

# "Two brains are often better than one, probably"

Adult ESL learners' paired and individual lexical inferencing task performances, in relation to L2 proficiency

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# **Abstract**

This research concerns lexical inferencing (LI), i.e., the ability to infer the meaning of unknown words in a running text (Haastrup, 1991). Despite its advantages, there is little research on LI as a collaborative effort. Further, virtually no studies compare paired and individual LI task performances. Based in Task-Based Language Learning (TBLL) and Vygotsky's (1978) Sociocultural Theory (SCT), the present study seeks to explore the relationship between global second language (L2) proficiency and LI success. It further investigates the effect of (a) collaboration and (b) patterns of interaction on LI. The participants (N = 22) were adult learners of English as a second language (ESL) taught by the teacher-researcher. Their proficiency levels were determined by a series of tasks-referenced proficiency measures, namely Reading, Writing, Listening, Speaking and Vocabulary (Bygate, 2016). This enabled the creation of mixedproficiency dyads, engaging in paired LI. These collaborative task outcomes were compared to the same students' individual LI task performances. Both tasks amounted to verbally inferring the meaning of 12 carefully selected target words in a running text. The findings corroborate previous research (e.g. Haastrup, 1990, 1991) showing a positive effect of global L2 proficiency on LI, as a correlation between the proficiency task scores and the LI scores was established. However, no statistically significant positive effect of collaboration was found. A qualitative analysis revealed that 'collaborative' dyads generally performed better than pairs labelled as 'expert/novice' or 'dominant/passive' (Storch, 2002). Pedagogical implications and suggestions for future research are discussed.

**Keywords**: Lexical inferencing, L2 proficiency, task-based language learning, collaboration, sociocultural theory, dyadic patterns of interaction

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# 1. Introduction

All second language (L2)<sup>1</sup> users may encounter unfamiliar words while reading. One of the most commonly employed strategies in these situations is lexical inferencing (LI) (Wesche & Paribakht, 2010; Soria, 2001). LI is defined by Haastrup (1991) as a procedure that involves "making informed guesses as to the meaning of words in the light of all available linguistic cues in combination with the learner's general knowledge of the world, her awareness of the context and her relevant linguistic knowledge" (p. 13). It is exemplified in (1) below, where the speaker is reading a text, and is faced with the unfamiliar word *opine*. Using a type of introspective verbal reporting known as the think-aloud technique (Dörnyei, 2007), the learner guesses the meaning of the target word by drawing on knowledge of another word with the same word stem.

(1) "**Opine** seems like something from opinion, so it [means] to have an opinion" (Data taken from Nylander, 2014, p. 21)

Learners infer lexis using various cues to meaning, including orthography, syntax, and the context in which the target word appears (Haastrup, 1990). LI is typically seen as a reading comprehension strategy, through which learners tackle new vocabulary. These encounters may also equal the first of many exposures to the unknown word, which can eventually lead to retention (Haastrup, 1991; Hu & Nassaji, 2012). Seeing these advantages of the strategy, researchers like Nassaji (2003) advocate teaching LI to language learners.

Having received extensive scholarly attention since the 1970's, LI has been explored in relation to various factors, including reading comprehension (Juliana, 2018; Paribakht & Wesche, 1999; Bengeleil & Paribakht, 2004), vocabulary knowledge (Ebadi, Weisi, Monkaresi & Bahmalou, 2018; Ehsanzadeh, 2012; Qian, 2005) and text characteristics (Garza & Harris, 2016; Frantzen, 2003). Soria (2001) investigated the inferencing behaviour of L2 Ilokano learners of 'high' and 'low' proficiency. However, as discussed below, his study does not include a detailed mapping of the participants' global L2 proficiency, which would have been warranted, since the proficiency grouping was a prerequisite for the study. This relates to Tremblay (2011), who surveyed 144 articles on L2 acquisition from three reputable journals, and who found that only approximately one third of these studies contained independent measures of L2 proficiency.

<sup>&</sup>lt;sup>1</sup> Following Ortega (2009), the label L2 is used to cover all the languages acquired after the L1 (L2, L3, Ln).

Moreover, a vast majority of the existing LI research (e.g., Benoussan & Laufer, 1984; Nassaji, 2003; Pulido, 2007; Ehsanzadeh, 2012; Hu & Nassaji, 2012; Nylander, 2014) rests on individual task performances. Haastrup (1990, 1991), however, is an exception. She looked at the LI skills of 62 Danish ESL learner dyads, and underscores that pair think-aloud is ideal for LI tasks. The author argues that it resembles real-life situations where learners discuss word meanings, and that it maximizes the chances of students verbalizing all their thoughts and thus revealing the cognitive processes involved in the activity (Haastrup, 1991). Haastrup's research has inspired numerous scholars investigating individual LI (e.g. Hu & Nassaji, 2014; Nylander, 2014; Akpinar, 2013; Wesche & Paribakht, 2010; Soria, 2001). Seeing the prominence of her work and the advantages of the methodology, it is therefore surprising that so few LI researchers have used the collaborative task format. Further, even fewer experiments compare the efficiency of paired and individual LI tasks, as a means to explore how collaboration affects learners' LI success<sup>2</sup>.

Collaboration is central to Vygotsky's (1978) sociocultural theory (SCT). This theory posits that learning is essentially social, in that knowledge is co-created through interaction (Ansari & Ansari, 2016). SCT thus advocates working collaboratively with language tasks, as doing so allows learners to combine their knowledge and consequently perform better than they would do individually (Fernández Dobao, 2012). More specifically, Vygotsky (1978) hypothesises that collaboration between a more proficient 'expert' and a less proficient 'novice' is beneficial in that it can result in a form of dialogic assistance known as scaffolding. The use of such heterogeneous dyads in the language classroom has been questioned, however. For example, Leeser (2004) notes that 'less' proficient learners may not always be developmentally ready to discuss the ideas of a 'more' proficient peer. Educators like Roberts (2016) also point to the danger in simply classifying students as 'novices' and 'experts', since such roles can be fluid. Taken together, this indicates that Vygotsky's hypothesis is worth testing.

SCT commonly serves as a theoretical framework in SLA studies exploring pair work (see e.g., Storch, 2002; Roberson, 2014; Ahmadian & Tajabadi, 2017). By reference to the theory, Storch (2002) presents a coding scheme, distinguishing between four dyadic patterns of interaction exhibited by peers engaged in language tasks. The patterns have been referred to in several experiments (see e.g., Wantabe & Swain, 2007; Kim & McDonough, 2008; Roberson, 2014). However, as noted by Ahmadian and Tajabadi (2017), these studies typically concern

<sup>&</sup>lt;sup>2</sup> To date, I only know of one study comparing individual and collaborative lexical inferencing tasks, which is in Mandarin.

undergraduates engaged in collaborative writing. According to the authors, the studies are also relatively few in number. This led them to call for research applying the scheme to "more varied aspects of language and different language learners" (Ahmadian & Tajabadi, 2017, p.111).

Further, Erlam and Ellis (2018) recently pointed out that "[m]uch of the research investigating tasks has not been conducted in real classrooms, and many studies that have done so did not make use of the classroom's usual teacher" (p. 2.). This is noteworthy, seeing that exploring task work in educational settings is important for the ecological validity of the research (Pica, 2005; Erlam & Ellis, 2018). Task-related studies typically stem from a theoretical framework known as Task-Based Language Learning (TBLL). The framework assumes that tasks, i.e., classroom assignments "in which learners use language 'pragmatically', that is, to do things" enable L2 development and acquisition (Bygate, 2016, p. 381). As noted by Ellis (2003), tasks may well be used to assess language learners' proficiency levels, as they are convenient and easy to incorporate into the learning process. Pica (2005) further points out that researchers and educators can implement the same tasks for independent or joint purposes, which, in turn, allows beneficial research-practice relationships. Thus, TBLL presents itself as an interesting avenue to explore in the current research.

In sum, there appears to be a need for (a) more studies where the participants' L2 proficiency levels are properly mapped, and (b) research on collaborative LI. There is also a scarcity of (c) analyses of the interaction patterns exhibited during different kinds of task work, and (d) TBLL studies by researching practitioners. With this in mind, the aim of the current study is to investigate the effect of L2 proficiency, collaboration and patterns of interaction on LI success, in a classroom-based study on adult learners of L2 English, taught by the teacher-researcher. The students' global L2 proficiency was established through a series of language tasks. This allowed the creation of mixed-proficiency pairs, which, in turn, enabled testing of the Vygotskian 'expert/novice' hypothesis mentioned above.

The thesis is divided into six sections. The following section constitutes a background to the present study. It ends with a summary of relevant previous research, leading up to the aims, hypotheses and research questions of the thesis. In Section 3, the research context and methodology is presented. Section 4 displays the present findings, which are then discussed in Section 5. Finally, the thesis ends with a brief conclusion in Section 6.

# 2. Background

The research reported here is primarily an LI study investigating the impact of L2 proficiency, collaboration and interactional patterns on LI success. Hence, this section first accounts for LI in detail. Subsection 2.2 concerns L2 proficiency, as its effect on the ability to infer lexis is central to this study. As shown in Section 1, LI success can be investigated by means of LI tasks, where students verbally infer the meaning of supposedly unknown words. Further, language tasks are arguably efficient and appropriate for assessing L2 proficiency. Thus, TBLL was deemed interesting in relation to the present research, and the framework is presented in Subsection 2.3. This is followed by an account of Vygotsky's SCT, as it was used to explore collaboration within mixed-proficiency dyads in this thesis. Section 2 also contains Storch's (2002) coding scheme, as it was utilized to establish the interaction patterns exhibited in the analysed lexical inferencing data.

# 2.1 Lexical inferencing (LI)

This subsection concerns lexical inferencing (LI). It first provides different definitions of LI, as well as an account of how LI and inferential success is defined in this thesis. This is followed by a summary of factors affecting LI tasks and skills. The subsection ends with an account of LI in relation to L2 proficiency. Later, in Section 3, I explain how the outlined factors were considered in the LI experiment reported here.

## 2.1.1 Defining lexical inferencing

According to Haastrup (1991), the concept of inferencing is referred to in several areas of research. Within the field of philosophy, for instance, a deductive inference is achieved when arriving at a conclusion based on premises. Further, in pragmatic analyses of L1 language use, inferences arise when speakers provide missing links, make conscious connections in speech, and fill in gaps created by discontinuity (Haastrup, 1991). As shown in Section 1, the type of inferencing called lexical inferencing, however, amounts to guessing the meaning of unknown words in a running text. An example of LI from the data analysed in the present study is shown in (2). Here, the participant Selma (S) is inferring lexis in front of the researcher (R). The target word in focus, *meddle*, is marked in boldface. Like a majority of the subsequent examples from the data set, I have translated example (2) into English from Swedish.

(2)

1S: (Reads from the text) 'we should not **meddle** in other people's business'... **Meddle**... [it's], like, [to] interfere, I 2think.

3R: Did you know [the word] from before?

4S: No, actually not. It is the first time I see it. I am trying to use, like, the context of the text. So, (continues to the next target word) [...]

Assuming that Selma is honest, she manages to successfully guess the meaning of *meddle*, relying solely on LI through the context in which the word appears. This then allows her to continue reading, and move on to the next target word, in a manner typically displayed in authentic reading comprehension (cf. Section 1). Following Haastrup (1990, 1991) the present study defines LI success as the ability to infer lexis by providing an appropriate translation or definition of the target word in question, like in the above example.

Haastrup (1990, 1991) views LI as central to the development of receptive language and vocabulary knowledge in SLA. This is because language learners essentially acquire a L2 by forming hypotheses about the language. In turn, this requires rich L2 input, which enables learners to subconsciously test these hypotheses during, for instance, interactions with a teacher or other peers. LI, Haastrup explains, is thus vital in that hypotheses can be checked and formed during inferential procedures. LI may also help solve a comprehension problem as in (2). Further, LI can lead to L2 rule formation, or, as discussed below, vocabulary acquisition (Haastrup, 1991).

As noted by Kavianpanah and Alavi (2008), there are conflicting views on what LI actually entails. In some research (e.g., Graza & Harris, 2016), lexical inferencing is predominantly presented as a vocabulary acquisition technique, allowing learners to acquire lexis through context. As Nassaji (2003) notes, there is robust evidence of first language (L1) learners acquiring much of their vocabulary using LI. According to Paribakht and Wesche (1999), LI may thus lead to vocabulary retention for L2 learners as well. They indicate that in this regard, LI equals a kind of incidental vocabulary acquisition, where learners learn lexis while focusing on the comprehension of the text.

However, as underscored by e.g., Goldina, Shany, Geva and Katzir (2014), the efficacy of LI as a vocabulary learning strategy has also been questioned. Bengeleil and Paribakht (2004), for instance, did not find any statistically significant evidence of vocabulary retention through single LI sessions like those reported here (see Section 3). According to the authors, this was unsurprising, as language learners typically need to be exposed to a word multiple times in meaningful contexts, before they can acquire it. Like Haastrup (1991), they note that learners

typically do not learn vocabulary through LI alone, and that feedback which verifies or rejects their guesses may be necessary, if they are to retain words encountered via inferencing.

Following Haastrup (1991), the current research views LI as an ability in which to train learners. It is seen as a reading comprehension strategy, which, when utilized successfully, enables readers to independently solve comprehension problems and proceed with a text. At the same time, LI can also function as the first of many exposures to unknown words, possibly leading to vocabulary retention. As noted in Section 1, Nassaji (2003) therefore advocates teaching ESL students about LI and inferential strategies. Similarly, the Swedish National Agency for Education (*Skolverket*), which is the central administrative authority for the public school system in Sweden, notes that L2 English students like the current research participants, should "be given the opportunity to develop their ability to use different strategies to [...] solve problems when language skills are inadequate" (Skolverket, n.d., p.1). As indicated by Haastrup (1990) an LI task is a problem-solving task where students practice tackling unknown words, i.e. attempt to solve comprehension problems caused by insufficient vocabulary. Hence, teaching LI like in the current study, is also in line with the national policies governing the current research context.

# 2.1.2 Factors affecting lexical inferencing success

## 2.1.2.1 Text and target word characteristics

The nature of the text from which words are inferred has a great impact on LI (Soria, 2001; Pulido, 2007). For example, Polido's (2007) participants were significantly more successful when inferring lexis from a text about a familiar scenario, compared to when they read about an unfamiliar topic. Similarly, Soria (2001) notes the importance of (a) being culturally familiar with the phenomenon treated in the LI task, and (b) finding the task interesting.

For LI to occur, the text must also be appropriate in terms of overall difficulty (Haastrup, 1991). Research suggests that the readers should know about 95 % of all the words in a text in order to be able to successfully infer the meaning of the few words that are unknown (Akinpar, 2013; Chegeni & Tabatabaei, 2014). Kaivanpanah and Alavi (2008) show that syntactic complexity affects LI success, in that complex LI tasks are more demanding than simpler tasks. The syntactically complex tasks in their study were characterized by several relative clauses, passive sentences, subordinate clauses without a surface subject or finite verb, and a lack of explicit

markers.

According to Kaivanpanah and Alavi (2008), learners can be helped by both the immediate and the global context of target words when inferring their meanings. Thus, in an LI task, there should not be too many unknown words in the same clause. Garza and Harris's (2016) research participants read texts with between zero and seven unknown target words per sentence. The authors found that the more unfamiliar words there were in a sentence, the more difficult it became for the participants to infer them correctly. Garza and Harris also noted a drastic decrease in comprehension when the participants read sentences containing five or more unfamiliar words.

Focusing on the nature of target words, Pourghasemian, Zarei, Golham and Jalali (2014) tentatively suggest that nouns and verbs may be easier to infer than words from other parts-of-speech. This is in line with Wesche and Paribakht (2010), who indicate that nouns and verbs are more likely to attract inferencing attempts than other words. Similarly, word morphology typically plays a central role in LI (see e.g., Haastrup, 1991). Hu and Nassaji (2014), for example, illustrate that learners often misinterpret different parts of target words, which, in turn, can lead to them misunderstanding the entire text in which the target word appears.

# 2.1.2.2 Learner-related factors

Factors like high learner motivation (Hu & Nassaji, 2014) and a high level of attention to details (Frantzen, 2003) has a positive impact on LI success. This resonates with Kavanpanah and Alavi (2008), who state that LI requires great effort, and that students engaged in lexical inferencing typically must be very concentrated. Nassaji (2003) notes that for learners who must use their L2 when verbally inferring lexis, the task can become particularly challenging, as it may affect their ability to articulate all their inferences. Thus, the participants in the current study were given the choice to use English, Swedish or a combination of both during the LI sessions, as it was assumed that this would maximize the outcomes of the sessions (cf. Nylander, 2014).

Moreover, the role of L2 proficiency in LI has been explored in different ways (Prior et al., 2014). Some (e.g. Benoussan & Laufer, 1984; Haastrup, 1990, 1991; Soria, 2001) have compared groups of learners on different global proficiency levels performing the same LI task, while Pulido (2007), for instance, looked at how individual proficiency differences can be used to predict LI success. With few exceptions, the research indicates a positive relationship between global L2 proficiency and inferential skills, in that proficient learners are able to make more accurate guesses than their

'less proficient' peers (but see Benoussan & Laufer, 1984 and Soria, 2001 for different findings) (Prior et al., 2014).

The above findings raise the question of why more proficient language learners typically are better at inferring lexis than less proficient students. This is discussed by Haastrup (1990), who compared the inferencing behaviour of 'high' and 'low' proficiency students of L2 English. She points to a hierarchy in the cues to meaning that learners use to infer word meanings, and distinguishes between top-level and bottom level cues. According to Haastrup (1990), top-level cues are related to conceptual or schematic knowledge from learners' L1 or L2. These are thus utilized when learners infer word meanings by means of semantics, or make use of the context in which the target word appears (see example 3). Bottom-level cues concern various linguistic levels of the L2, i.e., syntax, target word part-of-speech, word origin, lexis, morphology, orthography, phonology, and collocations (Haastrup, 1990).

As noted by Haastrup (1990, 1991), proficient students inferring lexis can typically make use of multiple top- and bottom-level cues in a single inference. The author refers to this as cross-talk, which is when top-level and bottom level cues interact. According to Haastrup (1990) cross-talk typically results in effective inferencing, as it allows bottom level cues to be tested against top-level cues. Example 3 below illustrates how two 'high' proficiency learners, student A and student B, crosstalk when successfully inferring the meaning of *insatiable*.

```
(3)
1A: Able means being able to... Insatiable... ins...
2B: I think it is a positive word... Something with extremely great...
3A: What does sati mean?
4B: Satanic.
5B: There is also a negation... it is something with –in... I mean the prefix
6A: He sounds as if he is rather single-minded.
7A: In-sa-ti okay.... In is something with...
8B: It is a negation [...]
9B: It is a good word... Oh, by the way, sati is related to satisfy
10A: Yes, he has not yet been satisfied.
(Data taken from Haastrup, 1990, p. 127)
```

As Haastrup (1990), notes the inference in (3) contains a minor mistake ('satanic'). Otherwise, the students skilfully combine the use of top-level cues related to context ('He sounds as if he is rather single minded') and semantics (knowledge of *satisfy*), with bottom-level cues such as morphology

(knowledge of -able). As a result, they succeed in inferring the meaning of the target word in question.

By contrast, Haastrup (1990) notes that less proficient learners tend to resort to non-interactive processing. In other words, they typically do not cross-talk, but rather employ top- or bottom-level cues only. Haastrup argues that low proficiency learners also tend to rely heavily on bottom-level cues. As a result, they cannot test their inferences against higher levels, which leads to unsuccessful guessing behaviour (Haastrup, 1990). This type of LI is illustrated in example 4. Here, students C and D are talking to a researcher (R) about the target word *insatiable*. Student C has suggested that it means *stable*, whereas Student D asserts that insatiable is synonymous with *unstable*.

**(4)** 

1R: How did you arrive at stable?

2C: I think it looks like it.

3R: Why did you suggest unstable?

4D: When –in is placed there I thought it was the opposite

(Data taken from Haastrup, 1990, p. 123)

As Haastrup (1990) notes, student C focuses on the orthography of the target word ('because it looks like it'), whereas student A concentrates on the prefix –*in*. Unlike the 'high' proficiency students A and B in (4) the 'low' proficiency learners in (4) thus rely solely on bottom-level cues, without comparing their inferences to the context of the target word.

Moreover, focusing on L2 proficiency, Prior et al. (2014) point out that it is complex, and includes several components (cf. Subsection 2.2). Yet, the authors note that most existing research on proficiency and LI has focused solely on the aspects of L2 proficiency related to reading skills and vocabulary knowledge. Bengeleil and Paribakht (2004), for example, explored the effect of reading proficiency on LI success, and found that the skilled readers participating in their study were more successful when inferring lexis than the other participants. Focusing on vocabulary, Ehsansadeh (2012) investigated LI in relation to vocabulary breadth (i.e. the number of words acquired) and depth (i.e. how well students know words beyond a basic meaning). He sought to determine which of these dimensions that best predict inferential success, and found vocabulary depth to be the most crucial. Hatami and Tavakoli (2012), however, conducted a similar experiment, and argue that lexical breadth is more important. Taken together, these findings thus illustrate that reading skills and vocabulary knowledge are prerequisites for successful LI.

As discussed in Section 3, vocabulary tests can be used as a substitute for more comprehensive proficiency tests in SLA research. It is therefore possible that some of the researchers looking solely at LI and vocabulary knowledge, actually tapped into the relationship between global L2 proficiency and inferential skills. Regardless, seeing the complexity of L2 proficiency, there is a need for LI studies where L2 proficiency is properly mapped. L2 proficiency is defined and further discussed in the next subsection.

