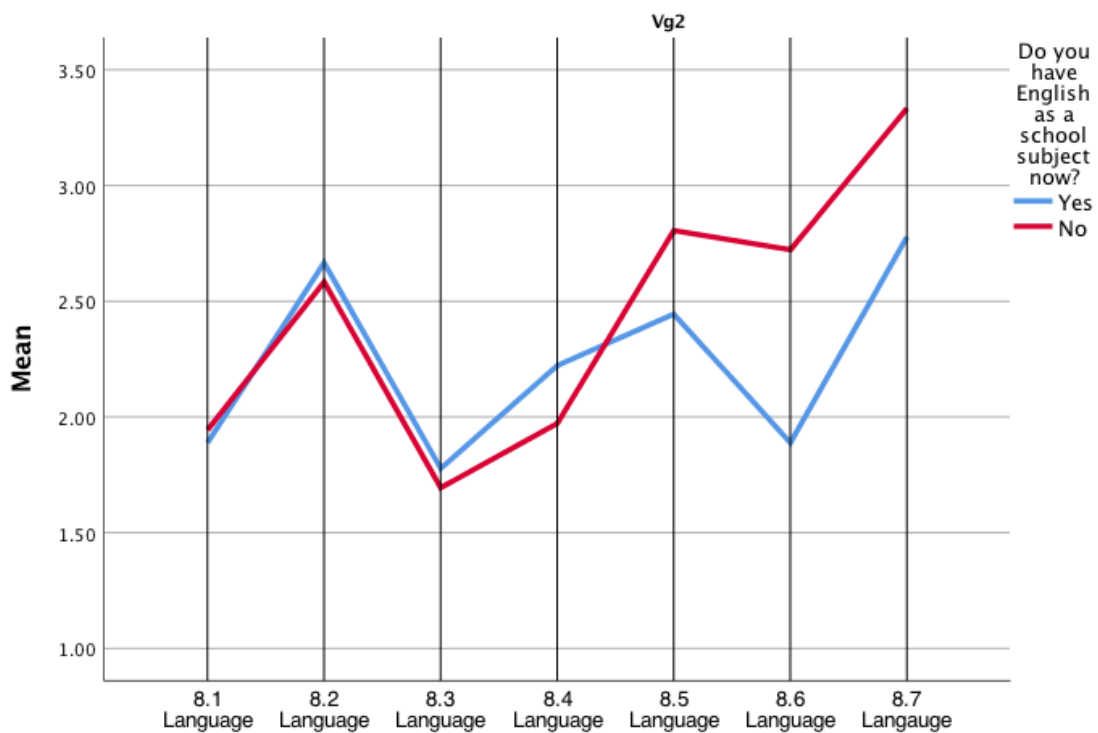


Figure 5.25: Language section distinguished by those who continue to study English at Vg2 and those who do not

The results in Figure 5.25 show that Vg2 participants who continue to study English in their second year of upper secondary school respond in line with the other participants for statements 8.1 to 8.3. The two groups differ more with regards to the remaining four statements. Those who have chosen not to study English as a subject

at Vg2 respond more in favour of statement 8.4 ('I try to use what I've learnt from other languages when I'm learning a new language'). The group of students that has English as a subject at Vg2 respond more in accordance with the statements 8.5 to 8.7. The response to statement 8.5 on the benefit of having learnt English when studying French, suggests that those who continue to study English also see more of possibility for language transfer to French. Most noteworthy is the marked difference for the use of meta-language (8.6) where those who continue to study English respond have a higher preference for meta-language. This suggests that knowledge of meta-language may encourage further language learning. None of the statements showed a significant difference between the two groups when comparing them with the Mann-Whitney U test.¹⁵

To sum up this chapter on findings, no explicit support is observed for Hypotheses 1 and 2, while, a strong affirmation is found for Hypothesis 3. The findings on gender suggest that male participants show high engagement at 8th grade, but that this engagement diminishes over time and the female participants score more in agreement with all the sections in 10th grade and Vg2. Participants respond that language comparison features in all language instruction, though to a higher degree in L3 French and L2 English than in L1 Norwegian. Students at Vg2 who continue to study English show a preference for meta-language and see stronger connections between the experience of learning English on learning French, and the benefit of transferring language knowledge from French to the L1/L2.

¹⁵ Comparing participants who continue to study English at Vg2 with those who do not: 8.1 Language p -value .782 ($p > .05$), 8.2 Language p -value .1000 ($p > .05$), Language 8.3 p -value .889 ($p > .05$), Language 8.4 p -value .786 ($p > .05$), 8.5 Language p -value .508 ($p > .05$), 8.6 Language p -value .114 ($p > .05$), 8.7 Language p -value .317 ($p > .05$).

6. Discussion

This chapter discusses the findings presented in the previous chapter in light of the theoretical background of the thesis. As seen in the previous chapter, the findings reveal a complex picture of the language learning process and clear conclusions are at times difficult to draw. The theoretical discussion may, therefore, aid the interpretation of the findings.

A preliminary observation from the findings, regardless of the tested hypotheses, is that students on average generally agree to statements about using language knowledge across languages. The majority of mean scores in the language section are around the value 2 that suggest an average score of ‘Somewhat agree’. Considerable variation is seen in the answers, as has been demonstrated by the figures showing the distribution of mean scores for each participant, but a positive tendency is seen overall. These results imply that many of the students see the possibility of using their multilingual knowledge across languages. Although this is the case, no explicit support is found in the findings for either Hypothesis 1 or 2. The following discussion assesses reasons based on the theoretical framework why this may be the case.

In the theory chapter, section 2.2 discussed perspectives on language awareness and multilingualism. Jessner (2006; 2008a) is cited for her claim that it is when a learner gains knowledge of more than two languages that the learner develops a metasystem of language. As a consequence, learners are thought to start to see their languages more in relation to each other, rather than entirely separate. Hypothesis 1 assumes that this metasystem is more noticeable among participants who know Norwegian, English, French and another language and thereby reveal greater language awareness. My findings from section 8 of the questionnaire revealed that an advantage of knowing an additional language could only be seen for statement 8.6 on the use of meta-language. The preference for a metasystem for participants with additional languages is also seen in the use of learning strategies where statement 9.3 on looking for grammatical patterns display a higher agreement for participants with additional languages in 8th grade and Vg2. My other findings for Hypothesis 1 suggest that learners with additional languages do not to a larger extent show evidence of broader language awareness where they compare languages more than their classmates without additional language. Neither is there a tendency to see more

similarities between languages and a greater awareness of transfer between languages among students with additional languages to Norwegian, English and French. Language awareness and metalinguistic awareness with the focus on meta-language, as defined in section 2.2.1, appear, therefore, not to be as clearly linked as first expected. The reason for this can be that multilinguals see the benefit of meta-language without clear instruction, but that the possibility of developing broader language awareness on the basis of a multilingual competence is more dependent on direct instruction. Such a claim is in accordance with Hufeisen & Marx's observation that learners need to be made aware of transfer opportunities between languages and that transfer will not necessarily occur automatically (2007: 315). It can also be noted here that Vg2 students who continue to study English alongside French in the second year of upper secondary school also appear to show a greater preference for meta-language. It may be postulated that a greater awareness of the benefit of meta-language can encourage further language learning.

