



FACULTY OF EDUCATION  
DEPARTMENT OF EDUCATION AND SPECIAL EDUCATION

# APPLICATION OF PROCESSABILITY THEORY TO SFI STUDENTS' L2 WRITING COMPETENCIES

Reyhaneh Tajgardoun

---

Master's thesis:	30 credits
Programme/course:	L2EUR (IMER) PDA184
Level:	Second cycle
Term/year:	Autumn 2019
Supervisor:	Birgitta Svensson
Examiner:	Dawn Sander

# Abstract

Master's thesis:	30 credits
Programme/Course:	L2EUR (IMER) PDA184
Level:	Second cycle
Term/year:	Autumn 2019
Supervisor:	Birgitta Svensson
Examiner:	Dawn Sander
Keywords:	Swedish as a second language, second language acquisition, L2 writing, morphology, processability theory

---

**Aim:** The main purpose of this study is to study the written proficiency of SFI students at different morphological learning levels, and their ability to conjugate verbs, nouns, and adjectives using a wordless children book (frog-story).

**Theory:** This study tries to link SFI levels of written proficiency to the levels of Pienemann hierarchy of language learning. Processability theory is a universal theory of L2 that is applicable to different languages. This theory has been adopted to cover not only the process of L2 acquisition but also the development of grammatical forms. PT demonstrated which L2 forms and which variants of grammatical forms are processable at every developmental stage.

**Method:** The study is a linguistic study within language-learning using a combination of primarily quantitative and qualitative methods. It utilizes a commonly used pictorial frog-story (Mayer,1969) and an accepted taxonomic model of language acquisition, the Pienemann model of processability hierarchy. The morphemes written by SFI students were identified from qualitative data (narratives) and then processed via a quantitative method (independent sample t-test).

**Results:** The study shows that Pienemann model can be applied to the writing skills of the students of C and D levels of SFI. In this study, the SFI students' narrative abilities, the numbers of morphemes written, and students' competences to conjugate and put in agreement three main word classes (verb, noun, and adjective) were evaluated. Independent Samples T-test was used to confirm that writing competences of advanced-level (D level) students are higher than writing competences of beginner-level (C level) students. The analysis of the morphemes produced by the students revealed that beginner level (C level) students demonstrated the 1st, 2nd and 3rd levels of Pienemann model of processability hierarchy, while advanced-level students demonstrated higher results at the 2nd, 3rd, and 4th levels of the model.

# Acknowledgements

My deepest appreciation goes to my supervisor, Birgitta Svensson, for her support, suggestions, and inspirations.

I would like to express my sincere gratitude to all of those who provided me with the possibility to complete this Master thesis.

I would also like to thank all the participants in my thesis who have shared their time with me.

I would like to acknowledge with much appreciation my husband and my family who have always been supportive and always believed in me.

Last but not least, I would like to thank my dearest friend Oxana Rosca who has been supportive and providing me with the best suggestions.

Reyhaneh Tajgardoun (Renée)

October 2019, Gothenburg

” A new WORD is like a fresh seed sown on the ground of the discussion and like everything metaphysical the harmony between thought and reality is to be found in the GRAMMAR of the language”

*Ludwig Wittgenstein 1889-1951*

# Table of contents

Abbreviations.....	1
1. Introduction.....	2
Purpose.....	3
2. Background.....	4
Swedish educational system for adult immigrants.....	4
A brief outline of Swedish morphology.....	7
A brief outline of Processability Theory.....	10
3. Theoretical framework.....	11
Learnability process and Processability Theory.....	14
4. Methodology.....	19
Frog, where are you?.....	20
Picture-elicited narrative.....	21
Participants and Data Collection.....	22
Ethical considerations.....	24
Limitation.....	24
Additional Assisting Morphemes.....	25
5. Results and interpretations.....	28
Independent sample t-test.....	28
Application of Pienemann model.....	39
English morphemes in the texts.....	47
6. Discussion.....	48
7. Conclusion.....	48
Further study.....	49
8. References.....	50
Appendices.....	61
Appendix 1 - Number of students, narratives' length and total verbs.....	61
Appendix 2 - Number of nouns and adjectives.....	62
Appendix 3 - Students' information.....	63
Appendix 4 - Frog where are you?.....	66
Appendix 5 - Personal inquiry.....	74
Appendix 7 - knowledge requirement for Writing skill for SFI.....	77
Appendix 8 - Independent Sample Test with standard error and confidence intervals.....	81

# Abbreviations

ELL	English language learners
L1	First Language
L2	Second Language
LAD	Language Acquisition Device
LFG	Lexical-Functional Grammar
PT	Processability Theory
SLA	Second Language Acquisition
SFI	Swedish for Immigrants
TL	Target Language

# 1. Introduction

The SFI (Swedish For Immigrants) students come to classes with different educational and cultural backgrounds to learn Swedish as a second language (L2) or as the target language (TL); thus, the way of their writing language is dissimilar. Student's problems and difficulties in learning a new language have various reasons, not always related to linguistic differences. However, investigation of learners' Swedish written language proficiency can clarify specific difficulties that they experience in learning the written skill of Swedish as L2.

What we learn and how we learn depends on the contexts in which we learn (Schleppegrell, 2004, p.4). Language appears in a variety of forms, including spoken, signed, and written forms (Stromqvist, Nordqvist & Wengelin, 2004, p.359). We speak to be heard in order to be understood (Öhman, 1979; Jakobson et al. 1952), we sign to be seen in order to be understood, and we write to be read in order to be understood (Stromqvist, Nordqvist & Wengelin, 2004, p.360). The activities of speaking, signing, and writing involves the language user's planning, execution, and monitoring of linguistic utterances (Levelt 1989; Clark 1996). It is significant to state that the circumstances and the management of understanding are very different between spoken and written communication.

This study tries to research on L2 writing proficiency in non-English languages and on Swedish L2 writing proficiency specifically. There are few studies on this topic in other languages than English. The book "L2 writing beyond English" (2019), for example, is dealing with L2 writing in non-English languages such as Japanese, Chinese but not Swedish. The theoretical framework for this study is Processability Theory (PT) which is a universal theory of L2 and is applicable to different languages (see, Pienemann, 1998).

It needs to be mentioned that several Swedish L2 studies were based on PT perspectives, for instance: Glahn, Håkansson, Hammarberg, Holmen, Helenekide and Lund (2001), Philipsson (2008), Rahkonen och Håkansson (2008), Eklund Heinoen (2009), Håkansson och Norby (2010). The studies that had adopted PT in other languages are English (Charters, Dao & Jansen, 2011), Arabic (Mansouri, 2000), Italien (DiBiase & Kawaguchi, 2000), Chinese (Zhang, 2004) and Japanese (Kawaguchi, 2005; Itani-Adams 2011). All of these studies also adopted a theoretical model of Lexical-Functional Grammar (LFG) and the hierarchy of processing procedures of Processability Theory (Håkansson, 2014, p. 157). The research presented in this paper aimed to investigate the use of vocabulary in narrative writing proficiency by SFI language learners in different levels of learning.

I evaluated different levels (from beginner to advance) of narrative abilities, the number of morphemes written and students' competences to conjugate and put in agreement three significant word classes (verb, noun, and adjective).

Some L2 theorists presume that adults learn a second language, but children acquire it. On the other hand, it needs to be considered that adults can access the same natural LAD "language acquisition device" that children. Krashen suggests that acquisition and learning are two different and separate experiences, and knowledge is created through the acquisition. What L2 students learn by memorizing operates as "monitor," which clarifies the attained information and is precisely the similar way as adults learn L2. (Krashen, 1982, p.15). Conversely, the inventor of LAD "language acquisition device," Noam Chomsky cited that "people learn language from pedagogical grammars by the use of their unconscious universal grammar" (1975, p. 249).

I adopted Processability Theory (PT) to this study to cover not only the process of L2 acquisition but also the development of grammatical forms. Pienemann 1998, demonstrated which second language forms and which variants of grammatical forms are processable at every developmental stage. PT is based on research into language processing and is formalized within Lexical-Functional Grammar (LFG). In 1998, the postulates of the theory were applied to the L2 development of English, Japanese, German, and Swedish, and likewise established in online experimentations (Pienemann, 1998).

## Purpose

This research takes an inflectional morphology perspective on the written proficiency of Swedish for immigrants (SFI) which is a neglected research area. It also deals with a method of how consequences and forms are related to grammatical systems of the written Swedish language.

Main purpose of this project is studying the written proficiency of SFI students at different morphological learning levels, and their ability to conjugate verbs, nouns, and adjectives using a wordless children book (frog-story). In this study, I try to link SFI levels of written proficiency to the levels of Pienemann hierarchy of language learning.

It needs to be specified that this study concerns three of the essential word classes in morphological levels (noun, verb, and adjective) and paid no attention to discourse levels, which means that in this study I did not analyze the events or describe the different unit of sentences in deferent narrations. Additionally, this study is not taking parts in the details of cross-linguistic similarities or differences between different languages based on the learners' L1. Thus, as it was mentioned above, the principal aim is to find out a level of SFI learner's proficiency in deferent word classes (noun, verb, adjective), defined in processing procedures of the learning development hierarchy of PT. The research presented in this paper aimed to investigate how SFI language learners in different levels of learning use vocabulary in narrative writing proficiency.

Therefore, the research questions of the study are:

1. Can Pienemann model be applied to different levels of writing skills of SFI students?
2. Do students of D-Level have better command on writing proficiency on Swedish as L2 than the students of the C-Level when measured in accordance with Pienemann model?

## 2. Background

### Swedish educational system for adult immigrants

In today's complex world, literacy means far more than learning to read and write to accomplish discrete tasks. Instead, literacy is a form of social action where language and context co-participate in making meaning (Halliday, 1978; Lemke, 1989).

In 2014, over 120,000 people immigrated to Sweden, about 58,000 women and 70,000 men, which was an increase of 9.6% compared with 2013. At the same time, around 51,000 people emigrated, which gives net immigration of approximately 75,000 people.

In 2015, Sweden's population increased by 103,662 people, and the increase in population was due to an immigration overplus. The immigration excess amounted to 78,410 persons, 35,284 women, and 43,126 men. The immigration surplus thus accounted for 77 percent of the population increase in 2015. In 2015, 134,240 people immigrated to Sweden, about 60,641 women, and 73,599 men. This is an increase of 7,274 people compared to 2014.

According to SCB (Statistics Sweden), immigration has significantly increased in Sweden. At the beginning of the 2000s, around 60,000 people immigrated in a year. In 2016, the total immigration to Sweden was the highest ever, with over 163,000 immigrants. Since then, immigration has decreased, and in 2018, 133,000 people immigrated to Sweden.

The information above is not just about Sweden but around the world today; there are more and more children and adults who, for individual, economic, or academic reasons, are multilingual. The fact is, there are more bilingual brains on the planet than monolingual ones. Whether it be to find new literature, friends, or business markets, or to maintain a connection with the historical past of a heritage language, there are many reasons to learn something of an L2. There are several advantages of being exposed to a second or third language, including cognitive advantages that can arise from achieving a particular level of proficiency in a second language.

In Sweden, the National Agency for Education (Skolverket) is the central administrative authority for the public school system, publicly organized pre-schooling, school-age childcare and for adult education (Skolverket, 2015).



SFI (Svenska för invandrare), Swedish for immigrants is municipal adult education in Sweden. It gives the basic knowledge in Swedish and Swedish society. Participants will learn the Swedish language and will learn to use the computer as a tool; it needs to be mentioned that it is tuition-free.

SFI begins in the 1960s, and it is a voluntary program offering free tuition to adult students with a mother tongue other than Swedish (Skolverket, 2012b). The first curriculum of SFI was created in 1971, and it was an education mainly for male workers to facilitate the settlement of newly arrived immigrants (Papadopoulos, 2016), but now SFI and learning the Swedish language is located in the center of education.

Based on learner's educational background, the SFI process has three learning levels as follow:

1. For those who have short or no school background from their home country. Course A - D.
2. For those who have 6-9 years of school background from their home country. Course B - D.
3. For those who have more than ten years of school background from their home country. Course C - D.

According to Skolverket (2012c, p.8), the principal goals of adult education are:

1. To get information on the current and expected professional skills.
2. To give an opportunity for learners to get their knowledge and skills be improved and assessed.
3. To develop their self-knowledge (when a person knows his/her pros and cons of learning and can control and direct their own learning process) and the ability to plan their study.
4. To take a position on life-long learning and vocational orientation basis of accumulated experience and knowledge.
5. To enhance the student's ability to make an educated choice" or an informed choice.
6. To familiarize learners with working life and labor market conditions in Sweden in relation to labor law and work environment in general and, if possible, to their study orientation.
7. To inform learners about opportunities for further education, practice and work in Sweden and other countries, and
8. To educate learners about all changes in their occupational areas in pace with technical development, about changes in social and working life and increased international collaboration, and the need for personal development in the profession.

Similarly, to English, learning Swedish has four proficiencies; listening (höra), speaking (tala), writing (skriva), and reading (läsa). The goals and knowledge requirements for different levels of proficiency in Swedish for immigrants (SFI) have been regulated by Skolverket and are briefed here and in the course plan (see Writing proficiency requirements in Appendix 7).

1. Listening proficiency
2. Speaking proficiency
  - A. Oral interaction
  - B. Oral production
3. Reading proficiency
4. Writing proficiency

An SFI student is graded on every completed level. If the student received an approved grade from level D, he or she is authorized to start Swedish As a Second language (SAS).

Swedish as a second language (SAS) therefore means more language teaching than requires the subject Swedish. It is a core subject (course) both within primary adult education and high school adult education adapted/developed for those who did not learn Swedish as L1.

According to Skolverket, in 2018, SFI students would have had the opportunity to develop their Swedish spoken and written language skills that they would have gained confidence in Swedish language skills and ability to express themselves in different contexts and for different purposes. Based on Folkuniversitetet 2018, course plan SVA (svenska som andraspråk / Swedish as L2) has three consequent levels. The strategies for each level are as follows;

SAS 1: The strategies for the first level are: writing different types of texts that are adapted to subject, purpose, situation and recipient; using different types of vocabulary and structure them in different communication situations; reading and talking about texts; knowing about linguistic and geographic variations of Swedish language; making comparisons between the Swedish language and student's mother tongue; Reflecting on language learning, emphasizing how oral situations and texts can be used to build vocabulary and to develop student's language skills.

SAS 2: The course is a continuation of Swedish as Second Language 1 and includes: oral investigative and argumentative presentations in and in front of a group; strategies for writing different types of texts that are adapted to subject, purpose, recipient; Swedish vocabulary and structure in different communication situations; reading and talking about texts; language variation in Sweden and in the Swedish language.

SAS 3: The course is a continuation of Swedish as Second Language 2 and includes: participation in conversations and discussions where arguments are used to clarify student's own opinions and to respond to the arguments of others; written presentation of investigative and argumentative texts of a scientific nature; using Swedish vocabulary and structure in different communication situations; reading and

talking about texts of various kinds with emphasis on structuring, referencing, evaluating and critically reviewing larger text volumes.

## A brief outline of Swedish morphology

The Swedish language is a satellite-framed language and provides rich morpho-syntactic means especially for detailing direction, and like many other satellite-framed languages, it offers a wide variety of lexical options and has simple present and past tenses. Moreover, it has a full-fledged aspectual system (Stromqvist and Verhoven, 2004, p.113). Satellite-framed languages, such as the Germanic ones, tend to incorporate or "frame" notions of direction into "satellites" of the verb, such as particles for instance "tittar på" in Swedish (Stromqvist and Verhoven, 2004, p.117). Ragnarsdottir & Strömquist mentioned the verb *ramla* 'fall', which can be combined with the following five constellations of morphemes: *i* / 'into', *ner* 'down', *ner i* 'down into', *ner från* 'down from', *ut* 'out'. These constellations contain four different function words: *i* / 'into', *ner* 'down', *från* 'from', *ut* 'out'. Consequently, satellite-framed languages bend to have an affluent menu of lexical options (p.134). Accordingly, Berman & Slobin (1994) stated that the satellite-framed languages allow for detailed description of paths within a clause, because the syntax makes it possible to accumulate path satellites to a single verb, along with prepositional phrases that add further specification (e.g., the deer threw them off over a cliff in water) (p.118-119).

Table 1  
*Swedish Indefinite and Definite Articles* (Pienemann & Håkansson 1999, p.399)

Gender	Indefinite		Definite	
	Singular	Plural	Singular	Plural
Uter	<i>en</i>	—	<i>den</i>	<i>de</i>
Neuter	<i>ett</i>	—	<i>det</i>	<i>de</i>

*Note.* The term *uter* refers to what is sometimes called *common* gender, which represents a historical merger of masculine and feminine.

Table 2  
*Swedish Adjectival Morphology* (Pienemann & Håkansson 1999, p.399)

Type	Indefinite		Definite	
	Singular	Plural	Singular	Plural
Attributive				
Uter	∅	-a	-a	-a
Neuter	-t	-a	-a	-a
Predicative				
Uter	∅	-a	∅	-a
Neuter	-t	-a	-t	-a

The Swedish language has SVO (subject-verb-object) word order, and likewise, it has five different forms of articles: *en, ett* "a" (indefinite, singular), *det, den* "the" (definite, singular), and *de* "the" (plural). There are two different genders, uter, and neuter, with different morphemes, -(e)n and -(e)tt, for the definite form (see Table 1). For instance, *en hund* (a dog), *hunden* (the dog), *hundar* (dogs), *hundarna* (the dogs) or *ett hus* (a house), *huset* (the house), *hus* (houses), *husen* (the houses) (Pienemann & Håkansson 1999, p.398-400).

In Swedish language an adjective agrees with its subject and diacritic features; gender, number, and definiteness are simultaneously marked by one affix that can take one of three forms: a zero morpheme, the suffix -t, and the suffix -a (see Table 2) (Pienemann & Håkansson 1999, p.399). Table 3 illustrates the Swedish nominal morphology. The morphological plural marking on nouns is based on the lexical entry.

Table 3  
*Swedish Nominal Morphology* (Pienemann & Håkansson 1999, p.400)

Gender	Indefinite		Definite	
	Singular	Plural	Singular	Plural
Uter	∅	∅, -or, -ar, -(e)r	-(e)n	-na
Neuter	∅	∅, -n, -(e)r	-(e)t	-(e)n, -(n)a

A choice of a form of a marker depends on a declension class of the noun. There are five classes and a set of irregular nouns; a zero morpheme, -or, -ar and -(e)r to mark utter, indefinite, and plural. Suffixes on nouns agglutinate only if they express the following combination of diacritic features: (a) plural + definite (+genitive) or (b) definite + genitive. For instance:

1. En grön groda. "a green frog."
2. Grodan är grön. "the frog is green."
3. Ett grönt hus. "a green house."
4. Huset är grönt. " the house is green."
5. Två gröna grodor. (two green frogs) => PL
6. Grodorna är gröna. (the frogs are green) => PL
7. Två gröna hus. (two green houses) => PL

As it is shown in these examples, each word in nominal phrases has an indication to illustrate if it is singular or plural.

Table 4  
*Swedish Verbal Morphology* (Pienemann & Håkansson 1999, p. 400)

Category	Suffix	Finiteness
Present	∅, -r, -er	+
Past	-de, -dde, -te	+
Infinitive	∅, -a	-
Supine	-t, -it	-

Swedish has simple present and past tenses similar to English. It can have more than one verb in a verbal phrase, the suffixes which have been illustrated in Table 4 can be added to a verb to indicate its tense. This type of tense marking can, therefore, be classified as lexical morphology (Pienemann & Håkansson 1999, p. 402). For instance:

Vi talar svenska. "We speak Swedish."

Vi talade svenska. "We spoke Swedish."

Vi ska tala (∅) svenska. " We will speak Swedish."

Vi har talat svenska. "We have spoken Swedish."