# 2.2 L2 Proficiency

One of the goals of the research reported in the present study is to explore the relationship between L2 proficiency and LI success. As noted by Leclercq and Edmonds (2014), the issue of proficiency has been of great interest for both researchers and educators for several decades. They explain that in the middle of the 20<sup>th</sup> century, many scholars equated L2 proficiency with knowledge of grammatical structures in the target language. According to Leclercq and Edmonds (2014), these researchers were often inspired by Chomsky (1965). Chomsky (1965) makes a distinction between competence and performance, where competence is an innate ability shared by all native speakers of a language. Performance, on the other hand, has to do with what a speaker does in the moment. Chomsky (1965) emphasises competence, whereas performance is secondary in his view.

However, different scholars view proficiency in different ways (Canale and Swain, 1980; Leclercq and Edmonds, 2014). Hymes (1972), for instance, argued that Chomsky's definition of competence was too narrow, as it e.g., did not include the ability to judge the appropriateness of one's word choices in a given context. Thus, Hymes introduced the wider notion of communicative competence, which focuses on what a learner is capable of doing (i.e., usage), and can be seen as a hybrid between Chomsky's (1965) competence and performance. Canale and Swain (1980) present a theoretical framework of the skills involved in communicative competence. They explain that communicative competence includes several systems of knowledge, namely grammatical competence related to lexical items, morphology, syntax, grammar semantics, and phonology, and sociolinguistic competence, i.e., knowledge of sociocultural rules of discourse. The authors also refer to strategic competence, which is the ability to employ communication strategies when one's language abilities are insufficient. According to Leclercq and Edmonds (2014) this focus on usage is also evident in the Common European Framework of Reference for Languages (CEFR), which is a language policy document used to assess language proficiency. Among other things, the document contains functional descriptors of global L2 proficiency on a scale ranging from A1 to C2, and the document clearly states what the learner should be able to do on each level (Council

of Europe, 2001). Seeing that the CEFR is not central to the current study, discussing its descriptions of global L2 proficiency is irrelevant. Descriptions of global L2 proficiency from the CEFR are, however, included in Appendix L.

A slightly more recent take on proficiency was put forward by Hulstjin's (2011). Hulstjin distinguishes between core and peripheral components of language proficiency. The core components are related to linguistic cognition in the domains of e.g., phonetics and phonology. The peripheral components are metacognitive, and equal e.g., metalinguistic knowledge and strategic competence. According to Hulstin (2011) L2 proficiency can be conceptualized in light of these terms. He proposes a definition of global language proficiency, which begins as follows:

[...] language proficiency is the extent to which an individual possesses the linguistic cognition necessary to function in a given communicative situation, in a given modality (listening, speaking, reading or writing). Linguistic cognition is the combination of the representation of linguistic information (knowledge of form-meaning mappings) and the ease with which linguistic information can be processed (skill). Form-meaning mappings pertain to both the literal and pragmatic meanings of forms (in decontextualized and socially-situated language use, respectively) (Hulstjin, 2011, p. 242, italics in the original, emphasis added).

Hulstjin's definition of proficiency is both comprehensive and covering, as it refers to several aspects of language skills, i.e., areas having to do with both socially situated language use and more cognitive aspects. Thus, it was deemed appropriate for the current study. Importantly, the above definition refers to the different modalities in which language proficiency can be expressed. This suggests that measures of global L2 proficiency should entail mappings of students' listening, speaking, reading, and writing skills respectively. However, as indicated in Section 1, this is not always the case, as researchers e.g., can rely on 'teachers' assessments' of the participants' proficiency levels, without pointing to specific task results or accounting for the judgements made by these educators. More seriously, Wood Bowden (2016) notes that "[m]uch SLA research does not even attempt to measure L2 proficiency" (p. 648). This relates to a survey by Tremblay (2011) based on 144 studies investigating the linguistic knowledge and behaviour of L2 learners. The studies were conducted between 2000 and 2008, and came from the journals Second Language Research, Studies in Second Language, and French Language Studies. According to the survey, approximately 60 % of the research did not contain any independent measures of proficiency, but instead relied on other available means, such as classroom level or years of instruction. Even though L2 proficiency was not necessarily an independent variable in all the studies from the survey, the observations are nevertheless noteworthy, seeing that this lack of proficiency measures has a major impact on the generalizability of the research, and arguably makes the findings elusive (Leclercq & Edmonds, 2014; Wood Bowden, 2016).

In studies where proficiency is assessed, it is often determined by means of e.g., self-ratings or various tests (Wood Bowden, 2016). For example, Wood Bowden (2016) notes that vocabulary tests such as Nation's (1990) Vocabulary Levels Test (VLT) often are utilized as an alternative to measuring proficiency by means of e.g. tasks. This is arguably convenient, as these tests are relatively easy to administer (Wood Bowden, 2016), and since vocabulary measures typically correlate with global L2 proficiency (Alderson, 2005). However, as shown above, language proficiency involves several components, which presumably cannot be captured in a single vocabulary test performance. Thus, the research reported here advocates measuring proficiency through other instruments, capturing learners' ability to function in all the above modalities respectively.

The definition of language proficiency from Hulstjin (2011) suggests that proficient language learners can process linguistic information with enough ease to (a) function in various communicative contexts, and (b) employ the language in several different situations. This relates to Roberson (2014), who notes that "as language proficiency increases, learners can "[...] engage more deeply with the language problems they are attempting to solve" (p. 18). As illustrated in 2.1, this study defines LI as a strategy used to tackle unknown words while reading, i.e., solve language problems. Thus, applied to the current research, Roberson's (2014) comment suggest that the learners' proficiency levels will influence their ability to infer lexis, in that the more proficient learners presumably will be more successful when trying to solve the LI task, than their less proficient peers.

Focusing on L2 proficiency and task work, certain previous research suggests that learners on different proficiency levels often benefit from collaborating when performing tasks (see e.g. Storch, 2001; Kim & McDonough, 2008). Kim and McDonough (2008), for instance, found that heterogeneous dyads focused more on language form and were better at agreeing on accurate answers, than same-proficiency pairs performing language tasks. This suggests that the current mixed-proficiency dyads will succeed when inferring lexis as a collaborative effort.

Leeser (2004), however, analysed the paired task work of adult L2 Spanish learners engaged in a text reconstruction task. More precisely, the students were asked to take notes while listening to a

reading of a short passage, in order to reconstruct what they had heard. He found that for the low-proficiency learners, merely comprehending the text on which the task was based was a struggle in itself, making them unable to direct as much of their attention to the actual task work as the more proficient learners. Consequently, the overall proficiency of the dyads affected the pairs' ability to focus on form and successfully resolve language-related problems. Leeser (2004) therefore questions whether 'low' proficiency learners actually are helped from working with 'high' proficiency students on a text reconstruction task, as 'weaker' learners may not be developmentally ready to discuss the issues addressed by their 'stronger' peers. Put differently, they are not necessarily in a position to be helped by the information given by the other student. Leeser (2004) also considers the task type used in his experiment, and notes that students may benefit more from working in heterogeneous dyads if the task work is less contextualized and e.g., involves clear roles and exchanges of information. With this in mind, it remains to be seen whether mixed-proficiency dyads are preferable for collaborative LI tasks.

Some studies (Wantabe & Swain, 2007; Kim & McDonough, 2008) indicate that proficiency levels per se do not necessarily affect collaborative task outcomes. Rather, these findings suggest that successful pair work stems from a beneficial dialogue, which agrees with the Vygotskian idea of learning as something that occurs in, rather than as a result of, interaction (see Subsection 2.4). Task work will be further discussed in the next subsection, which outlines Task-Based Language Learning (TBLL) and Teaching (TBLT).

## 2.3 Task-Based Language Learning and Teaching

As indicated in Section 1, TBLL and TBLT focus on second language acquisition through tasks, where the L2 is seen as a communicative tool rather than an object of study (Erlam & Ellis, 2018). Tasks vary in format, and can be constructed from different types of input (e.g., podcasts, articles etc.), the common denominator being that they enable clear communicative outcomes in functional 'real-life' contexts (Ellis, 2003; Pica, 2005). According to the task-based approach, task work provides opportunities for improving various aspects of L2 proficiency, including pronunciation, syntactic complexity, and fluency (Robinson, 2011; Pica, 2005). Thus, tasks are arguably appropriate for eliciting learner samples of real-time language use, making them valuable to both language teachers and SLA researchers (Ellis, 2003; Pica, 2005; Robinson, 2011; Bygate, 2016). Following Bygate (2016), this research defines a task based on the following criteria:

- "(1) The primary focus should be on 'meaning' (by which is meant that learners should be mainly concerned with processing the semantic and pragmatic meaning of utterances).
- (2) There should be some kind of 'gap' (i.e. a need to convey information, to express an opinion or to infer meaning).
- (3) Learners should largely have to rely on their own resources (linguistic and non-linguistic) in order to complete the activity.
- (4) There is a clearly defined outcome other than the use of language (i.e. the language serves as the means for achieving the outcome, not as an end in its own right)" (p. 386).

The instruments used to investigate LI in the current study were designed in relation to Bygate's (2016) task criteria. It is assumed that these LI tasks, (see Section 1 and Section 3) are naturally permeated with a focus on meaning (cf. criterion 1). They also contain a gap, since they amount to inferring meaning, which is explicitly mentioned in criterion (2). The students' performances largely depend on their own L2 abilities, as they are free to use the L2 in any way to approach the tasks (cf. criterion 3)<sup>3</sup>. Finally, the outcomes are in the form of solutions to the tasks, rather than mere language use (cf. criterion 4).

As mentioned in Section 1, tasks can also be used to assess students' language skills (Ellis, 2003; Wills & Wills, 2007). According to Ellis (2003), this approach, known as task-based assessment (TBA), is advantageous in that it allows language teachers to assess students continuously, and often results in valuable feedback. Additionally, tasks typically mirror what language learners must master in the real world, which, in turn, strengthens the validity of the assessment. Seeing the advantages of TBA, institutional proficiency tests such as the International English Language Testing System (IELTS) can contain task-like elements (Ellis, 2003). The IELTS, for example, is an accepted measure of L2 English proficiency as in 99 % of all four-year colleges in America, and could thus have been used to assess proficiency and create mixed-proficiency dyads in the present study (IELTS, 2018). However, this would not have resonated with the current research context, as the school policy favoured more dynamic and practical ways of working (see Section 3). Also, standardized proficiency tests are typically time-consuming and costly, which, considering the scope of this research, makes them inappropriate for the study reported here (Wood Bowden, 2016). In the present study, L2 proficiency was thus measured by means of separate Listening, Speaking, Reading and Writing tasks, which were all designed based on Bygate's

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<sup>&</sup>lt;sup>3</sup> As shown in Section 3, the participants were allowed to use English, Swedish or a mixture of both during the work. It was assumed that the tasks were beneficial for their L2 development regardless of how they chose to perform them, seeing that the tasks centred around English texts and vocabulary.

(2016) criteria above. The proficiency tasks will be presented in Section 3 and discussed in Section 5.

Moreover, Ellis (2003) also points to the complexity of TBA. He notes that in certain tasks, it may, for example, be difficult to distinguish between world knowledge and language skills. Ellis (2003) thus concludes that task-based assessment (TBA) "need not, and probably should not be used by itself" (p. 316). Instead, he suggests assessing proficiency by combining tasks and so-called indirect methods of assessment, such as vocabulary tests (p. 316). In the current study, a vocabulary test was therefore used as a complement to the L2 proficiency tasks (see Section 3). TBLL differentiates between the concepts task and activity, in that a task is the actual assignment that learners deal with, whereas the activity is what the learners do during a task or exercise (Nunn, 2001; Ellis, 2003). A task also differs from an exercise, since the former concerns pragmatic meaning depending on context, and the latter is more systematic in nature. It should, however, be stressed that introducing exercises alongside tasks can be theoretically grounded, and even favoured (Ellis, 2003). This indicates that all elements of TBLT do not necessarily have to be equally 'task-like' for the teaching to be valuable to second language learners. Similarly, Bygate (2016) introduces three different approaches to TBLL and TBLT. He explains that in tasksupported teaching, tasks are implemented into existing course structures. In task-referenced teaching, tasks are used to establish what students should do, without necessarily permeating the teaching in all respects. Finally, in "properly task-based" teaching, all the relevant micro- and macro-level pedagogic procedures, including the curriculum, are completely centred around tasks (Bygate, 2016, p. 387). It should be noted, however, that not only completely task-based teaching is relevant to TBLL research. Like Ellis (2003), Bygate (2016) rather underscores that tasksupported or -referenced teaching, too, can "be consistent with the fundamental principles of TBLL", and function as a realistic and interesting implementation of the TBLL approach (p. 387).

In the study reported here, the teaching had to be adapted to the national and local policies of the current research context (see Section 3). These are not entirely task-based. Thus, this study is classified as 'task-referenced'. The next subsection discusses the implementation of TBLL from a more practical perspective.

# 2.3.1 Planning, teaching and assessing TBLL

As pointed out by Ellis (2003), there is a "bewildering array" of variously labelled types of tasks (p. 210). The author therefore stresses the importance of utilizing a specific classification of task

types. Wills and Wills (2007) present such a taxonomy, where the topic of the teaching functions as the point of departure. Wills and Wills' (2007) classification is illustrated in Figure 1 below. Wills and Wills's (2007) taxonomy is based on the cognitive processes involved in task work. Starting with listing, a simple listing task could, for example, entail listing available means of transportation, whereas a more complex listing task might involve listing reasons for using a certain type of transport. Listing can be further divided into brainstorming (e.g. brainstorming lists of chores or qualities), and facts finding, which involves searching for lists of facts. According to the authors, brainstorming can be used to initiate in-class discussions in TBLT.

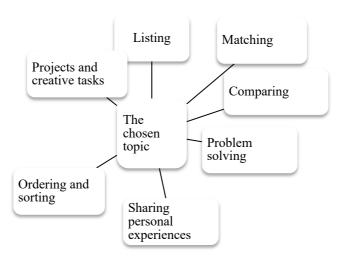


Figure 1. Wills and Wills's (2007) classification used to generate tasks from a topic.

Moreover, matching and comparing can be applied to reading and writing tasks. For example, students could match descriptions to pictures, or texts to headlines (Wills & Wills, 2007). Problem solving tasks, typically invite students to offer advice and recommendations on various problems, and e.g., write an e-mail to a politician (Wills & Wills, 2007).

Students can share personal experiences by writing down anecdotes or doing storytelling. Furthermore, ordering and sorting tasks can, for example, be used to prompt discussions. Wills and Wills (2007) outline a speaking task, where students first work independently, and come up with eight world leader qualities. Then, they should work in pairs, and agree on five qualities. Each individual student should then (a) rank the five qualities in order of importance and (b) justify his or her ranking in a final group discussion. Finally, projects and creative tasks typically result in relatively concrete task outcomes, such as a class newspaper, a poster or a survey (Wills & Wills, 2007). Thus, a creative task or project task about world leaders, for example, could amount to

preparing and recording a podcast in pairs, where one student acts as the interviewer, and the other learner pretends to be the world leader in question (personal example).

Ellis (2003) notes that a taxonomy of tasks also can be based on specific language skills, and thus refer to Reading, Speaking, Listening, and Writing tasks respectively. Such a classification, he indicates, is convenient and easily applicable to most educational contexts. However, according to Ellis (2003) the danger of classifying tasks in this manner is that they will lose their 'taskness', and rather become exercises focusing on specific aspects of language. The current research nevertheless contains separate Reading Speaking Listening and Writing tasks. This is because such a structure was necessary in order to measure the participants' global L2 proficiency in an efficient manner, which aligned with the definition of proficiency utilized to in this study (see Section 2.2). The school at which the current research took place implemented thematic unit-based teaching, departing from specific topics like 'Revolutions' or 'Democracy' (see Section 3). Thus, Wills and Wills (2007) classification of tasks was also deemed appropriate for planning the teaching reported here. In Section 3, the tasks used in this study will be presented in the light of Wills and Wills's (2007) taxonomy.

Wills and Wills (2007) emphasise the value of structured task-based units, where students work with tasks and strive towards a specific goal in the form of e.g. a concrete project task (cf. above). This is in line with the policies of the current research context, as the school board explicitly advocated initiating more practically oriented projects (M. Berglund, personal communication, 18 October 2018). The current study also seeks to properly map L2 proficiency, and explore its impact on LI. To meet these needs and aims, the task-referenced unit reported here consists of a series of tasks, which promotes different aspects of L2 proficiency, and leads up to a project task resulting in a final product. This ends the outline of TBLL, which is one of two theoretical frameworks utilized in this research. The next subsection summarizes the second framework, namely Vygotsky's sociocultural theory (SCT).

## 2.4 Vygotsky's sociocultural theory (SCT)

SCT is an approach to learning and mental development originated by the Russian psychologist L. S Vygotsky (1978). Despite primarily focusing on children's cognitive development, SCT can be applied to several processes, including SLA (Otha, 1995; Storch, 2002). According to a Vygotskian view of language learning, social settings like peer groups and collaborative tasks are prerequisites for learning and development (Ansari & Ansari, 2016). Here, learning equals the

effort that a learner ('novice') is able to make with the assistance of another person ('expert'), who can be either a teacher or a peer (Lantolf & Becett, 2009).

As Ellis (2003) notes, an important concept within SCT is that of mediation, which involves "the modification and reorganization of genetically endowed capacities into higher order forms" (Ellis, 2003, p. 345). Ellis (2003) explains that mediation can occur via three types of semiotic tools. The first type of mediation arises through the use of a material tool, e.g. when tying a knot in a handkerchief to remember something. It is also possible to achieve mediation via language. Verbal interaction is particularly central to Vygotsky's theory, since it facilitates cognitive development and functions as a tool enabling collaborating learners (e.g. an expert and a novice) to "plan, coordinate and review their actions" (Storch, 2002, p. 121) Thus, returning to TBLL, the task-based approach to language learning is in line with SCT, in that tasks can be used to construct collaborative acts, which, in turn, can lead to learning (Ellis, 2003).

SCT advocates collaboration between students, as it enables interaction within their so-called Zones of Proximal Development (ZPDs) (Férnandez Doabo, 2012). The ZPD is "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). In TBLL, this means that all tasks, including the present, must be appropriately challenging. Otherwise, learners will be unable to "dynamically construct [their] ZPDs", and gain from the collaboration they entail (Ellis, 2003, p. 179).

Moreover, the ZPD can be mistaken for scaffolding, which is another construct related to the SCT Scaffolding equals a kind of assistance, where one speaker supports the other in performing a task that he or she is unable to do alone. Scaffolding can, for instance, occur when the assisting speaker enlists interest in the task, simplifies it, or clarifies its purpose (Ellis, 2003). Unlike the ZPD, which is a qualitative unity of learning and development, scaffolding can be quantified and refers to the amount of assistance given to a learner (Lantolf, Thorne & Poehner, 2015). It can arise when a learner is helped by a teacher, but also in interactions between learners (Ellis, 2003). Scaffolding is exemplified in (5) below. The dialogue is taken from Roberson (2014), and illustrates successful assistance provided by Joe (J) to his fellow student SongWoo (SW) during a peer response session. The topic of conversation is SongWoo's written summary of a novel about a team of refugee football players called The Fugees.

In Vygotskian terminology, example (5) shows that, by asking questions and directing the interaction, Joe manages to provide effective scaffolding in the form of comments, which SongWoo understands and manages to implement. Using language as a semiotic tool, Joe and SongWoo are thus interacting within SongWoo's ZPD. This arguably helps her excel, and perform the writing task better and more accurately together with Joe than by herself.

(5)

1SW: Can I say 'as time goes... goes along', or something'?

2J: 'As time goes by', yeah you can say that. 'As time goes by, The Fugees has become a good team'. You don't 3have to use this, you can ...

4 SW: Yeah, it's like you know, to be a good team, the teamwork is very important, yeah, that's what I meant.

5 J: Yeah, you can say that. 'To be a good team, teamwork is very important.'

6SW: Uh huh, uh huh, okay (Data taken from Roberson, 2014, p. 128).

As Ellis (2003) points out, opportunities for the type of successful scaffolding illustrated above do not stem from tasks alone. Rather, the quality of the dialogue between learners often depends on how the participants approach the task in question (Ellis, 2003). This agrees with Vygotsky's (1978) activity theory. Activity theory distinguishes between three levels of cognition referred to as motives, goals, and operations. Motives are related to the purpose of a task. The level of goal reflects what is done, and the operation level indicates how it is performed. According to activity theory, learners will approach tasks differently depending on their underlying motives, meaning that the same task can result in different kinds of activity for different learners. For example, someone who views a task as 'work' might engage in a different and more serious type of activity than a learner who views the same task as a 'game'. Even though this naturally is not necessarily true for all learners, it illustrates a cornerstone within SCT, namely that tasks cannot be separated from those who perform them (Ellis, 2003).

Ohta (2000) further notes that not all scaffolding is equally effective, as such assistance must be given in an "orderly and developmentally sensitive manner" (p. 63). In other words, providing beneficial scaffolding requires subtle intuition and skills, as the assistance must be adapted to the learner receiving it (Ohta, 2000; Ellis, 2003). According to Ellis (2003) effective scaffolding is typically characterized by contingency, meaning that all utterances are coherently connected (Ellis, 2003). The dialogue in (5), for instance, is highly contingent, since Joe and SongWoo constantly confirm, incorporate and extend on each other's comments.

As Ohta (1995) explains, the 'expert' can also gain from the act of providing scaffolding to a

'novice'. Analysing the interaction of a mixed-proficiency dyad engaged in collaborative task work, Ohta illustrates how 'stronger' students learn from helping the 'weaker' learner, as doing so pushes her to provide explanations of good quality. Ohta argues that this, in turn, allows the 'stronger' learner "experiment with and refine her own language use", and as a result, both participants are learning within their ZPDs (p. 108).