In my findings in section 5.4.2 on language comparison in instruction, the participants respond that language comparison occurs in all language courses. Some precautions should be taken with regards to the results from this part of the questionnaire as this section inquires about the instruction and not the participants' learning process. It may be harder for participants to assess the general instruction compared to their own experience of language learning. From the findings, it can, however, be said that the participants perceive language comparison to occur between their respective languages in instruction. Language comparison appears to occur most frequently in French classes and also in English classes with comparisons to L1 Norwegian, comparisons are less frequently made the other assessed languages in Norwegian classes.

Jessner suggests that the development of a metasystem will enable bidirectional transfer, where knowledge of L3 can develop L1/L2 competence (2008a: 271). From the findings on language comparison in class, it is not easy to discern whether comparisons are made for the transfer of knowledge from L1/L2 → L2/L3, or if comparisons are also made with the purpose of using L3 knowledge to transfer to L1/L2. The statement 10.3 on comparing English with other foreign languages in English classes was the statement the participants showed the highest disagreement for, and, thus, reveals that little use of L3 knowledge is drawn upon in English

instruction. A clearer picture is observed in section 8 of the questionnaire. The following statements are relevant: statements 8.4 'I try to use what I've learnt from other languages when I'm learning a new language', 8.5 'My experience of learning English makes it easier to learn French' and 8.7 'I use the language knowledge that I gain from learning French to improve my understanding of other languages I know, such as Norwegian and English'. My findings indicate that statement 8.7 on using knowledge from French for other known languages receives the least agreement in the language section shown in section 5.2.1. The score for statement 8.7 ($L3 \rightarrow L1/L2$) is between 'Neither agree nor disagree' and 'Somewhat disagree' for 10th grade and Vg2, for 8th grade it is between 'Neither agree nor disagree' and 'Somewhat agree'. The scores for statements 8.4 ($L1/L2 \rightarrow L2/L3$) and 8.5 ($L2 \text{ English} \rightarrow L3 \text{ French}$) are lower overall, and are closer to 'Somewhat agree'. This implies that $L1/L2$ are used for building $L3$ knowledge ($L1/L2 \rightarrow L3$), but that drawing on $L3$ knowledge to improve knowledge of $L1/L2$ ($L3 \rightarrow L1/L2$) may not be as apparent for the learner. Jessner's description of a bidirectional relation between languages appears, therefore, not to be supported in the findings where a unidirectional form of transfer appears to be prevalent. For learners to make full use of their $L3$ knowledge, they should be made more aware of this potential in language instruction for $L1$ and $L2$. In the discussion on the language curriculum, little suggestion is found for drawing on $L3$ knowledge in $L1$ and $L2$ instruction.

The participants appear to see more possibility for unidirectional transfer of language knowledge than bidirectional transfer. Still, the scores for statement 8.5 on perceiving the experience of learning English as useful for learning French evoke more disagreement than the statement 8.4 on using prior language experience when learning a new language. The response to statement 8.5 for 10th grade and Vg2 is closer to 'Neither agree nor disagree' than 'Somewhat agree', slightly more positive response is found for 8th grade participants. This suggests that the experience of learning English is generally not perceived as related to learning French. The language curricula can be argued not to show this possibility for transfer strongly enough. In the English and Foreign language curricula, the competence aims mainly stress a comparison with $L1$ (thereby $L1 \leftrightarrow L2$ and $L1 \leftrightarrow L3$, but not $L2 \leftrightarrow L3$). Though, in the theory, good support is found for making comparisons between $L2$ and $L3$. As Falk & Bardel describe, the learning process of $L1$ relies more on implicit

linguistic competence supported by procedural memory, whereas, L2 language learning, especially in formal instruction, is dominated by explicit metalinguistic knowledge supported by declarative memory (2010: 191-192). The process of learning an L3 in a formal setting is, thereby, more similar to learning an L2 than an L1. Drawing more explicit comparisons between the learning process of L2 and L3 in instruction can, therefore, more easily relate to the students' earlier experience of language learning and build language awareness.

Another argument for using the L2 in L3 instruction to build language awareness is Williams & Hammarberg's (1998) theorising of the L2 status factor. The L2 status factor assumes that the L3 learner is more likely to draw on their L2 knowledge rather than their L1, as they perceive their L1 as not foreign, thereby not applicable for transfer to another language. That the curriculum generally suggests comparing the L3 with the L1, and not the L2, in the competence aims may, therefore, not facilitate the full potential for building a multilingual competence and language awareness. Using L2 English more actively can strengthen the reflection on own language learning.

Some of the reason why the participants do not see a more apparent relation between learning English and learning French may be as Falk & Bardel (2010) postulate that the L2 status factor is reduced when the learner masters the L2 to a near L1 proficiency. In my findings, a very strong agreement is found in the motivation section for seeing the usefulness of English. This indicates that the participants are motivated for learning English, and they are likely highly proficient in the language. This, in turn, may suggest that these participants may not see the transferability of their language knowledge from L2 to L3 as perceive the two learning processes as quite different. Such a claim strengthens the argument for more explicitly showing how language knowledge can be transferred across languages in instruction, as the students may be less susceptible to the possibility for transfer themselves.

Another relevant issue to discuss is the question of a threshold level for the effect of additional languages on language awareness. De Angelis (2007: 6) writes that 'some studies have already shown that even as little as one or two years of formal instruction in a non-native language can affect the acquisition of another non-native language to a significant extent'. In Hypothesis 1, it was assumed that a threshold level might also be seen in the findings. Although those participants who have learnt an additional language to Norwegian, English and French for more than two years

show a more positive response compared to those who have only learnt an additional language for a short period, they did not demonstrate significantly greater language awareness compared to those without additional languages. No clear trend is seen for those who have learnt additional languages for ten years or more either. This makes it hard to suggest a threshold level at all. In line with the above discussion, it can be hypothesised that this may be because the participants do not see their additional languages as a potential resource in their broader language learning.