Table 5  
*Processing Procedures Applied to Swedish Morphology* (Pienemann & Håkansson 1999, p.398)

Processing procedures	L2 structure	Swedish morphology
Clause boundary	Main and subordinate clause	—
S-procedure or word order rules	Interphrasal information	Adjective agreement in predicative constructions
Phrasal procedure	Phrasal information	Definiteness agreement, markings in NPs, compound tense markings in VPs
Category procedure	Lexical morphemes	Plural, definiteness on nouns, past or present tense on verbs
Word or lemma access	Words	Invariant forms

Table 5 illustrates the relevant morphological rules for Swedish according to Pienemann's (1998a, 1998b) hierarchy of processing procedures (Pienemann & Håkansson 1999, p.404) which is outlined in the theory section.

## A brief outline of Processability Theory

Processability Theory explains the process of language learning based on Levelt's model of speech production.

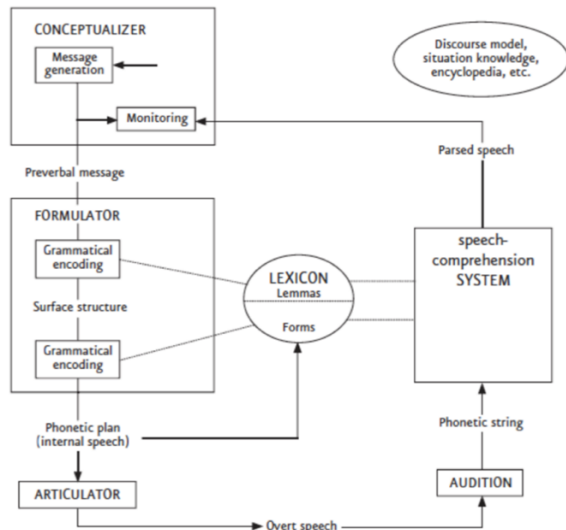


Figure 1. Levelt's model of speech production (Hammarberg, 2004, p.53)

Figure 1 presents the most significant model of speech production, the model of Levelt (O'Grady et al., 1996, p. 459). The production of speech (a message which is formed) starts in Conceptualizer; then this message will collect linguistic form in Formulator. The formulator contains grammatical and phonological processes, and it draws upon the lexicon (Wilfrid, 2010, p.15).

Levelt's model is recognized as a suitable basis for discussion about various speech production activities in cognitive-linguistic researches. A theory of grammatical development of L2 learners which is based on a learner's ability of cognitive processing of grammatical structures is a Processability Theory. The aim of this theory is to identify and explain the natural developmental stages of L2 learning. PT defines an appropriate ordering of L2 grammar acquisition in the morphological and synthetic field of linguistics. This means that one step at a time must be completed by a learner to fulfill every requirement and to proceed to the next level. This theory was proposed and developed by Pienemann from 1998 to 2003. It tells us about the structure of the second language learning with processing the component of SLA (see next chapter).

### 3. Theoretical framework

This chapter is about the SLA theories with some of them being related to this study. First, the relevant theories are briefly outlined, and then the Processability Theory (PT), the principal theory of this study is presented in detail.

In 1967 Corder, the professor of applied linguistics wrote an essay about "The Significance of Learners' Errors" (SLA). In his essay, he rejected a behaviorist explanation of SLA and implied that learners use their own essential inner linguistic processes to learn. He also stated that "the learner is using a definite system of language at every point in his development" (Corder, 1986, p.10).

Subsequently, in 1972, Selinker wrote an article about interlanguage. In this article, he argued that L2 learners have their own specific linguistic systems which are different and independent. Larry Selinker (1974) distinguished between teaching and learning circumstances. Moreover, he stated that when someone is teaching or employs some method to help a learner to attain learning, he is also learning because learning implicates "meaningful performance." This means that when an adult who already have meaningful performance, tries to express meanings, he is in the process of learning.

Selinker (1974) presumed that there is a latent language structure in children's brains that can but is not guaranteed to be activated. In other words, pursued learning does not occur automatically in every L2 learner. Consequently, he assumed that those adults who are successful in learning an L2, have operated and managed to activate their latent or hidden language structure. This involves that they can obtain facts about languages without any sort of explicit and accurate teaching. Furthermore, he argued that there are differences in linguistic systems — interfering with the bosomed language structure.

He completed his presumption by "interlanguage". This means that there must be a different latent language structure or there must be a separate linguistic system intervening. Selinker (1972) mentioned that some L2 learners try to apply the rules of their L1 or native language to their target language (TL). He called this mechanism "fossilization". As every latent psychological structure, interlanguage is made up of five processes:

1: language transfer, 2: transfer of training, 3: strategies of L2 teaching, 4: strategies of L2 communication and 5: overgeneralization of the L2 linguistic material (Abrahamsson, 2009, p.111). Selinker (1972) interpreted fossilization, as certain target-language-deviating forms that tend to remain in learner's learning system without being further developed. Finally, Abrahamsson (2009) defined fossilization as the features of the TL that are no longer developed and as deviated TL rules and forms that become permanent parts of the interlanguage system of a learner regardless of further L2-exposure, corrections or explicit grammatical explanation (p. 115).

These five processes are not necessarily conscious and facilitate the following statements: Language transfer can be clarified as the effects of L1; transfer of training is the consequences of recognizable L1 items in training process which are used to teach the L2, strategies of L2 teaching is the application of a learner's L1 method to the L2 material, strategies of L2 communication is the results from a learner's L1 method of communication with native speakers of the L2; and the last process is overgeneralization of the semantic features and rules of L2. Moreover, some other problems are being encountered, and no one can say what is a successful learning per se (Selinker, 1972, p.224).

Later in 1982, Krashen stated that language begins with two important words which are acquisition and learning. He calls the acquisition a natural way, synonymous to picking up a new language. In other words, the acquisition is subconscious. For instance, once a person can detect someone's linguistic error but cannot say what is precisely incorrect, that means this person acquired the language unconsciously. Learning, however, is a conscious act, which means, one willfully learns about the rules and grammar. In the learning process, the air correction helps sufficiently. For example, you make a mistake, and someone corrects you; then you change the idea about how the rule works. According to Krashen, acquisition-learning happens when you speak L2 fluently. Fluency comes from what you acquired unconsciously and from all the rules that you learned to act as a monitor. In 1975 Krashen suggested a hypothesis that in pedagogical terms, the acquisition gives us fluency, and learning gives us accuracy.

Consequently, we need and want both to speak and write easily, fluently, and grammatically correct. He, therefore, argued for a balanced program which means, for example, two days a week grammar and two days a week conversation. He cited that, people acquire the language in the same way, just as all are digesting the food in the same way. Krashen pointed that the most significant concept of the language is acquiring language in only one way and that is: we acquire language when we understand it; accordingly, we do not acquire language when producing it or learning the grammar rules or get our errors corrected, however, motivation, self-confidence, and anxiety are the most significant segments of acquiring L2, this means that low motivation, low self-confidence, and low anxiety are not proper inputs (Larsen-freeman & H.long, 1991, p.412). Consequently, Krashen came up with five hypotheses on SLA (second language acquisition):

1. Acquisition-learning distinction: the process/ability to develop L2 competence in adults is the same as in children acquiring L2, and it is a subconscious process.
2. The natural order hypothesis suggests a specific order of acquisition of grammatical structures.
3. The monitor hypothesis states that the acquisition in conscious learning is responsible for how we become fluent in an L2.
4. Input hypothesis infers that in order to acquire language, a learner should move from one stage to another. Children acquiring an L2 in a natural environment usually go through a "silent



period" and begin to produce utterances in the L2 when they are ready for it (Tulldahl, 2004). Tulldahl (2004) stated that "L2 learners in traditional language classes are normally not allowed this silent period, and they have to produce utterances in the L2 although they are not ready yet. Then the result is interference from the L1, which means that learners use L1 rules when an L2 rule is not available. What we need, according to Krashen 1985, is to obtain comprehensible input, which is real language acquisition. (Tulldahl,2004, p.9)

5. Affective Filter hypothesis proposes such variables as motivation, self-confidence, and anxiety playing a significant role in a learner's success in SLA (Larsen-freeman & H. long,1991, p.383).

In 1987, Barry McLaughlin claimed that regarding adult-child differences in acquiring L2, several types of research showed that the adults do certainly better in syntax and semantics, while younger children do better in phonological development. Krashen has not attempted to define whether the given process contains acquisition or learning, and he did not make an accurate distinction between them. McLaughlin mentioned that Krashen's theory was cognitive theory, and the interlanguage must be evaluated as well. Subsequently, he defines the interlanguage theories as: "(1) the learner's system at a single point in time and (2) the range of interlocking systems that characterizes the development of learners over time" (McLaughlin, 1987, p.60).

Several findings showed that L1 does play an enormous role though it cannot predict what sort of error an L2 learner will make and why. The studies show that errors are due to either intralingual or interlingual factors, or both. The significant issues that became topical after the error-analysis period were (1) How systematic and how a variable is an interlanguage? (2) How are interlanguages acquired? (3) What is the role of the first language? (McLaughlin, 1987, p.69). Then the most linguistically oriented researchers like Huebner (2006 & 2009) started to study both systematicity and variation in interlanguage development. Huebner found the "chaos" which was simply appearing because the learner was changing his/her hypotheses about the L2. This systematicity "chaos" is below the "superficial chaos" and happens at a similar stage of development: a learner might use a rule on one situation but use a different one in another situation. Accordingly, it can be stated that interlanguage is systematic because it shows sufficient order in its development. Interlanguage is based on a learner's experiences with L2 and can be activated when one attempts to learn L2, and, likewise, it can fossilize or terminate developing.

Interlanguage happens when a learner borrows patterns from his/ her mother tongue, extends patterns from the target language and expresses meanings by using L2 words and grammar, which are already known to him/her. Thus, it can be assumed that the interlanguage is unique, it contains ungrammatical sentences copied from the speaker's original language and, according, to Selinker (1972) it is systematic, dynamic and variable.

## Learnability process and Processability Theory

Learnability Theory and Processability Theory form a theoretical network for the present study. In rationalist tradition, every learnability theory identifies four factors of learnability analysis (e.g., Wexler and Pinker, 1979):

- 1) target grammar (a linguistic knowledge),
- 2) linguistic data input for a learner,
- 3) learning device that must acquire a targeted grammar given a certain set of knowledge contained in
- 4) the initial state of the learner's grammar.

The overall idea is that a learnability theory must specify how a learner develops from his/her initial state to the target grammar with an available input and a given learning device (Pienemann & Håkansson, 1999, p.385). It is deep-rooted in how a learnability theory is structured to address a specific linguistic problem, a 'logical problem' in language acquisition: to connect a representation of linguistic knowledge to the acquisition of that knowledge (Wexler 1982, p. 288-315). To that end, Wexler (1982) recommended a rationalist approach to learnability theories.

Felix (1984), Clahsen (1992), Gregg (1992 and 1996) are the grammar-based-oriented researchers who noted that learnability theory is limited to explaining the acquisition of the linguistic knowledge and that there are at least two sets of facts that a theory of language acquisition must also explain (Pienemann, 1998, p.4):

- 1) What enables a learner to attain linguistic competence?
- 2) What causes describe the route of the development of this competence? To follow?

Pinemann 1998 and Gregg 1996, answer these questions as follows: Answer to question (1) is, the classical basis for Chomsky's assumption of a Universal Grammar, while question (2) has only more recently been recognized as a part of the learnability problem. They define question (2) as the 'developmental problem' (Gregg,1996). Moreover, Pienemann mentioned that to explain the developmental problem, vital psychological aspects of human language processing have to be investigated because natural developmental routes are, at least in part, caused by the architecture of the human language processor.

The premise of Processability Theory is possible structural options, will be produced by a language learner only if the necessary processing procedures are available; Processability Theory primarily deals with the nature of computational mechanisms and the way in which they are acquired (Pinemann, 1998, p.5). According to Pinemann & Håkansson 1999, "The logical problem basically describes the following

paradox: Children acquire the basic principles of their native language in a relatively short period of time and on the basis of limited linguistic input, although many of these principles are considered impossible to infer from the observations made by the learner."

The following processing procedures form the hierarchy that underlies Processability Theory (Table 6 and Table 7) (with the highest level placed at the top of hierarchy):

5. the subordinate clause procedure — if applicable.
4. the S-procedure
3. the phrasal procedure
2. the category procedure
1. lemma access

Table 6  
*Implicational Sequence of Processing Procedures (Pinemann, 1998, p.79)*

Procedures	Order of development				
	1	2	3	4	5
Subordinate clause procedure	-	-	-	-	+
S-procedure	-	-	-	+	+
Phrasal procedure	-	-	+	+	+
Category procedure	-	+	+	+	+
Word or lemma access	+	+	+	+	+

Table 7  
*Processing Procedures and their Structural Outcomes (Pienemann, 1998; Hammarberg 2004, p. 56; Abrahamsson, 2009, p. 125)*

Processing procedure	Structural outcome
5. Subordinate clause procedure	Main and subordinate clause
4.S-Procedure	Interphrasal information exchange
3.Phrasal procedure	Phrasal information exchange
2.Category procedure	Lexical morphemes
1.Word or lemma	Words

Furthermore, Pienemann cited that the logico-mathematical hypothesis space is further constrained by the architecture of human language processing (Pienemann, 1998, p. 1), and PT in its contemporary formulation is based on the interplay between a processing theory and a theory of linguistic knowledge. This observation is fully explicit and applies to the whole range of phenomena captured by the interacting theories of language processing and linguistic knowledge. Additionally, PT can account for entire systems of morphosyntax rather than isolated morphosyntactic aspects (Pienemann, 2015, p.124).

In PT a set of crucial grammatical encoding procedures are arranged based on the sequence of activation in the language process, and it is indicated that this sequence follows an implicational pattern in which each procedure is a necessary prerequisite for the following procedure. The following is a simplified account of the Processability Hierarchy illustrating information exchange required for the insertion of English morphemes; it can be applied to many other target languages likewise.

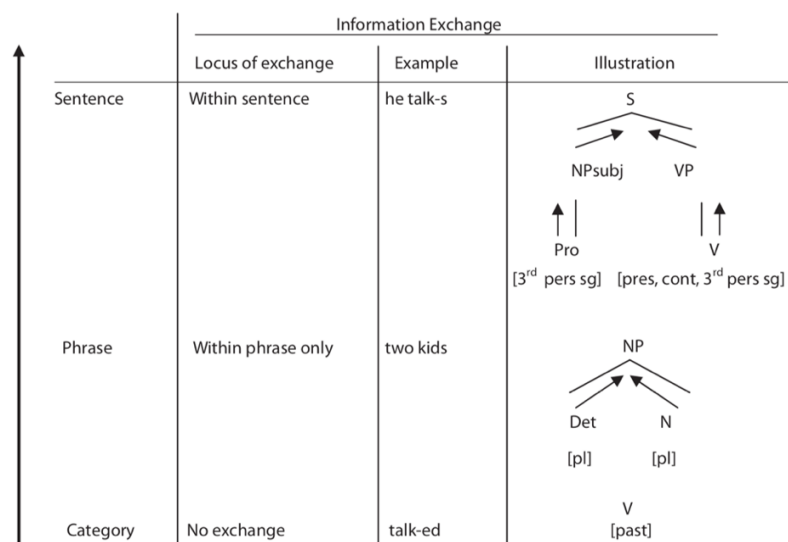


Figure 2. A simplified account of the Processability Hierarchy illustrating information exchange required for the insertion of English morphemes. (Pienemann, 2015, p. 128)

Pienemann (2015) illustrates the processability hierarchy with the aspect of constituent structure with three examples in 3 different levels of constituent structures that are category, phrase, and sentence. The locus of exchange shows the type of information transfer possible at each level. Further morphological structures for L2 are illustrated as examples that comply with each level. Finally, the information transfer for each generation is demonstrated in the last column. For instance, for a noun phrase "two kids" (e.g., in the sentence "he has two kids") the information "plural" only has to be exchanged between the determiner and the noun (Pienemann, 2015, p. 128-129). See Figure 2.

According to PT, learners are constrained in entertaining hypotheses about the structure of the TL by what they can process. Hence the focus is on the effect of processing constraints on possible structural hypotheses rather than on access to universal principles of language (White, 2003).

A dynamic view of language acquisition requires a view of what is being acquired, how the learning task is constrained, and how a learner progresses from one point to the next one. As it is pointed out above, PT is built on the premise that learnability is a logico-mathematical problem but crucially that "the logico- mathematical hypothesis space is further constrained by the architecture of human language processing" (Pienemann, 1998a, p. 1).

PT outlines two sets of constraints:

- (1) constraints on human language processing
- (2) the mathematical aspect of the dynamics of language acquisition processes (Pienemann, 2015, p.134).

PT maintains an explicit position on the role of L1 transfer, known as the Developmentally Moderated Transfer Hypothesis (DMTH) (Pienemann, 1998a, 1998b; Pienemann et al., 2005). The DMTH is a component of PT (see also Pienemann & Keßler, 2011). The fundamental logic of the DMTH is that language transfer is constrained by processability, in particular by the capacity of the L2 learner's language processor, which plays a significant role in it. L2 learner's development provides the ground capacity for the L2 learner's stage of acquisition (Pienemann, 1998a, 2005). Only those grammatical features can be transferred that can be processed within the current capacities of the L2 processor; in other words, the L2 learners can only transfer features from the L1 when they are developmentally ready to acquire them (see Pienemann et al., 2005, p. 85). Pienemann, Di Biase, Kawaguchi, and Håkansson (2005) reviewed several extensive studies on L1 and L2 transfer that include a wide range of typologically different languages and support DMTH. Lenzing (2013) provides an up-to-date review of research on L1 and L2 transfer and of a theory debate behind it. Moreover, Pienemann (1984) mentioned the Teachability Hypothesis which put forward long before PT was conceptualized. It assumes that the effect of teaching intervention is constrained by the learner's current state of development. When the Teachability Hypothesis was developed in the 1980s, it was based on two fundamental premises:

- (1) natural SLA and formal SLA are not fundamentally different
- (2) processing strategies (as assumed at the time and therefore before PT was formalized) are implicitly ordered.

It was concluded that: (1) learners cannot circumnavigate the next developmental stage (through formal instruction), (2) formal instruction may be beneficial if timed correctly in developmental terms- assuming a narrow gap between procedural and declarative knowledge.

The primary reason for adopting PT for this study might be cited by Pienemann and Håkansson 1999 that this theory "is not designed to contribute anything to the question of the innate or learned origin of linguistic knowledge or the inferential processes by which linguistic input is converted into linguistic knowledge. Instead, it is the sole objective of processability theory to determine the sequence in which procedural skills develop in the learner" (Pienemann & Håkansson, 1999, p.386). The second reason is that PT signifies an intent to go beyond a general obligation to a procedural skill.

PT includes a minimal, but the explicit set of assumptions about the initial state and assumes that formal aspects of grammar development out of the minimal components contained in the initial state shaped by processing constraints and generative entrenchment. The focus of PT-based research and many other approaches to SLA development is not on factors external to SLA but on the inner mental processes that drive key aspects of the dynamics of SLA. As an approach to SLA, PT can account for entire systems of morphosyntax rather than isolated morphosyntactic aspects, and it contains clear and operationalized criteria for developmental and variational aspects of L2 systems.

It needs to be mentioned two significant bases of PT, which are:

1. It assumes basic notions of the constituency and the one-to-one mapping of semantic roles to be present in the initial state. All other formal aspects of language development from this. Also, the basic notion of predicate-argument structure is assumed to be part of the initial state.
2. PT contains a hierarchy of mapping processes. This hierarchy predicts explicitly the sequence in which mapping processes and the required grammar develop in the learner (Pienemann, 2015, 145-146).

Numerous authors such as Levelt, 1978; Rossman, & McLeod, 1983; McLaughlin, 1987; McLaughlin, Hulstijn, 1990 and Schmidt, 1992 consider that language acquisition is the acquisition of procedural skills. Their points of view need to be completed by psychological aspects to confirm that the development of L2 involves the procedure of automatization of linguistic processes. There has been a lot of different stages in SLA research by focusing on errors, but scientists' attention has been shifted to different facets of the interlanguage difficulty, which means that L2 can be learned despite these difficulties, which are another focus of this study.