Like any theoretical framework, SCT naturally has its limitations. Theoretically, Roberts (2016) questions the form of SCT that privileges the more capable peer and their role in the ZPD (cf. above). Focusing on two collaborating learners with very different abilities, Roberts (2016) shows how the two students worked together on coming up with questions for a group discussion. Roberts (2016) illustrates that 'weaker' student had intricate and philosophical ideas, but was unable to express them eloquently. The 'high achiever', on the other hand, was struggling to come up with open questions, and needed help grasping this phenomenon. Thus, through collaboration, the students demonstrated a reciprocal and mutually beneficial learning relationship. Roberts therefore (2016) rejects the idea of pairing up 'weaker' and 'stronger' students based on assumptions about their ability. This is in line with Ohta (1995), who, in addition to the above findings, also concludes, that "collaboration draws upon the matured skills of each learner, regardless of each learners' level of overall language development" (p. 109). In other words, 'less proficient' learners can offer valuable assistance to their 'stronger' peers, making the roles of 'novice' and 'expert' relatively fluid (Ohta, 1995; Ellis, 2003; Roberts, 2016).

Roberts (2016) stresses that the type of fruitful relationship that she reports often needs time to emerge. Roberts' (2016) and Ohta's (1995) research is also in the form of small case studies, making it important to be cautious when interpreting the results. They do, however, illustrate the complexity of learner dyads, and suggest that the main idea behind SCT about a 'weaker' novice student learning from a 'stronger' expert deserves to be questioned and tested. Therefore, the two LI tasks from this study will be performed in mixed-proficiency dyads, where, hypothetically, the 'high' proficiency learner acts as the 'expert', and the 'low' proficiency student is a 'novice' (see Section 3).

Methodologically, Ellis (2003) notes that much sociocultural SLA research avoids quantification, and relies on qualitative analyses. On the other hand, scholars like Storch (2002) skilfully illustrate how qualitative analyses of collaborative task work can reveal important nuances and details in learner interactions, which arguably are hard to capture in quantified data. Thus, the study reported here contains both quantitative and qualitative elements (see Section 3). The next sub-section

relates to the qualitative aspects of this study. It accounts for a coding scheme classifying patterns of dyadic behaviour, which was used in the experiment reported here. The specific research questions and hypotheses are outlined in Subsection 2.7.

## 2.5 Analysing and classifying dyadic interactions

According to Van Lier (1996), classroom interactions between collaborating language learners are complex and non-linear. This, he notes, is because they are affected by numerous factors, including power dynamics and peer relationships. Thus, Van Lier (1996) argues that since the discussions emerging from such collaborations are not always logical and predictable, they should be analysed with scrutiny in qualitative research. One such study was carried out by Damon and Phelps (1989). In terms of relevance for the present study, they distinguish between two indexes of peer engagement referred to as 'equality' and 'mutuality'. The former has to do with the degree of control over the task. A high degree of equality is evident when both partners take directions from each other, making them equally active and in control of the task work. Mutuality is about the degree to which the collaborating learners engage with each other's contributions and consider each other's ideas (see below).

The above indexes are also employed in a longitudinal study by Storch (2002), exploring adult ESL students' interactions during paired task work. The author sought to determine the interaction patterns visible among her participants during collaborative task work. The patterns were determined through an inductive approach, where the categories were grounded in the data. Focusing on how learners approached the task, the roles they assumed, and the different levels of equality and mutuality, Storch presents four main patterns labelled according to the role relationships manifested in them.

The first pattern is referred to as 'collaborative'. It is illustrated in (6) below, where the learners Charley (C) and May (M) are working on a writing task based on a diagram labelled Figure 3. All the excerpts in this subsection are taken from Storch (2002), and have been abbreviated to fit the current context.

(6)

1 C: This (reads instructions).... What is this?

2 M: From the chart

3 C: The chart about...

4 M: The data

```
5 C: With percentage and eh...
```

6 M: Describes the percentage of

7 C: English language fluency

8 M: English language fluency between two countries, yeah? Vietnam and Laos.

9 C: Yes, and the compare [sic.] before they came here and now [...]

10 C: You can separate it here

11 M: Yeah... First we...mm the...

12 C: Perhaps you should write?

14M: Yeah I write from the information of the chart yeah [writing information from the chart]

15C: No, from Figure 3

16 M; Ah, figure 3! [...]

17 M: It shows the...the data or percentage?

18C: Should be the percentage (Data taken from Storch, 2002, p. 131).

According to Storch, the 'collaborative' pattern is characterized by a moderate to high degree of both equality and mutuality, which means that the students collaborated on all aspects of the task. The author illustrates how the learners collaborate by incorporating, repeating and extending each other's utterances (see e.g., lines 2-7). As can be seen in line 15, the dialogue is also characterized by explicit pair repair, meaning that one learner clearly corrects the other. Similarly, lines 5-6 shows a recast of May's erroneous utterance. Despite being relatively direct, these comments do not seem to be interpreted negatively, since the entire dialogue is permeated with several requests (e.g. lines 8 and 13), confirmations (see e.g. lines 8-9 and 11-12), and a critical but constructive tone. Put differently, the dialogue is contingent (see Section 2.4), and by pooling resources, the dyad arrives at resolutions accepted by both learners.

The second pattern, labelled 'dominant' dominant', is exemplified in (7). Here, Maria (M) and Lee (L) have been asked to create a meaningful and grammatically correct text by inserting function words and changing certain word forms in the task.

```
(7)
```

1 M: The study investigated that immigration was.... Was [a] tend.

2 L: No no, not was. The study investigated the... not that...

3 M: of the... of the emigration

4 L: No no no the study investigated that ah investigated of that ... of the.... Not...

5 M: The study investigated the immigration trends

6 L: Yeah, that's good

7 M: And economical implications of the immigrants

8 L: But [...] put the here.... The economic implications of migrants of immigration

9 M: But I think it should be 'the emigration'

10 L: No no no

11 M: I will put the (Data taken from Storch, 2002 p. 132).

According to Storch, the above pattern reflects a moderate to high level of equality, and a moderate to low degree of mutuality. The students both contribute to the tasks, but without always considering each other's contributions. As illustrated in (7), the 'dominant/dominant' pattern is characterized by numerous disagreements (e.g., lines 1-2 and 4-5), and a lack of willingness to negotiate, resulting in an inability to reach consensus (see line 11).

The third pattern was labelled 'dominant/passive'. It is illustrated in (8), which is a dialogue between Victor (V) and Tanako (T). The students are editing a short text with commonly made errors (Storch, 2002).

(8)

1V: [Reads the text] Not only from the... not only from the United Kingdom, but also different parts of the world

2....migrants... most of the migrants came here ... migrants... migrants came here because they seeked a

3 new life [...]."

4 [Reads the instructions] Improve the text in terms of grammatical accuracy and expression and.... Why? [...]

5T: So should this be changed to here . . . [You should change it to] they had

6V: Nowadays . . . many students particularly from Asia. Particularly from Asia.

7[Does it say] particular? Ah [it says] particular from Asia [...]

8T: Mm

(Data taken from Storch, 2002).

As shown in (8), Victor is the 'dominant' participant. This is reflected in his long monologues, by means of which he seems to deliberate, and decide the entire process and task outcome. Tanako is 'passive', and she only makes very few tentative contributions (see e.g. line 5) and mostly expresses phatic expressions, like in line 8. Consequently, the negotiation is virtually non-existent, and the level of both equality and mutuality is moderate to low (Storch, 2002).

Finally, the fourth pattern is labelled 'expert/novice'. Here, an 'expert' encourages a 'novice' to participate in the task performance, which, according to Storch, results in low equality but high mutuality. The pattern is evident in the following interaction between the two learners Ed (E) and Yong (Y), who are collaboratively editing a text (Storch, 2002).

```
(9)
```

1Y: The study... the study and small "s"

2E: Yeah, investigates

3Y: Investigates. I think [...] we need to use the past tense [...] because it happened in the past.

4[...]

5Y: What's your opinion?

6E: Yeah, you are right. The study was carried [out] in the past

7Y: Yeah, in the first sentence the study tell [sic] [...] was carried out by the professor...

8E: Hugo... at Adelaide University

9Y: Mm.

10E: The study investigated, yeah (Data taken from Storch, 2002).

As noted by Storch, this pattern equals successful scaffolding between peers (see Section 2.4), with Yong being the 'more proficient expert' and Ed being the 'less proficient novice'. Yong clearly states his opinion (line 3). However, by trying to provide explanations (line 3) and asking questions (line 5) he does not dominate the discussion, but rather helps Ed to understand and arguably learn something from their collaboration, as shown in line 10 (Van Lier, 1996; Storch, 2002).

One limitation acknowledged by Storch is that the above coding scheme is relatively simple and potentially imprecise. On the other hand, the scheme has been employed successfully in several ESL research studies investigating dyadic interactions (see Sections 1 and 2.6.3), although Ahmadian and Tajabadi (2017) note that the studies are too few to present any generalizable findings. Also, the existing research typically concerns collaborative writing tasks performed by undergraduates, leading Ahmadian and Tajabadi (2017) to call for research utilizing the coding scheme for different purposes. Thus, applying the scheme to the current data set was deemed relevant and appropriate.

#### 2.6 Previous studies

As stated in Section 1, there is a fair number of L2 lexical inferencing studies in the literature (see e.g. Bensoussan,& Laufer, 1984; Haastrup, 1990, 1991; Paribakht & Wesche, 1999; Soria, 2001; Frantzen, 2003; Nassaji, 2003; Bengeleil & Paribakht, 2004; Paribakht, 2005; Pulido, 2007; Kaivanpanah & Alavi, 2008; Wang, 2011; Hu & Nassaji, 2012; Comer, 2012; Akinpar, 2013; Yin, 2013; Chengenei & Tabatabaei, 2014; Hu & Nassaji, 2014; Nylander, 2014; Pourghasemian et al., 2014; Prior et al., 2014; Teng & He, 2015; Anvari & Farvardin, 2016; Graza & Harris, 2016; Ebadi et al., 2018; Juliana, 2018). In the following subsection, the research by Haastrup (1991) and Soria

(2001) is reviewed, as it is particularly relevant in relation to one of the aims of the current study, which is to investigate the effect of L2 proficiency on inferencing success. The subsection also outlines Nylander (2014), as it is hoped that the research reported here will be a progression from that research. Subsection 2.6.2 relates to current the aim of exploring the effect of collaboration on LI success. Finally, Subsection 2.6.3, is primarily connected to the final goal of the present study, which is to investigate the impact of interaction patterns on inferential success. Together with the theoretical foundation presented in the previous sections, the research reviewed below constitutes the basis for the aims, hypotheses, and RQs presented in 2.7, as well as the methodological choices discussed mainly in Section 3.

## 2.6.1 Previous lexical inferencing studies

Haastrup (1991) investigated the LI skills of 15 to 16-year-old Danish learners (N = 124) of English as a second language (ESL). She aimed at exploring the effect of global L2 proficiency on LI success. This was done by means of a lexical inferencing task consisting of an English text with 25 supposedly unknown<sup>4</sup> words in an otherwise comprehensible context. Using L2 English proficiency tests and teacher ratings, Haastrup formed 62 same-proficiency dyads, where 50 % of the pairs had 'high' proficiency, and the others were 'low' proficiency learners. The students then took a short individual pre-test, after which they performed an LI task during think-aloud sessions (see Section 1 and Section 3), together with their assigned partner. Some students also took part in individual retrospective sessions, where they developed and clarified their inferences. Haastrup notably concludes that the 'high' proficiency dyads were "at the upper end of the score spectrum" whereas the less proficient learners were "at the lower end" (p. 174). Thus, it is hypothesised that the current study will reveal a positive relationship between global L2 proficiency and LI success. Haastrup's study offers valuable insight into the paired think-aloud procedure, and the author repeatedly advocates using this methodology to explore LI (see Section 1). Yet, the number of LI studies using paired think-aloud is relatively scant, and research including both collaborative and individual LI is, to my knowledge, virtually non-existent. Thus, it would be interesting to follow up on Haastrup's research by comparing the two formats.

Soria (2001) carried out one of the few studies on collaborative LI in addition to Haastrup's work. Focusing on 'high' and 'low' proficiency learners of Ilokano, he primarily sought to determine (a) which cues to meaning learners employed when inferring lexis, and (b) whether the participants

<sup>&</sup>lt;sup>4</sup> For a discussion on how to ensure that the target words are unknown to the participants, see section 3.

differed in their use of knowledge sources. The participants (*N*= 26) were undergraduates studying Ilokano at an advanced or intermediate level. Based on their teacher's assessment, the students formed homogeneous 'high' and 'low' proficiency dyads. Each pair then read a text with six target words, which they were asked to collaboratively infer the meaning of. The author found that although the 'high' level students made the largest number of successful guesses, participants from both proficiency groups were able to use various cues to meaning to infer lexis effectively. This led Soria (2001) to conclude that "student proficiency is not a decisive factor in successful lexical guessing" (p. 100). Exploring paired LI behaviour in a relatively small and under-researched language, Soria's study is a particularly welcome contribution to the field. However, simply claiming to rely on "the teacher's assessment [...]" when creating the same-proficiency dyads is not ideal, as it is unclear what this assessment entails (Soria, 2001, p. 85). Another shortcoming pointed out by the author was that the students repeatedly produced "wild" rather than "informed" inferences (p. 100, italics in original). This, Soria notes, could have been avoided, had the participants practiced inferring lexis before performing the task.

Nylander (2014) explored the relationship between LI success and vocabulary depth. The study also aimed at investigating whether learners with a deep vocabulary used different knowledge sources compared to those with less vocabulary depth, and the potential effect of target word partof-speech on inferential success. To this end, 20 ESL university students (L1 Swedish) performed a vocabulary depth test and a lexical inferencing task. Vocabulary depth was measured using Read's (1993) Word Associates Test (WAT). The LI task amounted to verbally inferring the meaning of 12 target words from a running text, during individual think-aloud sessions. Nylander found that students with high WAT-scores generally performed the LI task more successfully than those with a less deep vocabulary. The participants, however, did not seem to rely on different knowledge sources depending on their vocabulary depth. It was hypothesised that the participants would be more successful at inferring verbs than adjectives, but no statistically significant evidence to support this claim was found. However, subsequently, based on improved additional statistical analyses, verbs were found to be inferred more successfully than nouns (Nylander & Gyllstad, 2016). The study by Nylander (2014) is a small-scale undergraduate project, and some methodological aspects can be improved, for example, using a second rater of part of the data, and documenting the participants' language backgrounds to a greater and more detailed extent.

# 2.6.2 The effect of collaboration on task<sup>5</sup> performances

Storch (1999) focused on tasks involving grammatical choices, and sought to determine whether students were more successful when performing such task work collaboratively compared to alone. The participants were 11 undergraduate ESL students. They performed (a) cloze exercises, where they completed a gap text by filling in suitable words on empty lines, (b) text reconstruction tasks, where they edited an ungrammatical text, and (c) composition tasks, which amounted to describing their English classes to a hypothetical new student. Each task came in two versions, which were as similar as possible. The students participated in two sessions. First, they performed the cloze task and the composition task individually, and the text reconstruction task in pairs. Then, during the second session, the individual version of the text reconstruction task was followed by the paired version of the cloze task and the collaborative composition task. All the pair work was carried out in self-selected dyads. The findings indicate a positive relationship between collaboration and task accuracy, in that the students were more successful and precise together than individually. This suggests that the participants of the present study will be more accurate and thus receive higher scores when inferring lexis in pairs compared to when they perform the individual task. Storch's study offers an interesting hypothesis regarding the effect of collaboration on task outcomes. However, to my knowledge, the study does not thoroughly account for how the tasks were made similar, although this arguably is important when wanting to isolate the effect of collaboration on task work. As noted by Storch, all the students also performed the tasks in the same order, which may have caused a practice effect.

In a later study, Storch (2007) compared individual and paired editing task outcomes. Four intact groups of a total of 66 ESL university students participated in the study. The first class completed the task in pairs, whereas those in the second group performed it individually. The students in groups three and four were given the choice to perform the task alone or with a peer. Storch did not observe a statistically significant difference in accuracy between the collaborative and individual tasks, and concludes that "deliberations and pooling of resources do not necessarily lead to correct resolutions" (p. 155). This suggests that collaboration may not necessarily have a statistically significant positive effect on the students' LI success. Storch's study provides

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<sup>&</sup>lt;sup>5</sup> The previous research referred to in this thesis does not necessarily define tasks in the same manner as in the present study. In light of Bygate's (2016) task criteria in Section 2.3, some of the tasks would not be considered tasks, but rather be classified as exercises (cf. Ellis, 2003). This study does not seek to evaluate the 'task-ness' of the tasks from any previous research reported here. In this subsection, it is thus the effect of collaboration between peers that is in focus, and not the 'task-ness' of the utilized instruments.

interesting findings on the relationship between collaboration and task completion and accuracy. However, the choice to not let all the students perform the same tasks can be questioned, as such a setup may be more sensitive to individual differences than e.g. the counterbalanced within-subject design described below (Phakiti, 2015).

Nassaji and Tian (2010) investigated task work centred around one reconstruction cloze task and one reconstruction editing task concerning 16 English phrasal verbs. The former task was about reconstructing a dialogue by providing missing words and phrases. The reconstruction editing task consisted of a complete dialogue with errors related to the phrasal verbs, which the students had to detect and correct. The authors aimed at exploring whether learners (a) were more successful in completing the tasks and (b) acquired more of the targeted phrasal verbs, when working on the tasks collaboratively, compared to when performing them individually. The authors also compared the two task types in terms of effectiveness. 26 low-intermediate adult ESL learners with different L1 backgrounds took part in the study. To minimize the effect of individual differences, a withinsubject design, where all the participants performed all the tasks, was utilized. The order of the tasks and conditions was counterbalanced, as a means to avoid task effects. This meant that after taking a pre-test establishing their previous knowledge of the targeted phrasal verbs, the students performed two cloze tasks (one collaborative and one individual), and two editing tasks (one collaborative and one individual), in different orders. The tasks contained four out of the 16 targeted phrasal verbs each, and were followed by a post-test measuring the potential vocabulary uptake. The findings suggest that the learners performed the tasks more successfully in pairs than individually. There was, however, no significant difference between the individual and collaborative task formats in terms of vocabulary acquisition. Nassaji and Tian suggest that the findings are related to the nature of the paired interactions rather than the task formats per se, and that the participants' limited skills of how to perform collaborative task work effectively may have influenced the results. Like Soria (2001), they thus propose that experiments investigating paired task performances should include training sessions, where the participants can practice collaborating. Nassaji and Tian's study adds to the understanding of individual and collaborative task work. It should however be stressed that their dyads were formed randomly, which, as Baleghizadeh (2009) notes, is common in SLA studies comparing individual and joint task outcomes. This might be an intentional choice, based on the assumption that this is how dyads are formed in the language classroom. However, considering the numerous learner variables that may influence task work (see Section 3), the research reported in this thesis posits that in research exploring the effect of collaboration, the composition of pairs should not be left to chance.

# 2.6.3 Patterns of interaction during paired task work

In an in-depth classroom-based case study, Roberson (2014) explored the characteristics and outcomes of peer response sessions about student essays. Using Storch's (2002) coding scheme outlined in Subsection 2.5, the author sought to determine the patterns of interaction exhibited during the sessions. She also explored the potential relationship between the established patterns and the dyads' revision outcomes, and investigated whether the patterns changed with time. The participants (N=10) were non-native speakers of English studying academic writing at a large university. Working in self-selected dyads, the students participated in three peer response sessions in the classroom, during which they discussed and gave peer response to different versions of each other's essays. The sessions were followed by simulated re-call interviews, which, together with the recorded peer response sessions and the researcher's observation notes, formed three data sets. The sessions were coded as exhibiting one of Storch's (2002) patterns of interaction, and the preand post-peer response drafts were analysed for improvement. In Roberson's study, the 'collaborative' pattern was the most common, followed by 'expert/novice', 'dominant/passive' and 'dominant' patterns respectively. The 'collaborative' writers received the highest scores on their second drafts, and were able to implement the feedback given by their peers to a larger extent than the other students. The novice writers from the 'expert/novice' dyads also benefited from the treatment in the experiment, as they showed the most improvement between their first and second drafts. The 'dominant' writers, however, had the poorest gains. Due to the relatively small number of participants, no clear pattern of change in the interactions was revealed. In light of the current research, the findings do, however, suggest a possibility of a positive relationship between the collaborative pattern of interaction and LI success. Roberson's findings also suggest that the 'novice' students in the present study, if any, will benefit from collaborating with an 'expert' peer. As I have aimed for 'expert/novice' dyads, it is assumed that this will be the predominant pattern of interaction in this research. Roberson's study is a welcome contribution to the body of research utilizing Storch's (2002) coding scheme, since examining interactions as they occur in the classroom arguably increases the ecological validity of the findings (see Sections 1 and 3). However, as mentioned previously, a vast majority of the studies employing the coding scheme concern undergraduates' collaborative writing. Thus, it would be interesting to extend the research to other learners and aspects of language.

One of the few studies applying Storch's (2002) patterns of interaction to vocabulary-related tasks performances was carried out by Ahmadian and Tajabadi (2017). Focusing on young ESL learners (N=18) with a mean age 6.3 years, the authors sought to establish the patterns of dyadic interaction

found among the participants, and to determine which of the constellations that were the most conducive to vocabulary acquisition. The children were randomly assigned to dyads, and participated in six sessions, during which they received instructions on 24 supposedly new words. They also performed two vocabulary acquisition tasks. The former was a recognition task, which required the participants to match the new words to a series of pictures. This was followed by a production task, where they practised the vocabulary through drawing. The children were then given post-tests to measure the vocabulary uptake. Similarly to Roberson (2014), Ahmadian and Tajabadi (2017) noted a predominance of the 'collaborative' pattern. The 'collaborative' dyads also achieved the highest vocabulary post-test scores. The second highest scores belonged to the 'expert/novice' pairs, whereas the 'dominant/dominant' and 'dominant/passive' dyads typically received low post-test scores. Although the current study does not investigate vocabulary uptake per se, Ahmadian and Tajabadi's (2017) findings suggest that there will be a positive relationship between LI success and the 'collaborative' and 'expert/novice' patterns of interaction.

