HÁSKÓLI ÍSLANDS

Hugvísindasvið

English Reading Comprehension of 9th Grade Students in Iceland

Ritgerð til M.A. - prófs

Ólöf Hildur Egilsdóttir

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Enskukennsla

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Preface

This thesis is submitted as a fulfillment of the degree of M.A. in English Teaching within the Faculty of Foreign Language, Literature and Linguistics School of Humanities, University of Iceland.

It is a 30-credit thesis and is written under the supervision of Birna Arnbjörnsdóttir, Professor of Second Language Acquisition and Pedagogy, Faculty of Foreign Language, Literature and Linguistics School of Humanities, University of Iceland.

I am grateful to the students who willingfully participated in the study, and for their teachers who so graciously allowed me to come in to their classrooms and take valuable time away from their already busy schedules.

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Last but certainly not least, I want to thank my husband Pétur Tryggvi Jónsson, for his endless encouragement and support through this journey.

Útdráttur

Markmið rannsóknarinnar var að skoða hvernig lesskilningur í ensku hjá grunnskólabörnum hefur breyst frá árinu 1983. Fengnir voru 146 9. bekkingar úr fjórum grunnskólum í Reykjavík og lesskilningshluti samræmdra prófa frá árunum 1983, 1997 og 2008 lagður fyrir þau. Niðurstöðurnar voru svo bornar saman við upphaflegar niðurstöður sömu prófa. Rannsóknin sýndi að 2012 árgangurinn stóð sig ögn betur en 1983 árgangurinn, verr en 1997 árgangurinn og enn verr en 2008 árgangurinn. Niðurstöðurnar sýna því að lesskilningur íslenskra barna í ensku fer versnandi og er það í samræmi við tilgátur rannsóknarinnar. Einnig eru merki þess að eftir því sem textinn er lengri, og því meiri akademískur orðaforði er til staðar, þeim mun lakari eru niðurstöðurnar.

Abstract

This study focuses on how reading comprehension in English has evolved among primary school students in Iceland from the years 1983. 146 9th grade students in 4 primary schools in Reykjavik, Iceland retook standardized reading comprehension examinations from the years 1983, 1997 and 2008 and their results were analysed, compared and correlated with the original test taker's results. The 2012 test takers performed marginally higher in the 1983 standardized examination than the original test takers, but scored lower than the original 1997 test takers, and scored even lower on the 2008 examination. The results showed that reading comprehension is on the decline which did support the tentative hypothesis proposed in the study. Test results correlated with text length and difficulty in the examinations. The longer and more academic the text, the worse the performance of the test takers.

Contents

1 *Introduction*

This study examines English reading comprehension among students at the 9th grade primary school level in Iceland. Specifically, the study examines how reading comprehension in the English language has evolved in Iceland from 1983 to present.

Initially, my interest in this subject matter was sparked when I started my BA studies in English at the University of Iceland back in 2007. What struck me as odd, right from the beginning was how unwilling my fellow students were to communicate in English with the teachers. I remember feeling awkward as only I and a handful of other students were willing to actively participate in any discussions in class. As I began to get to know my fellow students better, I came to the realization that the reason that they were not willing participants was because they simply did not have the language proficiency to do so at the academic level that was required in the University classroom. This small discovery planted a seed in my mind, and I began taking notice of the way people around me spoke English. It turns out that the English I was used to hearing from my fellow Icelanders all around me was quite informal and context embedded language where people stayed on safe topics which they were quite familiar with. From that moment forward, I have been very interested in the subject of English in Iceland, and especially how we can prepare our students from grammar school forward to successfully take on the challenges of University studies.

A recent study has shown that 90% of textbooks at university level in Iceland are written in English (Birna Arnbjörnsdóttir, 2009). These staggering numbers imply that a high proficiency in English is necessary in preparation for a professional career, regardless of what field of study is chosen.

Samúel Lefever conducted a study in five urban schools in Iceland on 8 year old children who had not yet started formal English education in school. He looked at the reading, listening and communications skills in English of these Icelandic children. The results of his study point out that there is a "strong indication that children are beginning to develop early literacy skills in English without formal instruction" (Lefever, 2010, p. 15). This would seem to indicate that if Icelandic children begin formal English education in grade 4 with a good foundation of literacy skills that they have been able to develop on their own that by the time they reach University, they should not be experiencing the communication problems I observed with my fellow classmates.

Being able to use a foreign language such as English is more than just speaking the language. Reading and reading comprehension also plays a large part. Students who continue their education must be able to cope with textbooks and scholarly articles in English. Icelandic students perceive themselves to be good English speakers, but the fact that they struggle with academic language in their English suggests that the key word in this sentence is perceive. Icelanders are exposed to conversational English and receptive language, but are increasingly called upon to use academic and work related English. Birna Arnbjörnsdóttir (2011) reports on studies of exposure to English in Iceland that "about 86% of respondents hear English every day and 65% listen to English more than one hour a day" (p. 5). This passive exposure is mostly through radio, television and increasingly through computers with the younger generation. The danger of this type of passive exposure is that one develops receptive skills or understanding of language without having an active command of it. Additionally, the type of passive exposure common in Iceland tends to be of a colloquial nature.