## 4. Methodology

To address research questions that arise from different theoretical orientations and require different methodological procedures (Rahman, 2016. p. 106) I adopted a combination of (primarily) quantitative and qualitative methods. I used a commonly used pictorial frog-story (Mayer,1969) and an accepted taxonomic model of language acquisition, the Piennemann model of processability hierarchy. The morphemes written by SFI students were identified from qualitative data (narratives) and then processed via a quantitative method (independent sample t-test).

Quantitative research methods allow for a large sample size and more variables and make testing research trustworthy (Rahman, 2016. p. 106). Many studies found that language testing and assessment research prioritizes quantitative methods as an effect of its overwhelmingly larger rate of use by researchers around the world. Bryman 2012 defined quantitative research as "A research strategy that emphasis quantification in the collection and analysis of data..." (p. 35). This method helps to investigate the answers to the questions starting with 'how many,' 'how much' and 'to what extent' (Rasinger, 2013, p.10). Quantitative research is based on deductive logic and focuses on those aspects of social behavior which can be quantified and patterned rather than just finding out them and interpreting their meanings. The quantitative findings are generalizable to a whole population or a sub-population because they involve large, randomly selected samples (Carr, 1994, p. 716-721). Consequently, the data can be interpreted via statistical analysis, and, since statistics are based on the principles of mathematics, a quantitative approach is viewed as scientifically objective and rational (Carr, 1994; Denscombe, 2010).

In this study, the results are presented in tables, and the investigation is considered as quantitative research. Tables present the numbers of Swedish verbs, nouns, and adjectives written by SFI students in their written tasks. The results of the quantitative analysis are discussed and interpreted in the result chapter.

Qualitative method of data collection in language testing and assessment research helps the researcher to achieve more profound insight into designing, administering, and interpreting language assessment. However, a small sample size sometimes makes the results unreliable and ungeneralizable (Tierney & Clemens, 2011, p.21). Denzin and Lincoln 1994 claimed that "Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter" (p. 2).

Maanen apparently presents qualitative research as a potential method when defines it as "an umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world" (1979, p. 520).

An overview of the participant's information (level of studying SFI, daytime and evening, age, gender, L1, number of years in Sweden, occupation and their Swedish interaction) can be seen in (Appendix 3). Correct and incorrect verbs (imperative, infinitive, present tense, past tense, perfect, and future tenses) can be seen in (Appendix 1). Nouns (definite and indefinite) and adjectives have been mentioned predominantly in (Appendix 2). In this study, the word "correct," means correct in conjugating of different word classes.

For this study, I asked participants in different SFI levels to go through the 24 pictures of "Frog, where are you?" picture book (which are presented in Appendix II) and to write a narration (berättelse in Swedish) in their own words. They were allowed to ask their teacher about different word classes (such as noun, verb and adjective and per chance adverb). Nevertheless, the teacher in level C and D would not write any sentences but vocabulary. Moreover, the participants were not allowed to use a dictionary or their mobile phones.

Afterward, teachers wrote the vocabularies which the learners asked about and classified them into different groups of word classes. I wrote those morphemes and divided them into different groups as it is shown in tables 1,2,3 and 4. Pienemann and Håkansson suggested that "a word needs to be added to the target language lexicon before its grammatical category can be assigned. The grammatical category of the lemma is needed before a category procedure can be called." (1999, p. 390). Hence, the learners were provided with necessary morphemes.

Firstly, to analyze the data, I ran descriptive analyses, counting the number of words and placing them in different groups as correct or incorrect conjugating of verbs, nouns, and adjectives and testing the differences between SFI levels (See appendix 1 and 2).

Secondly, I analyzed the errors based on the PT theory and to find different-level situations in the PT hierarchy. This study, as mentioned before, is not focused on discourse levels of the texts but is specifically looking at the morphological levels. This means that lexical derivational morphology (word formation) was adopted to study Swedish words and their interrelationships.

## Frog, where are you?

In Mercer Mayer's picture-book (see Appendix I), the following story is represented: a boy has a dog, and a frog; the frog get away from its bottle; the boy and his dog look for it everywhere, through woods, across hills, over a cliff, and, at the end, the boy and the dog find the frog among its frog friends, and they return home with a baby frog.



This book contains pictures of a journey story, it is a valuable resource to investigate writing proficiency of the learners which has different languages and the focus is on the investigation of learner's morphological level (Berman & Slobin 1994; see also Slobin 1991, 1994; Ozsaliskan & Slobin 1998; Ozyurek & Ozcahskan 1998; Wilkins 1997). The frog story contains several occasions and events of different categories. For instance, Pictures 11 and 12 (see Appendix 4) show several temporally overlapping events for the use of tense, aspect, and means for temporal clause linkage in the linguistic construction of the narrative. Pictures 16 and 18 show an episode that is rich in motion events. (Stromqvist and Verhoven, 2004, p.8) In this frog-story research, a great deal of attention has been devoted to the morphology level of linguistics. My intention is to investigate Swedish learner's ability in writing a narrative and the number of lemmas which they use in their stories based on Piennemann hierarchy of language learning.

### Picture-elicited narrative

The method for frog-story research is simple but noticeable and powerful. The ways of writing the frog story are characteristic of a learner's language, skills, or problems. Hence, it is not surprising that the method has achieved a great deal of popularity.

According to Stromqvist and Verhoven (2004), "The frog-story methodology is perfectly neutral with respect to the source and target languages" (p.12). This method has numerous privileges. For instance, the learners (except few), in different age groups enjoy telling the story or ask about new vocabularies and try to write a narrative.

Stromqvist and Verhoven (2004), listed a few advantages of using frog-story as follows (p.5):

1. The type of plot represented by the frog story is a cross-culturally pertinent theme.
2. The data elicited through the frog story represents connected meaningful discourse. This allows the analyst not only to perform lexical and grammatical analyses on the data but also to identify discourse functions served by the narrators' lexical and grammatical choices (for example, introducing versus maintaining a reference to story characters or foregrounding versus backgrounding story situations).
3. Written narrative based on the picture story "Frog, where are you?" is a complex and demanding task, sensitive to cognitive and cultural factors.
4. The frog story is fictional.

By adopting the frog-story narrative as a method, I induced participants to perceive and interpret the objects individually (e.g., sleepers, jar, beehive...) and find out their relations to each other (e.g., sleepers on the floor, the frog in the jar). They can describe the boy, the dog, and the frog by giving

them proper names and expressing their thoughts or feelings. The characters in the frog-story are involved in several different situations (e.g., moving, looking somewhere, or falling down) which gives the opportunity to the participants to illustrate and use as much vocabulary as they can. They can express and explain the background of each picture and whether the characters are inside or outside the home (e.g., moon, night, forest). Simultaneously, the learners can be involved emotionally by the characters and try to evaluate, add, justify, or explain different situations. It needs to be noted that a collection of articles which are related to the frog story is in the book "Relative events in narrative, typological and contextual perspective." This book contains a relative study of elicited narrative production, across languages, cultures, modalities like speech, sign, writing, and settings (Strömquist and Verhoeven, 2004).

## Participants and Data Collection

The participants of this study are forty adult SFI learners with different mother tongues (L1), occupations, and Swedish interactions (Appendix 3). Sample characteristics are presented in Tables 8 – 10. Table 8 shows the gender distribution for the total sample, Table 9 illustrates gender percentage in subsamples: groups C and D (SFI levels) and Table 10 presents descriptive statistics of ages across both groups.

Table 8  
*Gender Distribution in Total Sample*

	Frequency	Percent
Female	23	57.5
Male	17	42.5
Total	40	100.0

Table 10  
*Gender Distribution in Groups C and D.*

Groups	Gender	Frequency	Percent
C Level	Female	12	60.0
	Male	8	40.0
	Total	20	100.0
D Level	Female	11	55.0
	Male	9	45.0
	Total	20	100.0

Table 9  
*Descriptive Statistics of Participants' Age in Groups C & D*

Statistics			
Age			
C Level	N	Valid	20
		Missing	0
	Mean		31.00
	Std. Deviation		6.633
	Minimum		23
	Maximum		47
D Level	N	Valid	20
		Missing	0
	Mean		33.30
	Std. Deviation		5.202
	Minimum		27
	Maximum		44

The data for this study has been obtained via Mayer's (1969) children story picture book "Frog, where are you?" (Mayer 1969; Appendix 4). The book was used as a material to provoke narratives from forty

adults who were learning Swedish at SFI. The book contains only pictures, with no text. The pictures present a set of perceptual components which narrators can decide to comprise, include, stress or ignore when writing a story. "Frog, where are you?" has been already used as research material. For instance, Berman and Slobin, used "Frog, where are you?" to describe differences within languages in the way people talk about events. They presented the findings on crosslinguistic and developmental differences in their book "Relating events in narrative" (1994). They brought together three essential and productive trends in research on languages, cognition, and development (e.g., Karmiloff-Smith, 1979). They found out that nine-years children can create an explicit large-scale story structure, to express temporary and causal connections and create an evaluative reference to the state of mind of the characters in the story. In these respects, their narrative production is approaching adult-like skills. (Strömquist and Verhoeven, 2004, p.10).

For this study first, I asked the students in B-level to browse through the 24 pictures of the booklet frog, where are you? Their teacher made mind mapping and wrote different words/ vocabularies on the board: Noun/ substantive that learners mentioned were as follows: pojke (boy), natt (night), hund (dog), lampa (lamp), säng (bed). Subsequently, the teacher included: en måne (a moon), en glasburk (a glass jar), en toffla/, plural. tofflor (slippers), en groda (frog), ett träd (a tree), en bikupa (a beehive), en mullvad (a mole), en uggla (an owl), ett rådjur (a deer).

Sover (sleep), går ut (go out), vaknar (wake up) and öppnar (open) were the verbs mentioned by learners. The only adjective which has been mentioned by learners was "arg" (angry). Afterward, the teacher went through each picture, talked about them, and wrote one or more sentences for all 24 pictures (Appendix 6).

The chosen levels were B, C, and D, both day course and evening course. In C and D levels, participants were shown a copy of the picture storybook and asked to write a story. They then went through the booklet, picture by picture. After browsing the pictures, participants asked to write a story while trying to imagine different moments "if they want." I mentioned that the protagonists of the book could have names, the objects can have different colours, and the characters can have different sensations. Simultaneously, I told them that they could ask different words they need to write a story, and the tense of the narration can be present or past.

SFI students on daytime courses have everyday three-hour sessions (five days a week). However, evening learners have three-hour classes twice a week, which means that daytime students have 15 hours a week to learn Swedish while the evening group study six hours in a week. The materials (books, booklet, and so forth) for daytime sessions are not the same as for evening classes. In daytime classes, teachers usually follow the chapters of a particular textbook, and students have the opportunity to borrow

the book during sessions. The books are Mål 1 for B, Mål 2 for C and Mål 3 for D levels. Meanwhile, teachers have at least two different copies of the other books which are related to topics that he/she chose to teach. However, in the evening, students do not follow a specific book. Teachers make copies of different chapters of the books and bring them to the classes again related to the topic that she/he has planned to teach.

## Ethical considerations

Ethical considerations of research are the norms that dictate how a researcher should act so that his or her research does not harm other people. The researcher's behaviour has been increasingly constrained by the codes of ethical conduct which require investigators to act in ways that do as little harm as possible to the people they study. By ethical research norms (Howe & Moses, 1999), participants' names, gender, age, and ethnicity were kept confidential. In this study, the information on gender, age, and the participant's professions are the demographic data of the sample. They were collected not for data analysis for this study but as a description of the sample. While this study will be connected later to other research studies on this topic, there will be a need for the definitions of demographic data.

I informed the participants that: their participation is voluntary; The study is anonymous, they need not report their names, nevertheless gender/ age and occupation will be used in the study. Then I highlighted that their work would not be graded, and the result of the study would have no impact on their grades. Since the learners are adults, they have chosen themselves if they want to be a part of this study or not. To avoid harming the participants' feelings, the researcher has explained in advance that the participants can drop participation if they feel uncomfortable and that they can have access to the results of the study.

With the help of an Arabic translator (40% of B students were with Arabic L1) and a teacher of B level, I instructed B level students for 60 minutes and then gave them 60 more minutes to ask for necessary words and to write a story. Being multilingual, I actively helped other students with French, English, Dari, and Persian L1. However, we could not equally support the translation of the students with Tigrinya L1.

## Limitation

Unfortunately, B-level student's Swedish was insufficient to write a story. With the help of their teachers and translators, we provided them with related nouns and motion verbs such as *en groda* (a frog) and *ramlar ner* (fall down). Both teachers and several students were consequently impressed by this type of teaching method, but there were five students (out of 20) that did not write anything, not a sentence. Their explanation was their old age. They expressed that it is tough for them to learn Swedish as L2

since they are too old to learn any new languages: "sorry, I cannot write anything; I am 65 years old". So, for B-level students, the researcher had to adjust her planned study to the situation.

The second limitation of the present study is the small size of the sample. With 20 participants per group and 40 participants in the total sample, I could not generalize the results to the population of SFI students in Sweden. A larger study would be more efficient and could result in population estimates on the topic.

## Additional Assisting Morphemes

Since students had no related and sufficient vocabularies to write a story, it was decided that the teacher would provide Swedish words asked by students instead of providing dictionaries. Table 11 -Table 14 present the lists of words for each class which had been written on the whiteboard. It also gave the opportunity to other students in the classroom to learn and use those words.

Table 11  
*The Words Requested by Learners and Provided by Teacher in C Level/ Day*

Substantives		Verbs		Adjectives	
Swedish	English	Swedish	English	Swedish	English
en groda	a frog	ställer till	make a mess	busig	naughty
en hjort	a deer	skäller	burk		
en uggla	an owl	smiter ut	slip out / off		
en fånge	a prisoner	märker	notice / find		
en bikupa	a beehive	letar efter	searching/looking for		
en stam	a trunk	flyg	fly		
ett husdjur	a pet	ramlar ner	fall down		
		hoppa	jump		

Table 12  
*The Words Requested by Learners and Provided by Teacher in C Level/ Evening*

Substantives		Verbs		Adjectives	
Swedish	English	Swedish	English	Swedish	English
en saga	a story	stoppa i	stick in	busig	naughty
en berättelse	a narration	flyr	fly	förtvivlad	desperate
en fantasi	a fantasy	följer	follow	högt	high

en stövel	a boot	ropar	call, shout	orolig	worried
en groda	a frog	hoppar	jump	farlig	dangerous
en vän	a friend	jagar	chase	ledsen	sad
en säng	a bed	söker	search	ovänlig	unfriendly
en glasburk	a glass jar	blir	get / become	rädd	scared
en bikupa	a beehive	förstör	destroy	arg	angry
en måne	a moon	ramla (ner)	fall down		
en toffla	a slipper	slår (ner)	knock down		
en uggla	an owl	biter	bite		
en sten	a stone	håller	hold		
en gren	a branch	går sönder	break down		
en pöl	a puddle	klättrar	climb		
en pall	a stool	attackerar	attack		
en klippa	a cliff	kastar av	throw		
en skog	a forest	luktar	smell		
en mullvad	a mole	lyfter upp	lift up		
ett fönster	a window	hyssjar	hush		
ett husdjur	a pet				
ett rådjur	a deer				
ett hål	a hole				

Table 13

*The Words Requested by Learners and Provided by Teacher in D Level/ Day*

Substantives		Verbs		Adjectives	
Swedish	English	Swedish	English	Swedish	English
en groda	a frog	ramlar	fall	–	–
en uggla	an owl	går sönder	destroy		
en glasburk	a glass jar				
en bikupa	a beehive				

en stövel	a boot		
ett rådjur	a deer		
ett träd	a tree		

Table 14

*The Words Requested by Learners and Provided by Teacher in D Level/ Evening*

Substantives		Verbs		Adjectives	
Swedish	English	Swedish	English	Swedish	English
en groda	a frog	ramlar ner	fall down	tung	heavy
en vas	a vase	flyr	escape	arg	angry
en burk	a jar	ropar	call / shout	högt	high
en uggla	an owl	skriker	scream	orolig	worried
en håla	a hole			farlig	dangerous
en damm	a dam				
en mullvad	a mole				
en klippa	a cliff				
en bikupa	a beehive				
ett rådjur	a deer				
ett glas	a glass				

The narratives have been collected from 60 students of 6 classes (2 from level B, 2 from level C and 2 two from level D):10 students per each class. It needs to be mentioned that we asked all students to fantasize about the pictures or about the story. However, B-level students didn't write narratives but copied the vocabularies from the whiteboard. Seven out of twenty (in both B levels) gave a name to the characters and also started the story by title. For instance, *En pojke som heter Soren* (a boy named Soren), *en pojke (som) heter Wassim* (a boy named Wassim) or *det var en gång en pojke...* (once upon a time a boy...). The teacher wrote these sentences on the board, and it was remarkable that most of the students in B level understood them and tried to read and write the sentences.

## 5. Results and interpretations

### Independent sample t-test

#### Descriptive Summary

In this secession, the morphemes written by SFI students were identified from the produced narratives and processed via independent sample t-test. This means that the whole text length and 3 main word-classes (verb, noun, and adjective) have been counted in different categories such as total number, correct and incorrect use (wrong form). For instance, Table 15 illustrates a fragment of the dataset: the correct and incorrect verbs (imperative, infinitive, present tense, past tense, perfect and future tenses) for 10 students in level D1 (1 and 2 represent day and evening classes respectively). The numerical result tables for the verb, nouns (definite and indefinite) and adjectives are presented in Appendix 1 and 2. In this study, the word correct means correct in conjugating of different word-classes.

Table 15  
Dataset fragment

Number	Level	Length	Verb													
			V.Total	V.Correct	V.Imperative	V.Inco.Imperative	V.Infinite	V.Inco.Infinite	V.Present	V.Inco.Present	V.Past	V.Inco.Past	V.Perfect	V.Inco.Perfect	V.Future	V.Inco.Future
101	D1	152	26	24	0	0	2	0	3	1	19	1	0	0	0	0
102	D1	190	41	33	0	0	2	0	4	1	27	7	0	0	0	0
103	D1	248	48	29	3	0	1	4	15	7	10	8	0	0	0	0
104	D1	220	45	33	0	0	4	5	29	6	0	1	0	0	0	0
105	D1	255	51	51	0	0	5	1	0	0	46	0	0	0	0	0
106	D1	192	41	30	0	0	4	1	2	2	24	8	0	0	0	0
107	D1	257	44	29	0	0	0	2	0	3	25	10	4	0	0	0
108	D1	317	60	53	2	0	3	3	24	1	23	2	0	0	1	0
109	D1	102	16	11	0	0	0	3	10	1	1	1	0	0	0	0
110	D1	128	27	22	0	0	5	1	12	3	5	0	0	0	0	0

The first variable reports the length of each narrative. Figure 3 presents the average of the total length of the texts per each class. Level C1 and C2 have 135 words on average and level D1 and D2 have over 200 words on average. Figure 3 suggests that D level students maintain larger numbers of words or morphemes.

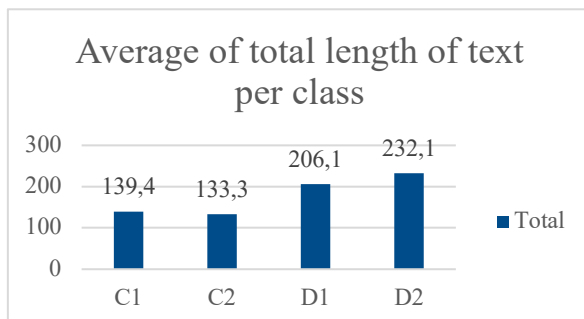


Figure 3. Average total length of narratives per class



Figure 4 illustrates the average number of used verb tenses per class. The bar chart shows the advantage of students in D level over students in C Level. Both figures 4 and 5 suggest that there is no difference between D1 and D2 or between C1 and C2 classes.