## 2.7 Summary, research questions, and hypotheses

Summing up, this study primarily rests on one individual and one paired lexical inferencing (LI) task, which amount to verbally guessing the meaning of unknown words. Here, LI is viewed as a reading comprehension strategy, which may lead to vocabulary uptake. Thus, teaching LI to the current research participants is both valuable (cf. Soria, 2001; Nassaji, 2003), and in line with the educational policies of the current research context, specifying that the student should be given tools to e.g. resolve comprehension problems while reading (Skolverket, n.d.).

The LI tasks are part of a larger task-referenced unit performed by the participants, who were taught by the researcher-educator. The other tasks from the unit are presented below, and were used to assess the students' global L2 proficiency. This assessment was supplemented by a vocabulary test, as Ellis (2003) notes that combining these two tools is ideal for assessing overall L2 proficiency. As shown in Section 3, this allowed the creation of heterogeneous dyads, which could then engage in the collaborative LI task. In Section 4, these task outcomes are compared to their individual LI task scores. This research is called for due to a need for (a) more SLA research properly mapping the participants' proficiency levels, (b) studies investigating LI as a collaborative effort, and (c) TBLL research conducted by teacher-researchers. The study will be discussed in detail in the next section. First, however, Section 2 has lead up to the following research questions (RQs):

*RQ1*: What is the relationship between adult upper secondary school level ESL students' global L2 proficiency, and their lexical inferencing (LI) success?

*RQ2*: What is the effect of collaboration on adult upper secondary school level ESL students' LI success, as compared to their individual performances?

*RQ3*: What is the relationship between adult upper secondary school level ESL students' pattern of interaction during a paired LI task, and their collaborative success score?

It is hypothesised that the current study will corroborate Haastrup's (1991) study, where the 'high' proficiency participants were more successful at inferring lexis than the 'low' proficiency learners. Even though Soria (2001) claims that high L2 proficiency is not essential to LI, it is hypothesised that there will be a correlation, since this is what the majority of the existing research suggests.

Secondly, leaning on Vygotsky's (1978) SCT, the current research hypothesises that 'less proficient' learners generally benefit from collaborating with a 'more proficient' 'expert', as doing so allows the 'novices' to exceed their individual levels. The 'more proficient' learners are expected to receive at least similar scores on the collaborative LI task compared to the individual one. This agrees with Storch (1999) and Tian and Nassaji, (2010), who observed a significant positive effect of collaboration on task completion and accuracy, and with Roberson (2014) who found that 'novice' writers gained from collaborating with an 'expert' peer. Storch (2007), however, did not observe a statistically significant positive effect of collaboration on task accuracy. Similarly, some (e.g. Ohta, 1995; Wantabe & Swain, 2007; Roberts, 2016) stress that 'stronger' students do not necessarily help 'weaker' learners, since all learners make different contributions to the complex and reciprocal situation that is collaborative task work.

As to Storch's (2002) patterns of interaction, previous research (Ahmadian & Tajabadi 2017; Roberson, 2014) suggests that the 'collaborative' and 'expert/novice' approaches are the most conductive to learning and successful task outcomes. In the current study, it is therefore hypothesised that dyads with these approaches will be better at inferring lexis than other pairs. In Ahmadian and Tajabadi (2017) and Roberson (2014), the 'collaborative' pattern was typically predominant. Seeing that the current research aims for mixed-proficiency dyads, it therefore assumed that the 'expect/novice' pattern will be common among the research participants, although the 'collaborative' pattern may be dominant as well.

# 3. Methods and materials

Subsection 2.6 pointed to several methodological considerations worth mentioning. For example, using (a) randomly formed dyads like Nassaji and Tian (2010) and Ahmadian and Tajabadi (2017), or (b) self-selected pairs like in Roberson (2014) and Storch (1999) when exploring the effect of collaboration on task performances is not ideal. Storch's (2007) choice to not let all the participants perform both individual and collaborative tasks can be questioned, as it arguably complicates the issue of isolating the effect of collaboration on task work. Soria (2001) and Nassaji and Tian (2010) stress the importance of allowing participants to practice the targeted task work. Nylander (2014) did not have a second rater of the data, and did not sufficiently document the participants' language backgrounds, which may have influenced the results. This section outlines the instruments, research design and procedures from the current study, and accounts for how the above-mentioned flaws were addressed. First, however, subsection 3.1 presents the participants and the context of the study.

# 3.1 Participants and research site

Twenty-two ESL student aged 19 to 35 participated in this research. Fourteen of the learners were taught by the teacher-researcher. The others had a different main teacher, but were instructed by the teacher-researcher during all the phases of the experiment. Table 1 below describes the student participants in terms of gender, age, years of formal education, and first language(s) (L1). It also indicates (a) the students' other languages in addition to English (Ln), and (b) the dyads in which the students performed the paired lexical inferencing task. All languages are listed in the order of acquisition indicated by the students. The background information was retrieved by means of the questionnaire available in Appendix I. The – symbol indicates that information is missing, either because the participant did not fill out the questionnaire, or because he or she chose not to provide the information.

Table 1

Participant characteristics

Dyad	D	Caralan	A	Years of	Т 1	Τ
number	Pseudonym	Gender Age		formal education	L1	Ln
1	Emma	Female	21	11	Swedish	-
1	Malin	Female	21	9	Romani	Swedish
2	Mattias	Male	35	13	Swedish	-
2	Jens	Male	22	12	Swedish	-
3	Dante	Male	23	8	Romani	Swedish
3	Petra	Female	23	-	Romani	Swedish
4	Zarah	Female	23	11	Arabic	Danish, German, Swedish
4	Zoe	Female	24	11	Arabic	Danish, German, Swedish
5	Johan	Male	24	-	Swedish	Arabic, Lithuanian
5	Josephine	Female	26	11	Swedish	-
6	Henrik	Male	27	11	Swedish	-
6	Selma	Female	22	15	Bosnian	Swedish
7	Joel	Male	20	11	Arabic	Swedish, Italian
7	Tomas	Male	27	11	Swedish	-
8	Daisy	Female	24	13	Swedish	Serbian
0	N/ 1	3.6.1	2.4	12	Serbian and	
8	Markus	Male	24	13	Swedish	-
9	Ernst	Male	20	14	Swedish	-
9	Ellen	Female	19	11	Swedish	-
10	Dan	Male	20	12	Swedish	Finish
10	Beatrice	Female	22	11	Bosnian	Swedish
11	Hannes	Male	19	13	Swedish	Spanish
11	Jessica	Female	21	11	Swedish	-

Table 1 shows all the participants from the current research. They studied L2 English at a folk high school (*folkhögskola*) in a relatively small Swedish city. This type of education is typically aimed at adults needing to supplement their non-finished grades from secondary school courses. Folk high school educators are not obligated to base their teaching on national curricula. This allows them to shape the course content independently, and to aim for a dynamic and 'creative' method of working, which can function as an individualised alternative to the formal educational system (Folkbildningsrådet, 2010; Bernhard & Andersson, 2017). The school implemented thematic unit-based teaching. Thus, the students were engaged in educational units, which ranged over approximately two months, and permeated all of their classes. The topics of the units were decided

collaboratively by the teachers. During the current study, the students' ESL classes were devoted to a unit on democracy and citizenship in general, and the rights, duties, and possibilities of local citizens in particular, as this aligned with both the local and national school policy.

As indicated by Calvert and Sheen (2015), conducting educationally situated research such as the present comes with numerous advantages. Combining theory and practice, it allows the perspectives of practitioners to be documented in the research field, whilst simultaneously serving as a rewarding opportunity for professional development for the teacher-researcher. In other words, such research is often relevant for the research field at hand, as well as a larger context. As Baumfield, Hall and Vall (2011) note, it is nevertheless important to consider the complexity of conducting studies in the school context. For example, it is important that researching practitioners primarily meet the needs of the students, without letting the lesson content be biased by one's own research agenda. Thus, the choice to conduct the study in a more controlled and lab-like setting was considered, as this may have facilitated the elicitation of inferencing behaviour. On the other hand, classroom-based research enables experimentation with a great variety of methodological options, which are easy to pilot and re-evaluate (Baumfield, Hall and Vall 2011). Thus, considering that the study sought to explore the impact of L2 proficiency on LI using proper proficiency mappings, the current research site was deemed suitable.

#### 3.2 Instruments

#### 3.2.1 Measuring proficiency

In this research, it was hypothesised that 'less proficient' students would benefit from collaborating with their 'more proficient' peers during an LI task. Testing this hypothesis required (a) assessment of the students' global L2 proficiency, and (b) one individual and one collaborative lexical inferencing task. Together, the proficiency measures, the LI tasks, and a final project task formed a thematic task-referenced unit illustrated in Figure 2 below.

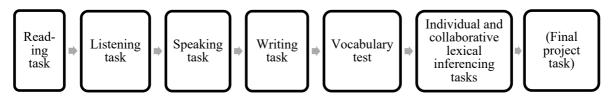


Figure 2. The unit.

Figure 2 contains all the tasks from the unit, i.e., all the instruments which were used to measure global L2 proficiency in the current study. They were designed by the teacher-researcher for this

particular experiment. The final project task, which is not part of the current investigation, was designed in co-operation with a colleague. All the participants signed a consent form specifying that they agreed to participate in the research. The form also stated that they should view the tasks as normal schoolwork, that they could choose to withdraw from the study at any time, and that their participation in the study would not affect their grades in any way (see Appendix K). The headmaster of the school approved the research project via e-mail.

The Reading task (see Appendix A) amounted to reading a short online article about ways in which students can create change in their local community. The students answered a series of questions on the text, and were asked to match each paragraph with appropriate headings. Thus, using Wills and Wills's (2007) terminology, the reading task involved matching. The students read a printed version of the article, and were not allowed to use any aids while performing the task. The Listening task (see Appendix B) used to assess the participants' listening skills, was divided into two parts. First, the students answered comprehension questions on a recorded lecture about a local community project. The lecturer stressed the value of taking care of neglected spaces, and referred to a wall in such a spaced, which had been transformed into a big blackboard, where the citizens of the community could write down their ambitions and wishes. The wall was replicated in the classroom. After having listened to the lecture, the students were asked to brainstorm and write down their own dreams on the wall. This was followed by a discussion on the topic. Thus, the task is in line with Wills and Wills (2007), who note that brainstorming can serve as the first step of an in-class discussion (see Subsection 2.3.1). The students also listened to an interview with a citizen in charge of a project aimed at helping particularly vulnerable citizens in his city. The lecture and the interview are both available online (see Appendix B), but the tasks upon which they are based were created for this experiment.

The Speaking task (see Appendix C) was a modified version of a task developed by Dörnyei and Kormos (2000). The students were instructed to read a list of ten local election issues, and determine which five suggestions they deemed most important<sup>6</sup>. After ranking the options in order of importance, they were told to work in pairs and (a) compare lists, (b) try to convince each other about their ideas, and (c) collaboratively compose a new list of three proposals from the original list, which they had ultimately agreed where the most important ones. The Writing task (see Appendix D) amounted to writing a fictitious e-mail to the head of the municipality about a

<sup>&</sup>lt;sup>6</sup> When the students performed this task, there was an on-going general election in Sweden.

relevant problem in their city. The students were instructed to describe the problem, argue for its importance, and present an idea regarding how it could be solved. The Writing task can thus be classified as a problem-solving task according to Wills and Wills (2007) (cf. 2.3.1).

As shown in Subsection 2.2, vocabulary tests can complement tasks used to assess proficiency. Thus the students also took a shortened version of the monolingual Vocabulary Size Test (VST) (Beglar & Nation, 2007). The VST is a receptive multiple choice test with English target words grouped according to frequency, followed by four response options per test item (see Appendix E). It is generally considered a test capable of yielding reliable and valid scores (Beglar, 2010; Gyllstad, 2012) (but see Gyllstad, Vilkaitė and Schmitt (2015) for some issues with this test format). The VST allowed me to test the knowledge of many words in a short period of time and thus obtain an independent vocabulary score, appropriate for the current study.

The final project task was not part of the study itself, but was rather introduced as a means to create a meaningful task-referenced unit in line with the TBLL approach and the schools' policies. The aim was to let the students implement the content from the proficiency tasks by creating, presenting, and advertising their own local community project ideas. This resulted in project plans, visual presentations and flyers, which were displayed at an authentic local community event (*Kulturnatten*) (see Appendix F). This part of the unit thus exemplifies Wills and Wills's (2007) description of a project task (see Subsection 2.3.1).

#### 3.2.2 The LI tasks

The LI tasks for the experiment were based on two experimental texts (250 words each), which both contained 12 clearly marked target words (see Appendix G and Appendix H). Franzen (2003) points to a lack of LI tasks based on authentic texts. Similarly, Soria (2001) suggests creating LI tasks using existing authentic online texts tailored to meet the requirements in question. However, it was assumed that exploring different LI task formats like in the present study requires specific and carefully designed tasks. Thus, the current tasks were composed and designed for this particular experiment. Both experimental texts dealt with young adults who struggled with mental health issues, and who tackled this by initiating local community projects. This resonated with both the current theme, and a previous unit, which dealt with human behaviour. It was thus assumed that the topic of the experimental texts was suitable, and that the students would be familiar with it (cf. Subsection 2.1.2.2).

To determine the effect of collaboration on LI success, the two tasks needed to be as similar as possible in terms of various textual factors affecting lexical inferencing. When writing the experimental texts (i.e. the texts in which the supposedly unknown target words appeared) I thus considered the factors outlined in Subsection 2.1.2.1. Table 2 below compares 15 different text characteristics of the experimental texts from the individual lexical inferencing task (ILI) and the paired lexical inferencing task (PLI).

As shown in Table 2, the experimental texts for both tasks contained 250 words (tokens). The texts did not contain any contracted forms (e.g. *I'm*). Instead, instances like *I am* were considered two words. Words in the genitive (e.g. *Mary's*) were seen as one word, and hyphenated forms like *24-year-old*, were classified as three words. The type-token ratio is types (i.e. the different words) divided by tokens (i.e. the total number of words in the text) (Scott, n.d.). Moreover, lexical density is the total number of content words divided by the total number of words. A t-unit is a measure of syntactic complexity referring to a main clause and all its potential subordinate clauses (Gyllstad, Granfeldt, Bernardini & Källkvist, 2014).

Table 2
A comparison of the ILI and PLI in terms of text characteristics

Value number		ILI	PLI
1	Words in text (tokens) counted manually	250	250
2	Different words (types)	138	125
3	Type-token ratio	0.55	0.50
4	Tokens per type	1.81	2.02
5	Lexical density	0.52	0.54
6	Number of sentences	19	19
7	Average words per sentence	13.16	13.26
8	Average syllables per word	1.43	1.42
9	Number of t-units counted manually	24	24
10	Number of target words	12	12
11	Target word verbs	5	5
12	Target word nouns	3	3
13	Target word adjectives	3	3
14	Target word adverbs	1	1
15	Flesch Reading Ease:	71.75	65.81

Table 2 also specifies that each task contained 12 target words (i.e. words to infer). In both tasks, five of these were verbs, three were nouns, three were adjectives and one was an adverb. Finally, Flesch Reading Ease is a readability formula specifying the difficulty level of a text. A high number indicates that a text is easy to read, whereas a lower number signals difficulty. As to the Flesch Reading Ease, scores between 100.00 and 90.00 indicate minimal difficulty, whereas scores between 30.00 and 00.00 suggest that that the texts are very challenging (DuBay, 2004). Thus, the Flesch Reading Ease scores in Table 2 (71.75 and 65.81) suggest that the two texts are relatively similar in terms of difficulty.

The first 8 values were compared and no statistically significant difference was found between them. As shown in Table 2, values, 1, 6, 8 and 9-14 were identical in both texts. It was assumed that the minor differences in terms text characteristics would not affect the outcome of the experiment, in that any differences between the paired and individual LI task outcomes would be related to actual inferencing behaviour, and not to the texts per se.

To elicit LI behaviour, the target words in the text also had to be unknown to the participants. This was controlled for successfully in Nylander (2014) by choosing infrequent target words from Paul Nation's (n.d.) frequency list, where words are listed according to how common they are. I thus

repeated this procedure in the current study, and selected target words from the 7K-11K frequency bands of the wordlist (see References), as it was assumed that these words would be unknown to the participants. This was later corroborated in a pilot study (see below). The choice to utilize pseudo-words was considered, as doing so could have ensured that the target words were unknown to the participants. However, since this study views LI as a strategy for real-life situations, using authentic target words seemed more appropriate. In addition, seeing that the research was part of an actual language course, having students work with made-up language was deemed unethical.

The similarity of the two LI tasks and the difficulty of the target words were also verified through a pilot study, where students with a similar level of English as the participants were given versions of the two LI tasks without target words in boldface. The students were asked to read the texts carefully, and to underline any words that they did not know. They also placed the texts on a scale ranging from 1 (not at all difficult) to 5 (very difficult). Initially, the participants from the pilot study did not underline all the words that I intended to use as target words. Consequently, the experimental texts where changed in accordance with the results from the pilot study, until all the target words where underlined and both texts were given similar ratings on the scale. The tasks were piloted twice before they were distributed to the participants.

# 3.3 Data collection and procedures

Once the above instruments had been designed and the proficiency tasks had been carried out, I started assessing the outcomes of the proficiency measures. This was done by means of analytic scales designed to generate a maximum of 15 points per task. The vocabulary test contained 100 vocabulary items, worth 1 point each. This allowed me to calculate global L2 proficiency scores based on Speaking, Reading, Listening, Writing and Vocabulary skills, which were then used to investigate the relationship between global L2 proficiency and LI success (cf. Subsection 2.7). The proficiency scores are accounted for in detail in Subsection 4.1.

As mentioned previously, the research reported here acknowledges the importance of controlling for relevant learner variables when assigning pairs for task work (cf. Davis, 2009), especially when seeking to isolate the effect of collaboration on task outcomes, like in the current study. Before finalizing the dyads, a number of factors were identified that needed to be controlled for. These are summarized in the next sub-section.

## 3.3.1 Forming dyads for the collaborative LI task

This subsection outlines the learner variables controlled for when creating the mixed-proficiency dyads for the collaborative LI tasks, in addition to proficiency. Seeing that this research mainly explores LI, discussing these factors in detail it is beyond the scope of this research. Rather, the aim is to explain why and how the variables were accounted for in the experiment.

Firstly, the participants' age was considered. As Ortega (2009) notes, it has been argued that since the plasticity and adaptability of the brain generally deteriorates with age, 'younger' learners acquire a language more efficiently and with better outcomes, than 'older' students. Thus, this could indicate that 'younger' students may find it easier to perform LI tasks than 'older' learners. It should, however, be stressed that the findings regarding age and SLA are somewhat inconsistent (Abello-Contesse et al., 2006). In the current study, the age factor was nevertheless controlled for in that the students constituting each dyad were as homogeneous as possible in terms of age.

I also considered personality, which Ortega (2009) defines as "stable traits or qualities in a person" having to do with "dynamic moods that are related to cognitive processing of emotions, or even predispositions that have been learned through social experience" (p. 193). Ortega points to evidence indicating that extraverted people generally are better than introverts at "maintain[ing] high degrees of fluency when speaking an L2, even under stressful conditions" (p. 197). Applied to collaborative LI, this may suggest that the extraverted students will be more successful discussing lexical inferences than their more introvert peers, even though personality traits obviously do not constitute an inherent ability miraculously affecting learners' language abilities. Rather, introversion and extroversion may have an impact on learners' goals and ways to approach e.g. a task, which, in turn, can influence the actual achievement (Ortega, 2009). Thus, I avoided placing particularly extrovert or introvert students in the same dyad. The personalities of the students were considered by means of a questionnaire (see Appendix I) and by discussing the composition of the dyads with a colleague who knew most of the students well, and who was responsible for issues regarding special education at the school. However, seeing the complexity of all language learners, simply labelling a student as 'extrovert' or 'introvert' is difficult, and possibly even undesirable. Thus, this was rather an attempt to control for the personality factor, and create suitable dyads.

#### 3.3.2 Procedures related to LI

Once I had finalized the dyads and LI tasks, I devoted an 80-minute lesson to LI, starting with a short interactive lecture based on the presentation in Appendix J. After the lecture, the students practiced inferring lexis using an LI task similar to the experimental tasks (see Appendix J). Along the lines of what is suggested in Soria (2001) and Nassaji and Tian (2010) (see Subsection 2.6), it was assumed that pre-teaching the students about LI, and allowing them to practice it in class would make them feel confident and relaxed during the experimental LI tasks.

After the lesson, 59 % of the participants performed the paired task before the individual assignment, and the remaining students performed them in reversed order. It was hoped that this counterbalancing would minimize the carryover effect that may come with a repeated measures design (see Nassaji & Tian, 2010; Phakiti, 2015). Moreover, the individual LI task was performed during think-aloud sessions with the researcher-educator and the participant present. First, I briefly told the participant about the purpose of the sessions. This was to ensure that the participant understood (a) what he or she should do, and (b) the implications of the participation. Following Eckert (2013) I documented consent by means of the consent form in Appendix K, and clarified both what will remain confidential, and what would actually be included in the thesis. The participant was then reminded of what we had done during the lesson devoted to LI, and redid parts of the LI task from that class. When ready, the student received the actual individual LI task, and was asked to read through the text, before verbally inferring each of the marked target words, like in e.g., example (1). Following Haastrup (1991), the participants were instructed to use Swedish, English or a mixture of both, as this hopefully allowed them to express themselves as freely as possible, maximizing the chances of generating interesting data (see also Nylander, 2014). They were also instructed to indicate whether they knew any of the target words. If so, these were disregarded during the sessions, since discussions about words that learners think they know do not classify as inferences, even if these reports turn out to be erroneous (Haastrup, 1991; Soria, 2001).