As a way to sum up the discussion thus far, it appears fitting to cite Bono & Stratilaki's claim that the teaching institution has 'a critical influence on the learners' willingness, or reluctance, to rely on previously acquired knowledge and to transfer resources from one context into another' (2009: 212).

In contrast to Hypothesis 1 and 2, Hypothesis 3 displays a clear correlation in the findings based on the terms of the hypothesis. The summary of the section on motivation and the summary of the language section have a significant correlation at all the educational levels in the study. The correlation is strongest in the 8th grade, but decreases somewhat in the 10th grade, and further in Vg2, although it remains significant. Lindemann's (2007) investigation of Norwegian L3 learners who were found to have a high level of motivation for learning an L3 when starting to study the new language, but that the level of motivation decreased over time (in Haukås 2015: 399). This study has not explicitly investigated motivation for L3 learning, where instead the questionnaire states more general statements about language learning. However, the same tendency as Lindemann found appears in this study.

Henry (2012 in Haukås 2015: 399) 'suggests that motivation for learning an L3 (French, German, Spanish) is lower than for learning L2 English, due to differences in perceived usefulness'. This can also be supported by the findings in this thesis where a much stronger agreement is found for the statement 6.3 for perceiving the future usefulness of English compared to statement 6.4 on the perceived future usefulness of French.

A significant positive correlation is also found between the motivation section, the sections on language contact, language and learning strategies, suggesting that all of these positively enforce each other in language learning. This supports Masgoret & Gardner's (2003) extended definition of motivation, set out in chapter 5.

To sum up this chapter, it has been argued that the reason why Hypothesis 1 and 2 is not generally supported by the findings can be because language comparison

does not feature to a sufficient degree in language instruction. Teacher awareness of this potential, as well as some improvements to the curricula, can facilitate the development of greater language awareness among multilinguals. For this to occur, language transfer should not only be unidirectional, but bidirectional where also L1 Norwegian and L2 English instruction sees the benefit of the multilingual competence most of their students hold. The findings also show that a high motivation for language learning predicts greater language awareness. It could also be argued that the opposite is true, that a higher level of language awareness can lead to more motivation for language learning.

7. Conclusions

The multilingual students' studied in this thesis appear to use their multilingual competence in language learning, thereby, showing signs of language awareness. A general tendency is revealed in the findings that the participants report to compare, see similarities and see the potential for transferring knowledge from one language to another.

However, when assessing Hypothesis 1, no clear advantage was found for knowing an additional language to Norwegian, English and French, when it comes to broader language awareness. Still, a preference was seen for the use of metalanguage, illustrating metalinguistic awareness. The discussion has suggested that more explicit instruction in how the learners can use their multilingual competence is needed to encourage broader language awareness.

For Hypothesis 2, a positive trend was for Vg2 participants for comparing and seeing similarities between their languages, as well as the use of learning strategies. The difference between how the Vg2 participants responded compared to the rest was, however, rarely very significant. Bearing in mind that the Vg2 participants have actively chosen to pursue general studies and concentrate on language studies, the difference compared to 8th grade and 10th grade may be expected to more distinct. A greater awareness of the potential to draw on a multilingual competence in all language instruction can develop language awareness among multilingual students. A bidirectional possibility of transfer is here urged, where also L1 and L2 instruction see the benefit of drawing on knowledge from the L2 or L3. Such a multilingual pedagogy can, as Jessner & Kramsch describe, encourage greater student participation in language teaching, as well as enhance the learning potential for the students (2015: 4).

Hypothesis 3 on motivation for language learning and language awareness is the only hypothesis in the study that is clearly confirmed by the findings.

This thesis has shown the fruitful ground for researching how participants perceive their language knowledge and use when assessing language awareness. The study has revealed that students do not perceive their languages as completely separate, although a monolingual emphasis is often observed in language instruction. However, the method adopted in this thesis for researching language awareness and multilingualism is only one among many that can shed light on how language learners

learn and understand their knowledge of several languages. One of the precautions to the method in this thesis, discussed in chapter 4, is the acknowledgement that not the same participants partake at the different educational levels. The adopted approach cannot account for the individual diversity in the language learning process. A longitudinal study that follows multilingual learners over a more extended period and assesses the participants' language awareness can better account for how the individual language learner perceives and develop their multilingual knowledge.

Another potential for future studies is to conduct more qualitative research of the multilingual learner's language perception. This thesis has prioritised a quantitative approach due to the possibility to collect data from a larger participant group and to more easily compare the gathered results. This approach has, however, some limitations, as it does not enable the researcher to assess which considerations the participants make when filling in the questionnaire. 8th grade participants may, for example, understand the statements differently compared to older Vg2 participants.

Appendix I – Questionnaire



Spørreundersøkelse om språkforståelse og flerspråklighet / Questionnaire about language awareness and multilingualism

1.1 Hvilket klassetrinn går du på nå? / Which educational level are you at? _____

1.2 Kjønn / Gender _____

jente, kvinne/female _____ gutt, mann/male _____

Språkbakgrunn / Language background

Norsk / Norwegian

2.1 Er norsk morsmålet ditt? / Is Norwegian your mother tongue?

ja/yes nei/no

2.2 Hvis nei, oppgi morsmål / If no, specify mother tongue: _____

2.3 Hvis norsk ikke er morsmålet ditt, hvor lenge har du lært norsk? /

If Norwegian isn't your mother tongue, for how long have you been studying Norwegian?

_____ år/years _____ måneder/months

2.4 Hvilket skriftspråk er hovedmålet ditt på norsk? /

Which is your main written variety of Norwegian?

Bokmål Nynorsk

2.5 Følger du sidemålsundervisning i den andre skriftformen? /

Do you attend teaching in the other written variety of Norwegian?

ja/yes nei/no

Engelsk / English

3.1 Hvor lenge har du lært engelsk? / For how long have you been studying English?

_____ år/years _____ måneder/months

3.2 Har du engelsk som skolefag nå? / Do you have English as a school subject now?

ja/yes nei/no

Fransk / French

4. Hvor lenge har du lært fransk? / For how long have you been studying French?

_____ år/years _____ måneder/months

Andre språk / Other languages

5.1 Har du lært andre språk enn norsk, engelsk og fransk? /

Have you studied other languages than Norwegian, English and French?

ja/yes nei/no

5.2 Hvis ja, fyll ut nedenfor hvilke språk og hvor lenge du har lært hvert språk/

If yes, fill in below the language and for how long you've been studying each of them