English does play a predominant part in the lives of Icelanders today "As in all of the Nordic countries, there is wide exposure to English in Iceland and there is

increased pressure to use English in all walks of life including education and business, even amongst speakers for whom English is not a native language" (Birna Arnbjörnsdóttir, 2011 p. 2). Another facet to Iceland's exposure to English is the increase in immigration to Iceland. Iceland is not only reaching out to the world, it seems that the world is also reaching out to Iceland. Statistics Iceland (i. Hagstofa) tells us that foreign nationals were 7.6% of the total population of Iceland in 2009. Iceland became a part of the European Economic Area in 1994 which opened opportunities for foreign nationals to move to Iceland. Employment is a prerequisite for a foreign national to obtain a resident's permit to live in Iceland; therefore, there has been an increase in non Icelandic speaking foreign nationals on the work force in Iceland. The immigrating laborers come from all over Europe, and English is the language that they along with the Icelandic workers have in common.

Based on the discussion above, it was important to examine whether and if so, how the increased exposure to conversational English, and the fact that English instruction begins earlier than before, affects literacy skills in English, especially reading comprehension. When looking at difficulties students are having with English literacy skills Hafdís Ingvarsdóttir and Birna Arnbjörnsdóttir (2010) state that 58% of students sometimes have problems at University when working with English text in an otherwise Icelandic learning environment. (p. 9). Anna Jeeves (2008) in her study came to the conclusion that because of their exposure to conversational English, students' knowledge of formal language was not sufficient. This resulted in poor or limited vocabulary knowledge. It was therefore important to provide empirical evidence for this apparent lack of formal language knowledge by examining the development of English literacy skills by Icelandic students over time. The only available data was from standardized tests.

The research question is: Is there a difference over time (from 1983 to 2008) in students' performance in reading comprehension on standardized exams in Iceland? My hypothesis is that because of the increase over the years of colloquial English in Iceland, the bulk of input Icelandic children receive is passive conversational English leading to a decline in reading comprehension scores for 9th grade students of English in Iceland.

The thesis consists of six chapters. Chapter 1 discusses the importance of reading comprehension and explores the background and aims of the study. Chapter 2 provides the theoretical foundation for the study through the elements of reading, reading comprehension, first language and foreign language reading as well as the status of English in Iceland today. Chapter 3 discusses the method of the study, as well as the subjects, the data, the tests, data collection and data analysis. Chapter 4 shows the results of the study. Chapter 5 further discusses the results of the study. Chapter 6 provides conclusions of the study with some suggestions for further studies.

2 *Literative review*

In the last chapter, I discussed the purpose of the study. In this chapter the theoretical foundation for the study is reviewed. I will begin by looking at the nature of reading, from decoding sounds to word recognition, reading comprehension at the text level, metacognition and reading strategies. Then I will move on to the characteristics of good and poor readers and describe differences between spoken and written language and first vs. second language reading. Finally, I will discuss the role of English in Iceland in education and everyday life.

2.1 Elements of reading

Reading comprehension is an integral part of learning a foreign language. Although it can be said that it is possible to learn a language by listening and speaking, without reading comprehension, the language learner has limited hope of learning new vocabulary and stagnates with what linguistic oral productive knowledge he has obtained. To speak and understand oral language, is to have only partial language proficiency. Functional language proficiciency in the foreign language learner is required as well. Literacy is the foundation for being a participant in the information age. The information age, among other things, has brought about major structural change in countries in regard to international trade. Individuals and societies are both shaping and having to adapt to the rapid advances in technology. As technology advances, there is a growth of economic interdependency among countries and firms through increased trade stressing furthermore the importance of high levels of literacy skills in foreign language learners and users. The focus of the research in this paper is to examine English reading comprehension of 9th grade students in Iceland, but before I

look specifically at reading comprehension, I would like to begin by defining the principal components of the reading process.

A combination of various processes occur in reading. At a basic level, a reader has to be able to recognize and use individual sounds to create words. Secondly, the reader has to have the ability to decode what he is reading, to have the ability to recognize written representations of words (Adams, 1990). Another important characteristic of reading is that the individual develop the skills to read a text accurately and quickly, to develop fluency, and this includes learning the meaning of words and developing a certain amount and type of vocabulary. In addition to learning vocabulary, the reader needs to integrate new material into their existing knowledge base, to construct new understanding, and adapt existing conceptions and beliefs as needed. The existing conceptions that a reader relies on to comprehend is the reader's background knowledge. Grabe (2004) states "It is well documented that readers comprehend texts better when texts are culturally familiar or when they relate to well-developed disciplinary knowledge of a reader" (p. 51). The text itself does not carry meaning, the people reading the text do.

2.1.1 *Recognizing and using individual sounds to create words*

The first principal components of the reading process is recognizing and using individual sounds to create words; the reader's phonemic awareness. This is not actually a part of reading itself, but it is one of the essential building blocks leading up to being able to read. Once the prospective reader understands that words are made up of sounds which can be assembled in different ways to make different words, the child can begin the process of decoding. This phonemic awareness is not a part of a child's natural

maturation like the development of spoken language, but it is a skill that must be learned. Through the process of learning to talk, the child needs to be taught to hear sounds in words and that words are made up of smallest parts of sounds, or phonemes. Once a child has gained phonemic awareness, he has obtained a key to the understanding of written language; he can learn how to decode (Adams, 1990).