The paired LI tasks were performed in a similar manner, the only difference being that I now sat down with dyads instead of individual students for approximately 20 minutes. To facilitate the scoring, I followed Haastrup (1991), and asked all the students to write down their final inferences

<sup>&</sup>lt;sup>7</sup> For practical reasons, it was not possible to include exactly 50 % of the participants in each group.

on answer sheets. To encourage collaboration, the dyads shared one answer sheet and one copy of the task. All the individual and collaborative LI sessions were audio-recorded.

I considered following Roberson (2014) and conducting all the collaborative LI sessions simultaneously in the actual classroom, rather than in quiet, separate rooms. This would have enabled an observation of LI task work during a normal lesson, which could have resulted in interesting pedagogical implications. However, in my role as the participants' teacher, I had noted that many of the students benefited immensely from working with only an educator and a peer present, like during paired or individual think-aloud sessions. Dörnyei (2007) further notes that such verbal protocols generally are considered "valid data on thinking" since they are assumed to mirror what the learners are thinking during the task work (p. 148). Thus, seeing the current aim of exploring individual and collaborative LI, think-aloud sessions were deemed more appropriate than classroom observations, as it is possible that important details would have been missed, had I observed all the paired LI sessions at the same time.

## 3.4 Data analysis and scoring

As indicated in Subsection 2.4, sociocultural SLA studies often rely heavily on qualitative analyses, leading Ellis (2003) to call for more quantitative research from the field. However, seeing the insightful qualitative analyses provided by e.g. Storch (2001, 2002), the strengths of this approach are obvious. Instead, the research reported here combines quantitative and qualitative analyses, which, as Dörnyei (2007) notes, is suitable when researching complex phenomena, such as paired and individual task work. The following subsections account for how the analyses were carried out.

#### 3.4.1 The quantitative analysis

Once all the data had been collected, it was reviewed in detail. The inferences were categorized using three categories ('successful', 'partially successful', and 'unsuccessful') on a scale from two to zero. When categorizing the inferences, I consulted the online version of Oxford Dictionaries (2019) and the Swedish-English dictionary Norstedts engelska pro (n.d.). A successful inference was awarded two points. It needed to be contextually, semantically and syntactically appropriate (in English or Swedish), and be listed as a synonym of the target word in one of the two dictionaries. Partly successful inferences were worth one point. These inferences were either approximate guesses, or words that were correct in terms of semantics but not syntax (e.g. a verb

instead of a noun). Inferences that were unsuccessful and did not correspond to the target word generated zero points.

Table 3
Successful, partially successful and unsuccessful inferences

Target word	Swedish translation from	Synonyms from	Full success	Partial success	Unsuccessful
	Norstedts engelska plus	the Oxford	(two points)	(one point)	attempt (zero
		dictionaries			points)
Camaraderie	kamratskap, kamratanda	friendship,	"Alltså, hon	"Kamrater	"Camaraderie
		comradeship,	har hittat	kan det [betyda]	[] det
		fellowship, good	något bra här i	det?"	[betyder]
		fellowship,	hennes [sic]		kanske
		companionship,	grupp. Så jag	'Friends	intresse
		brotherliness,	tror	could it [mean]	[]?"
		brotherhood,	Friendship	that?'	
		sisterhood,	,eller?"		'Camaraderie
		closeness,			[] maybe it
		affinity,	'Like, she has		means
		togetherness,	found		interest []?
		solidarity,	something		
		mutual support	good here, in		
			her group. So		
			I think		
			Friendship,		
			or'?		

This is illustrated in Table 3, where three different inferences have been categorized according to the three categories. In my undergraduate project on lexical inferencing (i.e., Nylander, 2014), having a second rater would have been ideal (see subsection 2.6.1). This time, a second rater therefore rated four recordings of individual LI sessions, and two recordings of paired LI sessions, which constituted 20 % of all the LI data. The inter-rater reliability values, based on the Krippendorff's Alpha (Hayes & Krippendorff, 2007) formula, were .74, .74, .77, and .91 for the individual sessions and .57 and 1 for the paired sessions. According to the Krippendorff's Alpha formula, the value 1 indicates perfect reliability Hayes & Krippendorff, 2007). Thus, the values were acceptable, and some (.91 and 1) were excellent. All disagreements were solved by means of discussion.

Table 3 shows three different inferencing attempts regarding the same target word. The inferences were the participants' final guesses, which they wrote down on their answer sheets. In scoring, it was the final inferences that were given a score of zero to two points. This system allowed me to quantify the lexical inferencing success and thus address the current research questions. The participants obtained one individual score on the task they performed alone, and one shared score on the collaborative task. Following Haastrup (1991) and Soria (2001), the target words that the participants reported knowing were not included in the final analysis.

## 3.4.2 The qualitative analysis

One goal of the present study is to investigate the impact of interaction patterns on LI success during a paired LI task. To this end, the LI data was coded for Storch's (2002) patterns of interaction (see Subsection 2.5). Based on Storch (2002), I created a spread sheet specifying all the salient traits of each approach, and made one copy of the spread sheet for each pair. This allowed me to determine which pattern that best described each dyad, by listening to the recordings from the paired think-aloud sessions multiple times, and noting down all the examples of each feature in the spread sheet. If a dyad exhibited tendencies of several approaches (i.e. 'collaborative' and 'dominant/passive'), it was labelled as belonging to the pattern that was the most salient.

# 4. Results

# 4.1 Determining lexical inferencing success

This study explores the impact of (a) global L2 proficiency and (b) collaboration, and (c) patterns of interaction on LI success. Here, inferential success equals high scores on the individual LI task (ILI) and the paired LI task (PLI). As stated in Section 3, the instances where students reported knowing a target word were excluded from the analysis and scoring. It was thus necessary to first calculate adjusted LI scores, based solely on inferences of word meanings that the students did not claim to know.

Firstly, Table 4 therefore lists all the raw scores on the ILI and the PLI. It also displays the number of target words that each individual student or dyad reported knowing, as well as the number of words left to infer. The table contains each students' respective maximum scores, and the adjusted scores on the two LI tasks. Finally, Table 4 displays each students' score on the respective proficiency measures (Reading, Writing, Listening, Speaking and Vocabulary), as well as their global proficiency task scores.

Students inferring all the target words could receive a maximum of 24 points per task, as each task contained 12 target words, and every fully successful inference generated two points. These students' success scores are shown as percentages, and were calculated by dividing their total scores with the maximum score 24. For instance, Jessica did not report knowing any of the target words from the individual LI task, hence the 0 in the column called 'Known words ILI'. This left her with 12 target words to infer, and a maximum score of 24 points, i.e., 12 times two. As shown in the column labelled 'Individual score', Jessica's individual lexical inferencing task score was 6 points. Thus, her adjusted individual score (i.e. success rate) was six divided by 24, i.e., 25 %. However, Henrik, for example, reported knowing five of the target words from the individual task. He consequently had seven words to infer, and a potential score of 14 points, i.e., maximum two points for each of the seven words respectively. Thus, Henrik's adjusted individual score was calculated by dividing his total number of points of 14 and not 24. As shown in the column called Indiv score, Henrik obtained 4 points when performing the individual LI task. His adjusted individual score (i.e., success rate) is 29 %, i.e. four divided by 148.

<sup>&</sup>lt;sup>8</sup> In accordance with APA, all the percentages have been rounded up to even numbers.

Student (pseudonym)	Reading task score	Writing task score	Listening task score	Speaking task score	Vocabulary test score	Global L2 proficiency score	Dyad number	Individual Score	Paired Score	Known words ILI	Words to infer ILI	Maximum score ILI	Adjusted Score ILI	Known words PLI	Words to infer PLI	Maximum score PLI	Adjusted Score PLI
Emma	0.47	0.90	0.33	0.33	0.37	0.48	1	5	5	0	12	24	0.21	0	12	24	0.21
Malin	0.20	0.57	0.47	0.57	0.29	0.42	1	3	5	0	12	24	0.13	0	12	24	0.21
Mattias	0.47	0.70	0.60	0.50	0.56	0.57	2	5	6	0	12	24	0.21	1	11	22	0.27
Jens	0.47	0.93	0.87	0.73	0.72	0.74	2	9	6	0	12	24	0.38	1	11	22	0.27
Dante	0.20	0.60	0.33	0.37	0.25	0.35	3	7	3	0	12	24	0.29	0	12	24	0.13
Petra	0.53		0.20	0.67	0.52	0.48	3	13	3	0	12	24	0.54	0	12	24	0.13
Zarah	0.67	0.80	0.67	0.60	0.44	0.63	4	9	6	0	12	24	0.38	0	12	24	0.25
Zoe	0.60	0.73	0.47	0.57	0.45	0.56	4	9	6	0	12	24	0.38	0	12	24	0.25
Johan	0.87		0.87	0.67	0.48	0.72	5	9	7	0	12	24	0.38	0	12	24	0.29
Josephine	0.53	0.83	0.80	0.70	0.66	0.71	5	9	7	0	12	24	0.38	0	12	24	0.29
Henrik	0.93	0.93	0.87	0.90	0.89	0.90	6	4	15	5	7	14	0.29	2	10	20	0.75
Selma	0.73	0.93	0.87	0.77	0.81	0.82	6	12	15	0	12	24	0.50	2	10	20	0.75
Joel	0.20	0.57	0.73	0.50	0.39	0.48	7	6	8	0	12	24	0.25	0	12	24	0.33
Tomas	0.67			0.73	0.59	0.66	7	13	8	0	12	24	0.54	0	12	24	0.33
Daisy	0.80	0.97	0.87	1.00	0.85	0.90	8	10	9	1	11	22	0.46	5	7	14	0.64
Markus	0.93	0.80	0.87	0.93	0.67	0.84	8	13	9	1	11	22	0.59	5	7	14	0.64
Ernst	0.80		0.67		0.83	0.77	9	11	9	4	8	16	0.69	1	11	22	0.41
Ellen	0.53		0.87	0.80	0.76	0.74	9	12	9	2	10	20	0.60	1	11	22	0.41
Dan	0.93	0.93	0.87	0.90	0.88	0.90	10	10	7	1	11	22	0.46	2	10	20	0.35
Beatrice	0.40		0.87	0.73	0.56	0.64	10	11	7	0	12	24	0.46	2	10	20	0.35
Hannes	0.93	0.83	0.87	1.00	0.85	0.89	11	11	3	3	9	18	0.61	6	6	12	0.25
Jessica	0.67			0.73	0.68	0.69	11	6	3	0	12	24	0.25	6	6	12	0.25

Table 4. LI and proficiency task scores.

Table 4 also shows that each student obtained a score in the form of a success rate percentage for each task. It was calculated by dividing the obtained number of points by 15, which was the maximum number of points on the Reading, Writing, Listening, and Speaking tasks (see Subsection 3.3). The maximum score on the vocabulary test was 100 points. Thus, the vocabulary test scores in Table 4 equal the obtained number of points divided by 100. This then allowed me to calculate a global L2 proficiency score for each student, which was the mean score (i.e. mean success rate in the form of a percentage) of all the task scores success rates. In the cases where students had missed one or several proficiency tasks, the global proficiency score was based on the mean of the tasks that he or she had performed. Markus, for example obtained a Reading task score and a Speaking task score of 93 %. This means that he scored 14 out of 15 on the Reading task and the Speaking task. His Writing task score is 80 % which corresponds to 12 out of 15 points. His Listening task score is 87 %, i.e., 13 out of 15 points. Markus answered 67 out of 100 vocabulary test items correctly, and received a Vocabulary score of 67 %. His global L2 proficiency score, 84 %, is the mean of all of these percentages.

The reliability of the proficiency tasks was established by means of Kuder-Richardson formula 21 (KR21) (Bachman, 2004). Reliability has to do with the consistency of the measures of an assessed ability. If a person is tested twice on the same test or task, one day apart, we expect them to perform very similarly as long as no intensive learning has taken place over night. KR21 provides us with a rough estimate of this consistency but without having to use the same measure twice. The obtained KR21 values were .67 for Speaking, .76 for Listening, .78 for Reading, .49 for Writing, and .95 for Vocabulary. The relatively low value for Writing may be explained by the fact that the KR21 uses variance as one of its parameters, and the variance for the Writing task was lower than that for the other tasks. This could have depressed the reliability coefficient somewhat. Aiming for values at or above .70, these numbers suggest that the reliability of the proficiency measures is with one exception acceptable.

As an initial analysis, a paired-samples t-test was computed based on all the participants' adjusted LI scores, comparing their individual score with their pair score. The Mean score and the Standard Deviation for the two LI types are shown in Table 5 below.

Table 5

Omnibus results on the two LI task types

Group	IL	[	PLI		
	Mean	SD	Mean	SD	
Omnibus $(N=22)$	.406	.152	.353	.182	

Even though the mean scores were numerically different, there was no statistically significant difference between the whole group's scores on the ILI (M = .406, SE = .032) compared to the PLI (M = .353, SE = .039), t(21) = 1.247, p = .226.

# 4.2 Analysing the impact of L2 proficiency and order of LI task type on lexical inferencing success

In order to address RQ1, first, all the participants' global proficiency scores were correlated with their adjusted scores on the ILI and the PLI. A Kendall's tau correlation was observed between the proficiency scores and the ILI scores,  $\tau = .395$ , p < .05, as well as between the proficiency scores and the PLI scores,  $\tau = .605$ , p < .01. Thus, there was a significant relation between L2 proficiency and successful lexical inferencing for both LI types, with the PLI being stronger than the ILI.

To further address RQ1 and investigate the relationship between global L2 proficiency and inferential success, the participants were divided into three proficiency groups based on their global L2 proficiency scores. This enabled the creation of three proficiency groups referred to as LOW (1) (scores between .00 and .59) MID (2) (scores between .60 and .74) and HIGH (3) (scores between .75 and .90) in Table 6. Table 6 below lists all the student participants, and shows which of the three proficiency groups they placed in. This study employs a within-subject design, and the order of the LI tasks was counterbalanced. Therefore, Table 6 also shows the order in which the students performed the paired and individual tasks. One participant, Zarah, who belonged to the MID group, was excluded from this analysis as dissimilar group sizes are not appropriate for the type of analysis reported below in this subsection (Field, 2013).

Table 6

Proficiency groups and order of tasks

Student	Order ILI	Proficiency group
Emma	1	1
Malin	2	1
Mattias	1	1
Jens	1	2
Dante	1	1
Petra	2	1
Zarah	1	2
Zoe	1	1
Johan	2	2
Josephine	1	2
Henrik	2	3
Selma	1	3
Joel	1	1
Tomas	2	2
Daisy	2	3
Markus	2	3
Ernst	1	3
Ellen	1	2
Dan	1	3
Beatrice	1	2
Hannes	2	3
Jessica	2	2

As displayed in Table 6, Johan, for example, has the number 2 in the order column. This means that he performed the collaborative task before the individual one. As shown in Table 4 above, his global L2 proficiency score was 72 %, placing him in the MID (2) proficiency group, hence the 2 in the column labelled Proficiency group in Table 6.

The descriptive statistics for the LI tasks are shown in Table 7. The table shows the mean scores and the standard deviations for the 3 proficiency groups. A series of paired- samples t-tests were carried out, comparing the ILI and PLI scores shown in Table 7 within each group. These showed that there was no statistically significant difference between the LOW group's scores on the ILI (M = .286, SE = .052) compared to the PLI (M = .217, SE = .029), t(6) = .983, p = .364, that there was a statistically significant difference between the MID group's scores on the ILI (M = .425, SE = .045) compared to the PLI (M = .314, SE = .020), t(6) = 4.149, p = .006, and that there was no

statistically significant difference between the HIGH group's scores on the ILI (M = .512, SE = .050) compared to the PLI (M = .542, SE = .077), t(6) = -.266, p = .799. Thus, the MID group scored significantly worse on the PLI compared to the ILI, but no other differences were significant.

Table 7

ILI and PLI Mean scores and SDs for the three proficiency groups, as well as t-value and statistical significance for ILI and PLI score comparisons

Group	N	II	I	PLI		Statistical comparison <i>t</i> -test of ILI
						and PLI scores
						(p-value significance)
		M	SD	M	SD	
LOW	7	.286	.137	.217	.076	t = .983
MID	7	.425	.118	.314	.054	t = 4.149 (**)
HIGH	7	.512	.132	.542	.203	t =266

Note \*\* = p-value is smaller than .01.

As a next step, a Mixed Design ANOVA with LI task type as a within-subject variable and L2 proficiency and order of LI task as between-subject factors was carried out. This design allows a mixture of between-group and repeated-measures variables to be included in the same analysis (Field, 2013). The reason for also including Order of LI task as a variable, even though there was counter-balanced in the design, was to see whether it still made a difference in which order the participants performed the two LI tasks.

As to the within-subjects results, the analysis showed no significant main effect for task type, F (1, 15) = 1.588, p = .227,  $\eta_p^2$  = .096, indicating that the participants' scores on the two types of LI task were not significantly different from each other. In terms of the between-subjects results, there was a main effect for Proficiency group, F (2, 15) = 17.324, p < .001,  $\eta_p^2$  = .698, indicating that there was a difference in terms of how the proficiency groups performed in the LI tasks. There was no main effect for Order of LI task, F (1, 15) = .192, p = .668,  $\eta_p^2$  = .013 and no interaction effect for Proficiency Group and Order, F (2, 15) = .215, p = .809,  $\eta_p^2$  = .028. No interaction means that there was no combined effect of the two variables (proficiency group and order of the LI task).

Contrasts revealed that all three proficiency groups were statistically significantly different from each other, LOW vs MID (p = .046), LOW vs HIGH (p < .001, and MID vs HIGH (p = .008). The mean scores for the three proficiency groups on the two respective LI tasks are plotted in Figure 3.

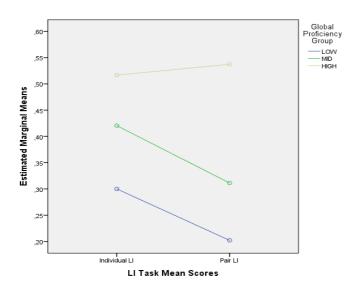


Figure 3. LI task mean scores for the three proficiency groups.

The plot in Figure 3 summarizes how the three proficiency groups, i.e. LOW (1), MID (2) and HIGH (3), scored on the two LI tasks. The Y axis shows the mean group score. For the X axis, the first point on each coloured line shows each groups' individual LI task mean score, and the second point shows the group's mean score on the paired LI task. For example, the LI task mean scores of the LOW (1) proficiency group are shown in the form of the purple line. The first point on this purple line shows that the LOW (1) proficiency group scored a mean of 29 % on the individual LI task. The second point on the purple line shows that the same groups' mean score on the paired LI task was 22 %. Overall, Figure 3 shows that the HIGH proficiency group did slightly better on the paired task, but that MID and LOW groups did slightly worse.

# 4.3 Lexical inferencing success and patterns of interaction

Addressing RQ 3, Table 8 below illustrates the most characteristic patterns of interaction exhibited in each dyad, and specifies which student took on which role in the 'expert/novice' and 'dominant/passive' approaches. Table 8 also includes the students' paired LI task scores.

Table 8
Interaction types and paired lexical inferencing task scores

	Dyad	Adjusted		
Student	number	Score DLI	Interaction type	Roles
Emma	1	0.21	'collaborative'	
Malin	1	0.21	'collaborative'	
Mattias	2	0.27	'collaborative'	
Jens	2	0.27	'collaborative'	
Dante	3	0.13	'expert/novice'	'novice'
Petra	3	0.13	'expert/novice'	'expert'
Zarah	4	0.25	expert/novice	'expert'
Zoe	4	0.25	expert/novice	'novice'
Johan	5	0.29	collaborative	
Josephine	5	0.29	collaborative	
Henrik	6	0.75	collaborative	
Selma	6	0.75	collaborative	
Joel	7	0.33	expert/novice	'novice'
Tomas	7	0.33	expert/novice	'expert'
Daisy	8	0.64	collaborative	
Markus	8	0.64	collaborative	
Ernst	9	0.41	dominant/passive	'passive'
Ellen	9	0.41	dominant/passive	'dominant'
Dan	10	0.35	collaborative	
Beatrice	10	0.35	collaborative	
Hannes	11	0.25	expert/novice	'expert'
Jessica	11	0.25	expert/novice	'novice'

As shown in Table 8, the two most successful dyads were both labelled as 'collaborative'. These were Henrik and Selma, whose score was 75 %, and Daisy and Markus, whose score was 64 %. Example (10) below provides an illustration of this pattern from the current data set. Here, Markus (M) and Daisy (D) are inferring the meaning of the target words *chide* and *predisposed (to)*. Example (10) has been translated from Swedish to English. Examples (10)-(15) serve as illustrations of the interaction patterns found in the data. The patterns will be further discussed in Section 5.

(10)

1D: Either [chide] means that they don't blame him, like, they're not punishing him

2M: I'm thinking exactly that. They're not punishing him or something along those lines...

3D: Yeah, because they know how he is feeling

4M: Yeah, because **predisposed**... I think that's...

5D: (Reads from the text) They knew that he was **predisposed** to...

6M: They know that he has had it, or has it

7D: It's genetic, sort of?

8M: Sort of. Like me, when my mother always thought that I had ADHD

9D: Yeah

10M: I went for a medical examination, and I had ADHD. Or I have ADHD. So that's what I think **predisposed** means. And **chide**, I think that [means] what you said, that they're not blaming him, sort of.