Språk /Language	år/years	måneder/months

Motivasjon / Motivation

Sett kryss i boksen du er mest enig med / *Tick the box you agree the most with*



Enig – uenig / Agree - disagree					
<i>Påstand / Statement</i>	<i>Svært enig / strongly agree</i>	<i>Nokså enig / somewhat agree</i>	<i>hverken eller / neither agree nor disagree</i>	<i>Nokså uenig / somewhat disagree</i>	<i>Svært uenig/ strongly disagree</i>
6.1 Jeg synes det er gøy å lære et nytt språk / <i>I think it's fun to learn a new language</i>					
6.2 Jeg liker å lese på andre språk enn morsmålet mitt / <i>I like to read in other languages than my mother tongue</i>					
6.3 Jeg tror engelskkunnskapene mine vil være nyttige når jeg er ferdig på skolen / <i>I think my knowledge of English will be useful when I finish school</i>					
6.4 Jeg tror franskkunnskapene mine vil være nyttige når jeg er ferdig på skolen / <i>I think my knowledge of French will be useful when I finish school</i>					
6.5 Jeg ønsker å lære flere språk enn de jeg allerede kan / <i>I would like to learn other languages than those I already know</i>					

Språkkontakt utenfor undervisning / Language contact outside teaching

Sett kryss i boksen du er mest enig med / *Tick the box you agree the most with*

Hypighet / Frequency					
<i>Påstand / Statement</i>	<i>Hver dag / every day</i>	<i>2-3 dager i uken / 2-3 days a week</i>	<i>en gang i uken / once a week</i>	<i>annenhver uke / every other week</i>	<i>Aldri / Never</i>
7.1 Hvor ofte leser du på engelsk på fritiden? / <i>How often do you read in English in your spare time?</i>					
7.2 Hvor ofte leser du på fransk på fritiden? / <i>How often do you read in French in your spare time?</i>					
7.3 Hvor ofte snakker du engelsk på fritiden? / <i>How often do you speak English in your spare time?</i>					
7.4 Hvor ofte snakker du fransk på fritiden? / <i>How often do you speak French in your spare time?</i>					

Språk / Language

Sett kryss i boksen du er mest enig med / Tick the box you agree the most with



Enig – uenig / Agree - disagree Påstand / Statement	Svært enig / strongly agree	Nokså enig / somewhat agree	hverken eller / neither agree nor disagree	Nokså uenig / somewhat disagree	Svært uenig/ strongly disagree
8.1 Jeg sammenligner ofte forskjellige språk / <i>I often compare different languages</i>					
8.2 Jeg synes språkene jeg kan er veldig forskjellige / <i>I think that the languages I know are very different</i>					
8.3 Jeg legger ofte merke til likheter mellom språkene jeg bruker / <i>I often notice similarities between the languages I'm using</i>					
8.4 Jeg prøver å bruke det jeg har lært i andre språk når jeg lærer et nytt språk / <i>I try to use what I've learnt from other languages when I'm learning a new language</i>					
8.5 Min erfaring med å lære engelsk gjør det lettere å lære fransk / <i>My experience of learning English makes it easier to learn French</i>					
8.6 Jeg synes det er nyttig å fokusere på grammatikk og grammatiske begrep (som subjekt, verb, substantiv, adjektiv m.f.) når jeg lærer språk / <i>I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I'm studying languages</i>					
8.7 Jeg bruker språkkunnskapen jeg lærer i fransk til å få en bedre forståelse av andre språk jeg kan, som norsk og engelsk / <i>I use the language knowledge that I gain from learning French to improve my understanding of other languages I know, such as Norwegian and English</i>					

8.8 Hvis du svarte **svært enig** eller **nokså enig** på '8.1 Jeg sammenligner ofte forskjellige språk', oppgi hvilke språk du pleier å sammenligne / *If you answered **strongly agree** or **somewhat agree** to '8.1 I often compare different languages', which languages do you compare:*

Læringsstrategier / Learning strategies

Læringsstrategier er fremgangsmåter for å organisere egen læring. Med læringsstrategier strukturerer du måten du jobber på for å lære mer effektivt /

Learning strategies are ways of organising own learning. By using learning strategies you can work more structured and learn more efficiently

Sett kryss i boksen du er mest enig med / Tick the box you agree the most with



Enig – uenig / Agree - disagree					
Påstand / Statement	Svært enig / strongly agree	Nokså enig / somewhat agree	hverken eller / neither agree nor disagree	Nokså uenig / somewhat disagree	Svært uenig/ strongly disagree
9.1 Jeg benytter meg av lesestrategier som jeg har lært i et språk, også i andre språk / <i>I use reading strategies that I have learnt in one language, also in other languages</i>					
9.2 Hvis jeg leser et ord jeg ikke vet hva betyr så prøver jeg å se om det ligner på et ord jeg kan på et annet språk / <i>If I come across a word that I don't understand, I try to compare it to a word I know in a different language</i>					
9.3 Jeg ser etter gramatiske mønstre i språket jeg lærer / <i>I look for grammatical patterns in the language I'm learning</i>					
9.4 Hvis jeg leser et ord jeg ikke gjenkjenner så slår jeg det opp i en ordbok eller på nettet / <i>If I encounter a word that I don't recognize, I look it up in a dictionary or online</i>					
9.5 Jeg prøver å forstå hva en setning betyr selv om jeg ikke forstår alle ordene i setningen / <i>I try to work out what a sentence means even though I don't recognise the meaning of all the words in the sentence</i>					

9.6 Hvis du bruker andre læringsstrategier som ikke er nevnt over, vennligst skriv disse nedenfor og på baksiden av siste ark hvis du trenger mer plass / *If you use learning strategies that are not mentioned above, please list them below and at the backside of the last sheet if you need more space*

Språksammelijning i undervisningen / Comparing languages in class

Sett kryss i boksen du er mest enig med / Tick the box you agree the most with

Hyppighet / Frequency Påstand / Statement	Hver time / every lesson	Annenhver time / every other lesson	Av og til / Sometimes	Sjeldent / Rarely	Aldri / Never
10.1 Hvor ofte sammenlignes norsk og engelsk som en del av undervisningen i norsktimene / How often are Norwegian and English compared as a part of the teaching in your Norwegian classes ?					
10.2 Hvor ofte sammenlignes norsk og engelsk som en del av undervisningen i engelsktimene / How often are Norwegian and English compared as a part of the teaching in your English classes ?					
10.3 Hvor ofte sammenlignes engelsk og et annet fremmedspråk som en del av undervisningen i engelsktimene / How often are English and another foreign language compared as a part of the teaching in your English classes ?					
10.4 Hvor ofte sammenlignes norsk og fransk som en del av undervisningen i fransktimene / How often are Norwegian and French compared as a part of the teaching in your French classes ?					
10.5 Hvor ofte sammenlignes engelsk og fransk som en del av undervisningen i fransktimene / How often are English and French compared as a part of the teaching in your French classes ?					