2.1.2 Decoding

After a child has gained phonemic awareness, and after an individual learns to talk and is able to hear the different sounds that make up a word, he or she needs to be made aware of the relationships between written letters and spoken sounds, or phonics. This is the process of decoding. When a person learns to read, they master the system by which print encodes oral language (Adams, 1990). Once a reader realizes the relationship between letters and sounds they begin to recognize familar words accurately and automatically. When a person strings together the spoken sounds of the letters a mental representation of the word occurs in the readers mind; the reader decodes the written text. Decoding is a fundamental necessity in reading and "distinguishes reading most clearly from spoken language processes" (Perfetti, Van Dyke & Hart, 2001 p. 127). As far as written language is concerned, children must come to readily identify words and encode their relevant meaning into the mental representation that they are constructing, in order to be able to read (Perfetti, Landi & Oakhill, 2005, p. 229). Research has shown that an early grasp of the relationship between written letters and spoken sounds can have a positive academic outcome for the child later on in life. "The increased reading experiences of children who crack the spelling-to-sound code early thus have important positive feedback effects. Such feedback effects appear to be potent sources of individual differences in academic achievement" (Stanovich, 1986, p. 364).

2.1.3 Fluency

Although decoding written text is the basis of reading, this skill needs to be practiced to the level of automatic word recognition. In order to comprehend a text, a child must develop the ability to read a text accurately and quickly. Poor readers read slowly, word by word, focusing on decoding words instead of comprehending meaning while the fluent reader recognizes words automatically and quickly. Therefore, in addition to being able to decode words, a reader needs to develop sight recognition of frequent and common words. Research has shown that lack of reading fluency appears to be the area of greatest impairement in reading (Rasinski & Padak, 1998). One possible explanation for lack of reading fluency is LaBerge and Samuels' (1974) theory of automaticity in reading. In (Raskinski, Rikli & Johnston, 2009), the theory of automaticity in reading is described this way:

> Readers who have not yet achieved automaticity in word recognition must apply a significant amount of their finite cognitive energies to consciously decode the words they encounter while reading. Cognitive attention or energy that must be applied to the low-level decoding task of reading is cognitive energy that is denied to the more important task of comprehending the text. Hence, comprehension is negatively affected by a reader's lack of fluency. (p. 351)

The whole point of reading is to understand what is being written. If the reader is spending the bulk of his cognitive energy on understanding the individual words, then comprehension of the text as a whole is an exercise in futility, and can only lead to failure. It is important to not mistake reading fast, without regard to comprehension, with fluency. A reader who reads fast with no regard to meaning is not a proficient or fluent reader. Once fluency is achieved, other factors such as increased vocabulary development can more readily take place to further progress literary development (Raskinski, Rikli & Johnston, 2009).

2.1.4 Vocabulary

A fluent reader understands that an essential part of learning to read is learning the meaning of words, or vocabulary development. The learner needs to actively build and expand their knowledge of written and spoken words, what they mean and how they are used. Part of the challenge of learning vocabulary is understanding that words are not isolated units of language, but have a place in the puzzle of many interlocking systems and levels (Nation, 2001, p. 23). The nature and amount of a learner's lexicon is crucial to the level of literacy he/she can attain.

Nation (2001) divided vocabulary into four categories: high frequency words, academic words, technical words, and low frequency words. The most commonly used list of high frequency words is General Service List of English Words (GSL), by West (1953a), which contains around 2,000 word families. They cover about 80% of the running words in academic texts. Academic vocabulary is the vocabulary used across all academic disciplines but is not the technical vocabulary of a particular academic discipline. Academic words are based on more Latin and Greek roots than most everyday spoken words. They cover about 10% of the running words in an academic text. This means that knowing the 2,000 high frequency words plus academic words will give about 90% coverage of the running words in academic texts. Technical words refer to types of words that usually occur in a specific subject area and are related to the topic of the text. They differ from subject area to subject area and cover about 5% of the running words in a text. The last category is low frequency words. They are the largest groups of words but only cover about 5% of the running words in an academic text. (Nation, 2001, pp. 11-13).

To acquire vocabulary, (Nagy & Anderson, 1984) point out that reading in itself is an effective way to learn vocabulary, and that vocabulary growth probably takes place through the learning of word meanings from context. Even if a reader were to read by looking up each encountered unknown word in a dictionary, this can be problematic because the English language has many homonyms, such as a branch of a tree and a branch of a financial institution. Here the word branch is spelled the same and sounds the same but derives a completely different meanings depending on how it are used in a sentence; hence, understanding words in context is essential. The subconscious activity which takes place is described by (Perfetti, 2001) as "a selection stage in which the meaning appropriate for context is selected while meanings inappropriate for context are supressed" (p. 12802). Curtis (2006), points out that successful readers must be exposed to substantial quantities of different types of texts to learn vocabulary. Vocabulary knowledge is in itself its own building block. The more vocabulary you know, the more you can read and acquire even more vocabulary. Research has shown that vocabulary and reading comprehension are highly correlated. Curtis (2006) notes that "Because vocabulary controls comprehension, to improve understanding it is necessary to increase the number of words meanings that are known" (p. 44).

2.1.5 Text comprehension

As I have touched upon above, vocabulary and reading comprehension are highly correlated; the same can be said for vocabulary and text comprehension. Understanding text calls on both bottom-up word recognition processes and top-down comprehension processes. Bottom-up processing refers to the reader obtaining meaning from the letters and words of a text and reconstructing the intended message. Top-down

processing refes to the reader's ability to look at a text as a whole and to connect and relate it to his existing knowledge base (Birch, 2002).

As cited by Verhoeven and Perfetti (2008), Perfetti, Chin-Lung and Schmalhofer (2008) have examined comprehension skill differences in the processes of word-to-text integration. This word-to-text integration is when a reader connects the meaning of a word, as it is read, to a representation of the text. Their studies have concluded that less skilled readers have a breakdown in comprehension and they are slow to integrate a word with its preceding context. This would mean that the reader is concentrating on bottom-up text processing and is not able to maintain text comprehension between sentences of the text.