Example (10) shows how Markus and Daisy constantly confirm each others' thoughts, resulting in a high degree of mutuality. They also incorporate and extend on each other's ideas, in that one of them always follows up on the others' previous thought. The dialogue is highly contingent, resulting in a high equality, and resources are pooled to reach a solution accepted by both learners. The collaborative pattern is also illustrated in (11) below, where the target word in focus is *retrograde*. I have translated the example from Swedish to English

(11)

1E: But skipped means to miss, right?

2M: Mm.

3E: Well, then he missed classes. He was somewhere else.

4M: Yeah. He did something else... retrograde....

5E: ...because he has depression [sic].

6M: Yeah, so he didn't attend his classes. But he can also do something at school. It could mean something that he

7 does at school

8M: Yeah, I think it [means] to play truant

9E: Okay, put down to play truant.

10M: Mm.

Similarly to Markus and Daisy, the students Emma (E) and Malin (M) in example (11) above corroborate each other's ideas throughout the entire dialogue. One student typically follows on the other, which creates contingency, and a situation where both students contribute and engage in each other's ideas. Thus, even though their final answer is incorrect, the task work is characterized by a high degree of both equality and mutuality.

36 % of the dyads were classified as 'expert/novice'. For example, the pattern was exhibited by Joel and Tomas, whose success rate was 33 %. The 'expert/novice' approach is exemplified in

(12), where Dante (D) and Petra (P) are discussing the target word *retrograde*. The dialogue was originally uttered in Swedish.

(12)

1P: Yeah, we can start with that one then ... **retrograde**... (Reads from the text) 'Luke started to retrograde and he 2 often skipped classes'. He started to... yeah... Luke started....

3D: (Reads from the text) 'And he often skipped...' What does that mean? That he skipped the lesson, or what?

4P: Yeah, he played truant. He started to... something... and he didn't go to school [...]

5D: (Reads from the text) 'He struggled a lot with personal issues... 'He fought a lot with the staff, right?

6P: No, struggle, it's like... he had a lot of...

7D... conflicts with the staff, right?

8P: No, with himself... Personal issues.

9D: Aha

In example (12), Petra takes the role as the 'expert', and provides explanations by answering Dante's questions. Petra also assists Dante by steering him away from the conclusion that the adjective *personal* means *staff*, which, despite making sense in Swedish<sup>9</sup>, is erroneous in English. Petra takes responsibility for the task outcome, resulting in low equality. The mutuality, however, is high, as they arguably are equally involved in the task.

The 'expert/novice' pattern is also illustrated in (13). In this example, Hannes (H) and Jessica (J) are inferring the meaning of the target word *chide* from the paired lexical inferencing task. This dialogue was uttered in English.

(13)

1H: I think it says that... that he... (Reads from the text) 'They knew that he was predisposed to depression and 2 anxiety.' Predisposed basically means that you have a natural facility for [something]. For example, it would be 3 like genetic...

4J: Aha! Okay, okay, okay.

5H: And out of that, I think that you could make the conclusion that **chide**, is kind of like trying to whip him going, 6 you know like 'oh, why are you sitting in your room all day', like, 'you suck'

7J: Aha, so you mean that they're not, like, punishing him for...?

8H:Yeah, that's what I think. [...] But... I don't.... Do you think that's correct? [...]

9J: Yeah, I wrote that they did not blame or punish him for feeling that way

In example (13) above, Hannes assumes the role of the 'expert' and explains the word predisposed

<sup>&</sup>lt;sup>9</sup> The Swedish noun *personal* means 'staff'.

to Jessica. This explanation then functions as a segue to an inference regarding the target word *chide*. However, seeing that he asks Jessica about her opinion, Hannes arguably does not impose his view, but is rather helpful instead of dominant. Jessica confirms the inference and is engaged in the activity, but without presenting any ideas of her own. Thus, the mutuality is relatively high, whereas the equality is lower.

One dyad, consisting of Ernst (E) and Ellen (El), was labelled 'dominant/passive'. As shown in Table 8, they scored 41 % on the paired LI task. The pattern is exemplified in (14), where the target words in focus are *aberrantly* and *resilience*. The example ends with a reference to the subsequent target word *propensity*. The dialogue has been translated from Swedish to English.

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(14)
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1El: (Reads from the text) 'And he behaved very **aberrantly**...'Very.... different, is my guess. Sort of.

2E: Mm.

3El: Different. [...]

4El: (Moves on to a new target word) **Resilience**... [...] I think it's, like, his well-being. That's what I would guess

5 that it means.

6E: Mm. Okay.

7El: (Moves on to the next target word) Eh... propensity....

In (14) Ellen appoints all the inferences and thus dominates the discussion, whereas Ernst only utters occasional phatic expressions (see e.g., line 6). As a result, the dialogue lacks negotiation, and is characterized by a low degree of both equality and mutuality. The pattern is repeated in (15) below, where the dialogue continues, and the same students infer the meaning of *propensity*. Example (15) has also been translated.

(15)

1El: (Reads quietly from the text) 'He had a **propensity**...' He had the gift of....something, I would say. Because it 2 is something... (reads from the texts and skips the target word)' He had... for learning about sports, and he started 3 feeling a lot better'. I'm thinking, like, it was easy for him to...

4E: Yeah.

5El: Yeah. Something like that.

In example (15), Ellen correctly suggests that the fact that the man from the text had a propensity for learning about sports, means that had the gift of doing so. Again, she does not encourage Ernst

to contribute, but rather refers to her own thoughts. Instead of engaging in Ellen's idea or making other suggestions, Ernst simply confirms her, which results in low equality and mutuality.

# 5. Discussion

The aim of this study was threefold. First, it sought to explore the relationship between adult upper secondary school level ESL students' global L2 proficiency, and their lexical inferencing (LI) success. A second aim was to examine the effect of collaboration on their LI success, as compared to their individual performances. A final goal was to look at the relationship between adult upper secondary school level ESL students' pattern of interaction during a paired LI, and their paired success score. In short, the findings suggest a positive relationship between global L2 proficiency and LI success, although no statistically significant positive effect of collaboration was observed. However, the qualitative analysis indicates that the dyads labelled 'collaborative' did better than the other pairs. In this section, the findings related to each RQ are first discussed in light of previous research. Then, in Subsection 5.1, I discuss the limitations of the study, focusing on how they could be considered in future projects.

Focusing on RQ 1, Haastrup (1990, 1991) observed a positive relationship between global L2 proficiency and LI success. The study reported here unsurprisingly replicates this finding, as there was a relation between L2 proficiency and lexical inferencing success for both LI types. This was observed both based on statistical correlations between proficiency scores and LI scores, and on the analysis of the three group performances. Thus, the current research corroborates that L2 proficiency is a decisive factor in successful LI. As discussed in Subsection 2.1.2.2, Haastrup (1990) suggests that proficient learners typically can combine top- and bottom-level cues in a manner leading to successful interactive processing and inferencing, whereas less proficient students tend to use non-interactive processing, which is less efficient and successful. Such tendencies were revealed in the current study as well. Compare, for instance, the inferences in (16) and (17), where Selma (S) and Zoe (Z) infer the meaning of *lunacy* during their respective individual LI sessions. In example (17), (R) stands for *researcher*. I have translated the examples into English.

(16)

S: (Reads from the text) 'She thinks that it is **lunacy** that people do not talk more about things like anxiety and depression'. I'm thinking about *lunatic*. That means *maniac*. [...] And if you, like, translate the sentence in which it appears, then it's like... Like it's crazy that we don't talk about more like anxiety and depression. So, [it means] crazy.

The inference in (16) was uttered by Selma, whose global L2 proficiency score placed her in the HIGH proficiency group, and whose individual LI task score was 50 %. Similarly to the high

proficiency students in Haastrup's (1990) example from Subsection 2.1.2.2 Selma manages to combine her understanding of the context ('if you translate the sentence in which it appears') with knowledge of another word with the same word stem (*lunatic*). Consequently, this combination of top and bottom level cues results in a relatively successful inference.

(17)

1Z: It means calm.

2R: Okay, calm. Like rolig in Danish?

3Z: Yes.

Example (17) focuses on Zoe, who was placed in the LOW proficiency group and received a relatively low individual LI task score (38 %). She thinks that 'lunacy' means calm. Since she is more proficient in Danish than in Swedish (see Section 3.1), the interviewer checks this by referring to the Danish translation equivalent *rolig* (line 2). When looking at (17), it should be born in mind that the inference was uttered in Swedish, where 'calm' means lugn. Thus, Zoe's guess looks and sounds somewhat similar to the target word lunacy. In Haastrup's (1990) terminology, Zoe thus employs bottom-level cues, which result in ineffective non-interactive processing, and an erroneous inference. Example (17) therefore illustrates Haastrup's (1990, 1991) work suggesting that proficient learners are successful inferencers because of their ability to use cues effectively. Naturally, however, it is possible that factors in addition to Zoe's L2 English proficiency per se also affect her ability to infer lexis. As mentioned in Subsection 2.1, LI is complex, and performing an LI task in an L2 complicates the process even further (Nassaji, 2003). Thus, as a means to maximize the students' possibilities to express themselves without hindrance, all the participants were encouraged to use English, Swedish or a mixture of both during the LI sessions. However, Zoe's strongest languages were Danish and Arabic, and neither Swedish nor English was her L1 (see Table 1). Zoe and Zarah, who had the same language background, were therefore given the choice to use Danish, as the researcher could understand the language. Nevertheless, they both primarily chose to speak Swedish, during the LI sessions, which may have added a particular set of challenges for these learners. This also applies to all the other students who did not have Swedish as their L1. Regardless, the present findings have pedagogical implications, as they suggests that educators teaching LI strategies to students, should do so when the learners are proficient enough to perform, and thus learn from, LI tasks in a profitable manner. Moreover, focusing on the proficiency tasks, these were created to test all the separate modalities (listening, writing, speaking and writing) and form a TBLL unit that aligned with the school's policy and educational philosophy. The tasks were designed based on Bygate's (2016) task criteria, as well as Wills and Wills' (2007) classification of tasks (see Subsection 2.3.1). During the Speaking task, for example, the students worked in pairs, and were asked to agree on a list of important election issues, by means of discussion and persuasion. Thus, returning to Bygate's (2016) criteria, there was a clear focus on the meaning of the suggestions (cf. criterion 1). The set-up created a clear communicative gap, in that they needed to exchange information by means of discussion (cf. criterion 2). Hence, the students were dependent on their own linguistic resources (cf. criterion 3), and rather than speaking for the sake of speaking, there was a clearly defined outcome in the form of a list (cf. criterion 4). Using Wills and Wills' (2007) terminology, the task involved both listing, ranking and brainstorming, since it was based on a list of local election issues (see Section 3).

It should, however, be acknowledged that not all the tasks from the current study were equally 'task-like'. The idea of the Reading task, for instance, was to let the students demonstrate their understanding of an article by answering a series of comprehension questions and matching each paragraph with appropriate headings. Thus, in light of Bygate's (2016) criteria, the Reading task was arguably 'task-like' in the sense that it primarily focused on the meaning of the text (cf. criterion 1) and required the students to rely on their own reading abilities (cf. criterion 3). The task also resonates with Wills and Wills (2007), who note that matching is central to TBLL. However, the Reading task arguably lacks a gap (cf. criterion 2), as the students merely answered questions and thus did not actively need to convey information or infer meanings like in the LI tasks, for instance. The Reading task also did not result in a concrete outcome other than the actual answers to the questions (cf. criterion 4), which, according to Ellis (2003), means that it contains elements of a traditional exercise (see Section 2.3).

However, as shown in Section 2.2, Ellis (2003) notes that exercises are not necessarily less beneficial than tasks. Importantly, the teaching reported here also does not claim to be completely task-based. Rather, TBLL was considered an interesting avenue to explore, and a suitable and efficient alternative to standardized proficiency tests. Using Bygate's (2016) terminology, the teaching thus formed a task-referenced unit, where TBLL did not necessarily permeate all the elements.

Addressing RQ 2, the learners from the HIGH proficiency group were expected to at least perform the same across the two LI tasks, which they did. In fact, they were slightly better at inferring lexis in pairs than alone, although this difference was not statistically significant. However, the current findings do not support the hypothesis suggesting that 'less proficient' students would benefit from

collaborating with a 'more proficient' peer, in that they would obtain higher scores when working in a mixed-proficiency dyad, compared to individually. This is because similarly to Storch, (2007), the current findings do not point to a statistically significant positive effect of collaboration. More precisely, the MID and LOW proficiency groups where, in fact, slightly more successful when inferring lexis alone than in pairs. This is merely a trend, as only the MID groups' scores were significantly different across the two LI tasks. Regardless, it is surprising, as it diverges from e.g. Storch (1999) and Nassaji and Tian (2010), who suggested an overall positive effect of collaboration on task completion. It should, however, be stressed that the types of tasks utilized by these authors were different from the paired LI task used in this thesis. Hence, it is possible that collaborative approaches are not necessarily always positive. Rather, the effect of collaboration may depend on the skill, modality and task in question. This resonates with Leeser (2004) who suggests that the collaborative task format primarily is appropriate for tasks where the co-operating students take on separate roles, and where there is a communicative gap in that one student has information which the other one does not see (cf. below).

(18)

1P: (Reads from the text) 'Luckily...'. 'Luckily, it means...?

2D: Fortunately.

3P: Fortunately, yes. (Reads from the text) 'Luke's parents did not [...] **chide** their son at all [...]' To force, maybe?

4 They knew that he wasn't doing well, so maybe they did not force him to go to school.

5D: It says here (reads from the text) 'did not'.

6P: Yeah, they did not force him to go to school.

The unexpected behaviour of the MID and LOW proficiency learners may also be explained by the way they reacted to assistance from their peers. This is evident in extract (18), in which Dante (D) and Petra (P) are inferring the meaning of *chide*. It has been translated from Swedish to English.

Example (18) illustrates how Petra, who typically assumed the role of the 'expert' in the dyad, proposes that *to chide* means *to force* (see line 3). Dante does not pick up the suggestion, however, and no contingency is created. Instead, Dante focuses on a specific detail in the experimental text (see line 5), which suggests that he primarily needs to concentrate on understanding the text, before he can infer the meaning of the target word. Thus, it is possible that Dante was not aided, but rather distracted, by his peer. This could explain why Dante, who was in the LOW proficiency group, received a higher success score on the individual task (29%), where he could focus solely on understanding the text and then inferring lexis, rather than on the paired task, where his and Petra's

joint success score was 13 %. This relates to the findings in Leeser (2004), who questions the merit of mixed-proficiency dyads during contextualized tasks, as the less proficient participants in his study were so occupied with understanding the text, that they were incapable of using the assistance provided by their peers in a way, which could have enabled contingency and interaction within their ZPDs. Consistent with Leeser (2004), the results observed in the present study thus suggest that the efficacy of using mixed-proficiency pairs for contextualized tasks like LI tasks, can be questioned.

On the other hand, (18) also displays that Dante knows the meaning of *luckily*, which helps Petra continue with the text. In (18), the roles therefore shift, as Dante's valuable contribution arguably makes him the 'expert' at the beginning of the extract (lines 1-3), whereas he, as discussed above, behaves more like a 'novice' towards the end of example (18) (lines 5-6). The dialogue is thus in line with previous findings (e.g. Otha, 1995; Roberts, 2016) pointing to the fluidity of labels like 'expert' and 'novice'. Importantly, *luckily* was not a target word to infer, but rather a word that Petra needed to comprehend in order to proceed. Thus, example (18) also aligns with researchers like Garza and Harris, (2016), who stress the importance of understanding the context surrounding the target words when inferring lexis (see Section 2.1.2.1).

Just like 'low' proficiency learners in general are not always susceptible to assistance, students can also fail to provide effective scaffolding, as doing so requires great mutual sensitivity and skills (see Section 2.4). Thus, another reason why the effect of collaboration was surprisingly scant could be that the students were unable to scaffold and collaborate successfully. In example (14) from Subsection 4.3, for instance, Ellen and Ernst evinced the 'dominant/passive' pattern, in that Ellen initiated all the inferences, whereas Ernst typically confirmed her without contributing. Seeing the difficulty in scaffolding and the complexity of LI, it is possible that the students resorted to the 'dominant/passive' approach because they had not been given the tools to effectively infer lexis as a collaborative effort. This relates to Nassaji and Tian (2010), who stress the importance of letting the research participants practice collaborative task work before performing it. The authors propose showing the participants videos of other students engaged in pair work. The videos, they suggest, can then function as a point of departure for a training session on collaboration. Although the current learners did practice both paired and individual LI (see Section 3), they only participated in a single training session in the classroom. This lesson was primarily devoted to LI strategies, and collaboration and effective scaffolding was not the main focus of the session. It is therefore possible that the current findings would have been different, had the participants practiced collaboration by means of the type of training proposed by Nassaji and Tian (2010). Thus, an important pedagogical implication from this study is that both teachers and researchers who want learners to engage in collaborative task work, must allow plenty of practice first.

As shown in Figure 3 in Subsection 4.2, the current findings indicate that unlike the other participants, the HIGH group did slightly better when inferring lexis collaboratively compared to individually. Although the difference was not statistically significant, this was somewhat unexpected. Even though it was assumed that the most proficient students would receive at least similar scores on the two tasks, which they did, it was not hypothesised that they would benefit more from the paired format than the 'less' proficient learners did, which they did not statically. Regardless, the behaviour of the HIGH proficiency group resonates with Ohta (1995), who argued that an 'expert' can gain from providing scaffolding, as it e.g., allows them to develop by experimenting with their own language use. Thus, it is possible that the most proficient learners from the present study somehow benefited from assisting their less proficient peers. This remains speculative, however, and more research is needed to establish the reasons for these results. As discussed in Section 2.4, collaborative task work is complex, since the roles are not always clearcut (cf. above), and since all learners approach tasks with different motives, resulting in different activities for different students. Although all the participants were instructed to treat the LI tasks as normal schoolwork, it is of course possible that they did not always approach them in the same manner by e.g. taking them equally seriously. Also, some of the learner-related factors possibly affecting LI success (e.g., the ability to pay attention to details) were not controlled for in the study.

Returning to RQ3, Table 8 revealed that the present findings are consistent with previous research in that pairs with a 'collaborative' approach often performed better than pairs labelled as 'expert/novice' or 'dominant/passive'. As shown in Subsection 4.3, the two most successful dyads were both classified as 'collaborative'. These were Henrik and Selma, who scored 75 %, and Markus and Daisy, whose paired score was 64 %. By contrast, Zara and Zoe, for example, were labelled 'expert/novice' and scored 25 %. The 'dominant/passive' dyad (Ernst and Ellen) obtained a score of 41 % on the paired LI task. Although no statistically significant positive effect of collaboration was established, such tendencies were thus uncovered through a qualitative analysis of the data. The 'collaborative' pattern was e.g., shown in example (10) in Section 4. The extract illustrates that, just like Storch's (2002) 'collaborative' research participants, Markus and Daisy repeatedly verified and extended on each other's ideas leading to a high degree of both equality and mutuality. With a collaborative success rate of 64.3 %, these students performed the paired task better than the individual LI task, where their scores where 59 % and 46 %, respectively.

The above-mentioned positive effect of collaboration was further corroborated during Markus's individual LI session, which took place after the collaborative task. Here, Markus clearly missed Daisy, as he repeatedly referred to their joint task performance. Example (19) below, which was uttered in English, nicely sums up his experience. In example (19), R stands for *researcher*.

(19)

M: Last time, when I worked with Daisy, things just popped up in my head. Not this time.

R: Why is that, you think?

M: [...] Probably because I [was] with her and... Two brains are often better than one, probably.

Taken together, the above indications suggest that, as illustrated in e.g. Roberson (2014) and Nassaji and Tian (2010), collaboration between peers can improve task outcomes. From a methodological perspective, the discussion shows the value of using a mixed-method approach when exploring collaboration, as the qualitative analysis reported here points to interesting findings which may have been left unexplored, had the study been strictly quantitative (cf. Section 3).

Like Roberson (2014) and Ahmadian and Tajabadi (2017), the current research revealed a predominance of 'collaborative' dyads, whereas the 'expert/novice' pattern was the second most common approach. Seeing the positive characteristics associated with 'collaborative' pairs, this indicates that the composition of dyads was generally successful. This, in turn, has pedagogical implications, as it points to the merits of pairing up students in a thought-out manner, like in the current study (see Section 3). As to the 'expert/novice' approach, it was hypothesised that it would be the most frequent pattern in the data, since the aim was to create heterogeneous dyads. However, as shown in Table 4, the proficiency differences between the collaborating students were sometimes minimal, which may explain why the pattern was slightly less frequent than expected. Also, the two most fortunate dyads consisted of students who both received relatively high and homogeneous proficiency scores, which, in addition to their collaborative approach, explains their success (see Subsection 4.1). Ideally, the dyads should have been more heterogeneous, as this would have facilitated the testing of the Vygotskian hypothesis suggesting that a 'less' proficient 'novice' merits from collaborating with a 'more' proficient 'expert' (see Subsection 2.4). For practical reasons, this was, however, not possible. The next subsection contains a more detailed discussion regarding gaps from the current study.

## 5.1 Limitations and suggestions for future research

Like any research, this thesis has limitations, which I will consider in future projects. For example, the second rater only analysed the LI data and not the proficiency tasks, which may have affected the overall proficiency scores. The participant group was relatively small (N = 22). Thus, it cannot be ruled out that the result trends observed that were not statistically significant may have become so with a larger sample size. Also, even though a comprehensive set of proficiency data was collected from the participants, there were some minor gaps in that a few students did not perform all the proficiency tasks. This meant that for these students, global proficiency scores were based on less than all five subskills. However, in all these cases they always had a vocabulary score. As mentioned in Subsection 2.2, it is known that such a measure typically correlates strongly with a person's global proficiency (see Alderson, 2005).