Takk for din deltakelse! / Thank you for your participation!

Appendix II – Mann-Whitney U tests

Mann-Whitney U test of summary of section 8 comparing additional languages with other participants

Test Statistics^a

8.1 + 8.3-8.7

Summary

Language

Mann-Whitney U	579.000
Wilcoxon W	2595.000
Z	-.854
Asymp. Sig. (2-tailed)	.393

a. Grouping Variable: S5A Other languages than Norwegian, English and French?

Mann-Whitney U test of summary of section 8 comparing additional languages with other participants at each educational level

Test Statistics^a

8.1 + 8.3-8.7

Summary

Language

1.1 Which educational level are you at?		
8th grade	Mann-Whitney U	83.000
	Wilcoxon W	273.000
	Z	-.123
	Asymp. Sig. (2-tailed)	.902
	Exact Sig. [2*(1-tailed Sig.)]	.923 ^b
10th grade	Mann-Whitney U	31.000
	Wilcoxon W	331.000
	Z	-1.119
	Asymp. Sig. (2-tailed)	.263
	Exact Sig. [2*(1-tailed Sig.)]	.291 ^b
Vg2	Mann-Whitney U	66.500
	Wilcoxon W	276.500
	Z	-.690
	Asymp. Sig. (2-tailed)	.490
	Exact Sig. [2*(1-tailed Sig.)]	.500 ^b

a. Grouping Variable: S5A Other languages than Norwegian, English and French?

b. Not corrected for ties.

Mann-Whitney U test of summary of section 8 comparing additional languages - Romance/Germanic and non-Romance/Germanic

Test Statistics^a

8.1 + 8.3-8.7
Summary
Language

1.1 Which educational level are you at?

8th grade	Mann-Whitney U	7.000
	Wilcoxon W	28.000
	Z	-.519
	Asymp. Sig. (2-tailed)	.604
	Exact Sig. [2*(1-tailed Sig.)]	.714 ^b
10th grade	Mann-Whitney U	.000
	Wilcoxon W	6.000
	Z	-1.342
	Asymp. Sig. (2-tailed)	.180
	Exact Sig. [2*(1-tailed Sig.)]	.500 ^b
Vg2	Mann-Whitney U	6.500
	Wilcoxon W	21.500
	Z	-.300
	Asymp. Sig. (2-tailed)	.764
	Exact Sig. [2*(1-tailed Sig.)]	.786 ^b

- a. Grouping Variable: S5D Romance/Germanic language family?
b. Not corrected for ties.

Mann-Whitney U test of section 8 comparing additional languages with other participants

Test Statistics^a

	8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
Mann-Whitney U	622.000	559.000	538.000	596.500	541.000	569.500	638.500
Wilcoxon W	2638.000	790.000	2491.000	2612.500	2557.000	800.500	2654.500
Z	-.425	-1.102	-1.246	-.692	-1.280	-.987	-.246
Asymp. Sig. (2-tailed)	.671	.270	.213	.489	.201	.324	.806

- a. Grouping Variable: S5A Other languages than Norwegian, English and French?

Mann-Whitney U test of summary of section 8 comparing additional languages 2+ with other participants

Test Statistics^a		8.1 + 8.3-8.7 Summary Language
1.1 Which educational level are you at?		
8th grade	Mann-Whitney U	68.000
	Wilcoxon W	96.000
	Z	-.293
	Asymp. Sig. (2-tailed)	.770
	Exact Sig. [2*(1-tailed Sig.)]	.796 ^b
Vg2	Mann-Whitney U	69.500
	Wilcoxon W	300.500
	Z	-.213
	Asymp. Sig. (2-tailed)	.831
	Exact Sig. [2*(1-tailed Sig.)]	.836 ^b

- a. Grouping Variable: S5E Additional language more than 2 years?
b. Not corrected for ties.

Mann-Whitney U test of summary of section 8 comparing additional languages 10+ with other participants

Test Statistics^a		8.1 + 8.3-8.7 Summary Language
1.1 Which educational level are you at?		
8th grade	Mann-Whitney U	47.000
	Wilcoxon W	62.000
	Z	-.631
	Asymp. Sig. (2-tailed)	.528
	Exact Sig. [2*(1-tailed Sig.)]	.560 ^b
Vg2	Mann-Whitney U	60.500
	Wilcoxon W	313.500
	Z	-.309
	Asymp. Sig. (2-tailed)	.757
	Exact Sig. [2*(1-tailed Sig.)]	.764 ^b

- a. Grouping Variable: S5F Additional language more than 10 years?
b. Not corrected for ties.

Mann-Whitney U test of section 8 comparing additional languages 2+ with other participants

Test Statistics^a

1.1 Which educational level are you at?		8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
8th grade	Mann-Whitney U	72.000	70.000	72.000	63.000	57.500	58.000	62.500
	Wilcoxon W	303.000	98.000	303.000	91.000	85.500	86.000	293.500
	Z	-0.085	-0.198	-0.083	-0.575	-0.891	-0.877	-0.608
	Asymp. Sig. (2-tailed)	0.932	0.843	0.934	0.565	0.373	0.381	0.543
	Exact Sig. [2*(1-tailed Sig.)]	.959 ^b	.876 ^b	.959 ^b	.604 ^b	.405 ^b	.435 ^b	.568 ^b
Vg2	Mann-Whitney U	66.500	49.500	71.000	64.500	50.500	56.000	65.000
	Wilcoxon W	94.500	77.500	302.000	295.500	281.500	84.000	93.000
	Z	-0.402	-1.317	-0.144	-0.503	-1.257	-0.965	-0.462
	Asymp. Sig. (2-tailed)	0.688	0.188	0.885	0.615	0.209	0.335	0.644
	Exact Sig. [2*(1-tailed Sig.)]	.717 ^b	.208 ^b	.917 ^b	.640 ^b	.228 ^b	.376 ^b	.678 ^b

a. Grouping Variable: S5E Additional language more than 2 years?

b. Not corrected for ties.