Although a skilled reader employes top-down text processing, the idea that a skilled reader processes a text by skipping over lots of words has been shown to be false. "Studies of eye movements show that, in reading texts, the reader's eyes fixate on most wordes, one estimate being about 70-80 percent of all content words" (Perfetti, 1984, p. 44). Perfetti even goes on to state that the type of text a college student reads does not influence the word sampling rate listed above.

2.1.6 When reading breaks down

In previous sections,we have examined what text comprehension represents to reading; now let us take a closer look at what happens when reading breaks down.

One of the characteristics of learning to read in a foreign language is that reading instruction often commences before adequate oral proficiency in the target language has developed. This limited linguistic knowledge causes processing constraints and what is being read is not understood. Cain, Oakhill, Barnes & Bryant (2001), attribute the breakdown of reading to deficiencies in "a wide range of lower level cognitive

processing abilities, such as phonological processing skill, word-decoding facility, and vocabulary knowledge" (p. 850).

Most researchers generally agree that word recognition is a critical part of reading (Hellekjær, 2009). When word recognition does not take place, the act of reading breaks down.

Perfetti's verbal efficiency theory "is grounded in the assumption that some of the higher-level mental processes of comprehension require a share of limited resources. If word identification also requires a significant share of these resources, then comprehension will be at risk" (Perfetti, 1984, p. 54). To make up for lack of word identification, "less skilled readers use context in word identification at least as much and perhaps more than do skilled readers" (Perfetti, Van Dyke & Hart, 2001, p. 136).

2.2 Reading comprehension

I have described briefly the different elements of reading and the importance of different types of vocabulary and will move on to further discuss the importance of reading comprehension. Reading comprehension is the ability to understand what has been read at the word level, the sentence level and paragraph level. Perfetti, Van Dyke & Hart (2001) tell us that "Clearly, reading comprehension depends on spoken language comprehension" (p. 131). Their study goes on to state that for children, reading comprehension skills approach listening comprehension skills as printed word identification is mastered. They say that these correlations increase as they advance academically (Curtis, 1980; Sticht & James, 1984). What we read differs formally, semantically and pragmatically from the way in which we speak, therefore (Olson, 1977) suggests that it is even possible that with literacy come some significant changes in the way people process spoken language

Reading comprehension involves processes beyond mere visual word identification. The reader has to select the appropriate word meaning, depending on the context of the text. Furthermore, the reader needs to be able to parse sentences, to analyze the sentence in terms of its grammatical constituents. A reader also needs to be able to construct an integrated understanding of the text across sentences using memory and metacognitive skills. These reading comprehension skills are obtained through practice in reading texts of varying types and difficulty levels. Reading comprehension occurs as a reader builds a mental representation of a text message, Perfetti, Landi & Oakhill (2005) state, "Across these levels, processes of word identification, parsing, refrential mapping, and a variety of inference processes all contribute, interacting with the reader's conceptual knowledge, to produce mental model of the text" (p. 228).

2.2.1 Selection of contextually appropriate word meaning

Another element of reading comprehension is understanding word meaning in context. Word meaning is not fixed and many English words can be quite ambiguous in meaning. Word meaning is in fact dynamically computed each time a word is encountered in a text. For example, Merriam Webster defines the word *just* as "having a basis in or conforming to fact or reason" (2012). This definition does not make sense in the sentence "William just came back from the library". A reader uses his prior knowledge of the world as well as context to determine meaning. This in itself is no easy feat when you consider that each word's meaning depends on meanings of other words whose meanings are themselves also context-dependent. Nation (2001), informs us that there are two major sources of meaning when we comprehend a word in context. First, "its inherent lexical meaning (what it means as an isolated word)", and secondly "the inferential meaning which we infer from other words in the immediate context, and

from our knowledge of the world" (p. 51). Activation of meaning of an ambiguous word depends on several constraints; the frequency of the word, the type of context it appears in and the strength of the context. Each culture has different verbal ways of communicating that can add to the confusion of the foreign language learner. It is therefore important that the readers understand the cultural and linguistic background of the text.

2.2.2. Parsing of sentences

In addition to understanding word meaning, a reader must have strong language processing skills. As a student goes on to higher levels of education,the syntax of written language becomes more complex. A reader with poor language processing skills will lose the meaning of the sentence when the syntax is complicated, and has difficulty parsing and linking the different parts of the sentence.

As an example of parsing difficulty when syntax becomes complex Perfetti, Van Dyke and Hart (2001) give us the sentence "When the boys strike the horse kicks" (p. 133). Perfetti, et. al tell us that initially when the reader reads this sentence, they tend to think of the horse as the object of the verb strike. Perfetti, et. al. (2001) tell us that " . . . the processing difficulty in the above example (When the boys strike the horse kicks) comes from a frequency-based preference for the transitive reading of strike over its intransitive reading. Because the problem sentence requires the less frequent intransitive reading, a parsing error occurs" (p. 133). When a parsing error like this occurs, the meaning of the sentence is lost and comprehension breaks down. A good reader will have repair strategies to get back on track, but a poor reader may continue without understanding the meaning or simply give up.