As noted in Section 3, conducting educationally situated research can be complex. The research reported here was sometimes practically challenging, which may have affected the findings. For example, the venues used for the LI sessions were relatively exposed, making it difficult for some students to concentrate. Seeing the complexity of LI tasks, it is possible that the students would have performed better had they worked in a more quiet room. Thus, the chosen research site was arguably not ideal, and traditional labs may, in fact, be better suited for studies on LI task work. However, as noted in Section 1, this research seeks to answer Erlam and Ellis's (2018) call for more TBLL studies conducted by researching practitioners, which naturally would not have been possible in such a setting. It also sought to map L2 proficiency using a series of tasks, which may not have been realistic, had it been conducted outside of a school (cf. Subsection 3.1). Hence, seeing the possibility of utilizing the same tasks in both classrooms and traditional experiments (see Section 1 and Subsection 2.3) future research on LI and L2 proficiency could be conducted by co-operating researchers and teachers. For example, a practitioner could design proficiency tasks and utilize them to measure students' proficiency in the classroom. The students could then participate in a traditional lexical inferencing experiment, conducted by a researcher. This would enable the teacher and the researcher to collaboratively compare proficiency task results and the LI experiment outcomes, as a means to explore the relationship between proficiency and LI success. They could also benefit from each other, in that the practitioner could consider the implications from the LI experiment in his or her teaching, whereas the researcher could focus solely on exploring LI, without having to e.g., administer time-consuming proficiency tests.

Moreover, the participants in the current study performed one paired and one individual LI task, functioning as two measures of their inferential skills. For practical reasons, introducing even more LI tasks was impossible. However, as noted by Roberts (2016), fruitful relationships between peers often take time to develop, which, in turn, may have affected the collaborative task outcomes. Thus, it would be interesting to carry out a study where the participants performed a series of collaborative LI tasks over time, and investigate the influence of time and the development of student relationships on LI as a collaborative effort. This resonates with Haastrup (1991), who also calls for such LI research.

The research reported here primarily concerns LI task completion, and examining the potential vocabulary uptake from the tasks was beyond the scope of the study. However, seeing that the efficacy of LI as a vocabulary acquisition strategy has been questioned (see Subsection 2.1) future research could explore learners' acquisition of the target words from individual and paired LI tasks. I could also conduct a new study focusing on the LI strategies used by the participants, as these were not explored in detail in this thesis. Seeing the heterogeneous language backgrounds of the participants, it also would have been interesting to look at how these affected their LI behaviour. Thus, more LI research could be conducted in the multilingual classroom.

## 6. Conclusion

This study aimed at investigating the effect of global L2 proficiency on LI success, using a series of proficiency tasks. It also sought to determine the effect of collaboration on LI, by comparing individual and paired LI task outcomes. A third goal was analyse the patterns of interaction exhibited during the paired LI, and explore the potential relationship between the patterns and inferencing success.

Corroborating previous research and one of the current hypotheses, the findings revealed a positive effect of global L2 proficiency on students' ability to infer lexis. However, no statistically significant positive effect of collaboration was found. Even though the students from the HIGH proficiency group obtained slightly higher success scores when inferring lexis with a peer compared to individually, the MID and LOW proficiency students unexpectedly did slightly better alone than in pairs. On the other hand, the analysis based on Storch's (2002) patterns of interaction helped reveal that some students benefited from collaboration, and that the 'collaborative' dyads were more successful than the pairs with an 'expert/novice' or 'dominant/passive approach'.

Several possible reasons behind the findings were discussed. With regard to the HIGH proficiency group, the act of scaffolding may have led to personal gains, and helped them perform better in pairs than alone. Such tendencies were observed by Otha (1995), but were not explored in detail in the present study. As to the MID and LOW proficiency groups, it is possible that they primarily needed to focus on comprehending the experimental texts, which, in turn, disabled them from collaborating in a fruitful manner, and thus made the individual task more approachable for them. Collaboration and effective scaffolding also requires practice and skills, which suggests that the results could have been different, had the learners engaged in several training sessions, focusing on such skills (Ellis, 2003; Nassaji & Tian, 2010). This remains speculative, however, as several findings are statistically insignificant trends based on a small group of participants. Thus, this thesis ends with a call for more and larger studies on individual and collaborative LI. For example, longitudinal research could be conducted by co-operating researchers and educators. This would allow further exploration of whether participant Markus's claim that "[t]wo brains often [are] better than one" actually applies to LI.

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## **Appendix A: The reading task**

Your name:	
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Below you will find a text about 5 ways to create change as a student. Read the text carefully, and try to answer the questions that follow. Please do not use any dictionaries or other resources, and work individually.

5 ways to create change as a student

https://blog.ed.ted.com/2018/01/02/5-ways-to-create-change-as-a-student/

Chances are, if you clicked on this article, you're young and you're itching for a change. Maybe you noticed that your local homeless shelter is underfunded. Maybe your school isn't accessible for differently abled individuals. Whatever it is, you think something isn't right and you want to do something about it. Well, you're in luck! Just because you're young doesn't mean you can't make a difference. From one student to another, here are a few suggested ways to make a change:

A: Sometimes, it's as simple as that; if you see something you want to change, do something about it! For example, if your local library is closing due to underuse and you want to revive it, you could write to your local politician or bring it up at a town hall meeting. Or, if you're like grade 12 students Miranda Wang and Jeanny Yao, who found plastic to be useful yet harmful to the environment, you might go in search of a new bacteria to biodegrade plastic. Want to learn more about what they did? Check out their <u>TED Talk!</u> Worried about finding the resources — money, human or otherwise — to make your project happen? Don't worry. You just need to reach out and ask others; you'll be surprised at how willing people are to help youth improve the community.

B: If you are interested in making a specific change, it's possible that others may be too. In that

case, if you find a common thread — or find that an aspect of what they do aligns with what you

want to do — you might want to join them! Remember, there is power in numbers and the sum is

greater than its parts.

C. Explicitly working on a project isn't the only way to make change; even small personal lifestyle

changes can add up. Let's say, for example, that you are passionate about sustainability and the

environment. You might decide to become more environmentally friendly and practice more

mindful consumption. In daily life, for example, that could mean that you start to bike or carpool,

to thrift your clothes instead of buying them, and to simply buy less stuff. We all have limited

resources, so how can we use our resources to help others the most? It's important to remember

that you don't necessarily have to sacrifice everything in order to make an impact. For example,

Giving What We Can (GWWC) is an altruistic organization whose members pledge to give 10%

of their income to effective charities. Founded at Oxford University in 2009 by moral philosopher

Toby Ord, the premise of GWWC is exactly that — giving what we can.

**D.** When you want to make the world a better place, it's important to learn about the world itself

and the problems it faces. So, what better way is there to learn than through research? Whether it's

a quick Google search, a trip to a library, or an interview with locals, research is often a critical

step in deciding which problem to solve next and how.

E. To expand your reach, you need to build awareness about your cause. This has a multiplier

effect, because the people you influence can in term persuade others to act as well. For example,

when Tavi Gevinson was fifteen years old, she had a hard time finding strong female, teenage role

models — so she built a space where they could find and empower each other. You can learn more

about what she did by watching her TED Talk.

There are plenty of ways to take action and make a change. What will you do?

**Question 1:** 

Look at the list of headings below. Choose the correct heading for each section in the text you just

read. Write the correct letter, A–E, next to the appropriate heading (5 p.)

List of headings:

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- 1. Make personal changes
- 2. Start your own project
- 3. Empower others and spread the word
- 4. Join an existing project
- 5. Research to learn

### **Question 2:**

The writer says that "there is power in numbers and the sum is greater than its parts". What does this mean? Circle the correct letter, **A**, **B** or **C**.

(1 p.)

- A It is important to be good at maths if you want to make a change as a student
- **B** Working together is an efficient and powerful way to make a change
- C If you want to make a change as a student, you have to think carefully about all the parts of your project

#### **Question 3:**

The writer mentions 3 personal changes you can make if you want to care more about the environment. What are they? (3 p.)

### **Question 4:**

What is Giving What We Can (GWWC)? (1 p.) Circle the correct letter, **A**, **B** or **C**. (1 p.)

- A A philosophy created by the moral philosopher Toby Ord
- **B** A charity founded by students at Oxford University
- C An organisation whose members give parts of their income to charity

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The writer says that building awareness about your cause has a multiplier effect. What does this mean? Circle the correct letter, **A**, **B** or **C**. (1 p.)

**A** When you build awareness about your cause ,it becomes increasingly easier to think of more and more ways to make a change

**B** When you build awareness about your cause, the people you influence can in term persuade others to act as well

C When you build awareness about your cause, your project becomes increasingly successful

## **Question 6:**

Complete the summary below by filling in the blanks.

Choose **NO MORE THAN TWO WORDS** from the text for each answer (4 p.).

There are several things that students like y	ou can do to make a ch	ange in your loca	al communities.
For example, you can start your own project	ct, and focus on the iss	ues that matter to	you. If you do
not know how to finance your project, you o	an always	to 1	the other people
in your community, who will probably b	e happy to help you.	Alternatively, y	ou can join an
existing project that	with what you want	to do. Making pe	rsonal changes,
such as being environmentally friendly b	y carpooling or takin	g the bike to so	hool, is also a
possibility. Regardless of what you take on	, it is always important	to	
the issues you want to tackle. This will be	useful if you wish to _		your reach,
and inspire others to make a change too.			

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## **Appendix B: The listening task**

Monologue
Your name:
TED-talk: Before I die, I want to
https://www.ted.com/talks/candy_chang_before_i_die_i_want_to#t-50288
The artist Candy Chang turned an abandoned house in her community into a giant chalkboard asking the fill-in-the-blank question: "Before I die I want to" Her neighbours' answers became an unexpected and much appreciated mirror for the community. What's your answer to the question?
A: Before we watch the TED-talk, let's go through the following vocabulary marked in <b>boldface</b> together:
A public space
Chalk
A chalkboard
A vacant storefront
An abandoned property
Personal aspirations
To live off the grid
Making space for reflection and contemplation
B: Listen to the TED-talk and try to answer the following questions:
1. Candy says that she has tried to share more with her neighbours using "simple tools". Which
three (3) tools does she mention (3 p.) ?

2. Where does Candy live (1 p.)?
3. Candy gives examples of things that people wrote on the walls of the property. Try to list three (3) of these examples by listening and filling in the blanks (3 p.).
Before I die, I want to
Before I die, I want to
Before I die, I want to
4. Candy says that walls like the one she created have been made in countries around the world Which countries does she mention? Please circle the correct letter, <b>A</b> , <b>B</b> or <b>C</b> (1 p.).
A Kazakhstan, South Africa, France, and Sweden
B Kazakhstan, South Africa, Australia, and Argentina
C South Africa, Australia, and England
5. What do you think Candy wants to tell the audience? What is the message of the TED-talk? Try to explain this using your own words (4 p.).

/ 12

C: Please discuss the following questions in pairs or small groups after you have seen the TED-talk:

Candy says that the house was a "neglected space that became a constructive one". What does this mean? Can you think of any neglected spaces in your community that could be changed? Which ones? What could be done?

D:

Go to the whiteboard and answer the fill-in-the-blank question yourselves. Take some time to reflect on what the other people in the class have written. After this, we will discuss your answers

**Interview** 

## Dale Rawlins- Rotary Young Citizen 2018-BBC News Interview

https://www.youtube.com/watch?v=u0Rkt0SE5TA

You are going to listen to an interview with Dale Rawlins. He lives in Gloucester, England, and is passionate about helping young disabled people get into football. Dale has helped over 400 players all over England to get the opportunity to join a football team. He also coaches a team in his community. To celebrate what he has done in his community, Dale recently won the Rotary young citizen award.

Listen to the interview and answer the three questions below by circling the correct letter, A, B or

C.

1. Why did Dale want to help disabled people get into football when he was 14?

A Because his father told him to

**B** Because he joined such a team in at the age of 12, and took on the team two years later

C Because he needed something to do

2. According to Dale, why is the project is so successful?

A Because everyone enjoys taking part in the project

**B** Because he has found a coaching method that works well

C Because the schools that the players go to are very supportive

3. What has Dale done in addition to enabling and coaching football teams for disabled people?

A He has opened 18 sports shops where disabled people can work as service staff

**B** He has created 150 new jobs for the disabled people in his community

C He has started a sports shop in Gloucester where disabled people can work

/ 3

**Appendix C: The speaking task** 

Speaking task: Improving everyday life in your local community

Part A

Work individually and try to think of a concrete suggestion that could make everyday life better

for adult students, like you, in your local community.

Try to:

88

- describe what your suggestion is
- explain why you think it is a good suggestion

Present your idea in brief, and try to speak for about 1 minute each. You can make some notes to help you if you wish.

#### Part B

One of the political parties has a number of ideas on how to make everyday life better for adult students, like you, in your local community. Some of these ideas will be prioritized and financed if the party wins the upcoming election. The following possible ideas have been suggested:

- Offering free travel cards (*Skånekort*) to all the adult students in town.
- Collaborating with the local bakeries and offering free breakfast to all the adult students
- Building a new nightclub in the city centre
- Offering free babysitting during evenings and weekends to young single parents who cannot get help from home
- Offering study allowances for financing a diving licence

- Giving all adult students free access to all the museums in town
- Offering all adult students a part-time job scheduled after school
- Giving all adult students discounts at the local restaurants
- Offering all adult students free dental care
- Opening a nail salon

First, look at the list alone for approximately 3 minutes and choose 5 ideas that you would find relevant. Put them on these lines in the order of your preference.

1		2	3		
4		_			
5		-			
Sacand	work with a frie	and and acompan	a your list with yo	ur nortnorg' T	ha lista ara ny

Second, work with a friend, and compare your list with your partners'. The lists are probably different. Your task is to find the best compromise with your partner and prepare a final list of 3 ideas that the two of you think should be prioritized.

You have approximately 10 minutes to convince each other about your ideas, and come to an agreement on the 3 best proposals. Make sure you give reasons for your opinions. Write down the 3 proposals below.

1			
2.			
3.			

## Appendix D: The writing task

## Writing task

Every city has issues worth paying attention to. For example, maybe the local library is closing due to underuse. Maybe your local homeless shelter is underfunded. Or perhaps your building isn't accessible for differently abled individuals. The best thing to do when you see something you want to change is to try to do something about it. So, write an e-mail to the head of your municipality (*kommunchef*) about **one local issue** in you community, which you think they should do something about. Your e-mail should cover the following points:

1. Start by describing the issue. Be as detailed and specific as possible.

- 2. Explain why the issue is important
- 3. Give <u>at least</u> one suggestion regarding what could be done about the issue

Remember to start and finish your e-mail appropriately.

Try to write approximately 150 words.

Please do not use any dictionaries or other resources. Work individually.

## **Appendix E: The Vocabulary Size Test (VST)**

Vocabulary Size Test<sup>1</sup>
Circle the letter a-d with the closest meaning to the key word in the question.

SEE: They saw it.

- - a. cut
  - waited for
- looked at started
- TIME: They have a lot of **time**. a. money b. food
- hours
- PERIOD: It was a difficult period. 3.
- question time
  - thing to do
  - c. d. book
- FIGURE: Is this the right figure?
  - answer a. b.
  - place time
- number
- POOR: We are poor.
- have no money
- - feel happy are very interested do not like to work hard
- DRIVE: He drives fast.
- throws balls
- uses a car
- JUMP: She tried to jump.
- lie on top of the water get off the ground suddenly stop the car at the edge of the road move very fast
- SHOE: Where is your **shoe**?

  a. the person who looks after you
  b. the thing you keep your money in
  c. the thing you use for writing
  d. the thing you wear on your foot
- STANDARD: Her standards are very
  - high.
    a. the bits at the back under her shoes
- the money she asks for the levels she reaches in everything
- BASIS: This was used as the basis.

  - a. answer b. place to take a rest
  - next step

<sup>1</sup> The test was created by Paul Nation, Victoria University of Wellington, and can also be found at http://www.lextutor.ca/. This test is freely available and can be used by teachers and researchers without seeking permission..

d. main part

#### Second 1000

- MAINTAIN: Can they **maintain** it? a. keep it as it is
- - make it larger
  - get a better one than it get it
- STONE: He sat on a stone.

  - hard thing kind of chair soft thing on the floor
  - d. part of a tree
- UPSET: I am upset.
  - tired
  - b.
- famous rich unhappy
  - DRAWER: The **drawer** was empty.
    a. sliding box
    b. place where cars are kept
  - - cupboard to keep things cold animal house
- PATIENCE: He has no patience.
- will not wait happily has no free time has no faith

  - does not know what is fair
- NIL: His mark for that question was nil.
- а. b. very bad nothing
- very good in the middle c. d.

- PUB: They went to the **pub**.

  a. place where people drink and talk

  b. place that looks after money
  - large building with many shops building for swimming
- CIRCLE: Make a circle. 8.
  - rough picture space with nothing in it
  - round shape
- MICROPONE: Please use the microphone.

- machine for making food hot machine that makes sounds louder machine that makes things look bigge small telephone that can be carried around
- PRO: He's a **pro**.
  a. someone who is employed to find out important secrets

  - a stupid person someone who writes for a newspaper someone who is paid for playing
- sport etc

#### Third 1000

- SOLDIER: He is a **soldier**.
  - a. person in a business
  - student
  - person who uses metal
- d. person in the army
- RESTORE: It has been restored.

  - said again given to a different person
- given a lower price
- d. made like new again
- 3. JUG: He was holding a jug.
- A container for pouring liquids an informal discussion b.
  - A soft cap
- A weapon that explodes d.
- SCRUB: He is scrubbing it. cutting shallow lines into it
- b. repairing it
- rubbing it hard to clean it
  - drawing simple pictures of it
- 5. DINOSAUR: The children were pretending to be dinosaurs.
  - robbers who work at sea
  - very small creatures with human form but with wings
  - large creatures with wings that
  - breathe fire
    d. animals that lived a long time ago
- 6. STRAP: He broke the strap.
  - promise
  - b. top cover
  - shallow dish for food
- strip of material for holding things X together
- PAVE: It was paved.
  - a. prevented from going through
  - divided
- given gold edges
- х d. covered with a hard surface
- DASH: They dashed over it.
- a. moved quicklyb. moved slowly

  - looked quickly d.
- 9. ROVE: He couldn't stop roving.
  - getting drunk
- travelling around
  - making a musical sound through closed lips
  - working hard
- LONESOME: He felt lonesome.
  - a. ungrateful
- very tired
- Ionely
  - full of energy

#### Fourth 1000

- COMPOUND: They made a new compound.
  - agreement
  - thing made of two or more parts
  - group of people forming a business guess based on past experience
- LATTER: I agree with the latter.
  - man from the church a.
- reason given
- last one
- c. d. answer
- 3. CANDID: Please be candid.
  - be careful a.
  - show sympathy
  - show fairness to both sides
- say what you really think х
- TUMMY: Look at my tummy. 4.
- cloth to cover the head a.
- stomach
  - small furry animal
  - thumb

х

- OUIZ: We made a quiz. 5.
  - thing to hold arrows
  - b.
  - serious mistake set of questions
  - box for birds to make nests in
- INPUT: We need more input. 6.
- information, power, etc. put into something
  - workers
  - artificial filling for a hole in wood
  - money
- CRAB: Do you like crabs?
- sea creatures that walk sideways
  - very thin small cakes
  - tight, hard collars
  - large black insects that sing at night
- VOCABULARY: You will need more 8.
- vocabulary.
  - b. skill
  - money
- REMEDY: We found a good remedy.
  - way to fix a problem
  - b. place to eat in public
  - way to prepare food
  - rule about numbers
- 10. ALLEGE: They alleged it.
  - claimed it without proof stole the ideas for it from someone b.

  - provided facts to prove it argued against the facts that supported it

2

#### to a shop

#### Fifth 1000

- DEFICIT: The company had a large deficit.
- spent a lot more money than it a. earned
  - b.
  - went down a lot in value had a plan for its spending that used c.
  - a lot of money
  - d. had a lot of money in the bank
- 2. WEEP: He wept.
  - a. finished his course
- b. cried
  - died
  - d. worried
- 3. NUN: We saw a nun.
  - long thin creature that lives in the a.
  - terrible accident
- woman following a strict religious life
  - unexplained bright light in the sky
- HAUNT: The house is haunted. 4.
  - full of ornaments
  - b. rented
  - empty c.
- d. full of ghosts
- COMPOST: We need some compost.
  - strong support
  - help to feel better b.
  - hard stuff made of stones and sand c. stuck together
- d. x rotted plant material
- 6.
  - CUBE: I need one more **cube**.
    a. sharp thing used for joining things a.
- solid square block
  - tall cup with no saucer piece of stiff paper folded in half c. d.
- 7.
- MINIATURE: It is a **miniature**. a. a very small thing of its kind
  - an instrument to look at small objects

  - a very small living creature a small line to join letters in handwriting d.
- 8. PEEL: Shall I peel it?
  - let it sit in water for a long time
  - take the skin off it
    - make it white
    - cut it into thin pieces
- 9. FRACTURE: They found a fracture.
- break
  - small piece b.
  - short coat
  - rare jewel
- BACTERIUM: They didn't find a single 10. bacterium.
  - a. small living thing causing diseaseb. plant with red or orange flowers
  - animal that carries water on its back
  - d. thing that has been stolen and sold

#### Sixth 1000

- DEVIOUS: Your plans are devious.
  - a. tricky
    - well-developed b.
    - not well thought out
    - d. more expensive than necessary
- PREMIER: The premier spoke for an 2. hour.
  - a. person who works in a law court
  - b. university teacher
  - adventurer
- d. head of the government Х
- BUTLER: They have a butler.
- man servant
  - h. machine for cutting up trees
  - private teacher
  - cool dark room under the house
- ACCESSORY: They gave us some accessories.
  - papers allowing us to enter a country
  - b. official orders
  - ideas to choose between
- extra pieces
- THRESHOLD: They raised the threshold. 5.
- point or line where something changes h.
  - roof inside a building
  - d. cost of borrowing money
- THESIS: She has completed her thesis.
- long written report of study carried out
  - for a university degree talk given by a judge at the end of a trial
  - first year of employment after c.
  - becoming a teacher
  - d. extended course of hospital treatment
- STRANGLE: He strangled her.
- killed her by pressing her throat gave her all the things she wanted a.
  - b.
  - took her away by force
  - d. admired her greatly
- 8 CAVALIER: He treated her in a cavalier manner.
- a. without care
  - b. politely
  - awkwardly
  - as a brother would d.
- 9 MALIGN: His malign influence is still felt.
- a. evil
  - b. good
  - very important c. d.
  - secret
- 10. VEER: The car veered.
  - went suddenly in another direction a.
    - moved shakily

    - made a very loud noise slid sideways without the wheels turning

#### Seventh 1000

- OLIVE: We bought olives.
- a. oily fruit
  - scented pink or red flowers
  - men's clothes for swimming
  - tools for digging up weeds d.
- QUILT: They made a **quilt**.
  a. statement about who should get their property when they die
  - h. firm agreement
- thick warm cover for a bed
  - feather pen
- 3. STEALTH: They did it by stealth.
  - spending a large amount of money
  - b. hurting someone so much that they agreed to their demands
- moving secretly with extreme care and auietness
  - taking no notice of problems they met
- SHUDDER: The boy shuddered. 4.
  - spoke with a low voice
  - b. almost fell
- shook
  - called out loudly
- 5. BRISTLE: The bristles are too hard.