Figure 5 also shows similar trends of using verb tenses across the classes. The past tense was used the most, present tense -- the second most, and infinitive – the least. It needs to be noted that in both groups, C and D, some students asked teachers about the correction of the past tenses but not present tenses since they knew the present tense form of the verbs or they had them written on the board. (see Table 11 -Table 14)

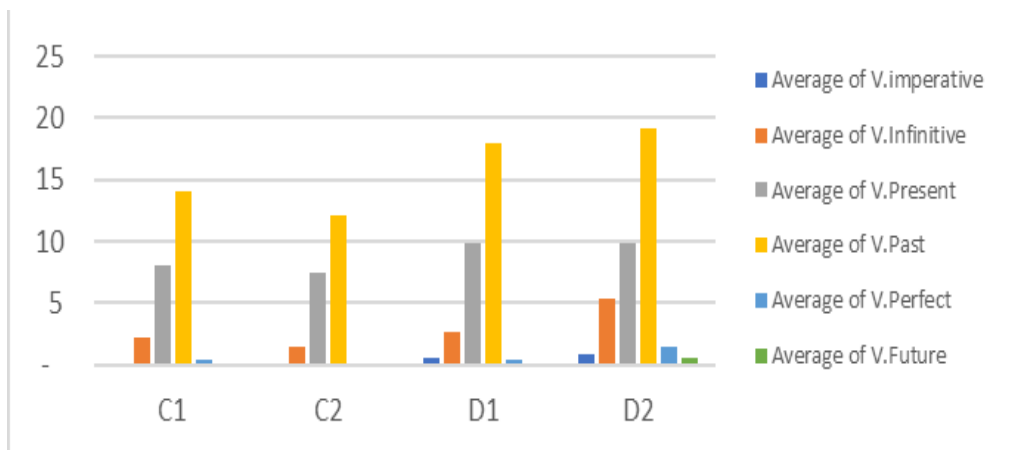


Figure 4. The average numbers of verbs in correct tense per class

A similar graph was built for nouns. Figure 5 shows the average numbers of correct nouns in Indefinite, Definite and Plural forms. The nouns in indefinite and plural forms follow the same pattern as verb tenses do in Figure 4. There is a visible difference between levels C and D. The use of definite nouns, on the other hand, follows an opposite pattern with C level using more nouns than D level. The last word class that was analyzed is adjectives. In Figure 7 two columns are presented. The first column is the average of total number (correct and incorrect) adjectives and the second one is the only average of correct adjectives per class. The graph shows that students in the C level used more adjectives than students at the D level.

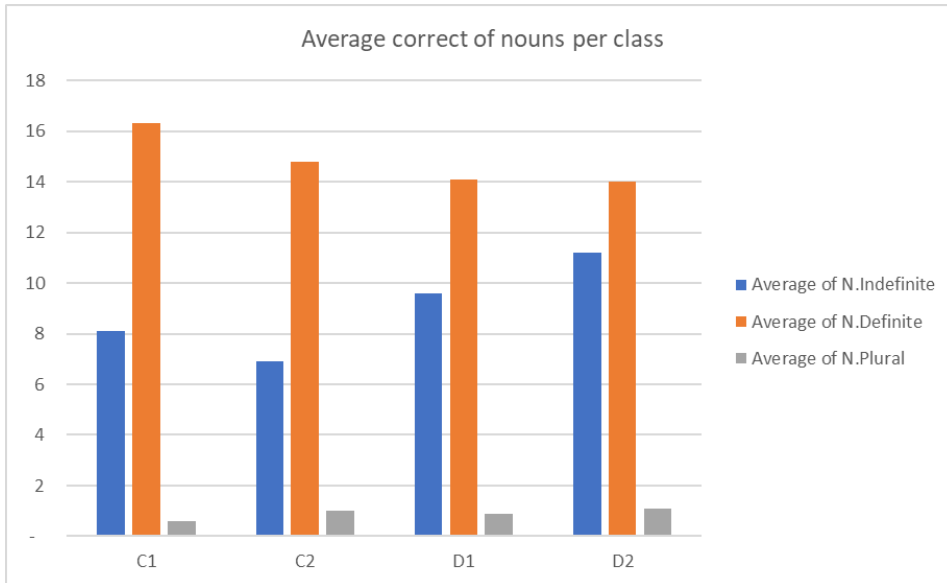


Figure 5. Average number of correct nouns per class

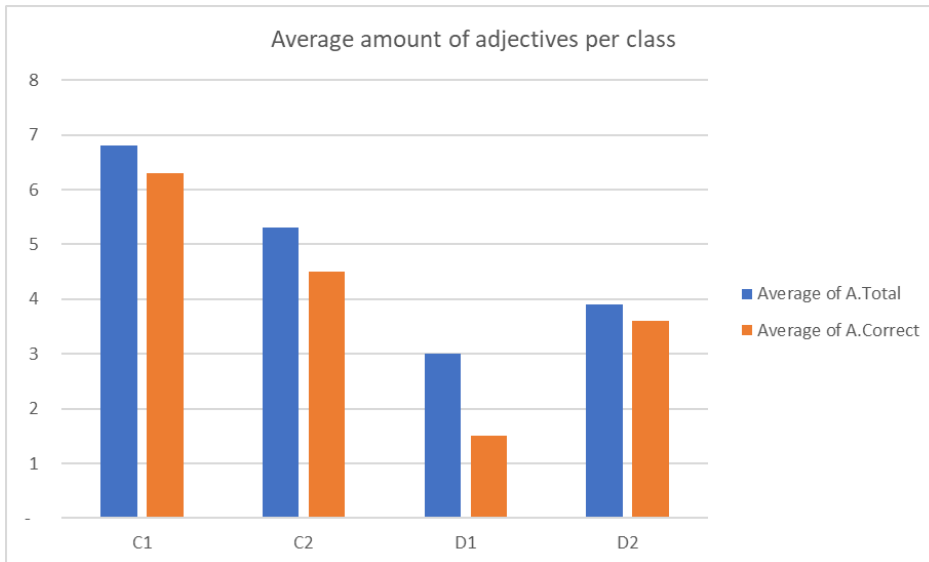


Figure 6. Average number of adjectives per class

Although four classes participated in the study, the research is focused on a comparison of two groups: level D and C, with two classes per level, a day-class, and an evening class. The further charts present a comparison only between two groups: level D and level C.

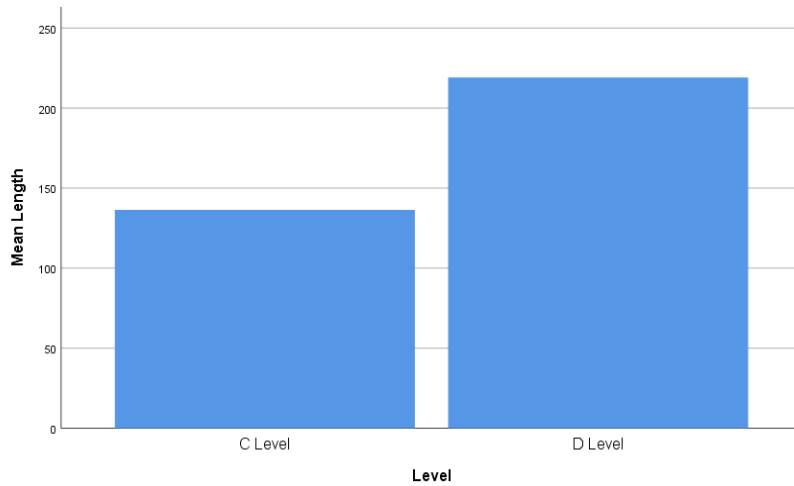


Figure 7. Average of total length of narratives per group level.

The preliminary result is from the first category which is the length of narratives. The difference between the average length of text of groups C and D is 83 words (Figure 7). Figure 8 shows the greater average numbers of verbs, nouns, and adjectives written by group D as opposed to group C.

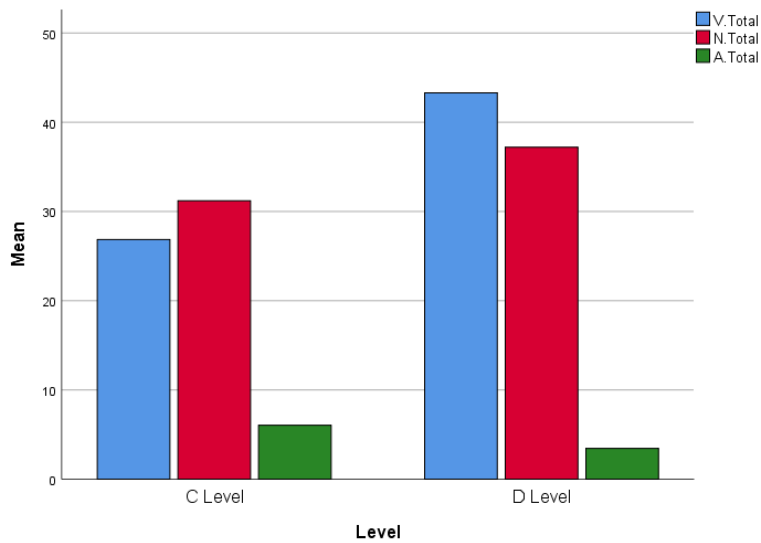


Figure 8. Average numbers of of verbs, nouns and adjectives the groups

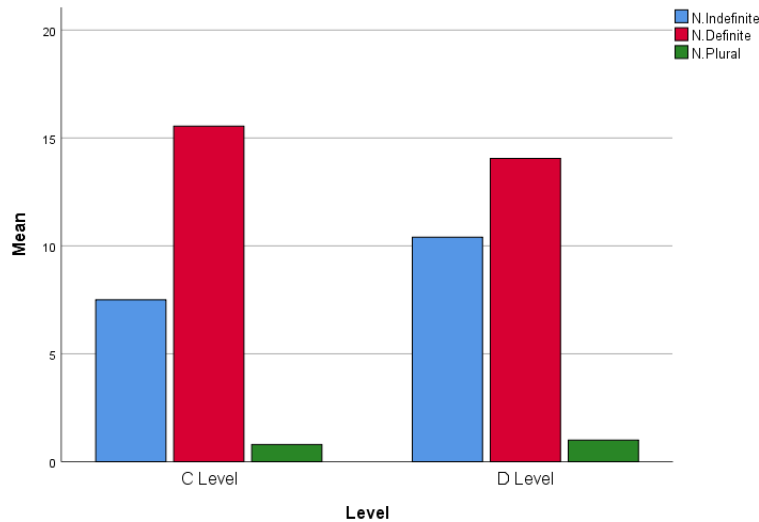


Figure 9. Average numbers of definite, indefinite and plural nouns per group C and D.

Further, the same bar chart for an average of verb tenses between two groups is plotted (Figure 10). The trend is similar to previous charts. Another result that can be inferred from the chart the difference between verb tenses that students used in context. The most used verb tense is past, the reason might be that they tell a story that potentially happened in the past. Second and third verb tenses are present and infinitive.

There is another word type which has a contradicting trend which is adjective. As shown in Figure 11 adjectives in total and correct form have a higher average in Level C than level D, this difference will be discussed later.

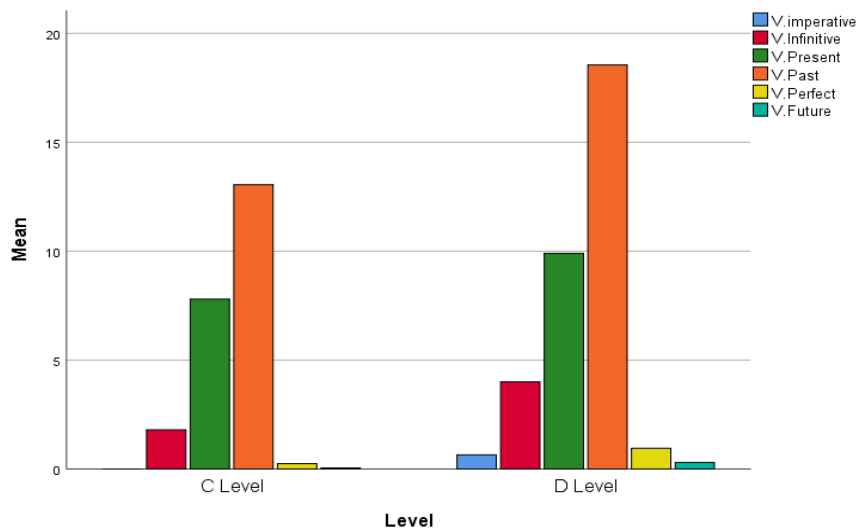


Figure 10. The average number of correct verb tenses per class

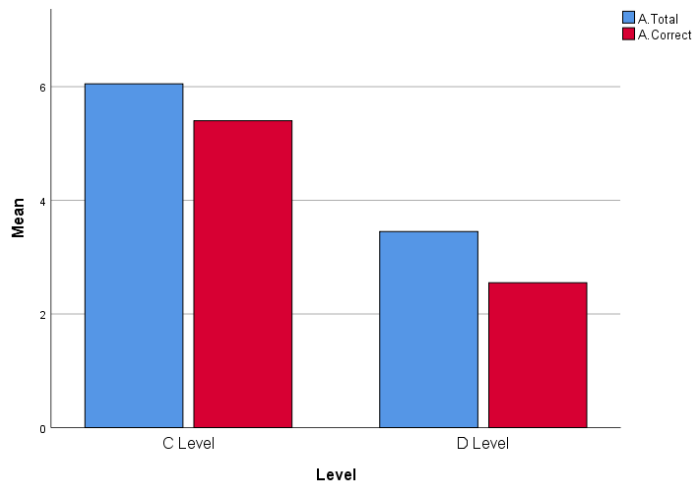


Figure 11. Average of total numbers of total adjectives and correct adjectives per group C and D.

## Independent Samples T-tests

Descriptive statistics of the results of the study suggested that group D showed better writing skills than group C. The aim for Independent Samples T-tests was to examine whether there is a statistically significant difference on 26 variables between C-Level SFI students and D-Level SFI students with D-group performing better than C-group.

The research hypothesis for independent samples t-test was:

Swedish writing skills of the D-Level group are better than the skills of the C-Level group.

The null-hypothesis was:

Swedish writing skills of the D-Level group are not better than the skills of the C-Level group.

The descriptive statistics for all 26 variables are presented in Table 16 and Table 17.

Table 16

*Descriptive Statistics on Focus Variables for Group D and group C***Group Statistics**

	Level	N	Mean	Std. Deviation	Std. Error Mean
Length	C Level	20	136.35	47.502	10.622
	D Level	20	219.10	74.486	16.655
V.Total	C Level	20	26.85	9.190	2.055
	D Level	20	43.30	17.646	3.946
V.Correct	C Level	20	22.95	9.992	2.234
	D Level	20	34.35	18.236	4.078
V.imperative	C Level	20	.00	.000	.000
	D Level	20	.65	1.040	.233
V.inco.imperative	C Level	20	.00	.000	.000
	D Level	20	.10	.308	.069
V.Infinitive	C Level	20	1.80	2.628	.588
	D Level	20	4.00	5.005	1.119
V.inco.Infinitive	C Level	20	2.75	4.064	.909
	D Level	20	1.85	1.785	.399
V.Present	C Level	20	7.80	6.598	1.475
	D Level	20	9.90	9.447	2.112
V.inco.Present	C Level	20	.55	.826	.185
	D Level	20	2.25	2.593	.580
V.Past	C Level	20	13.05	11.519	2.576
	D Level	20	18.55	12.433	2.780
V.inco.Past	C Level	20	.50	1.192	.267
	D Level	20	4.10	3.919	.876
V.Perfect	C Level	20	.25	.716	.160
	D Level	20	.95	1.538	.344
V.inco.Perfect	C Level	20	.15	.366	.082
	D Level	20	.60	1.392	.311
V.Future	C Level	20	.05	.224	.050
	D Level	20	.30	.470	.105
V.inco.Future	C Level	20	.05	.224	.050
	D Level	20	.00	.000	.000
N.Total	C Level	20	31.20	12.714	2.843
	D Level	20	37.20	12.488	2.792
N.Indefinite	C Level	20	7.50	2.838	.635
	D Level	20	10.40	4.198	.939

Table 17

*Descriptive Statistics on Focus Variables for Group D and group C (continued)*

<b>Group Statistics</b>					
	Level	N	Mean	Std. Deviation	Std. Error Mean
N.inco.Indefinite	C Level	20	4.05	6.825	1.526
	D Level	16	3.50	2.503	.626
N.Definite	C Level	20	15.55	11.551	2.583
	D Level	20	14.05	7.897	1.766
N.inco.Definite	C Level	20	2.70	2.755	.616
	D Level	16	8.44	7.447	1.862
N.Plural	C Level	20	.80	1.152	.258
	D Level	20	1.00	1.376	.308
N.inco.Plural	C Level	19	.84	1.015	.233
	D Level	16	.31	.602	.151
A.Total	C Level	20	6.05	5.010	1.120
	D Level	20	3.45	2.800	.626
A.Correct	C Level	20	5.40	4.806	1.075
	D Level	20	2.55	2.781	.622
A.Incorrect	C Level	20	.65	1.387	.310
	D Level	20	.90	1.294	.289
PLevel	C Level	20	2.20	.616	.138
	D Level	20	2.60	.681	.152

Independent Samples T-tests compares the means of two groups. The aim to do this T-test is to know whether there is a statistically significant difference on 26 writing skills between C-Level SFI students and D-Level SFI students. The SPSS application subtracted the average number on each variable for Level C from the average number on the same variable for Level D. For example, 219.1 - 136.35 for Length. The result is 82.75 (see the Mean Difference Column). Although we can do this simple calculation by hand and have it on the bar-chart for length for two levels, we cannot say whether the difference is significant. Therefore, we need a t-test.

Table 18 reports the results of the independent samples t-test on 26 measured variables. The orange-colored variable in t-test have not significant mean value difference and the blue colored are significant. Independent Sample T-test for 26 variables of the study. Six variables highlighted in blue showed support for rejecting the null hypothesis.

Green highlight in Sig. (2-tailed) column identifies statistically significant differences between C and D levels on the given variable. Blue highlight on Mean Difference column identifies statistically significant differences between C and D levels with D level showing better results on the given variable (in accordance with the research hypothesis).

On the statistically significant but inverted difference of “A. Correct” variable see pp. 37 and 38 of the manuscript. Three significant results on incorrect words (red in blue) were not reported since they are expectedly positively linearly related to the results on total and correct words: as more a learner writes new words, as more mistakes, he/she is likely to do.

As a result of the independent sample t-test with a robust alpha-level of .025: sixteen variables out of 26 did not show statistically significant differences between two groups: I failed to reject the null hypothesis and concluded that there is no difference between two groups on the following skills: V.inco.imperative, V.Infinitive, V.inco.Infinitive, V.Present; V.Past; V.Perfect; V.inco.Perfec, V.inco.Future, N.Total, N.Definite, N.inco.Definite, N.Plural, N.inco.Plural, A.Total, A.Incorrect, PLevel (see Table 18 and Appendix 8).

On seven variables the t-test revealed significant differences (see Sig. 2-tailed column  $<0.05$ ), and the null-hypotheses of equality of means between two groups were rejected.

On average, the students of D Level wrote longer texts ( $M = 219.1$ ,  $SE = 16.66$ ) than the students of C Level ( $M = 136.35$ ,  $SE = 10.62$ ). This difference is significant  $t(38) = 4.19$ ,  $p < .025$ , and represented a large-sized effect  $r = .56$ .

On average, the students of D Level wrote more verbs, correct and incorrect in total, ( $M = 34.35$ ,  $SE = 4.08$ ) than the students of C Level ( $M = 26.85$ ,  $SE = 2.06$ ). This difference is significant  $t(38) = 3.7$ ,  $p < .025$ , and represented a large-sized effect  $r = .51$ .

On average, the students of D Level wrote more correct verbs ( $M = 34.35$ ,  $SE = 4.08$ ) than the students of C Level ( $M = 22.95$ ,  $SE = 2.23$ ). This difference is significant  $t(38) = 2.45$ ,  $p < .025$ , and represented a medium-sized effect  $r = .37$ .