In addition to parsing difficulties, the reader also has to deal with the constraints of incrementally mapping each word into a semantically interpreted mental representation for comprehension. In the process of constructing an understanding of the text across sentences, the reader often comes across inferences. Perfetti (2001) provides an example of pronoun mapping with the following sentence: "Jane saw Margaret shopping in the grocery store. She was buying bread" (p.1283). The latter sentence contains two possible referents for a pronoun. Perfetti (2001) suggests that less skilled readers would have problems deciphering whether it was Jane or Margaret who was buying bread. A less skilled reader may be less adept at integrating referential information across sentences, and in this case the inference that Margaret was buying bread in the sentence above would be lost. Yang, Perfetti, and Schmalhoffer (2007) go on to say that "Successful integration in these cases will depend on the degrees to which the representation of the preceding context contains a match with the conceptual/referential understanding of the referring expression" (p. 56). Reading comprehension critically relies on the reader's level of confidence in his proficiency in the second/foreign language.

2.2.3 Metacognition and reading strategies

Moving on from parsing of sentences; metacognition is an integral part of successful reading. If we say that cognition is knowing, then we can say that metacognition is in fact knowing about knowing. A conscientious reader with good metacognitive awareness uses comprehension monitoring as a means to assure successful reading comprehension. This applies to first and second language readers and transcends languages. Perfetti (2001) states that "Skilled readers can use the detection of a comprehension breakdown (e.g., an apparent inconsistency) as a signal for rereading

and repair" (p. 12803). This is the reader's attempt to assure a consistent and meaningful understanding.

As a person reads, and a breakdown in understanding occurs, the metacognitively competent reader, checks for inconsistencies, re-reads, and compares with previous knowledge. "For comprehension to succeed, readers must import knowledge from outside the text" (Perfetti, VanDyke & Hart, 2001, p. 139). Perfetti, Landi & Oakhill (2005) expand furthermore on comprehension monitoring difficulties by stating: "Any observed problem can result from an incomplete representation of sentence meaning, a failure to activate relevant knowledge at the critical moment, a failure to monitor the coherence of the text with respect either to its internal consistency or the readers' knowledge of the world" (p. 235).

Another factor in a reader's metacognition is coherence. "When coherence is a goal, inconsistencies between text elements or between text elements and the reader's knowledge are resolved rather than ignored or not noticed" (Perfetti, Landi & Oakhill, 2005, p. 247). A reader with a high standard of coherence, really cares whether the text makes sense or not.

2.2.4 Memory

Memory and reading comprehension are factors that are in close interaction with each other. Reading comprehension relies both on working memory and on long-term memory. Working memory enables the coding, processing and recoding of information while reading. Perfetti, Landi & Oakhill (2005) state that "Understanding a sentence involves remembering words within the sentence, retrieving information from preceding text, parsing the sentence, and other processes that require resources" (p. 238). What Perfetti et. al are referring to here is working memory. Working memory is also what

allows a reader to remember the begnning of a word while decoding the rest of the word. Verhoeven and Perfetti (2008) inform us that "To arrive at text comprehension, the reader must combine the meaning of each sentence with the message accumulated up to that point on the basis of prior text" (p. 295).

Furthermore, Perfetti (1984) explains how comprehension failure is closely linked to working memory capacity by his verbal efficiency theory:

> This theory is grounded in the assumption that some of the higher-level mental processes of comprehension require a share of limited resources. If word identification also requires a significant share of these resources, then comprehension will be at risk. Verbal efficiency theory correctly predicts that comprehension skill will be related to word identification speed and short-term memory (p. 54).

Long term memory is necessary for reading comprehension for two main reasons. The first being recalling previously learned vocabulary to assist in comprehension, and the second being understanding of text through prior knowledge. Veroeven and Perfetti (2008) state that "text comprehension cannot be done with only the information present in the text, but that individuals also use their prior knowledge to construct new knowledge that is relevant to their individual experiences and situations" (p. 295). The reader has to be able to draw on their background knowledge, their experiences and knowledge stored in long term memory to be able to understand the text.

One of the characteristics of reading comprehension problems is that poor readers have deficits in retrieving phonological coding from long term memory (Geva & Wang, 2001, p. 188). Long term memory is an imperative factor in inference making. To make an inference while reading, information from the text and a knowledge base stored in long term memory has to be recalled and integrated. Cain, Oakhill, Barnes &

Bryant (2001) note that ". . . less skilled comprehenders may simply have poorer memory of the information necessary for inference generation" (p. 856).

2.2.5 Purpose in reading

Having a purpose in reading helps to create a focus on what you are reading and enhances reading comprehension. A successful reader needs to understand whether they are reading for enjoyment, to retell, to answer questions or to gain information; each purpose calling for a different combination of skills.

Readers with less fluent skills compensate with certain strategies such as slowing their reading rate, pausing, looking back and rereading. As Walcyk and Griffith-Ross (2007) point out, ". . . in the case of challenging texts, the willingness to compensate depends on the children's motivation to understand" (p. 563). Motivation therefore, plays a crucial part in reading comprehension.

Intrinsic motivation for reading has a direct impact on reading comprehension, with research focusing on the concept of reader interest, "demonstrated that personal interest (long-term intrinsic interest), as opposed to situation interest (temporary curiosity), is a significant predictor of comprehension and learning from texts" (Grabe, 2004, p. 59).

2.2.6 Textual Awareness

In regard to the type of reading strategies appropriate to each text type, there are several different text genres that call on different levels of understanding. One genre which has much been researched in regard to reading comprehension is the sensitivity to story structure; the understanding of narrative texts. Developmental research on the

topic of sensitivity to story structure has focused on the understanding of story structure (Smiley, Oakley, Worthen, Campione, & Brown, 1977). Perfetti, Landi & Oakhill (2005) argue that "Beyond the conceptual bases for narrative, however, is the understanding that the text itself honors the narrative structure through coherence devices" (p. 236). In order for a narrative text to make sense, the transition between ideas in the text has to be clear to the reader. Perfetti et. al (2005) go on to say that "Differences in this sensitivity to text coherence could lead to differences in comprehension" (p. 236). A study by Yuill and Oakhill (1991) showed that when presented with pictures, and asked to write a story, the less skilled comprehenders had difficulties with transition between ideas in their stories. The less skilled readers "produced fewer causal connectives and made more ambiguous use of referential ties than did skilled comprehenders" (Perfetti et. al 2005, p. 236).