  - questions short stiff hairs b.
  - folding beds
  - d. bottoms of the shoes
- BLOC: They have joined this bloc.
  - musical group
  - band of thieves b.
  - small group of soldiers who are sent ahead c. of others
- group of countries sharing a purpose d.
- DEMOGRAPHY: This book is about **demography**. a. the study of patterns of land use

  - the study of the use of pictures to show facts about numbers
- the study of the movement of water
- the study of population
- GIMMICK: That's a good gimmick.
  - thing for standing on to work high above the around
  - small thing with pockets to hold money
  - attention-getting action or thing
    - clever plan or trick
- AZALEA: This  ${\bf azalea}$  is very pretty. 9.
- small tree with many flowers growing in a.
  - light material made from natural threads
  - long piece of material worn by women in c.
  - sea shell shaped like a fan d.
- 10. YOGHURT: This yoghurt is disgusting.
  - grey mud found at the bottom of rivers
  - unhealthy, open sore
- thick, soured milk, often with sugar and flavouring

#### large purple fruit with soft flesh Eighth 1000

- ERRATIC: He was erratic.
  - without fault a.
  - very bad
  - c. d. very polite unsteady

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- PALETTE: He lost his **palette**. a. basket for carrying fish 2

  - wish to eat food
  - young female companion
  - artist's board for mixing paints
- NULL: His influence was null. 3.
  - had good results
- b. was unhelpful had no effect
- was long-lasting
- KINDERGARTEN: This is a good

#### kindergarten.

- activity that allows you to forget your worries
- place of learning for children too young for school
  - strong, deep bag carried on the back
  - place where you may borrow books
- ECLIPSE: There was an eclipse.

  - a strong wind a loud noise of something hitting the water b.
  - The killing of a large number of people
- The sun hidden by a planet
- MARROW: This is the marrow. 6.
  - symbol that brings good luck to a team
  - Soft centre of a bone b.
  - control for guiding a plane
  - increase in salary
- LOCUST: There were hundreds of locusts.
- insects with wings
  - unpaid helpers
    - people who do not eat meat
    - brightly coloured wild flowers
- 8 AUTHENTIC: It is authentic.
  - real
    - very noisy b.
    - Old
    - Like a desert d.
- 9
- CABARET: We saw the **cabaret**. a. painting covering a whole wall
  - song and dance performance
    - small crawling insect
    - person who is half fish, half woman
- MUMBLE: He started to mumble. 10.
  - think deeply
    - shake uncontrollably
  - stay further behind the others
- speak in an unclear way

#### Ninth 1000

- HALLMARK: Does it have a hallmark?
- stamp to show when to use it by stamp to show the quality
- - mark to show it is approved by the roval family
  - Mark or stain to prevent copying
- PURITAN: He is a **puritan**. 2.
  - person who likes attention
- b. person with strict morals
  - person with a moving home person who hates spending money
- MONOLOGUE: Now he has a monologue. 3.
  - single piece of glass to hold over his
  - eye to help him to see better long turn at talking without being
- interrupted
  - position with all the power
  - picture made by joining letters together in interesting ways d.
- WEIR: We looked at the weir.
  - person who behaves strangely
    - wet, muddy place with water plants b.
  - old metal musical instrument played
- by blowing thing built across a river to control d. the water
- WHIM: He had lots of whims. 5.
  - old gold coins
- female horses strange ideas with no motive
- sore red lumps
- PERTURB: I was perturbed. 6.
  - made to agree
- b. Worried
  - very puzzled
  - d. very wet
- REGENT: They chose a regent.
  - an irresponsible person
  - a person to run a meeting for a time
- a ruler acting in place of the king d.
  - a person to represent them
- OCTOPUS: They saw an octopus. 8.
  - a large bird that hunts at night
  - a ship that can go under water a machine that flies by means of
  - turning blades
- d. a sea creature with eight legs Х
- FEN: The story is set in the **fens**.
  a. low land partly covered by water
  - - a piece of high land with few trees a block of poor-quality houses in a city c.
  - a time long ago
- 10. LINTEL: He painted the lintel.
- Beam over the top of a door or window
  - small boat used for getting to land from a big boat
  - beautiful tree with spreading branches and green fruit

- board showing the scene in a theatre Tenth 1000
- AWE: They looked at the mountain with awe.
  - a. worry interest b.
  - wonder
  - d. respect
- 2. PEASANTRY: He did a lot for the **peasantry**.
  - local people
  - place of worship b.
  - businessmen's club
- d. х poor farmers
- 3.
- EGALITARIAN: This organization is **egalitarian**.
  a. does not provide much information about itself to the public
  - dislikes change
  - frequently asks a court of law for a judgement
- treats everyone who works for it as if they are egual
- MYSTIQUE: He has lost his mystique. 4.
- his healthy body the secret way he makes other people think he has special power or skill
  - the woman who has been his lover while he is married to someone else
  - the hair on his top lip
- UPBEAT: I'm feeling really upbeat about it.
- upset
- b. good
  - hurt
  - d. confused
- CRANNY: We found it in the cranny! 6.
  - sale of unwanted objects
  - narrow opening b.
  - space for storing things under the roof of a house
    - large wooden box
- 7.
- PIGTAIL: Does she have a **pigtail**?
  a. a rope of hair made by twisting bits together
  - a lot of cloth hanging behind a dress
  - a plant with pale pink flowers that hang down in short bunches c.
  - d. a lover
- CROWBAR: He used a crowbar.
- heavy iron pole with a curved end
  - false name b.
  - sharp tool for making holes in leather
  - d. light metal walking stick
- 9 RUCK: He got hurt in the ruck.
  - hollow between the stomach and the a. top of the leg
  - pushing and shoving
  - group of players gathered round the ball in some ball games c.
  - race across a field of snow
- 10. LECTERN: He stood at the lectern.
- desk to hold a book at a height for reading table or block used for church sacrifices
  - b.
  - place where you buy drinks very edge

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## Appendix F: The final project task



Your next task is to **plan**, **present**, and **advertise\*** a local community project

Imagine that you work for **our municipality**You and your team have been given a budget of **1000 000 SEK** to carry out something for the community

\* the advertising is not obligatory. Do this if you have time

- Criteria:
- The project has to be something concrete (konkret) that is missing in the community
- It has be free of charge (gratis) for the people taking part of it
- You have to **stick to the budget**. If 1000 0000 SEK is not enough, you, need to think of **alternative** ways to carry out your project. For example, you can imagine that you find sponsors or volunteers, have limited opening hours etc.
- It should be a long-term project that can live on for a long time, and not just a single festival or event

- Criteria
- The project should bring people together and making everyday life better
- Work in groups of 2-4
- Tip: you need to have a location/venue in mind if your project requires. You could choose a neglected space that could use something nice, or that is not used at the moment. Think about the TED-talk about neglected spaces that we have



#### Examples of possible projects

- A course or activity of some kind (drama club, art class, dance group, choir etc.)
- After school programmes for children
- Parks, cafés, playgrounds, retirement homes etc.







The project should consist of....

- 1. A project plan (projektplan) to hand in to your teacher. The project plan should be1-2 pages per group. Read the separate instructions and the example on Google Classroom.
- 2. A **Keynote presentation** of your project. Read the separate instructions and the example on Google Classroom.

3. If you have time, you should also create **flyers** (*reklamblad*) used to **advertise** your projects. This is not obligatory







Your projects will be displayed at Kulturnatten 12
 October. So the deadline is 11 October. Plan your projects accordingly!



# Appendix G: The individual lexical inferencing task and translations of the target words

During her last year in school, 24-year-old Pip Barrett was diagnosed with mental health problems, and she started to suffer from anxiety. This was a <u>laborious</u> time for Pip, and she thinks that she got anxiety because of all the homework and exams. Sometimes, she could <u>seethe</u> with anger. Sometimes, she <u>receded</u> and she kept herself <u>aloof</u>, without talking to anyone.

To handle the anxiety, Pip turned to painting. She realized that art made her feel better. Pip soon felt that she wanted to use her skills to give back to her community.

She decided to <u>contrive</u> an art class for people in her city, who were also affected by mental health issues. She was a <u>callow</u> teacher, but it went well. Now she finds great <u>camaraderie</u> among the people taking part in her class. During the art lessons, she can talk to them about the <u>ordeal</u> that she has experienced.

Pip hopes that her project has helped start a conversation about mental health issues. Pip is <u>audacious</u> and she speaks openly about her own problems. She thinks that it is <u>lunacy</u> that people do not talk more about things like anxiety and depression. We think that we should not <u>meddle</u> in other people's business. We also never ask people about how they are feeling. But most people struggle at some point. So it is better to talk about it. Pip thinks that if we <u>avow</u> that things like anxiety and depression are normal, things will get better.

Target word	Swedish translation
laborious	mödosam, tung
seethe	sjuda, koka
receded	drog sig tillbaka
aloof	reserverad, otillgänglig, isolerad
	keep (hold) [oneself] aloof hålla sig på sin kant
	(stay) aloof hålla sig undan (utanför)
contrive	tänka ut, hitta på, uppfinna; planera finna medel (utvägar) till, finna på
	ett sätt [ ordna till med, [lyckas] åstadkomma, ställa (ordna) det
	så, lyckas
callow	omogen, oerfaren, grön
camaraderie	kamratskap, kamratanda
ordeal	svårt prov, prövning, eldprov, pärs, pina
audacious	djärv, dristig, oförvägen
lunacy	vansinne, vanvett
meddle	blanda (lägga) sig 'i [andras angelägenheter], lägga sin näsa i blöt
avow	öppet tillstå, erkänna, vidgå; stå för, kännas vid

# Appendix H: The collaborative inferencing task and translations of the target words

When he was in high school, 19-year-old Luke Rees began to suffer from depression. He struggled a lot with personal issues. Luke started to <u>retrograde</u>, and he often skipped classes. Luckily, Luke's parents did not <u>chide</u> their son at all. They knew that he was <u>predisposed</u> to depression and anxiety, and that he behaved very <u>aberrantly</u>. He was very unwell.

Luke's parents felt that they had to help their son, and they told him to take a course for young sports leaders in his local community. Luke was a bit critical before he <u>acquiesced</u> in taking the course. But during the course, he started to feel confident and believe in himself. The sports course was very good for his <u>resilience</u>. He had a <u>propensity</u> for learning about sports, and he started feeling a lot better. The course made him understand how much he had messed up during the <u>grievous</u> time of his life.

After the leadership training, Luke started an after school sports course for young children in his local community. This changed his life completely, and today, Luke is an **industrious** young man. He studies sport leadership at the university. He has good grades and lots of friends. Luke's life has **transcended** all his expectations.

In <u>hindsight</u>, Luke understands that the course for young sports leaders and the after school project was very good for him. He wants to <u>promulgate</u> that helping others has been great for his development, and he encourages other young people to help others too.

Target word	Swedish translation
retrograde	dra sig tillbaka
chide	banna, gräla på, tillrättavisa; klandra
be predisposed to	vara mottaglig för, ha anlag för (för att)
aberrantly	avvikande
acquiesced in	gick med på
resilience	återhämtningsförmåga, förmåga att komma igen
have a propensity for	ha benägenhet, anlag för
grievous	sorglig, smärtsam, svår
industrious	flitig, arbetsam
transcended	överträffade
In hindsight	i efterhand, nu efteråt
promulgate	sprida, föra fram

## **Appendix I: Student questionnaire (in Swedish)**

Det här frågeformuläret används som bakgrund till min studie, som handlar om det vi gör på engelskan under temat *Demokrati och medborgarskap*. Alla svar som du anger i det här frågeformuläret, och alla resultat på samtliga uppgifter, är helt anonyma. Du kan närsomhelst välja att inte fortsätta svara på frågorna i frågeformuläret. Uppgifterna vi gör i klassrummet med koppling till studien ska som sagt betraktas som helt vanligt skolarbete, och huruvida dina resultat publiceras i studien eller inte påverkar **inte** din eventuella behörighet eller ditt omdöme på något sätt. Tveka inte att fråga om det är något du undrar över. Stort tack för din medverkan! © /Elin

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språken i rutorna nedan.

Förnamn	Efternamn	Datum		Eventuell funktionsnedsättning (frivilligt)
Ålder	Man	Kvinna	Annat	

2. Hur många år h folkhögskolan.	ar du gåt	t i skolan?	Räkna	från	och	med	årskurs	1.	Räkna	med	din	tid på
											_	

Språk A	Språk B	Språk C	Språk D	Språk E	Språk F

Kommentar (frivilligt):	 	 _	

4. Lista alla språk du kan, utifrån inlärningsordning. Börja med det du anser vara ditt förstaspråk.
Kommentera på raden nedan om det är så att du har flera förstaspråk. Skriv språken i rutorna
nedan.

Språk A	Språk B	Språk C	Språk D	Språk E	Språk F
Kommentar	(frivilligt):				

5. Försök att uppskatta din egen förmåga att göra följande på en skala från 1 (*inte alls bra*) till 5 (*utmärkt*).

	1 inte alls bra	2 ganska bra	3 bra	4 mycket bra	5 utmärkt
Prata engelska:					
Förstå talad engelska:					
Läsa på engelska:					
Skriva på engelska:					

Kommentar	(frivilligt):	

- 6. Hur väl stämmer följande påståenden in på dig?
- a. Jag känner mig bekväm med och gillar att arbeta i grupp

1	2	3	4	5
stämmer inte alls	stämmer ganska	stämmer bra	stämmer mycket	stämmer utmärkt
bra	bra		bra	

b. Jag tenderar att börja med uppgifter för snabbt, utan att tänka igenom dem först

1	2	3	4	5
stämmer inte alls	stämmer ganska	stämmer bra	stämmer mycket	stämmer utmärkt
bra	bra		bra	

c. Ibland lägger jag för mycket tid på att reflektera över saker och jag kommer inte till skott tillräckligt snabbt

1	2	3	4	5
stämmer inte alls	stämmer ganska	stämmer bra	stämmer mycket	stämmer utmärkt
bra	bra		bra	

d. Jag föredrar uppgifter som jag kan utföra själv

1	2	3	4	5
stämmer inte alls bra	stämmer ganska bra	stämmer bra	stämmer mycket bra	stämmer utmärkt

e. Jag behöver mycket tid på mig att planera vad jag ska säga i klassrummet

1	2	3	4	5
stämmer inte alls	stämmer ganska	stämmer bra	stämmer mycket	stämmer utmärkt
bra	bra		bra	

## Appendix J: The lexical inferencing lecture

## Lexical inferencing







 Every language learner occasionally comes across unfamiliar words when reading in his or her second language (English in your case).

What do you usually do when you see a word that you do not understand in an English text?



- One possible strategy is known as lexical inferencing
- Lexical inferencing is about making informed guesses as to the meaning of an unknown word using linguistic cues, your general knowledge of the world, the context in which the word appears, and your linguistic knowledge (språkkunskaper) (Haastrup, 1991, p.40).
- inferencing = guessing\*
   to infer = to guess ( att gissa)\*
- \* The guesses are not random, but informed

- In other words, if you come across an unfamiliar word when reading, you can try to guess (gissa) its meaning by....
- · looking at the text surrounding the unknown word
- using your knowledge about things in the world
- and/or your language skills ( = your knowledge of English, Swedish, French etc.)







#### Example

- Let's imagine that you are reading a text with the following sentence, and that the word in <u>boldface</u> is unknown to you:
- The missing girl <u>vanished</u> without a trace a year ago
- Can you infer/guess the meaning of this word?
- There are several things that can help you infer/ guess the meaning of 'vanished' in this sentence. For example...
- The context in which the word 'vanished' appears suggests that it refers to a disappearance (försvinnande)
- The missing girl vanished without a trace a year ago

- · Also, the -ed in vanished suggests that it is a verb in the past tense, just like e.g walked, baked etc.
- Or maybe you are familiar with the stain remover called "Vanish"



to vanish = att försvinna, blekna bort

Examples of ways to infer/guess the meaning of words

• 1. Look at parts of the unknown word Example: redo

-re means again

redo means to do something again

• 2.Try to think of words in any language that **sound** or are **spelled** like the unknown word Example: frustration

sounds and looks like the Swedish word 'frustration' The two words mean the same thing



- · 3. See if you can associate the unknown word with something else
- 4. Look at the sentence in which the unknown word appears

The **bakery** is a place where you buy biscuits and bread





- . 5.Look at the words closest to the unknown word Example:
- It was a terrible and devastating natural disaster
- 6. Try to replace the unknown word with a word that you do

- 7. Use your grammatical knowledge
- 8. Think about the paragraph and the whole text in which the word appears, including the punctuation.
- 9. Use knowledge of other languages Example:

There was nothing I could do to change the **situation** This word also exists in Swedish, French, Spanish etc.

10. Sometimes words go together. These words are called collocations. If the unknown word is part of a collocation, and you know one of the two words, this could help you understar the other one.

- 11.If possible, use your knowledge of the topic (ämne, tema) of the text
- 12. If possible, use relevant knowledge and ideas of the world. Do you think of anything from "real life" when you see the unknown word?

## Why are we doing this?

- Because lexical inferencing is a way to...
- .....move forward when you come across unknown words in a text
- .... learn new words that were originally unknown to you
- Also, all students taking English 5, 6 and 7 in Sweden should "be given the opportunity to develop their ability to use different strategies to [...] solve problems when language skills are inadequate" (Skolverket, n.d., p.1).

## The next step

Now you are going to try the lexical inferencing strategy. Here is what you should do:

A: Read through the following short text about a young man called Chris Catt, who helped someone in need.

B: Tell me if you know the meaning of any of the words marked in **boldface**. Since we practice guessing the meaning of unknown words, it is assumed that you do **not** know what they mean.

C: Individually try to guess the meaning of all the words in **boldface**, using the lexical inferencing strategy we just talked about. Then compare answers with a friend. Try to say your guesses out loud

Last year, during an <u>aviation</u> from Spain, Chris Catt (17) witnessed another passenger having a heart attack. There was an announcement asking for first aiders. Chris knew how to perform first aid, and did not hesitate to step up. The man with the heart attack was very <u>bemused</u>, but Chris remained <u>sedate</u>. Once the plain could land, the injured man was taken to an <u>infirmary</u>

Original article taken from: https://www.walesonline.co.uk/news/wales-news/teenager-used-first-aid-skills-11592121

aviation : flygning



bemused: förvirrad,

<u>sedate</u>: stillsam, lugn, sansad; stadig <u>infirmary</u>: sjukhus; sjukavdelning, sjukrum





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## **Appendix K: Consent form (in Swedish)**

## Samtycke till deltagande i forskningsstudie

Nedan ger du ditt samtycke till att delta i min studie som ligger till grund för min masteruppsats inom engelsk språkvetenskap. Studien handlar om' lexical inferencing' och om det som vi gör i skolan under temat Demokrati och medborgarskap. Läs igenom detta noggrant och ge ditt medgivande genom att skriva under med din namnteckning längst ned.

## Medgivande

- Jag är medveten om att det vi gör under temat Demokrati och medborgarskap och alla uppgifter angående 'lexical inferencing' ska betraktas som helt vanligt skolarbete, men att det kommer att sammanställas i en studie.
- Jag är medveten om att alla resultat (d.v.s. resultaten på uppgifter knutna till temat, uppgifter om lexical inferencing, samt viss information från frågeformulären) publiceras anonymt.
- Jag vet att jag själv väljer om mina resultat ska publiceras eller inte.
- Jag är medveten om att valet att låta mina resultat publiceras i studien eller inte **inte** påverkar mitt omdöme eller min eventuella behörighet på något sätt.
- Jag har fått tillfälle att få mina frågor angående studien besvarade och vet vem jag ska vända mig till med frågor.

Jag ger detta medgivande forutsatt att inga andra an de forskare och larare
som är knutna till studien kommer att ta del av det insamlade materialet.
Övriga kommer endast att kunna ta del av de resultat som publiceras
anonymt.
/

## Appendix L: Global proficiency levels according to the CEFR

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

(Council of Europe, 2001, p. 24)