On average, the students of D Level wrote more imperative verbs ( $M = 0.65$ ,  $SE = 0.23$ ) than the students of C Level ( $M = 0$ ,  $SE = 0$ ). This difference is significant  $t(19) = 2.8$ ,  $p < .025$ , and represented a large-sized effect  $r = .54$ .

On average, the students of D Level wrote more verbs ( $M =$ ,  $SE =$ ) than the students of C Level ( $M =$ ,  $SE =$ ). This difference is significant  $t(38) =$ ,  $p < .025$ , and represented a large-sized effect  $r = .51$ .

Table 18  
Statistically Significant Results of Independent Sample Test with Effect Sizes

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Length	EVA*	3.455	.071	4.189	38	.000	82.750	19.754	42.760	122.740
V.Total	EVA**	3.594	.066	3.698	38	.001	16.450	4.449	7.444	25.456
V.Correct	EVA	4.049	.051	2.452	38	.019	11.400	4.650	1.987	20.813
V.imperative	EVA	43.278	.000							
	EVNA			2.795	19.000	.012	.650	.233	.163	1.137
V.inco.imperative	EVA	10.688	.002							
V.Infinitive	EVA	1.310	.260	1.740	38	.090	2.200	1.264	-.359	4.759
V.inco.Infinitive	EVA	3.635	.064	-9.07	38	.370	-.900	.992	-2.909	1.109
V.Present	EVA	3.507	.069	.815	38	.420	2.100	2.577	-3.116	7.316
V.inco.Present	EVA	6.849	.013							
	EVNA			2.794	22.813	.010	1.700	.608	.441	2.959
V.Past	EVA	.087	.769	1.451	38	.155	5.500	3.790	-2.172	13.172
V.inco.Past	EVA	45.943	.000							
	EVNA			3.930	22.486	.001	3.600	.916	1.703	5.497
V.Perfect	EVA	12.113	.001							
	EVNA			1.845	26.872	.076	.700	.379	-.079	1.479
V.inco.Perfect	EVA	7.235	.011							
	EVNA			1.398	21.621	.176	.450	.322	-.218	1.118
V.Future	EVA	27.844	.000							
	EVNA			2.147	27.177	.041	.250	.116	.011	.489
V.inco.Future	EVA	4.457	.041							
	EVNA			-1.000	19.000	.330	-.050	.050	-.155	.055
N.Total	EVA	.592	.446	1.506	38	.140	6.000	3.985	-2.067	14.067
N.Indefinite	EVA	3.501	.069	2.560	38	.015	2.900	1.133	.606	5.194
N.inco.Indefinite	EVA	1.426	.241	-3.06	34	.762	-.550	1.800	-4.208	3.108
N.Definite	EVA	1.885	.178	-4.79	38	.634	-1.500	3.129	-7.834	4.834
N.inco.Definite	EVA	16.773	.000							
	EVNA			2.926	18.291	.009	5.738	1.961	1.622	9.853
N.Plural	EVA	.051	.822	.498	38	.621	.200	.401	-.612	1.012
N.inco.Plural	EVA	1.521	.226	-1.832	33	.076	-.530	.289	-1.118	.059
A.Total	EVA	3.771	.060	-2.026	38	.050	-2.600	1.283	-5.198	-.002
A.Correct	EVA	2.431	.127	-2.296	38	.027	-2.850	1.242	-5.363	-.337
A.Incorrect	EVA	.030	.863	.589	38	.559	.250	.424	-.609	1.109
PLevel	EVA	1.305	.260	1.949	38	.059	.400	.205	-.015	.815

\*EVA: Equal variances assumed

\*\*EVNA: Equal variances not assumed

On average, the students of D Level wrote more correct verbs in future tense ( $M = 0.3$ ,  $SE = 0.11$ ) than the students of C Level ( $M = 0.05$ ,  $SE = 0.05$ ). This difference is significant  $t(27.18) = 2.15$ ,  $p < .025$ , and represented a medium-sized effect  $r = .38$ .

On average, the students of D Level wrote more correct indefinite nouns ( $M = 10.4$ ,  $SE = 0.94$ ) than the students of C Level ( $M = 7.5$ ,  $SE = 0.64$ ). This difference is significant  $t(38) = 2.56$ ,  $p < .025$ , and represented a medium-sized effect  $r = .38$ .

On average, the students of D Level wrote less correct adjectives ( $M = 2.55$ ,  $SE = 0.62$ ) than the students of C Level ( $M = 5.4$ ,  $SE = 1.08$ ). This difference is significant  $t(38) = -2.3$ ,  $p < .025$ , and represented a medium-sized effect  $r = .43$ .

"A. Correct" that is (Adjective-correct) variable shows a negative Mean Difference (smaller than zero). On this variable, Level C students on average did significantly better than Level D students which fail to reject null-hypothesis. The reason might be such that the C-Level students asked teachers for more adjectives and teachers (see Table 12) provided the adjectives in correct forms and the learners used them in their narratives. While D-student used their own vocabularies and had to conjugate adjectives on their own.

The 'Mean Difference' column says what is the average difference between two groups on every variable. I questioned SPSS to subtract Level C average means from Level D average means because our hypothesis was that Level D students will do better on all measurements and their results will be greater than the results of Level C students.

I calculated the  $r$ -values for effect sizes (see Table 18) using  $t$ -values and degrees of freedom produced by SPSS. According to Field (2009, p. 332), the formula is:

$$r = \sqrt{\frac{t^2}{t^2 + df}}$$

Cohen's criteria for effect sizes: the threshold for a medium effect is around 0.3; the threshold for a large effect is around 0.5 (Field, 2009, p.57);

As Table 18 shows, the effect sizes for 3 significant variables on Length, V.Total, and V.imperative are large and medium. For V.Correct, V.Future, and N.Indefinite variables, two SFI Levels differ significantly with a medium effect size.

Finally, on the basis of the results of independent-sample  $t$ -tests, we can reject the null-hypothesis on 6 important variables and state that, on average, D-Level students have statistically significantly better writing skills than C-Level students. This result allows proceeding to the next part of the research, which is the application of PT to SFI levels C and D.

## Application of Pienemann model

To analyze the learner's narratives, I adopted the hierarchy of processing procedure (Pienemann & Håkansson 1999) which has been shown in Table 7

Table 19

*Svenska Processbarhetsnivåer* (Håkansson, 2004, p.154 of Pienemann & Håkansson,1999)

Nivå	Underliggande procedur	Exempel från svensk morfology	Exempel från svensk syntax
	Grammatisk information		
<b>Nivå 5</b>	mellan satser. Skillnad mellan huvud-och bisats		Negationen efter verbet i huvudsats och före verbet i bisats
<b>Nivå 4</b>	Grammatisk information mellan fraser	Predikative kongruens	Rak och omvänd ordföljd
<b>Nivå 3</b>	Grammatisk information inom fraser	Attributiv kongruens	Initialplacerat adverbial/ object och rak ordföljd
<b>Nivå 2</b>	Ordklass, lexical morfologi	Suffix för plural, presens, preteritum	Kanonisk ordföljd (oftast agent före handling/subjekt före verb)
<b>Nivå 1</b>	Enstaka ord	Oböjda former	Enstaka konstituer

Håkansson 2004, describes the different levels of Swedish processability which has been illustrated in Table 19. Her description of different levels has been translated from Swedish to English hence the examples have been provided by me (Håkansson, 2004, p. 153-156).

The first level is the same for all languages, namely that you have to learn words before you start using grammatical rules. Thus, the words are first perceived as invariant units. That is there is no switching between different curved forms for example (*dog, dogs*).

The second level means that the learner can process word classes with appropriate inflections. This is necessary since according to Levent (1989) words are stored in the dictionary together with information about the syntactic and morphological properties of the word-classes. Which means that verbs have properties other than nouns. The learner at this level (level 2) begins to develop the words with lexical morphology. For instance, the Swedish learner gives substantive ending for plural like (*skolor* / schools) and ending for a verb like (*pratar, pratade*). In Swedish language, there are several endings for plural (-

or, -ar, -n, -0) there is so common if the Swedish learner overuse some common endings for instance, (*grodar* instead of *grodor*).

At the third level, the morphology is developed to apply congruency morphology within the phrase. This means that the Swedish learner is able to process larger units than phrases and mark that there is grammatical information between two words in one phrase. For instance,

*en grön groda* / A green frog

*två grön-a grod-or* / two green frogs

Additionally, at this level, the learner has prerequisites of using V2 sequence, i.e. straight-word order when the subject is in the first place in a sentence (*Jag pratar nu* / I speak now) and revers word-order when something else comes first in the sentence (*Nu pratar jag* / now speak I). the location of the Verb in Swedish is always in the second place:

SVO => Subject + Verb + Object

OVS => Object + Verb + Subject

According to Swedish grammatical rules, now, the learner has an overview of the whole sentence and can transfer grammatical information between subject and predicate parts.

At the fourth level, the learner has the ability to use the reversed word order, not always however sometimes or possibly he/she cannot recognize between the principal clauses (*huvudsats*) and subordinate clauses (*bisats*).

Level five represents another step forward which means not only to process grammatical information between words and phrases but also between sentences. In Swedish grammar, there are differences between principal clauses and subordinate clauses. This level is the final level/ step in the development of the Swedish syntactic rules. The Pienemann model is been implemented to find the students' level in the PT hierarchy. The model is based on 5 levels (Table 7). In this study, each students' narratives are evaluated and placed in one of the 5<sup>th</sup> levels.

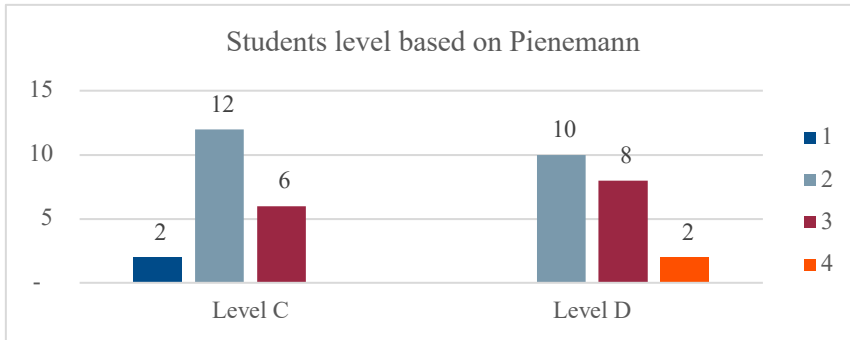


Figure 12. The student's narratives level according to Piennemann model

Figure 12 shows a comparison of the result between C and D level students in different classes. The general view of the graph shows C classes are in level 1,2,3 which level 2 is the most on (12 students) and D classes are in level 2,3,4 which level 2 has the highest number (10 students). There is no narrative that belongs to level 5.

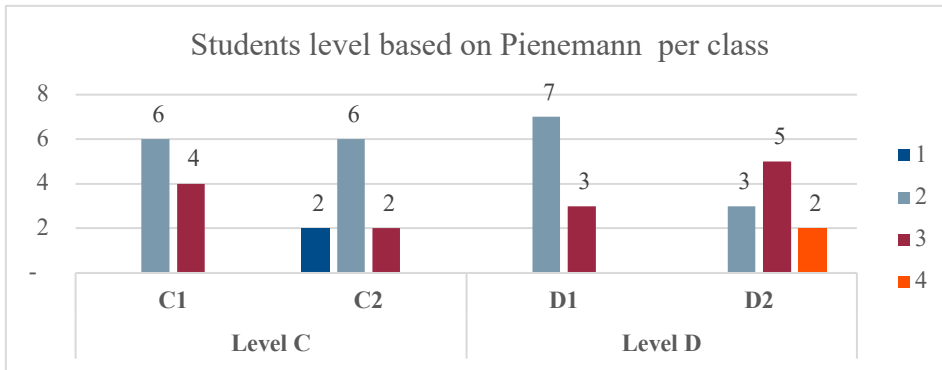


Figure 13. The student's narratives level according to Piennemann model per each class

The Piennemann model also is presented per each class. Figure 13 shows that D2 class has a higher level than D1 and also C1 class students have a higher level than C2 class. It is significant that there is a small difference between C1 and D1 levels.

## Morphological analyses

The students' written stories have been revealed some errors which are related to SLA theories of Selinker and L2 developing grammar learning of Piennemann. The assumptions about managing and activating the latent language structure has been found in a story, written by an L2 learner who is a researcher and living in Sweden for 5 years Her Swedish interaction is with her family, her colleagues, her friends and during shopping. She has been achieved level 4 in Piennemann processability hierarchy.

Here is a paragraph from her story/ narrative:

“Helt plötsligt kommer en uggla ut från trädet och nu är det den överraskande Toby (pojken) som faller ner. Samtidigt inser Sally (hunden) att det är kanske inte så roligt att leka med bin och försöker fly från dem.”

English translation:

” Suddenly, an owl comes out of the tree and now it is surprising Toby (the boy) who falls down. At the same time, Sally (the dog) realizes that playing with bees may not be so funny and try to escape from them.”

This paragraph has been indicated that this L2 learner (in D-level) passed all the requirements of level 4 in the PT hierarchy and she is ready to transfer to the next step (Level 5). Additionally, there have been some narratives in D-level which have passed the requirements of PT nevertheless, unfortunately, they did not have coherency and they were difficult to understand the entirety of them.

For instance:

“Bikupan gick nere hunden fortfarande tyckte grodan var där till bi trakasserat efter hunden. Under tiden Tim var trakasserat från en mullvad och gick upp i träden.”

English translation:

” The hive went down the dog still thought the frog was there to be harassed after the dog. Meanwhile Tim was harassed from a mole and went up in the trees.”

In this paragraph, the conjugating of the verbs *tyckte* (thought), *gick* (went), *var* (was) and *trakasserat* (harassing) and nouns *bikupan* (the beehive), *hunden* (the dog) and *grodan* (the frog) are correct but the whole paragraph did not have coherency and relevancy to understand. Therefore, according to PT and the correct conjugating of verbs and nouns, this student has been placed in the second level of the processing procedure hierarchy.

Since the focus of this study is not going beyond discourse analyses, I have been exemplified different writing errors/ mistakes made by SFI learners in both groups C and D levels. Afterward, based on these mistakes/ errors I put them in different levels of PT hierarchy. (see Table 7 for English and 19 for Swedish)

## Group D

This group of students, who are attending the last level of SFI, are familiar with single words, uninflected forms of a word and single constituents so they pass the first level of PT. Some learners cannot pass all the requirements of a level thus I put them in PT hierarchy according to their errors/mistakes.

Level two requirements are: knowing the word class, lexical morphology, the suffix for plural, present tense of verb and past tense of a verb. They must recognize the canonical order (usually agent before action/subject before the verb) which means the normal order of sentences in Swedish

(SVO => Subject + Verb + Object)

Figure 12 has been illustrated that 10 students out of 20 achieved level 2 of PT hierarchy.

- ⇒ Bi blivit ärga och gick alla ute bikupan.  
(Bees have been angry, and all went out the beehive.)
  - a. Ärga is an adjective in plural form, so Bi as a noun has to be conjugated in plural form, Bin;
  - b. The verb “blivit” cannot stand without har/hade in written form.
  
- ⇒ Per och Loto var sovitt.  
(Per and Loto were slept.)
  - Using two verbs in one sentence.
  
- ⇒ Medan Benji lekade med en bikupa.  
(While Benji was playing with a beehive.)
  - An incorrect conjugation of verb leker (lekte). (see Table 4)

To pass level 3 of this hierarchy, a learner needs to show his/ her understanding of grammatical information in phrases, attributive congruence for instance (en brun hund), initial situated adverbial/object and the chronological /normal word order.

- Jag ser ett ärg uggla. (I see an angry owl.)

The correct dictation of angry is *arg* this learner uses the attributive adjective in correct place however an owl in Swedish is *en uggla* this means that, when he/she by sudden use ett for the noun then the adjective needs to be inflected excessively (*argt*) though it is incorrect.

- Plötsligt dem hårt (har hört) nånting bakom ett gammalt träd.  
(Suddenly, they heard something (from) behind an old tree.)

The placement of the verb in Swedish language, is always in second place this means the Swedish language has three-word order: 1. canonical word order (SVO), 2. adverb fronting (ADV) and 3. Subject-verb inversion (INV) (Håkansson, Pienemann & Sayehly, 2002. p.252):

Normal word order: SVO => subject + verb + object

Rivers word order: OVS => subject + verb + subject

AVS => adjective /adverb + verb + subject

Level 4 requirements are: a learner needs to show the recognition of grammatical information between phrases, the ability of conjugating predicative adjective (hundar är bruna) in normal sentence/ word order and in reverse word order. I could not find any conjugating predicative adjective in D and C levels.

- ⇒ Samtidigt inser Sally att det är kanske inte så roligt att leka med bin och försöker flyr ifrån dem. (At the same time, Sally realizes that playing with bees might not be so funny and try to escape from them.)
- This learner has the ability of covering some requirements of the fourth level however the correct word order for this statement is:
  - ⇒ Samtidigt inser Sally att det **kanske är inte / kanske inte är så roligt** att leka med bin och försöker **fly** ifrån (**från**) dem.

Level 5 indicates that the learner needs to demonstrate his/ her ability of grammar information between sentences and can identify the difference between the main clause and a subordinate clause, the learner needs to use the negation after the verb in the main sentence and before the verb in the subordinate clauses. Unfortunately, there were no students who has the ability to writing subordinate/ dependents clauses (*bisats*) correctly in D level or in C level.

## Group C

This group of SFI alike group D are familiar with single words, uninflected forms of a word and single constituents which means they pass the first level of PT. It needs to be exemplified the errors/ mistakes of C group learners which situated them in different levels of PT hierarchy. Here I have written the sample of errors/mistakes for different levels of PT levels.

Level 2:

1. kom manga bi från det. (Plural form)
2. En rådjure ta hand och kastar honom. (ett rådjure)



3. De är ropa. (2 verbs är and ropa)
4. Hunden är ramla. (2 verbs är and ramla)

Level 3:

1. De måste går till skogen efter grodan. (måste + infinitive => måste gå)
2. Den djupa hålen. (Det djupa hålet)
3. Sista problemet var dålig. (Sista problemet var dåligt)

Additionally, it needs to point out that in group C, there were no student who has belonged to level 4 and level 5 of the PT hierarchy.

Table 20

*Mistakes / Errors Found in Narratives of D-level Daytime Class*

<b>D1</b>	<b>Pienemann Level</b>	<b>Errors / mistakes</b>
101	3	två besta vän
102	2	han mårde ärg/ skrikade (VG 4)
103	2	var sovade/ pojken ta hund och krama.
104	2	sin hund hjälpar/ två besta vän.
105	3	ett uggla
106	2	jag sökade om sig/ en rådjur
107	2	conjugating of nouns and verbs
108	3	de gå ut.
109	2	sedan den går ut på trädgården
110	2	Janus fallande på golv / en bee

Table 21

*Mistakes / Errors Found in Narratives of D-level Evening Class*

<b>D2</b>	<b>Pienemann Level</b>	<b>Errors / mistakes</b>
201	3	var sovvit
202	2	gåkk ut, sovat, fikk,
203	4	see example number 6
204	3	att letar
205	4	på morgonen Kalle kollar att Rocker är borta.
206	2	springade/ skrikade / 4 times

207	2	måste hitade / skulle jag att spelar
208	3	Plöstligt dem hört nånting...
209	3	ett ärg uggla
210	3	En liten hus.

Table 22

*Mistakes / Errors Found in Narratives of C-level Daytime Class*

C1	Pienemann Level	Errors / mistakes
301	2	en ljud/ måste går
302	2	Efter lång dag Olof var mycket trot.
303	3	English words (other), kom till en stor träd
304	3	Farliga bier
305	2	binar (bin)
306	3	stiggde (stiger, steg)
307	2	de var sova
308	3	den djupa hålen
309	2	sedan vi gick till skogen/ en grön träd
310	2	en familjer i skogen

Table 23

*Mistakes / Errors Found in Narratives of C-level Evening Class*

C2	Pienemann Level	Errors / mistakes
401	3	English transfer/ fell/ fortsättade (verb group 4 which are irregular)
402	2	English transfer/ fruit
403	2	All the verbs are in infinitive form
404	2	English vocabulary/ De mår arg / De mår inte prata.
405	1	Hund är ramla
406	2	Pojken sovade på nattet.
407	2	De söka många platser.