Another feature of comprehending narrative texts is the knowledge of different story features. Features such as the meaning of the title of a narrative, or the importance to the beginning of a story to setting and characters might not be clear to less skilled comprehenders. "Thus, less-skilled comprehenders appear to have less explicit awareness of the features of stories that might help scaffold their mental representation of the text" (Perfetti, Landi & Oakhill, 2005 p. 237). It would seem, based on this research, that the simple act of getting in the habit of reading a bedtime story to children at a young age can benefit them later on when it comes to reading comprehension.

2.3 Characteristics of good and poor reader

Turning from the importance of textual awareness, I would like to move on to the characteristics of the good and poor reader. One characteristic of a poor reader may be called learned helplessness. The reader who has a history of poor reading achievement,

starts to believe that he just can't do any better and is quick to give up. Stanovich (1986), when looking at the motivational side effects of unsuccessful readers, came to the conclusion that "Their behavioral and attributional patterns displayed characteristics consistent with the concept of academic learned helplessness" (p. 389). He goes on to say that the poor readers, when successful, attributed their reading success to luck, or the ease of the task, rather than to their actual ability. He also stated that the poorer readers had problems staying on task, and where quicker to give up than the successful readers.

One of the key differences between a good and a poor reader is that the good reader has better language knowledge and processing ability. A good reader has rapid word recognition. The good reader does not have to guess at words because he recognizes them at sight. This automaticity in word recognition helps the reader use less resources and frees the mind to engage in other cognitive activities. Stanovich (1986), states "In fact, it is not that the good reader relies less on visual information, but that the visual analysis mechanisms of the good reader use less capacity" (p. 368).

In addition to being a principle component of reading, vocabulary knowledge also plays a large part in succesful reading comprehension. Hand in hand with rapid word recognition of the successful reader is the possession of a reasonably sized vocabulary. As Curtis (2006) noted "Because vocabulary controls comprehension, to improve understanding it is necessary to increase the number of words meanings that are known" (p. 44). It would be virtually impossible to learn all vocabulary, but how many words do native speakers know? According to Nation (2001) ". . . educated native speakers of English know around 20,000 word families. These estimates are rather low because the counting unit is word families which have several derived family members and proper nouns are not included in the count" (p. 9). Another study by Curtis (2006)

estimates that "number of words known by the time students reach high school vary widely, ranging anywhere from 15,000 to 45,000 root words" (p. 53). Study shows that a productive knowledge of at least 3000 high-frequency English words will enable English foreign language learners to deal with university level reading tasks (Nation 1990). Regardless of the actual figure, a large vocabulary opens opportunities to a wider range of reading materials, and improves a student's ability to communicate through speaking, listening and writing. This holds true for the foreign language learner as well. Reading comprehension relies heavily on vocabulary knowledge, therefore, one characteristic of a poor reader would be a reader with limited vocabulary knowledge. This is especially important in second language reading where the size of the reader's second language vocabulary may not be large enough to support effective reading comprehension

A distinction that must be made when evaluating word knowledge is whether the knowledge is productive or receptive. Nation (2001) informs us that, "Receptive [knowledge] carries the idea that we receive language input from others through listening or reading and try to comprehend it, productive [knowledge] that we produce language forms by speaking and writing to convey messages to others" (p. 24). Words that are generally understood when heard or read are therefore a part of a person's receptive vocabulary. A productive vocabulary refers to words that can be produced correctly within an appropriate context. It is generally believed that words are known receptively first and only after intentional and incidental learning become available for productive use.

Good readers often have more ready access to a variety of reading strategies and use them with greater frequency and flexibility. Perfetti, Landi & Oakhill (2005) state that "Skilled readers can use the detection of a comprehension breakdown (e.g., an

apparent inconsistency) as a signal for rereading and repair. Less skilled readers may not engage this monitoring process" (p. 234). A good reader recognizes when a problem arises and strives to fix it, whereas a poor reader is quicker to give up and give in to learned helplessness.

2.3.1 The Matthew effect

One characteristic of good readers can be attributed to the Matthew effect. The Matthew effect is described by Keith Stanovich (1986) as the reciprocal causation of individual differences in reading. Studies have shown that the absence of phonological awareness and skill at spelling-to-sound mapping early in reading development can cause a chain reaction of negative side effects (Biemiller, 1977-1978; Allington, 1984). These differences can emerge as early as in the first grade. Stanovich (1986) states that "The combination of lack of practice, deficient decoding skills, and difficult materials result in unrewarding early reading experiences that lead to less involvement in reading-related activities" (p. 364). These unrewarding reading experiences then multiply and reading becomes a downward spiralling chore and reading for the sake of pleasure is avoided.

Stanovich (1986) further reports that "If the development of vocabulary knowledge substantially facilitates reading comprehension, and if reading itself is a major mechanism leading to vocabulary growth – which in turn will enable more efficient reading – then we truly have a reciprocal relationship that should continue to drive further growth in reading throughout a person's development" (p. 380). Again, the readers with unrewarding reading experiences avoid reading, and miss out on the chance for vocabulary growth through extensive reading, while the skilled readers who read because they are motivated to do so reap the benefits of added vocabulary growth.