Mann-Whitney U test of section 8 comparing additional languages 10+ with other participants

		Test Statistics^a						
1.1 Which educational level are you at?		8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
8th grade	Mann-Whitney U	51.000	55.000	47.500	44.000	40.000	57.000	48.500
	Wilcoxon W	66.000	331.000	62.500	59.000	55.000	72.000	324.500
	Z	-.416	-.160	-.622	-.836	-1.102	-.032	-.562
	Asymp. Sig. (2-tailed)	.678	.873	.534	.403	.270	.974	.574
	Exact Sig. [2*(1-tailed Sig.)]	.727 ^b	.908 ^b	.560 ^b	.447 ^b	.318 ^b	1.000 ^b	.600 ^b
Vg2	Mann-Whitney U	64.000	47.000	55.500	49.000	54.000	51.000	58.500
	Wilcoxon W	317.000	68.000	308.500	302.000	307.000	72.000	79.500
	Z	-.121	-1.101	-.640	-1.002	-.692	-.873	-.431
	Asymp. Sig. (2-tailed)	.904	.271	.522	.316	.489	.383	.667
	Exact Sig. [2*(1-tailed Sig.)]	.935 ^b	.309 ^b	.566 ^b	.365 ^b	.530 ^b	.427 ^b	.682 ^b

a. Grouping Variable: S5F Additional language more than 10 years?

b. Not corrected for ties.

Mann-Whitney U test of summary of section 8 comparing 8th grade and 10th grade

Test Statistics^a	
8.1 + 8.3-8.7 Summary Language	
Mann-Whitney U	359.000
Wilcoxon W	765.000
Z	-.542
Asymp. Sig. (2-tailed)	.588

a. Grouping Variable: 1.1 Which educational level are you at? 8th grade and 10th grade.

Mann-Whitney U test of summary of section 8 comparing 8th grade and Vg2

Test Statistics^a

8.1 + 8.3-8.7

Summary

Language

Mann-Whitney U	379.000
Wilcoxon W	785.000
Z	-.214
Asymp. Sig. (2-tailed)	.831

a. Grouping Variable: 1.1 Which educational level are you at? 8th grade and Vg2.

Mann-Whitney U test of summary of section 8 comparing 10th grade and Vg2

Test Statistics^a

8.1 + 8.3-8.7

Summary

Language

Mann-Whitney U	334.500
Wilcoxon W	740.500
Z	-.944
Asymp. Sig. (2-tailed)	.345

a. Grouping Variable: 1.1 Which educational level are you at? 10th grade and Vg2

Mann-Whitney U test of section 8 on language comparing 8th grade and 10th grade

Test Statistics^a

	8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
Mann-Whitney U	349.500	348.000	305.500	320.000	369.000	285.000	314.000
Wilcoxon W	755.500	754.000	683.500	726.000	775.000	691.000	720.000
Z	-0.721	-0.757	-1.277	-1.211	-0.388	-1.842	-1.331
Asymp. Sig. (2-tailed)	0.471	0.449	0.202	0.226	0.698	0.065	0.183

a. Grouping Variable: 1.1 Which educational level are you at? 8th grade and 10th grade.

Mann-Whitney U test of section 8 on language comparing 8th grade and Vg2

Test Statistics^a

	8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
Mann-Whitney U	237.500	310.000	271.000	354.500	381.000	293.000	338.000
Wilcoxon W	643.500	716.000	677.000	760.500	787.000	699.000	744.000
Z	-2.671	-1.400	-2.085	-0.638	-0.186	-1.693	-0.912
Asymp. Sig. (2-tailed)	0.008	0.161	0.037	0.523	0.852	0.090	0.362

a. Grouping Variable: 1.1 Which educational level are you at? 8th grade and Vg2.

Mann-Whitney U test of section 8 on language comparing 10th grade and Vg2

Test Statistics^a

	8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
Mann-Whitney U	316.500	282.000	332.500	296.000	390.500	386.500	380.000
Wilcoxon W	722.500	688.000	738.500	702.000	796.500	792.500	786.000
Z	-1.297	-1.869	-0.819	-1.622	-0.025	-0.094	-0.204
Asymp. Sig. (2-tailed)	0.195	0.062	0.413	0.105	0.980	0.925	0.839

a. Grouping Variable: 1.1 Which educational level are you at? 10th grade and Vg2.

Mann-Whitney U test of section 9 on learning strategies comparing additional languages with other participants

		Test Statistics^a				
1.1 Which educational level are you at?		9.1 Learning strategies	9.2 Learning strategies	9.3 Learning strategies	9.4 Learning strategies	9.5 Learning strategies
8th grade	Mann-Whitney U	78.500	83.500	64.500	73.500	83.000
	Wilcoxon W	123.500	128.500	109.500	263.500	273.000
	Z	-.362	-.103	-1.060	-.664	-.136
	Asymp. Sig. (2-tailed)	.718	.918	.289	.507	.892
	Exact Sig. [2*(1-tailed Sig.)]	.735 ^b	.923 ^b	.308 ^b	.562 ^b	.923 ^b
10th grade	Mann-Whitney U	41.000	29.500	37.000	46.000	42.500
	Wilcoxon W	341.000	329.500	337.000	56.000	342.500
	Z	-.529	-1.324	-.745	-.139	-.413
	Asymp. Sig. (2-tailed)	.596	.185	.456	.889	.680
	Exact Sig. [2*(1-tailed Sig.)]	.681 ^b	.235 ^b	.505 ^b	.924 ^b	.728 ^b
Vg2	Mann-Whitney U	57.500	65.500	55.000	75.000	67.000
	Wilcoxon W	93.500	101.500	91.000	111.000	277.000
	Z	-1.194	-.824	-1.320	-.272	-1.088
	Asymp. Sig. (2-tailed)	.233	.410	.187	.785	.277
	Exact Sig. [2*(1-tailed Sig.)]	.258 ^b	.469 ^b	.218 ^b	.823 ^b	.533 ^b

a. Grouping Variable: S5A Other languages than Norwegian, English and French?

b. Not corrected for ties.

Mann-Whitney U test of gender and summary sections

		Test Statistics^a			
		8.1 + 8.3-8.7 Summary Language	6.1-6.5 Summary Motivation	7.1-7.4 Summary Language contact	9.1-9.5 Summary Learning Strategies
Mann-Whitney U		786.500	783.000	733.500	827.000
Wilcoxon W		1314.500	2161.000	1261.500	2205.000
Z		-.420	-.453	-.911	-.046
Asymp. Sig. (2-tailed)		.675	.651	.363	.963