408	3	De hoppade på vatten.
409	1	De sovar
410	2	Han börjar söker / En hund är luktar

Table 20 present some errors/ mistakes which have been written by each student. The most interesting is more than 40% of learners have difficulty in conjugating Swedish irregular verbs which are in group 4. Some learners conjugate those irregular verbs by the instruction of verb group one. The rule for group 1 is to omit -ar and add -de at the end of the stem /root alike *ramlar => ramlade*. Hence this rule is not complicated, then, the learner tries to use it for the unfamiliar verbs.

Occasionally they conjugate nouns, verbs and adjectives in the way that they are comfortable with, for instance: *Pojken och biar blird arg*. That can be the result of fossilization. My interpretation is:

1. Conjugating Bi like bil. (Although it is *ett bi* but *en bil*)
2. The teacher did not mention the plural form of -ett words and
3. Subsequently, the teacher did not teach verb group 4 so the verb conjugated as *blird* instead of *blev*.

Perhaps the learner conjugates in this way to indicate that this verb is in the past tense.

## English morphemes in the texts

These English morphemes can provide SFI learners to try to complete their sentences and express their feelings which are the examples of interlanguage and likewise language transfer (see chapter 3);

- ⇒ Rock tycker om att spellar *hide and seek*.
- ⇒ Men förs, måste vi kolla om Rock lämnade några *clues*.
- ⇒ Kalle visste inte vad Roger menade till, han såg en stor *cloud of arga bees*.
- ⇒ De tittade *in* kep(s).
- ⇒ Han har *lost* sin groda.
- ⇒ Sedan hoppade Cheddar på träd med bikupa och den *fell down*.
- ⇒ Hund hittar *fruit* på träd.
- ⇒ De hittade *other* djurer.

## 6. Discussion

The aim of the study was to investigate the written proficiency of different levels of SFI students at different morphological learning levels. Writing about the word-less children's book (frog-story) adopted to measure the learner's ability to conjugate verbs, nouns, and adjectives. In this study, I try to link SFI levels of written proficiency to the levels of Piennemann hierarchy of language learning through answering the research questions. To answer the research questions, I ran the independent sample t-test (via SPSS application) to find any significant differences between C- group and D-group. The independent samples t-test indicated that there are differences between the groups on 9 variables. A single variable with a negative mean difference was "A. Correct" (Adjective-correct) due to the fact that C-Level learners received greater assistance on adjectives for their narratives. Via t-test, the null hypothesis was rejected on 9 variables. After having received statistical evidence that the D-level students have better writing skills than C-level students I applied PT hierarchy to the C and D levels of SFI. It has shown that 12 out of 20 students in the C-group and 10 out of 20 from D-group are situated in the second level of the PT learning hierarchy (see Figure 12). Nevertheless, the comparison between different classes indicate that C1 (C-group daytime) has 6 students in level 2 and 4 students in level 3, C2 (C-group evening) has again 6 students in Level 2, 2 in level 3 and 2 in the first level of PT hierarchy. D1 (D- group daytime) has 7 students in level 2 and 3 students in level 3 and the last class, D2 (D- group evening) have 5 students in level 3 and 2 students in level 4 and 3 students in the second level of the PT hierarchy learning procedure. The given study showed that Piennemann hierarchy is applicable to C and D levels of SFI with C SFI level matching the second and third levels of PT; D SFI level matches the third and fourth levels of PT.

## 7. Conclusion

Language is extremely necessary for our everyday lives (Bolander, 2016, p.10). It is not only important to us as individuals but has a decisive role to develop knowledge, to create, preserve and protect different cultures in different societies. We can think about pictures or images and we can think about words but most of the information is unconsciously processed and produced in our brain (Bolander, 2016, p. 9). The words are the fundamental tools for the language, they have been loaded in our minds with knowledge, experiences, memories, and emotions.

Linnarud (1993) stated that many learners are inhibited by their fear of making errors since at school it often leads to bad marks. But, as we have seen, errors may be a sign that learning is definitely happening. Writing is a proper method to improve in a language, it should be used as a practice method. It should be reminded that the TL learners can probably not produce a text like a native speaker of the same language since the learner does not master the formal aspect of the language that is essential in writing.

Adults and children are different in learning TL in many ways. For instance, in normal situations, children always reach a state of “complete” knowledge of their native language. In L2 acquisition (at least, adult L2), not only “complete” knowledge not always attained, it is rarely, attained. Fossilization, representing a non-TL stage, is frequently observed (Han, 2004; Long, 2007 mentioned in Gass & Selinker, 2013, p.164).

This study illustrated that there are differences between different groups of SFI. Although these differences are not large, they can have effect on the learning level of the students. It is usually expected that a child has built up a vocabulary that includes between 8,000 and 10,000 words in L1 at the age of school start. And it takes four years that most of the language rules have been dedicated to how we build sentences (Skolverket, 2012d, p.112). This means that adult learners need to build up more vocabulary to be skillful in not only writing proficiency but also in the other three skills.

Further, the study shows that Pienemann model can be applied to the writing skills of the students of C and D levels of SFI. In this study, the SFI students’ narrative abilities, the numbers of morphemes written, and students’ competences to conjugate and put in agreement three main word classes (verb, noun, and adjective) were evaluated. Independent Samples T-test was used to confirm that writing competences of advanced-level students are higher than writing competences of beginner-level students. The analysis of the morphemes produced by the students revealed that beginner-level students demonstrated the 1st, 2nd and 3rd levels of Pienemann model of processability hierarchy, while advanced-level students demonstrated higher results at the 2nd, 3rd, and 4th levels of the model.

## Further study

For further study, the first suggestion is the comparison of two types of learning: day-groups versus evening-groups. It would be very interesting as evening-group students are usually working students while the day-group are non-working students. the difference between them is that evening-group students are immersed in the Swedish language at their workplaces, while day-group students do not have this benefit. I would expect evening-groups to do better in all learning objectives than day-groups (with exception of intensive course) even though they get much less time to study, both in class and at home.

The second suggestion is discourse analyses of the narratives to show how SFI students use the different word classes in a sentence and how they express their feelings by looking at pictures or at picture booklets.

Then I would like to recommend using picture booklets to teach Swedish in different levels of SFI since it has been shown that adults are as much interested as children to tell and write a Frog-story.

## 8. References

- Abrahamsson, N. (2014). *Andraspråksinläring*. Lund: Studentlitteratur.
- Berman, R. A., & Slobin, D. I. (1994). *Relating events in narrative: a crosslinguistic developmental study*. London: Routledge, Taylor et Francis Group.
- Bolander, M. (1987). Man kan studera inte så mycke. Om placering av negation och adverb i vuxna invandrares svenska. *SUM-rapport 5*. Institutionen för lingvistik, Avdelningen för tvåspråkighetsforskning, Stockholms universitet.
- Bolander, M. (1988a). Nu ja hoppas inte så mycke. Om inversion och placering av negation och adverb i svenska som andraspråk. I: K. Hyltenstam & I. Lindberg (red.), *Första symposiet om svenska som andraspråk. Volym I: Föredrag om språk, språkinläring och interaktion*. Centrum för tvåspråkighetsforskning, Stockholms universitet. 203–214.
- Bolander, M. (1988b). Is there any order? On word order rules in Swedish as a second language. *Journal of Multilingual and Multicultural Development*, 9, 97–113.
- Bolander, M. (2016). *Funktionell svensk grammatik*. Stockholm: Liber.
- Carr, L. T. (1994). The strengths and weaknesses of quantitative and qualitative research: What method for nursing? *Journal of Advanced Nursing*, 20(4), 716-721.  
<http://dx.doi.org/10.1046/j.1365-2648.1994.20040716.x>
- Charters, H., Dao, L. & Jansen, L. (2011), Reassessing the applicability of Processability Theory: the case of nominal plural. *Second Language Research*, 27, 509-533
- Chomsky, N. (1975). *The logical structure of linguistic theory*. Cambridge, MA.
- Clahsen, H. 1992. Learnability theory and the problem of development in language acquisition". In J. Weissenborn, H. Goodluck and Th. Roeper (eds.), 1992. *Theoretical issues in language acquisition: Continuity and change*. Lawrence Erlbaum: Hillsdale, NJ, 53-76.
- Clark, H. H. (1996). *Using language*. New York: Cambridge University Press.

- Corder, S.P. (1967) 1974. *The Significance of Learners' Errors*. Error Analysis. ed. by Jack C. Richards. London: Longman.
- Corder, S. P. (1986). *Error analysis and interlanguage*. Oxford.: Oxford University Press.
- Denscombe, M. (2010). *The good research guide: for small-scale social research*. McGraw Hill.
- Di Biase, B. & Kawaguchi, S. (2002), Exploring the typological plausibility of Processability Theory: Language development in Italian second Language and Japanese second language. *Second Language research*, 18. 274\_302
- Eklund Heinonen, M. (2009), *Processbarhet på prov. Bedömning av muntlig språkfärdighet hos vuxna andraspråksinlärrare*. Doktorsavhandling, Uppsala University.
- Ellis, R. (1988). *Understanding Second Language Acquisition*. Oxford: Oxford University Press.
- Ellis, R. (2015). *Researching acquisition sequences: Idealization and de-idealization in SLA*. [Special Issue]. 181–209.
- Felix, S. W. (1984). Maturational aspects of universal grammar. In A. Davies, C. Criper and A. Howatt (eds.), *Interlanguage*. Edinburgh: Edinburgh University Press. 133-161.
- Field, A. (2009). *Discovering statistics using Spss*. London: SAGE Publications Ltd.
- Folkuniversitetet. (2019). *Svenska som andraspråk*. Retrieved September 19, 2019, From <http://www.folkuniversitetet.se/Skolor/Komvux/KomvuxGoteborg/komvuxgbgk/urser/gymnasiala-kurser/svenska-och-svenska-som-andrasprak/>
- Gass, S. M., & Selinker, L. (2013). *Second language acquisition: an introductory course*. London: Routledge.
- Glahn, E., Håkansson, G., Hammarberg, B., Holmen, A., Hvenekilde, A., & Lund, K. (2001). *Processability in Scandinavian second language acquisition*. *Studies in Second Language Acquisition*, 23, 389–416.
- Gregg, K. R. (1992). *UG and SLA theory: The story so far*. MS
- Gregg, K. R. (1993). Taking explanation seriously; or, Let a couple of flowers bloom. *Applied Linguistics* 15: 276-294.

- Gregg, K. (1996). *The logical and the developmental problems of second language acquisition*. In William C. Ritchie (ed.), *Handbook of second language acquisition*. San Diego: Academic Press, 49-81.
- Halliday, M.A.K. (1978). *Language as social semiotic*. London: Edward Arnold.
- Hammarberg, B. (2004). Teoretiska ramar för andraspråksforskning. In: Hyltenstam, Kenneth & Lindberg, Inger (RED.), *Svenska som andraspråk: i forskning, undervisning och samhälle*. Lund: Studentlitteratur. 27- 84.
- Han, Z. H. (2004). *Fossilization in Adult Second Language Acquisition*. Clevedon, UK: Multilingual Matters.
- Hartas, D. (2015). *Educational research and inquiry: Qualitative and quantitative approaches*. London: Bloomsbury Academic.
- Håkansson, G., Pienemann, M., & Sayehli, S. (2002). Transfer and typological proximity in the context of second language processing. *Second Language Research*, 18(3), 250–273. doi: 10.1191/0267658302sr206oa
- Håkansson, G., & Norrby, C. (2010). *Environmental influence on language acquisition: Comparing second and foreign language acquisition of Swedish*. *Language Learning*. 628–650.
- Håkansson, Gisela, 2003: *Tvåspråkighet hos barn i Sverige*. Lund: Studentlitteratur
- Håkansson, G. (2013). *Utveckling och variation – en tillämpning av processbarhetsteorin på svenskt inlärarspråk*. In: Hyltenstam, Kenneth & Lindberg, Inger (red.), *Svenska som andraspråk: i forskning, undervisning och samhälle*. Lund: Studentlitteratur. 151–167.
- Huebner, T. (2006). *Bangkok's linguistic Landscapes*. In *Linguistic Landscape: A new approach to multilingualism*. Multilingual Matters. 31-51.
- Huebner, T. (2009). *A framework for the linguistic analysis of linguistic landscapes*. In *Linguistic Landscape: Expanding the scenery*, New York: Routledge. 70 \_ 87.
- Itani-Adam, Y. (2011), Bilingual first language acquisition. I: Pienemann, M. & Kβler, J.-U. (red.), *Studying Processability Theory*. Amsterdam: Benjamins 121\_130.



- Jakobson, R., Fant, C. G. M. & Halle, M. (1952). *Preliminaries to speech analysis*. Cambridge, Massachusetts: MIT Press.
- Karlsdóttir, A., Norlén, G., Rispling, L., & Randall, L. (Eds.). *State of the nordic region 2018 - norden.diva-portal.org*. Retrieved September 19, 2018, from <http://norden.diva-portal.org/smash/get/diva2:1192284/FULLTEXT01.pdf>
- Kawaguchi, S. (2005), *Agreement structure and syntactic development in Japanese as a second language*. In Pienemann (2005), 253\_298.
- Komvux Folkuniversitetet. Svenska som andraspråk Retrieved December 5, 2018, from <http://www.folkuniversitetet.se/Skolor/Komvux/Komvux-Goteborg/komvux-gbg/kurser/gymnasiala-kurser/svenska-och-svenska-som-andrasprak/>
- Kursplan för svenska för invandrare (sfi) på andra språk*. Retrieved from <https://www.skolverket.se/undervisning/vuxenutbildningen/komvux-svenska-for-invandrare-sfi/laroplan-for-vux-och-kursplan-for-svenska-for-invandrare-sfi/kursplan-for-svenska-for-invandrare-sfi-pa-andra-sprak>
- Krashen, S. (1977). *Some issues relating to the monitor model*. In Brown, H. D. (, Yorio, C. A., & Crymes, R. (1977). *Teaching and learning English as a second language: trends in research and practice: on Tesol 77: selected papers from Eleventh Annual Convention of Teachers of English to Speakers of Other Languages, Miami, Florida, April 26-may 1, 1977*. Washington, DC: TESOL. 144–158
- Krashen, S. D. 1982. *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon Press.
- Krashen, S. D. 1985. *The Input Hypothesis: Issues and Implications*. London: Longman.
- Larsen-Freeman, D., & Long, M. H. (1992). *An introduction to second language acquisition research*. London: Longman.
- Larsen-Freeman, D., & Long, M. H. (2014). *An introduction to second language acquisition research*. London: Routledge.
- Lenzing, A. (2013). *The development of the grammatical system in early second language acquisition: The multiple constraints hypothesis*. Amsterdam: John Benjamins.

- Lenzing, A. (2015). Exploring regularities and dynamic systems in L2 development. [Special Issue]. *Language Learning*, 65, 89–122.
- Lemke, J. L. (1998). Resources for attitudinal meaning: Evaluative orientations in text semantics. *Functions of Language*. 33–56.
- Levelt, W. (1983). *Monitoring and self repair in speech*. *Cognition* 14, 41-104.
- Levelt, W. (1989). *Speaking*. Cambridge, Mass.: The MIT Press.
- Lewis, M. (1997). *Implementing the Lexical Approach*. Hove: Language Teaching Publications.
- Linnarud, M. (1993). *Språkforskning för Språklärare*. Lund: Studentlitteratur.
- Long, M. H. (1990). The least a second language acquisition theory needs to explain. *TESOL Quarterly*, 24, 649–66.
- Long, M. H. (2007). *Problems in SLA*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lowie, W. (2013). Dynamic systems theory approaches to second language acquisition. In C. Chappelle (Ed.), *The encyclopedia of applied linguistics* (pp. 1806–1813). Malden, MA: Blackwell.
- Lowie, W., & Verspoor, M. (2015). Variability and variation in second language acquisition orders: A dynamic re-evaluation. [Special Issue]. *Language Learning*, 65, 63–88.
- McLaughlin, B. (1987). *Theories of Second Language Learning*. London: Arnold Publishers.
- O’Grady, W., Dobrovolsky, M., & Katamba, F. (1996). *Contemporary linguistics*. London: Longman.
- O’Grady, W. (2012). Language acquisition without an acquisition device. *Language Teaching*, 45, 116–130.
- Papadopoulos, D. (2016, July 1). *Agents in the classroom? An ethnographic study of teachers' and students' perceived challenges and employed strategies in the Swedish for immigrants education*. Retrieved January 10, 2017, from <http://hdl.handle.net/2077/44843>
- Philipsson, A. (2007). *Interrogate Clauses and Verb Morphology in L2 Swedish: Theoretical Interpretations of Grammatical Development and Effects of different Elicitation Techniques*. Phd dissertation. Stockholm university.

- Pienemann, M., & Håkansson, G. (1999). A unified approach towards the development of Swedish as L2: a processability account. *Studies in Second Language Acquisition*, 21(3), 383-420. <https://doi.org/10.1017/S0272263199003022>
- Pienemann, M. (1984). Psychological constraints on the teachability of languages. *Studies in Second Language Acquisition*, 6, 186–214.
- Pienemann, M. (1987). Determining the influence of instruction on L2 speech processing. *Australian Review of Applied Linguistics*, 10, 83–113.
- Pienemann, M. (1989). Is language teachable? Psycholinguistic experiments and hypotheses. *Applied Linguistics*, 10, 52–79.
- Pienemann, M. (1998a). *Language processing and second language development: Processability Theory*. Amsterdam: John Benjamins.
- Pienemann, M. (1998b). *Developmental dynamics in L1 and L2 acquisition: Processability Theory and generative entrenchment*. *Bilingualism*, 1, 1–20.
- Pienemann, M. (1998c). A focus on processing. *Bilingualism*, 1, 36–38. Pienemann, M. (Ed.). (2005). *Cross-Linguistic aspects of Processability Theory*. Amsterdam: John Benjamins.
- Pienemann, M., Di Biase, B., & Kawaguchi, S. (2005). Extending processability theory. In M. Pienemann (Ed.), *Cross-linguistic aspects of processability theory*. Amsterdam: John Benjamins. 199–251.
- Pienemann, M. (2007). Processability theory. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition: An introduction* (pp. 137–154). Malden, MA: Blackwell.
- Pienemann, M., Di Biase, B., Kawaguchi, S., & Håkansson, G. (2005). Processability, typological distance and L1 transfer. In M. Pienemann (Ed.), *Cross-linguistic aspects of processability theory*. Amsterdam: John Benjamins. 85–117.
- Pienemann, M., & Johnston, M. (1987a). *A predictive framework of second language acquisition*. Unpublished manuscript, Sydney University, Sydney, Australia.