This phenomenon where children who fall behind in reading, read less, increasing the gap between them and successful readers has been dubbed the Matthew effect (Stanovich, 1986). The name is derived from the Gospel according to Matthew: "For unto every one that hath shall be given, and he shall have abundance: but from him that hath not shall be taken away even that which he hath" (Matthew 25:29, King James Bible). Stanovich (1986) states, "The effect of reading volume on vocabulary growth, combined with the large skill differences in reading volume, could mean that a 'rich-get-richer' or cumulative advantage phenomenon is almost inextricably embedded within the developmental course of reading progress" (p. 381). The Matthew effect can cause a further gap when reading comprehension moves from learning to read to reading to learn as comprehension failure can cause poor readers difficulty in understanding school subjects.

Curtis (2006) touches on the subject of the Matthew effect when she talks about the role of vocabulary instruction in adult basic education as well. Curtis claims "The more opportunities provided for reading, the better one is at understanding what is read, and the better one is at understanding, the more likely new word meanings will be learned. In other words, improvement in vocabulary is a consequence – not a cause – of comprehension" (p. 44-45). Curtis refers to this process as the byproduct hypothesis.

The Matthew effect also has a positive outcome on academic reading, as noted by Hellekjær (2009) in his study on academic English reading proficiency at the university level: "Unsurprisingly, the students who read English extensively mastered the reading of English textbooks better than those who did not. One explanation is that these respondents have, through extensive reading, acquired a vocabulary adequate to the task of mastering the language in their textbooks; in short, they have better language skills" (p. 209).

2.4 The difference between spoken and written language

In this section, I would like to take a look at the difference between spoken and written language as understanding this difference is crucial in understanding the reading process. One of the differences is the permanence of written language versus spoken language. "Speech is distributed in time, a fleeting signal that has few reliable cues to the boundaries between segments and words" (Treiman et al. 2003, p. 6). Since spoken language is much more dynamic and immediate, there is much less precision in it. Grammar slips occur when speakers are forming sentences and changing ideas rapidly. Spoken language is usually context rich - people converse about things that are known to the speaker. The presence of the speaker opens up a possibility for clarification of misunderstandings, if the listener catches the error to begin with. Written language on the other hand is more permanent.

Another significant difference between written and spoken language is of an orthographical nature. In speech, there are phonemes that correspond to writing's graphemes. But unfortunately, in written language, inconsistencies exist in English orthography at the letter-phoneme level. Other european languages such as Icelandic, map more consistently graphemes to phonemes. However, as Perfetti, Van Dyke & Hart (2001) point out, "The problem in English is not the contrast between *nation* and *national*, but that between *choir* and *chore* and *head* and *bead*" (p. 139). This may result in words being understood in spoken English but not in written texts.

Written texts are usually thought out more thoroughly than spoken language, they can present communicative ideas in a more precise and well-ordered manner than spoken language (formal speeches are an exception). Written texts present a more sophisticated way of engaging higher level vocabulary and ideas than is often presented

in spoken language. Conversely, spoken language can sometimes be more communicative as it allows for clarification and additional information in an interactive manner that a written document can not achieve.

Therefore, as I have stated above, the main difference between spoken and written language is that spoken language is fleeting and more colloquial. Another difference is that orthographically, some words can be understood conversationally, but not in text. Communicative ideas in written text are more precise and formal. Spoken language tends to be more conversational and it is easy for the foreign language learner to fall into the trap of assuming he knows a language when he can carry on a simple conversation, but in reality he doesn't have the breadth of productive vocabulary to be able to perform effectively in an academic setting.

2.5 First vs Second language reading

Reading in the first language (L1) shares certain important basic elements with reading in a second or foreign language.

Cummins (1992) in his study of interdependence of first- and second-language proficiency in bilingual children found that ". . . the transfer of reading skills from L1 to L2, while significant, is less when the languages are very dissimilar than is the case with similar languages" (p. 80). Furthermore, Bialystok, Luk and Kwan (2005) concur that, "Similarly, bilinguals transferred literacy skills across languages only when both languages were written in the same system" (p. 44).

One theory to support the transfer of skills between languages is the interdependence hypothesis developed by Cummins. This hypothesis argues that certain first language (L1) skills can be positively transferred during the process of second language (L2) acquisition. Cummins (2000) argued that "academic proficiency

transfers across languages such that students who have developed literacy in their first language will tend to make stronger progress in acquiring literacy in their second language" (p. 173).

Indeed, research has shown that the deeper a student's level of L1 cognitive and academic development, the better the individual will be as a foreign language student (Thomas & Collier, 1999, Birna Arnbjörnsdóttir 2007). It wasn't until the year 1946 that public school laws in Iceland allowed the teaching of a foreign language in primary school. There was concern that the children were too young, and learning the basics of reading, writing and arithmetic was more then enough of a challenge and the addition of a foreign language into the curriculum could possibly hinder a child in the education of his own mother tongue. The concern of the sceptics was in the other direction though, they were concerned that children learning a foreign language at such a young age would not have the cognitive ability to keep up with their Icelandic studies as well. When answering the question of whether the acquisition of a second language has any positive or negative consequences for the learner, Snow (1992) answers, "Acquiring a second language can give young learners some advantage in metalinguistic and analytic tasks but can also increase processing times slightly for both languages" (p. 18). Scholars have shown that keeping the two languages separate is not a problem for primary school students as long as input in the mother tongue doesn't cease (Collier, 1989; Cummins, 1981). When children continue to develop their abilities in two or more languages throughout their primary school years, they gain a deeper understanding of language and how to use it effectively.