a. Grouping Variable: 1.2 Gender

Mann-Whitney U test of gender and summary sections by educational level

1.1 Which educational level are you at?		Test Statistics ^a			
		6.1-6.5 Summary Motivation	7.1-7.4 Summary Language contact	8.1 + 8.3-8.7 Summary Language	9.1-9.5 Summary Learning Strategies
8th grade	Mann-Whitney U	29.500	22.000	33.000	35.500
	Wilcoxon W	57.500	50.000	61.000	63.500
	Z	-2.349	-2.747	-2.154	-2.034
	Asymp. Sig. (2-tailed)	.019	.006	.031	.042
	Exact Sig. [2*(1-tailed Sig.)]	.017 ^b	.005 ^b	.031 ^b	.042 ^b
10th grade	Mann-Whitney U	95.500	95.000	86.000	74.500
	Wilcoxon W	186.500	215.000	177.000	165.500
	Z	-.093	-.116	-.531	-1.069
	Asymp. Sig. (2-tailed)	.926	.908	.595	.285
	Exact Sig. [2*(1-tailed Sig.)]	.928 ^b	.928 ^b	.618 ^b	.294 ^b
Vg2	Mann-Whitney U	55.500	83.000	82.000	73.000
	Wilcoxon W	226.500	254.000	253.000	244.000
	Z	-1.660	-.339	-.385	-.821
	Asymp. Sig. (2-tailed)	.097	.735	.700	.412
	Exact Sig. [2*(1-tailed Sig.)]	.099 ^b	.759 ^b	.724 ^b	.436 ^b

a. Grouping Variable: 1.2 Gender

b. Not corrected for ties.

Mann-Whitney U test of Vg2 students and English instruction and section 8

1.1 Which educational level are you at?		Test Statistics ^a						
		8.1 Language	8.2 Language	8.3 Language	8.4 Language	8.5 Language	8.6 Language	8.7 Language
Vg2	Mann-Whitney U	76.000	81.000	78.500	76.000	68.500	51.500	62.000
	Wilcoxon W	121.000	252.000	249.500	247.000	113.500	96.500	107.000
	Z	-.277	.000	-.140	-.272	-.662	-1.581	-1.000
	Asymp. Sig. (2-tailed)	.782	1.000	.889	.786	.508	.114	.317
	Exact Sig. [2*(1-tailed Sig.)]	.820 ^b	1.000 ^b	.900 ^b	.820 ^b	.527 ^b	.131 ^b	.348 ^b

a. Grouping Variable: 3.2 English: Do you have English as a school subject now?

b. Not corrected for ties.

Appendix III Tables

Table Additional languages and language section

	Other languages than Norwegian, English and French?	N	Mean	Std. Deviation	Std. Error Mean
8.1 Language: I often compare different languages	Yes	21	2.4762	1.36452	.29776
	No	63	2.2302	.94964	.11964
8.3 Language: I often notice similarities between the languages I'm using	Yes	21	2.2381	1.09109	.23810
	No	62	1.9113	.94749	.12033
8.4 Language: I try to use what I've learnt from other languages when I'm learning a new language	Yes	21	2.4524	1.20317	.26255
	No	63	2.2381	1.13896	.14350
8.5 Language: My experience of learning English makes it easier to learn French	Yes	21	2.8810	1.22377	.26705
	No	63	2.4683	1.31638	.16585
8.6 Language: I find it useful to focus on grammar and grammatical terminology (such as subject, verb, noun, adjective etc.) when I'm studying languages	Yes	21	1.9524	.74001	.16148
	No	63	2.3413	1.23401	.15547
8.7 Language: I use the language knowledge that I gain from learning French to improve my understanding of other languages I know, such as Norwegian and English	Yes	21	3.0952	.88909	.19401
	No	63	3.0635	1.18965	.14988

Table Additional language 2 years+, language section and 8th grade/Vg2

1.1 Which educational level are you at?		Additional language more than 2 years?	N	Mean	Std. Deviation	Std. Error Mean
8th grade	8.1 Language	Yes	7	2.7143	1.38013	.52164
		No	21	2.5000	.70711	.15430
	8.2 Language	Yes	7	2.1429	.89974	.34007
		No	21	2.2619	.76842	.16768
	8.3 Language	Yes	7	2.4286	1.39728	.52812
		No	21	2.2857	1.05560	.23035
	8.4 Language	Yes	7	2.1429	1.46385	.55328
		No	21	2.2857	1.11323	.24293
	8.5 Language	Yes	7	2.1429	.69007	.26082
		No	21	2.5238	1.12335	.24513
	8.6 Language	Yes	7	1.5714	.78680	.29738
		No	21	2.0238	1.14538	.24994
	8.7 Language	Yes	7	3.0000	1.15470	.43644
		No	21	2.8095	1.07792	.23522
Vg2	8.1 Language	Yes	7	1.8571	1.06904	.40406
		No	21	1.9524	.92066	.20090
	8.2 Language	Yes	7	2.1429	.89974	.34007
		No	21	2.7857	1.14642	.25017
	8.3 Language	Yes	7	1.7143	.75593	.28571
		No	21	1.7381	.88909	.19401
	8.4 Language	Yes	7	2.2857	1.38013	.52164
		No	21	2.0238	1.16701	.25466
	8.5 Language	Yes	7	3.2857	1.60357	.60609
		No	21	2.4524	1.46548	.31979
	8.6 Language	Yes	7	2.0000	.81650	.30861
		No	21	2.5714	1.33497	.29131
	8.7 Language	Yes	7	3.0000	1.00000	.37796
		No	21	3.1905	1.36452	.29776

Table Additional language 10 years+, language section and 8th grade/Vg2

1.1 Which educational level are you at?		Additional language more than 10 years?	N	Mean	Std. Deviation	Std. Error Mean
8th grade	8.1 Language	Yes	5	2.4000	1.14018	.50990
		No	23	2.5870	.86145	.17962
	8.2 Language	Yes	5	2.2000	1.09545	.48990
		No	23	2.2391	.73654	.15358
	8.3 Language	Yes	5	2.0000	1.00000	.44721
		No	23	2.3913	1.15755	.24137
	8.4 Language	Yes	5	1.8000	.83666	.37417
		No	23	2.3478	1.23799	.25814
	8.5 Language	Yes	5	2.0000	.70711	.31623
		No	23	2.5217	1.08165	.22554
	8.6 Language	Yes	5	1.8000	.83666	.37417
		No	23	1.9348	1.13121	.23587
	8.7 Language	Yes	5	3.0000	1.22474	.54772
		No	23	2.8261	1.07247	.22363
Vg2	8.1 Language	Yes	6	2.0000	1.09545	.44721
		No	22	1.9091	.92113	.19639
	8.2 Language	Yes	6	2.1667	.98319	.40139
		No	22	2.7500	1.13127	.24119
	8.3 Language	Yes	6	1.8333	.75277	.30732
		No	22	1.7045	.88181	.18800
	8.4 Language	Yes	6	2.5000	1.37840	.56273
		No	22	1.9773	1.15961	.24723
	8.5 Language	Yes	6	3.0000	1.54919	.63246
		No	22	2.5682	1.52983	.32616
	8.6 Language	Yes	6	2.0000	.89443	.36515
		No	22	2.5455	1.30848	.27897
	8.7 Language	Yes	6	3.0000	1.09545	.44721
		No	22	3.1818	1.33225	.28404