- Pienemann, M., & Johnston, M. (1987b). *Factors affecting the development of language proficiency*. In D. Nunan (Ed.), *Applying second language acquisition research* Adelaide, Australia: National Curriculum Resource Centre. 45–141
- Pienemann, M., & Keßler, J.-U. (Eds.). (2011). *Studying processability theory: Introductory textbook*. Amsterdam: John Benjamins.
- Pienemann, M., & Keßler, J.-U. (2012). Processability theory. In S. Gass & A. Mackey (Eds.), *Handbook of second language acquisition*. Abingdon, UK: Routledge. 228–246.
- Pienemann, M., Keßler, J.-U., & Lenzing, A. (2013). Developmentally moderated transfer and the role of the L2 in L3 acquisition. In Mattsson, A. F., & Norrby, C. (2013). *Language acquisition and use in multilingual contexts: theory and practice*. Lund: Lund University. 142\_159
- Pinker, S. (1979). *Formal models of language learning*. Netherlands: Harvard University Press. <https://stevenpinker.com/files/pinker/files/10.1.1.124.5000.pdf>
- Pinker, S. (1984). *Language learnability and language development*. Cambridge, MA: Harvard University Press.
- Pinker, S. and Prince, A. (1988). *On language and connectionism*. *Cognition* 28, 73-193.
- Pinker, S. (1984). *Language learnability and language development*. Cambridge, Mass.: Harvard University Press.
- Pinker, S. and Prince, A. (1988). *On language and connectionism*. *Cognition* 28, 73-193.
- Ragnarsdottir, H. & Stromqvist, S. (2004). *Time, Space, and Manner in Swedish and Icelandic Narrative Construction in Two Closely Related Languages*. In S. Strömquist, & L. Verhoeven (Eds.), *Relating events in narrative. Typological and contextual perspectives*. Lawrence Erlbaum Associates. 113\_141
- Rahkonen, M. & Håkansson, G. (2008), Production of written L2-Swedish – processability or input frequencies? I: Kessler, J.-U. (red.), *Processability Approaches to Second Language Development and second Language Learning*. Cambridge: Cambridge Scholars Press, UK. 135-161
- Rahman, M. S. (2016). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language “Testing and Assessment”

Research: A Literature Review. *Journal of Education and Learning*, 6(1), 102\_112.

- Rasinger, S. M. (2013). *Quantitative research in linguistics: An introduction*. A & C Black, 10.
- Mclaughlin, B., Rossman, T., & Mcleod, B. (1983). Second Language Learning: An Information-Processing Perspective. *Language Learning*, 33(2), 135–158. doi: 10.1111/j.1467-1770.1983.tb00532.x
- Schlepppegrell, M. (2004). *The language of schooling: a functional linguistics perspective*. New York: Routledge.
- Schmidt, R. 1992: Psychological mechanisms underlying second language fluency. *Studies in Second Language Acquisition* 14, 357-85.
- Selinker, L. (1972) 1974. Interlanguage. *International Review of Applied Linguistics in Language Teaching* 10(2). 209–231.
- Selinker, L. (2009). Interlanguage, *International Review of Applied Linguistics in Language Teaching*, 10(1-4), pp. 209-232. Retrieved 2 Jul. 2019, from doi:10.1515/iral.1972.10.1-4.209
- Slobin, D. I. 1991. *Learning to think for speaking: Narrative language, cognition, and rhetorical style*. *Pragmatics*, 1, 7-26.
- Shibatani & S. A. Thompson (Eds.), *Grammatical constructions: Their form and meaning*, Oxford: Oxford University Press. 195-219.
- Slobin, D. I. 1997. Mind, code, and text. In J. Bybee, J. Haiman, & S. A. Thompson (Eds.), *Essays on language function and language type*, (pp. 437- 467). Amsterdam: John Benjamins.
- Slobin, D. I. 2004. The many ways to search for a frog: linguistic typology and the expression of motion events. In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Typological and contextual perspectives*. (pp. 219-257) Mahwah: Lawrence Erlbaum Associates.
- Skolverket. (1997). *Vem älskar sfi? Utvärdering av svenskundervisning för invandrare – en utbildning mellan två stollar*. Skolverkets rapport nr 131.

- Skolverket. (2012a). *Läroplan för vuxenutbildningen 2012*. Stockholm: Fritzes. Retrieved January 10, 2016, from [http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publication?\\_xurl\\_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlob%2Fpdf2945.pdf%3Fk%3D2945](http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publication?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlob%2Fpdf2945.pdf%3Fk%3D2945)
- Skolverket. (2012b). *Utbildning i svenska för invandrare – kursplan och kommentarer*. Stockholm: Fritzes. Retrieved January 10, 2016, from [http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publication?\\_xurl\\_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlob%2Fpdf2939.pdf%3Fk%3D2939](http://www.skolverket.se/om-skolverket/publikationer/visa-enskild-publication?_xurl_=http%3A%2F%2Fwww5.skolverket.se%2Fwtpub%2Fws%2Fskolbok%2Fwpubext%2Ftrycksak%2FBlob%2Fpdf2939.pdf%3Fk%3D2939)
- Skolverket (2012c). *Läroplan för vuxenutbildningen*. Stockholm: Retrieved September 10, 2018, from <https://www.skolverket.se/undervisning/vuxenutbildningen/komvuxgrundlaggan-de/laroplan-for-vux-och-kursplaner-for-komvux-grundlaggande/laroplan-lvux12-for-vuxenutbildningen>
- Skolverket. (2012d). *Greppa språket: ämnesdidaktiska perspektiv på flerspråkighet*. Stockholm.
- Skolverket. (2015a). *PM – Elevernas utbildningsbakgrund kalenderåren 2009-2014*. Retrieved May 10, 2016, from <http://www.skolverket.se/statistik-och-utvardering/statistik-i-tabeller/komvux/elever-och-kursdeltagare>
- Skolverket. (2015b). *PM – Kurser med flest deltagare per utbildningsnivå kalenderåret 2014*. Retrieved May 4, 2016, from <http://www.skolverket.se/statistik-och-utvardering/statistik-i-tabeller/komvux/elever-och-kursdeltagare>
- Skolverket. (2015b). *PM – Kurser med flest deltagare per utbildningsnivå kalenderåret 2014*. Retrieved January 16, 2017, from <https://www.skolverket.se/download/18.6bfaca41169863e6a65b8bc/1553966199173/df3482.pdf>
- Skolverket. (2016). *Engelska syllabus for municipal adult education in Swedish*. Retrieved September 19, 2019, from [https://www.skolverket.se/download/18.4fc05a3f164131a7418ce9/1535097772538/Kursplan\\_sfi\\_engelska.pdf](https://www.skolverket.se/download/18.4fc05a3f164131a7418ce9/1535097772538/Kursplan_sfi_engelska.pdf)

- Skolverket. (2019). *Kursplan för kommunal vuxenutbildning i svenska för invandrare*. Stockholm: Skolverket. Retrieved September 16, 2019, from <https://www.skolverket.se/undervisning/vuxenutbildningen/komvux-svenska-for-invandrarer-sfi/laroplan-for-vux-och-kursplan-for-svenska-for-invandrarer-sfi/kursplan-for-svenska-for-invandrarer-sfi>
- Skolverket. (2019). *Läroplan för vuxenutbildningen (Reviderad 2017)*. Stockholm:Skolverket. Retrieved March 15, 2019, from <https://www.skolverket.se/publikationsserier/styrdokument/2017/laroplan-for-vuxenutbildningen-reviderad-2017>
- Statistikmyndigheten SCB. Retrieved September 19, 2019, from <https://www.scb.se/>
- Strömqvist, S., Nordqvist, Å., & Wengelin, Å. (2004). *Writing the frog-story: developmental and cross-modal perspectives*. In S. Strömqvist, & L. Verhoeven (Eds.), *Relating events in narrative. Typological and contextual perspectives* (pp. 359-394). Lawrence Erlbaum Associates.
- Strömqvist Sven, & Verhoven, L. (2004). *Relating Events in Narrative. Vol. 2: Typological and Contextual Perspectives*. Mahwah: Lawrence Erlbaum Associates.
- Svensson, E. B. (2019). *L2 writing beyond English* (in press , *International Journal of Language Studies*)
- Sverige. Retrieved September 19, 2019, from <http://www.migrationsinfo.se/migration/sverige/>
- Tierney, W. G., & Clemens, R. F. (2011). Qualitative Research and Public Policy: The Challenges of Relevance and Trustworthiness. *Higher Education: Handbook of Theory and Research*, 57–83. doi: 10.1007/978-94-007-0702-3\_2
- Tulldahl, K. D. (2004). *A Study and Analysis of Errors in the Written Production of Swedish Adolescent Learners of English, Comparing the Evolution of a Class at Two Different Points in Time*. Retrieved March 17, 2019 from <https://core.ac.uk/display/86488936>
- Yiğitoğlu N., & Reichelt, M. (2019). *L2 writing beyond English*. Bristol, UK: Multilingual Matters.

- Van Maanen, J. (1979) *Reclaiming qualitative methods for organizational research: A preface*. *Administrative Science Quarterly* (24:4). 520–526.
- Wexler, K. (1982). A principle theory for language acquisition. In E. Wanner and L. R. Gleitman (eds.), 1982. *Language acquisition: the state of the art*. Cambridge: Cambridge University Press. 288-315.
- White, L. (2003). *Second language acquisition and Universal Grammar*. Cambridge, UK: Cambridge University Press.
- Wilfrid, R. (2002). *Model/Models in linguistics*. Reterived February 15, 2018, from Wilfrid R otgé, « Model/Models in linguistics », ASp [Online], 35-36 | 2002, Online since 04 August 2010, connection on 30 April 2019. URL: <http://journals.openedition.org/asp/1574> ; DOI : 10.4000/asp.1574
- Zhang, Y. (2004), Processing constraints, categorial analyses and the second language acquisition of Chinese adjective suffix -de (ADJ). *Language Learning*, 54, 437\_468.
- Öhman, S. (1979). Introduction. In Lindblom, B. & Ohman, S. (Eds.), *Frontiers of speech communication research* (pp. xv-xxv). London etc: Academic Press



# Appendices

## Appendix 1 - Number of students, narratives' length and total verbs

Number	Level	Length	Verb													V.Future	V.Inco.Future
			V.Total	V.Correct	V.Imperative	V.Inco.Imperative	V.Infinitive	V.Inco.Infinitive	V.Present	V.Inco.Present	V.Past	V.Inco.Past	V.Perfect	V.Inco.Perfect			
101	D1	152	26	24	0	0	2	0	3	1	19	1	0	0	0	0	0
102	D1	190	41	33	0	0	2	0	4	1	27	7	0	0	0	0	0
103	D1	248	48	29	3	0	1	4	15	7	10	8	0	0	0	0	0
104	D1	220	45	33	0	0	4	5	29	6	0	1	0	0	0	0	0
105	D1	255	51	51	0	0	5	1	0	0	46	0	0	0	0	0	0
106	D1	192	41	30	0	0	4	1	2	2	24	8	0	0	0	0	0
107	D1	257	44	29	0	0	0	2	0	3	25	10	4	0	0	0	0
108	D1	317	60	53	2	0	3	3	24	1	23	2	0	0	0	1	0
109	D1	102	16	11	0	0	0	3	10	1	1	1	0	0	0	0	0
110	D1	128	27	22	0	0	5	1	12	3	5	0	0	0	0	0	0
201	D2	70	11	9	0	0	0	1	0	0	9	1	0	0	0	0	0
202	D2	179	30	13	0	1	0	1	3	2	9	12	1	1	0	0	0
203	D2	361	89	88	1	0	23	0	17	1	42	0	4	0	0	1	0
204	D2	187	38	28	1	0	5	1	6	0	15	8	1	1	0	0	0
205	D2	337	69	57	3	0	6	5	20	2	25	5	2	0	0	1	0
206	D2	214	40	27	0	0	2	1	1	1	24	7	0	4	0	0	0
207	D2	201	40	26	0	0	1	5	4	2	20	6	0	1	1	0	0
208	D2	275	57	42	2	0	6	0	15	10	14	0	4	5	1	0	0
209	D2	243	48	43	0	0	7	3	27	2	5	0	3	0	0	1	0
210	D2	254	45	39	1	1	4	0	6	0	28	5	0	0	0	0	0
301	C1	147	24	23	0	0	1	1	3	0	19	0	0	0	0	0	0
302	C1	90	19	16	0	0	1	2	1	1	14	0	0	0	0	0	0
303	C1	266	55	54	0	0	11	0	1	0	39	0	3	1	0	0	1
304	C1	148	30	27	0	0	4	1	16	2	6	0	0	0	0	1	0
305	C1	93	17	15	0	0	0	1	13	0	1	1	1	0	0	0	0
306	C1	126	23	21	0	0	0	2	0	0	21	0	0	0	0	0	0
307	C1	135	26	25	0	0	0	0	1	0	24	1	0	0	0	0	0
308	C1	162	28	27	0	0	0	1	23	1	4	0	0	0	0	0	0
309	C1	106	21	20	0	0	3	0	6	0	11	1	0	0	0	0	0
310	C1	121	21	20	0	0	2	1	17	0	1	0	0	0	0	0	0
401	C2	233	43	40	0	0	2	1	1	0	36	2	1	0	0	0	0
402	C2	132	23	13	0	0	1	6	12	3	0	0	0	0	1	0	0
403	C2	117	28	12	0	0	0	15	8	1	4	0	0	0	0	0	0
404	C2	155	33	25	0	0	5	6	12	1	8	0	0	0	1	0	0
405	C2	92	26	13	0	0	1	12	10	1	2	0	0	0	0	0	0
406	C2	190	35	30	0	0	3	0	1	0	26	5	0	0	0	0	0
407	C2	106	22	20	0	0	0	2	3	0	17	0	0	0	0	0	0
408	C2	122	26	25	0	0	0	1	11	0	14	0	0	0	0	0	0
409	C2	88	17	15	0	0	0	1	5	1	10	0	0	0	0	0	0
410	C2	98	20	18	0	0	2	2	12	0	4	0	0	0	0	0	0

## Appendix 2 - Number of nouns and adjectives

	Noun						adjective		
	N.Total	N.Indefinite	N.inco.Indefinite	N.Definite	N.inco.Definite	N.Plural	N.inco.Plural	A.Total	A.Correct
26	9	3	12	2	0	0	1	1	0
25	8	2	11	3	1	0	4	3	1
55	9	9	14	23	0	0	0	0	0
47	5	5	19	15	1	2	1	0	1
50	15	2	25	7	1	0	4	0	4
29	12	4	8	3	1	0	7	3	4
47	11	3	8	24	1	0	4	1	3
47	15	8	17	3	4	0	5	4	1
28	5	0	16	0	0	0	2	1	1
27	7	2	11	7	0	0	2	2	0
12	4	1	3	4	0	0	3	2	1
55	4	3	28	14	4	1	0	0	0
57	10	2	32	7	4	0	11	11	0
41	13	1	12	15	0	0	1	1	0
28	19	1	5	3	1	1	7	6	1
42	14	0	21	0	0	0	6	6	0
29	12	3	4	1	0	1	2	2	0
31	10	0	12	0	1	0	5	5	0
28	10	7	7	4	1	0	3	3	0
40	16	0	16	0	0	0	1	0	1
26	8	2	12	2	3	2	3	2	1
13	5	0	7	0	0	1	3	3	0
43	10	0	16	8	0	4	14	13	1
37	13	2	17	1	3	1	20	20	0
26	4	1	19	1	0	1	3	3	0
29	7	2	21	0	0	0	8	8	0
32	8	2	20	2	0	0	7	5	2
42	10	0	31	2	0	0	4	4	0
19	7	3	9	0	0	0	5	4	1
26	9	2	11	3	0	1	1	1	0
69	14	3	48	3	2	1	11	11	0
38	2	31	5	0	1	1	12	6	6
28	7	10	7	4	0	0	1	1	0
22	7	4	7	2	1	1	6	6	0
15	7	2	3	3	0	0	2	2	0
48	8	2	35	2	0	1	7	6	1
32	5	0	21	4	2	0	7	7	0
28	6	3	7	9	1	2	5	5	0
29	5	4	9	8	3	0	1	0	1
22	8	8	6	0	0	0	1	1	0

## Appendix 3 - Students' information

Personal information								
Student number	Level	Day/Even.	Age	Gender	Mother tongue	Years in Sweden	Occupation	Swedish source
101	D1	1	32	F	Arabic	4	SFI Student	10
102	D1	1	44	F	Chinese	0.8	SFI Student	4 & 10
103	D1	1	35	F	Tamil	2	SFI Student	4 & 10
104	D1	1	35	F	Portuguese	3	SFI Student	10
105	D1	1	32	F	Urdu	6	SFI Student	10
106	D1	1	40	F	Arabic	1.5	SFI Student	0
107	D1	1	34	F	Tamil	1.5	SFI Student	3 & 10
108	D1	1	27	M	Persian	1	SFI Student	3 & 10
109	D1	1	36	M	Tigrinya	4	SFI Student	4 & 9
110	D1	1	30	M	Arabic	1	SFI Student	4
201	D2	2	43	M	Marathi	5	IT	2
202	D2	2	31	M	Albanian	2	IT manager	1 & 2
203	D2	2	29	F	Spanish	5	Researcher	1,2,3,5
204	D2	2	30	M	Telugu	2	IT engineer	0
205	D2	2	41	M	Spanish	6	Telecom	2 & 3
206	D2	2	27	F	Albanian	3	Housekeeper	5 & 2
207	D2	2	28	F	Bulgarian	2	Employed	2 & 3
208	D2	2	28	M	Tamil	1	Student assista	2
209	D2	2	32	M	Persian	2.5	Economy assis	2 & 5
210	D2	2	32	F	Korean	1	Purchaser	1 & 3
301	C1	1	47	M	Persian	1.5	SFI Student	5 & 10
302	C1	1	26	F	Spanish	0.5	SFI student	3 & 5 & 7
303	C1	1	28	M	Urdu	1	SFI student	3 & 5
304	C1	1	35	F	Persian	3	SFI student	3
305	C1	1	36	F	Greek	1.5	SFI student	1 & 10
306	C1	1	26	F	Arabic	2	SFI student	3 & 5 & 10
307	C1	1	30	F	Arabic	2.5	SFI student	
308	C1	1	33	F	Vietnamese	1	SFI student	10
309	C1	1	25	F	Spanish	0.7	SFI student	5 & 10
310	C1	1	28	F	Chinese	3	SFI Student	2 & 3
401	C2	2	27	M	Russian	0.5	Software engin	0
402	C2	2	33	M	Lou	1.25	House keeper	2 & 5
403	C2	2	25	F	Dari	1	House wife	10
404	C2	2	23	F	Turkish	1.5	University stud	10
405	C2	2	45	F	Thai	1		
406	C2	2	29	M	Greek	3.5	Bioinformatic	2 & 5 & 7
407	C2	2	25	M	Kannada (Ind	1.7	University stud	4 & 5 & 10
408	C2	2	28	F	Tamil	0.8	Software engin	3
409	C2	2	39	M	Macedonian	3	Student	1 & 2
410	C2	2	32	M	Indian	2	Self employed	2 & 5 & 10

### Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	C1	10	25.0	25.0	25.0
	C2	10	25.0	25.0	50.0
	D1	10	25.0	25.0	75.0
	D2	10	25.0	25.0	100.0
	Total	40	100.0	100.0	

### Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	C Level	20	50.0	50.0	50.0
	D Level	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

### Day/Evening

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Day Classes	20	50.0	50.0	50.0
	Evening Classes	20	50.0	50.0	100.0
	Total	40	100.0	100.0	

### Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	23	1	2.5	2.5	2.5
	25	3	7.5	7.5	10.0
	26	2	5.0	5.0	15.0
	27	3	7.5	7.5	22.5
	28	5	12.5	12.5	35.0
	29	2	5.0	5.0	40.0
	30	3	7.5	7.5	47.5
	31	1	2.5	2.5	50.0
	32	5	12.5	12.5	62.5
	33	2	5.0	5.0	67.5
	34	1	2.5	2.5	70.0
	35	3	7.5	7.5	77.5
	36	2	5.0	5.0	82.5
	39	1	2.5	2.5	85.0
	40	1	2.5	2.5	87.5
	41	1	2.5	2.5	90.0
	43	1	2.5	2.5	92.5
	44	1	2.5	2.5	95.0
	45	1	2.5	2.5	97.5
47	1	2.5	2.5	100.0	
	Total	40	100.0	100.0	

### Mother Tongue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Albanian	2	5.0	5.0	5.0
	Arabic	5	12.5	12.5	17.5
	Bulgarian	1	2.5	2.5	20.0
	Chinese	2	5.0	5.0	25.0
	Dari	1	2.5	2.5	27.5
	Greek	2	5.0	5.0	32.5
	Indian	1	2.5	2.5	35.0
	Kannada (Indian	1	2.5	2.5	37.5
	Korean	1	2.5	2.5	40.0
	Lou	1	2.5	2.5	42.5
	Macedonian	1	2.5	2.5	45.0
	Marathi	1	2.5	2.5	47.5
	Persian	4	10.0	10.0	57.5
	Portuguese	1	2.5	2.5	60.0
	Russian	1	2.5	2.5	62.5
	Spanish	4	10.0	10.0	72.5
	Tamil	4	10.0	10.0	82.5
	Telugu	1	2.5	2.5	85.0
	Thai	1	2.5	2.5	87.5
	Tigrinya	1	2.5	2.5	90.0
	Turkish	1	2.5	2.5	92.5
	Urdu	2	5.0	5.0	97.5
	Vietnamese	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

### Years In Sweden

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.5	2	5.0	5.0	5.0
	.7	1	2.5	2.5	7.5
	.8	2	5.0	5.0	12.5
	1.0	8	20.0	20.0	32.5
	1.3	1	2.5	2.5	35.0
	1.5	5	12.5	12.5	47.5
	1.7	1	2.5	2.5	50.0
	2.0	6	15.0	15.0	65.0
	2.5	2	5.0	5.0	70.0
	3.0	5	12.5	12.5	82.5
	3.5	1	2.5	2.5	85.0
	4.0	2	5.0	5.0	90.0
	5.0	2	5.0	5.0	95.0
	6.0	2	5.0	5.0	100.0
	Total	40	100.0	100.0	

### Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bioinformatic	1	2.5	2.5	2.5
	Economy assistans	1	2.5	2.5	5.0
	Employed	1	2.5	2.5	7.5
	Housekeeper	3	7.5	7.5	15.0
	IT	3	7.5	7.5	22.5
	N/A	1	2.5	2.5	25.0
	Purchaser	1	2.5	2.5	27.5
	Researcher	1	2.5	2.5	30.0
	Self employed	1	2.5	2.5	32.5
	SFI Student	20	50.0	50.0	82.5
	Software engineer	2	5.0	5.0	87.5
	Student	4	10.0	10.0	97.5
	Telecom	1	2.5	2.5	100.0
	Total	40	100.0	100.0	

Appendix 4 - Frog where are you?



-1-



-2-



-3-



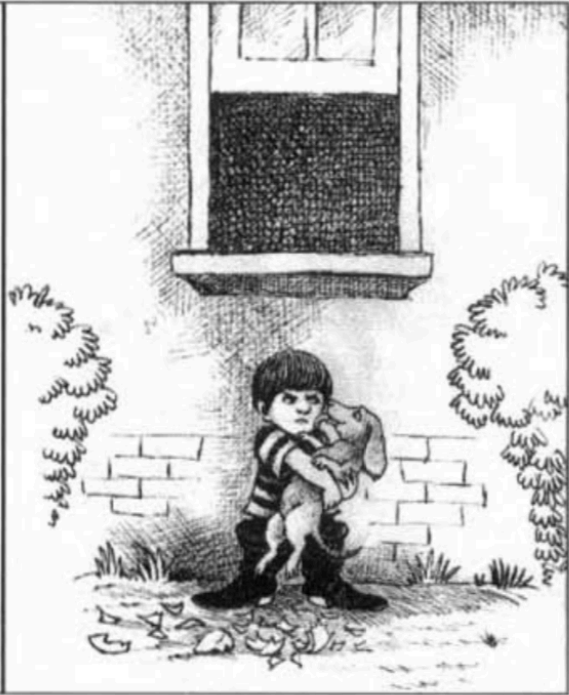
-4-



-5-



-6-



-7-



-8-

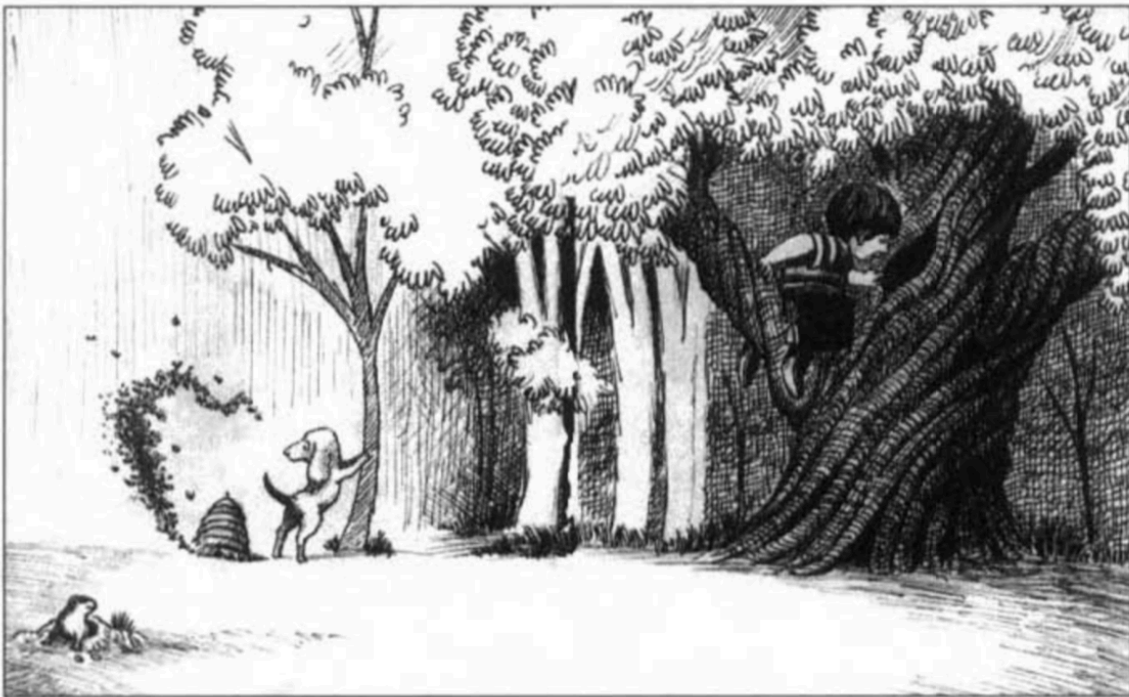




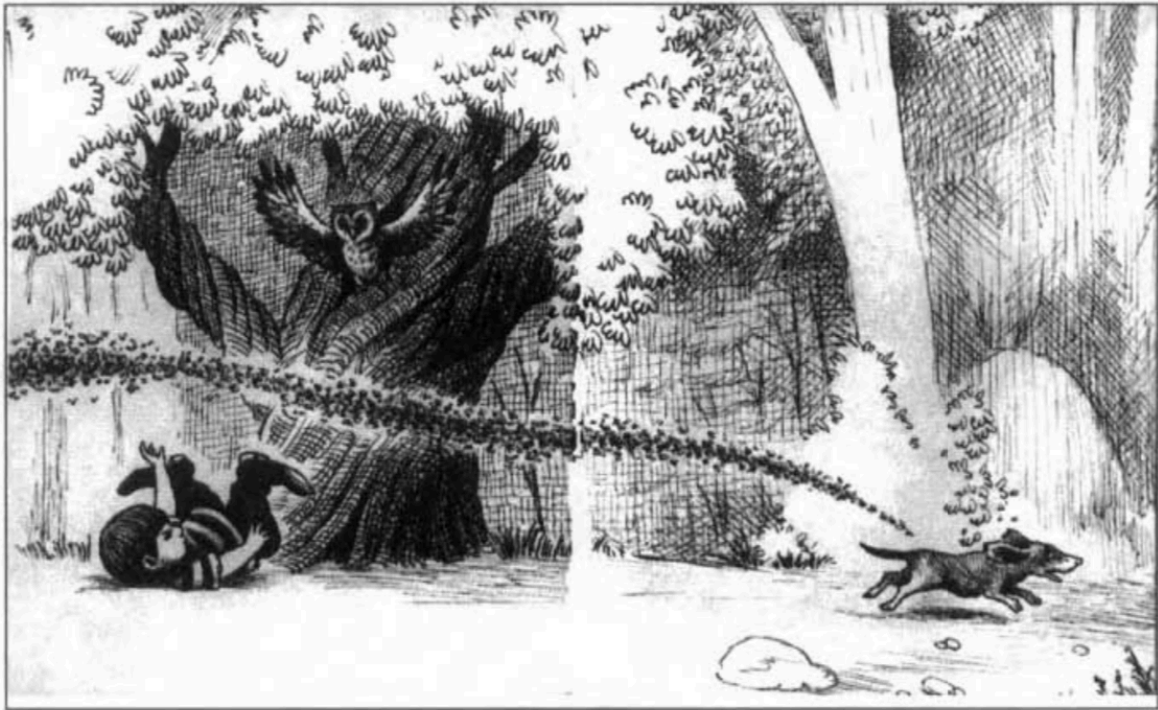
-9-



-10-



-11-



-12-



-13-



-14-



-15-



-16-



-17-



-18-



-19-



-20-



-21-



-22-



-23-



-24-

## Appendix 5 - Personal inquiry

Vänligen **skriv inte ditt namn**. Processen med denna forskning är anonym.

(Please **do not write your name**, the process of this research is anonymous)

1. Ålder / age:

2. Kön / gender:

3. Modersmål / mother tongue:

4. antal år i sverige / Number of years in Sweden:

5. Yrke / occupation:

6. Vilken typ av svenska interaktion har du varje dag? (till exempel när du handlar, pratar med vänner, pratar med grannar, prata med kollegor osv.)

What kind of Swedish interaction do you have every day? (for example, during shopping, talking to friends, talking to neighbors, talking to colleagues, etc)

Tack för ditt samarbete / Thanks for your cooperation



Reyhaneh Tajgardoun

(Renée)

## Appendix 6 - Vocabularies and sentences provided by teacher for B-level

I. Det var en gång var det en pojke och sin hund. (Once upon a time it was a boy and his dog.)

II. pojken heter... han har en hund och en groda. (The boy calls... has a dog and a frog.)

1. *Pojken och hunden tittar på grodan i glasburken.* (The boy and the dog look at the frog in a glass jar.)
2. *For this picture, the teacher mentioned different motion verbs for instance "flyr (escape) klättrar ut (climbs out), hoppar ut (jumps out) and går ut (go out).*  
*Pojken sover med sin hund i sängen.* (The boy sleeps with his dog in the bed.)  
*Grodan klättrar ut från glasburken.* (The frog climbs out from the glass jar.)
3. *De vaknar på morgonen.* (They wake up in the morning.)  
*Grodan är borta.* (The frog is gone.)
4. *De letar efter grodan.* (They look for the frog.)
5. *Pojken öppnar fönstret.* (The boy opens the window.)  
*Pojken och hunden ropar efter grodan.* (The boy and dog shout for the frog.)  
*Hunden och pojken tittar ut.* (The dog and the boy look outside.)
6. *Hundens huvud är i glasburken.* (The dog's head is in the glass jar.)
7. *Hunden ramlar ner på marken.* (The dog falls down on the ground.)
8. *Pojken är ärg.* (the boy is angry)  
*Glasburken går i sönder.* (The glass jar breaks down.)
9. *Vi ser skogen.* (We see the wood/forest)  
*De går ut i skogen och ropar efter grodan.* (They go out into the forest and shout for the frog.)  
*I trädet är ett hål.* (In the tree there is a hole.)
10. *Pojken tittar på märken.* (The boy looks at the ground.)  
*Vi ser många bin.* (We see many bees.)  
*Vi kan se en bikupa.* (We can see a beehive.)  
*Hunden hoppar.* (The dog jumps.)
11. *Hunden skäller.* (The dog barking.)  
*Hunden har det så roligt.* (The dog has so much fun.)  
*Vi kan se en mullvad också.* (We can see a mole too.)
12. *Bikupan ramlar ner på marken.* (The beehive falls on the ground.)

*Bin flyger i väg. (Bees fly away.)*

*Pojken klättrar upp i träd. (The boy climbs up a tree.)*

13. *Han ramlar på marken. (He falls down on the ground.)*

*Vi ser en uggla. (We can see an owl.)*

*Ugglan kommer ut från hålet. (The owl comes out of the hole.)*

*Bin flyger efter hunden. (Bin flies after the dog.)*

*Hunden springer. (The dog runs.)*

14. *Ugglan flyger efter pojken. (The owl flies for the boy.)*

15. *Han klättrar upp på ett berg. He climbs up a mountain.*

*Han ropar efter hunden och grodan. (He calls for the dog and the frog.)*

16. *Pojken ramlar på rådjuret horn. (The boy falls on the deer horn.)*

17. *Rådjuret är arg. (The deer is angry.)*

*Rådjuret och hunden springer. (The deer and the dog run.)*

18. *Rådjuret stoppar och dem ramlar ner. (The deer stops, and they fall down.)*

19. *Pojken och hunden ramlar i vattnet. (The boy and dog fall into the water.)*

20. *Hunden klättrar upp på pojkens huvud. (The dog climbs up on the boy's head.)*

21. *Hunden simmar i vattnet. (The dog is swimming in the water.)*

22. *Pojken och hunden klättrar på ett trä. (The boy and the dog climbing a wood.)*

23. *De tittar på grodor. (They look at frogs.)*

*Grodorna är glada. (The frogs are happy.)*

24. *Pojken och hunden sitter. (The boy and the dog are sitting.)*

*Det finns många grodorna. (There are many frogs.)*

*De tittar på grodorna. (They look at the frogs.)*

*Alla är glada. (Everyone is happy.)*

*Pojken håller en groda i handen. (The boy holds a frog in his hand.)*

*Han vinkar till grodorna. (He waves hand to the frogs.)*



## Appendix 7 - knowledge requirement for Writing skill for SFI

ENGELSKA

Swedish National Agency for Education

www.skolverket.se

### Knowledge requirements

#### Writing skills

Course A

The pupil can, with support, understand clear, simple speech in concrete real-life, everyday situations.

Grade E	Grade D	Grade C	Grade B	Grade A
<p>The student understands <b>common words and simple phrases</b> in a brief retelling of incidents in everyday life, and understands adapted and clear information that is of interest to the student.</p> <p>The student demonstrates an understanding of simple and commonly used oral instructions by acting on them in a <b>broadly functional</b> way.</p>	<p>Grade D means that the knowledge requirements for E and largely for C are fulfilled.</p>	<p>The student understands <b>simple phrases and sentences</b> in a brief retelling of incidents in everyday life, and understands adapted and clear information that is of interest to the student.</p> <p>The student demonstrates an understanding of simple and commonly used oral instructions by acting on them in a <b>functional</b> way.</p>	<p>Grade B means that the knowledge requirements for C and largely for A are fulfilled.</p>	<p>The student understands <b>coherent phrases and sentences</b> in a brief retelling of incidents in everyday life, and understands adapted and clear information that is of interest to the student.</p> <p>The student demonstrates an understanding of simple and commonly used oral instructions by acting on them in a <b>very functional</b> way.</p>

## Course B

The student can understand clear, simple speech in common situations in everyday life.

Grade E	Grade D	Grade C	Grade B	Grade A
<p>The student demonstrates an understanding of a brief retelling of incidents, conversations, information and adapted news on very familiar subjects by providing a simple summary of the <b>main content</b>.</p> <p>The student demonstrates an understanding of short and clear oral messages and instructions in everyday life by acting on them in a <b>broadly functional</b> way.</p>	<p>Grade D means that the knowledge requirements for E and largely for C are fulfilled.</p>	<p>The student demonstrates an understanding of a brief retelling of incidents, conversations, information and adapted news on very familiar subjects by providing a simple summary of the <b>main content and commenting on essential details</b>.</p> <p>The student demonstrates an understanding of short and clear oral messages and instructions in everyday life by acting on them in a <b>functional</b> way.</p>	<p>Grade B means that the knowledge requirements for C and largely for A are fulfilled.</p>	<p>The student demonstrates an understanding of a brief retelling of incidents, conversations, information and adapted news on very familiar subjects by providing a simple summary of the <b>main content and commenting on essential details and occasional nuances</b>.</p> <p>The student demonstrates an understanding of short and clear oral messages and instructions in everyday life by acting on them in a <b>very functional</b> way.</p>

## Course C

The student can understand clear, simple speech in common situations in everyday, social, student and working life.

Grade E	Grade D	Grade C	Grade B	Grade A
<p>The student demonstrates an understanding of a retelling of incidents, descriptions, conversations, information and news in brief on familiar subjects by providing a simple summary of the <b>main content</b>.</p> <p>The student demonstrates an understanding of simple and clear oral messages and instructions by acting on them in a <b>broadly functional</b> way.</p>	<p>Grade D means that the knowledge requirements for E and largely for C are fulfilled.</p>	<p>The student demonstrates an understanding of a retelling of incidents, descriptions, conversations, information and news in brief on familiar subjects by providing a simple summary of the <b>main content and commenting on essential details</b>.</p> <p>The student demonstrates an understanding of simple and clear oral messages and instructions by acting on them in a <b>functional</b> way.</p>	<p>Grade B means that the knowledge requirements for C and largely for A are fulfilled.</p>	<p>The student demonstrates an understanding of a retelling of incidents, descriptions, conversations, information and news in brief on familiar subjects by providing a simple summary of the <b>main content and commenting on essential details and certain nuances</b>.</p> <p>The student demonstrates an understanding of simple and clear oral messages and instructions by acting on them in a <b>very functional</b> way.</p>

## Course D

The student can understand clear speech in informal and more formal situations in everyday, social, student and working life.

Grade E	Grade D	Grade C	Grade B	Grade A
<p>The student demonstrates an understanding of accounts, descriptions, conversations, discussions, information and news on familiar subjects by providing a summary of the <b>main content</b>.</p> <p>The student demonstrates an understanding of detailed and clear oral instructions by acting on them in a <b>broadly functional</b> way.</p>	<p>Grade D means that the knowledge requirements for E and largely for C are fulfilled.</p>	<p>The student demonstrates an understanding of accounts, descriptions, conversations, discussions, information and news on familiar subjects by providing a summary of the <b>main content and commenting on essential details</b>.</p> <p>The student demonstrates an understanding of detailed and clear oral instructions by acting on them in a <b>functional</b> way</p>	<p>Grade B means that the knowledge requirements for C and largely for A are fulfilled.</p>	<p>The student demonstrates an understanding of accounts, descriptions, conversations, discussions, information and news on familiar subjects by providing a summary of the <b>main content and commenting on essential details and certain nuances</b>.</p> <p>The student demonstrates an understanding of detailed and clear oral instructions by acting on them in a <b>very functional</b> way.</p>

## Appendix 8 - Independent Sample Test with standard error and confidence intervals

Variable	Levene's Test for Equality of Variances		t-test for Equality of Means								
			t	df	Effect size (r-value)	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Conf. Interval of Difference		
									Lower	Upper	
F	Sig.										
Length	EVA	3.455	.071	4.189	38	0.56 (large)	.000	82.750	19.754	42.760	122.740
V.Total	EVA	3.594	.066	3.698	38	0.51 (large)	.001	16.450	4.449	7.444	25.456
V.Correct	EVA	4.049	.051	2.452	38	0.37 (medium)	.019	11.400	4.650	1.987	20.813
V.imperative	EVA	43.278	.000								
	EVNA			2.795	19.000	0.54 (large)	.012	.650	.233	.163	1.137
V.inco.Present	EVA	6.849	.013								
	EVNA			2.794	22.813	0.50 (large)	.010	1.700	.608	.441	2.959
V.inco.Past	EVA	45.943	.000								
	EVNA			3.930	22.486	0.64 (large)	.001	3.600	.916	1.703	5.497
V.Future	EVA	27.844	.000								
	EVNA			2.147	27.177	0.38 (medium)	.041	.250	.116	.011	.489
N.Indefinite	EVA	3.501	.069	2.560	38	0.38 (medium)	.015	2.900	1.133	.606	5.194
N.inco.Definite	EVA	16.773	.000								
	EVNA			2.926	18.291	0.56 (large)	.009	5.738	1.961	1.622	9.853
A.Correct	EVA	2.431	.127	- 2.296	38	0.43 (medium)	.027	-2.850	1.242	-5.363	-.337