Table Summary of motivation by educational level

		N	Mean	Std. Deviation	Std. Error Mean
8th grade	6.1-6.5 Summary Motivation	28	1.9286	.70965	.13411
10th grade	6.1-6.5 Summary Motivation	28	2.4476	.68963	.13033
Vg2	6.1-6.5 Summary Motivation	28	2.2964	.68122	.12874

Table: Motivation for future usefulness of English and French

	N	Mean	Std. Deviation	Std. Error Mean
6.3 Motivation: I think my knowledge of English will be useful when I finish school	83	1.1084	.41355	.04539
6.4 Motivation: I think my knowledge of French will be useful when I finish school	83	2.7711	1.13777	.12489

Table Summary sections motivation, language contact, language and learning strategies by gender

	1.2 Gender	N	Mean	Std. Deviation	Std. Error Mean
6.1-6.5 Summary Motivation	Female	52	2.1891	.65292	.09054
	Male	32	2.2813	.82401	.14567
7.1-7.4 Summary Language contact	Female	52	2.9567	.74586	.10343
	Male	32	2.7969	.93851	.16591
8.1 + 8.3-8.7 Summary Language	Female	52	2.4385	.79010	.10957
	Male	32	2.3698	.79845	.14115
9.1-9.5 Summary Learning Strategies	Female	52	2.0288	.62193	.08625
	Male	32	2.0969	.74552	.13179

Table Summary sections motivation, language contact, language and learning strategies by gender and educational level

1.1 Which educational level are you at?		1.2 Gender	N	Mean	Std. Deviation	Std. Error Mean
8th grade	6.1-6.5 Summary Motivation	Female	21	2.0952	.70248	.15329
		Male	7	1.4286	.48206	.18220
	7.1-7.4 Summary Language contact	Female	21	2.8631	.79343	.17314
		Male	7	1.8929	.40459	.15292
	8.1 + 8.3-8.7 Summary Language	Female	21	2.5635	.78480	.17126
		Male	7	1.8571	.58869	.22251
9.1-9.5 Summary Learning Strategies	Female	21	2.2238	.73546	.16049	
	Male	7	1.7714	.91235	.34484	
10th grade	6.1-6.5 Summary Motivation	Female	13	2.4179	.68376	.18964
		Male	15	2.4733	.71760	.18528
	7.1-7.4 Summary Language contact	Female	13	3.0769	.72266	.20043
		Male	15	3.0833	.92421	.23863
	8.1 + 8.3-8.7 Summary Language	Female	13	2.4269	.73439	.20368
		Male	15	2.6000	.82327	.21257
9.1-9.5 Summary Learning Strategies	Female	13	1.9077	.38829	.10769	
	Male	15	2.2400	.77164	.19924	
Vg2	6.1-6.5 Summary Motivation	Female	18	2.1333	.56046	.13210
		Male	10	2.5900	.80616	.25493
	7.1-7.4 Summary Language contact	Female	18	2.9792	.73296	.17276
		Male	10	3.0000	.88192	.27889
	8.1 + 8.3-8.7 Summary Language	Female	18	2.3009	.85326	.20112
		Male	10	2.3833	.78587	.24851
9.1-9.5 Summary Learning Strategies	Female	18	1.8889	.58197	.13717	
	Male	10	2.1100	.56263	.17792	

Table Comparing languages in class

	N	Mean	Std. Deviation	Std. Error Mean
10.1 Norwegian and English in Norwegian classes	83	3.3253	.91209	.10012
10.2 Norwegian and English compared in English classes?	82	2.8841	.95355	.10530
10.3 English and another foreign language in English classes?	82	3.5488	.96740	.10683
10.4 Norwegian and French in French classes?	82	2.7805	1.02770	.11349
10.5 English and French in French classes?	83	2.6325	.95982	.10535

Table Comparing languages in class by educational level

1.1 Which educational level are you at?		N	Mean	Std. Deviation	Std. Error Mean
8th grade	10.1 Norwegian and English in Norwegian classes?	28	3.3214	.66964	.12655
	10.2 Norwegian and English in English classes?	28	2.7679	.68694	.12982
	10.3 English and another foreign language in English classes?	28	3.6964	.91631	.17317
	10.4 Norwegian and French in French classes?	28	2.8750	1.01493	.19180
	10.5 English and French in French classes?	28	2.7321	1.19010	.22491
10th grade	10.1 Norwegian and English in Norwegian classes?	28	3.1429	1.04401	.19730
	10.2 Norwegian and English in English classes?	28	2.7857	1.05785	.19991
	10.3 English and another foreign language in English classes?	28	3.3036	.87495	.16535
	10.4 Norwegian and French in French classes?	27	2.9815	1.09616	.21096
	10.5 English and French in French classes?	28	2.5357	.87060	.16453
Vg2	10.1 Norwegian and English in Norwegian classes?	27	3.5185	.97548	.18773
	10.2 Norwegian and English in English classes?	26	3.1154	1.07059	.20996
	10.3 English and another foreign language in English classes?	26	3.6538	1.09334	.21442
	10.4 Norwegian and French in French classes?	27	2.4815	.93522	.17998
	10.5 English and French in French classes?	27	2.6296	.79169	.15236

Table English instruction and language section – Vg2

1.1 Which educational level are you at?		3.2 English: Do you have English as a school subject now?	N	Mean	Std. Deviation	Std. Error Mean
Vg2	8.1 Language	Yes	9	1.8889	1.05409	.35136
		No	18	1.9444	.93760	.22099
	8.2 Language	Yes	9	2.6667	1.22474	.40825
		No	18	2.5833	1.11474	.26275
	8.3 Language	Yes	9	1.7778	.97183	.32394
		No	18	1.6944	.82496	.19444
	8.4 Language	Yes	9	2.2222	1.48137	.49379
		No	18	1.9722	1.09104	.25716
	8.5 Language	Yes	9	2.4444	1.66667	.55556
		No	18	2.8056	1.50625	.35503
	8.6 Language	Yes	9	1.8889	1.05409	.35136
		No	18	2.7222	1.28592	.30309
	8.7 Language	Yes	9	2.7778	1.39443	.46481
		No	18	3.3333	1.23669	.29149
	8.1 + 8.3-8.7 Summary Language	Yes	9	2.1667	.96465	.32155
		No	18	2.4120	.77358	.18233

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