Students with high level reading comprehension in their first language can reach a high level of reading comprehension in a foreign language. Cook (2008) states, "Some studies support the commonly held teacher's view that children who are more advanced

in their first language are better at their second language" (p. 152). Droop and Verhoeven (2003) also concur that, "It should be noted that for both first- and second-language readers the strongest predictor of reading comprehension is the autoregressive factor of prior reading comprehension" (p. 99).

The importance of vocabulary to reading comprehension has been discussed. The size of a second language reader's vocabulary in the second language is a crucial factor in predicting reading success. However, Droop & Verhoeven (2003) suggest that, "The semantic networks of second-language learners appear to be less tight than those of first-language learners. That is, second-language learners not only have less extensive vocabularies than first-language learners but also fewer associative links between words" (p. 81). These findings would suggest that in order to become proficient at foreign language reading, extensive reading promoting vocabulary gain would be important. Enright, Grabe, Koda, Mosenthal, Mulcahy-Ernt & Schedl (2000) note that "underdeveloped processing skills stain limited capacity working memory, restricting higher-level conceptual processing" (p. 12).

Hellekjær (2009) in his study of Norwegian student's English proficiency at university level, found that 33% of the respondents in his study claimed to have reading difficulties. He goes on to state that ". . . slow reading and unfamiliar vocabulary were the most noteworthy problems" (p. 211). Grabe (2004) denotes that "The relation between vocabulary knowledge and reading comprehension has been powerfully demonstrated in both L1 and L2 contexts" (p. 50).

A significant difference between a good and a poor reader is the good reader's cognitive ability and his metacognitive strategic competence. The same applies while reading in a second language. Bialystok (1988) in her effort to explain the mental proccesses second language readers go through , claims that, "Control of processing is

necessary to direct the selection and use of the necessary information. To this end, poor readers have difficulty in monitoring comprehension, integrating information over large stretches of text, and shifting the style or reading strategy to accomodate different purposes, such as reading for gist, reading for specific information, and the like" (p. 23).

Cummins (2008) in his research on reading and the ESL student denotes a circumstance which he calls „The fourth grade slump phenomenon" (p. 73). With the increasing complexity of vocabulary in curriculum by grade four, poor readers have difficulty with coping with complex language and thought. Cummings (2008) emphasizes, "A core component of academic language proficiency is vocabulary knowledge and the vocabulary load in the curriculum increases dramtically after the primary grades. The development of academic language proficiency, for both ESL and non-ESL students, requires that students gain access to academic language by means of extensive reading and also that they are supported in harvesting the language they encounter in literature and content area texts" (p. 74).

Research has even gone as far to say that foreign language reading proficiency is also reliant on a very unscientific 'knack'. Cook (2008) states that

"The lack of this 'knack' is sometimes related to other problems that L2 learners have. students have been observed whose general problems with language have gone unnoticed until they did badly on a foreign language course. They lacked a linguistic coding ability in their first language as well as their second, particularly phonological, and, like dyslexia, apparently unrelated to their intelligence" (p. 146).

This would support Cook's (2008) earlier observation that children more advanced in their first language skills are better at their second language. That is not to say as Cummins (1992) points out, "It should be emphasized that the distinction between attribute-based and input-based aspects of proficiency is a relative one in that individual

learner attributes will be involved in most aspects of L2 learning to a greater or lesser extent and appropriate input is clearly essential for development of all aspects of proficiency. Thus, attributes and input are not totally independent of each other, as is illustrated by the fact that highly motivated individuals are likely to seek out a greater amount of input than those less motivated" (p. 85). Students who study because they are motivated and interested in what they are studying are more likely to attain higher levels of proficiency.

Viewed collectively, studies on reading transfer skills make it plain that first language processing experience has a long-lasting impact on the development of second language reading skills. For the second language learner to have any hope of academic success, understanding reading comprehension depends on understanding context reduced language rather than just context embedded language. As Cummins (1981) points out, language for general social interaction is context embedded. This is a communication that occurs in context of shared understanding, where there are cues and signals to help reveal the meaning. Context reduced language on the other hand relies primarily on linguistic or language-based cues to meaning and is more difficult to produce and comprehend. It can then be said that content embedded language is conversational language and context reduced language is academic language.

Success in reading in a second language depends on shared background knowledge, size of the L2 lexicon, general levels of L2 proficiency and crucially, good literacy skills independent of language.

2.6 English in Iceland

In the previous sections, I have looked at reading and reading comprehension in general and examined second language readings. The focus of this study is to look at

English reading comprehension in Icelandic 9th graders, therefore I would like to continue by looking at English in Iceland. With the age of globalization, English has taken over as a Lingua Franca in the world and although English is classified as a foreign language, it is widely spoken and the people of Iceland are subject to an extensive amount of English language exposure every day. Subject to, is the key phrase here, because although Icelanders are exposed to English every day, it is to a large extent passive exposure. Birna Arnbjörnsdóttir (2011) shares findings of two studies that point to the wide passive exposure. The first study was a survey of over 750 persons throughout Iceland where respondents were asked how often they heard, read, spoke and wrote English. This study was executed by The Social Science Research Institute of the University of Iceland (i. Félagsvísindastofnun Háskóla Íslands). "About 86% of respondents hear English every day and 65% hear English more than one hour a day. Fourteen percent hear English less than daily" (Arnbjörnsdóttir, 2011, p.5). As far as with reading English, the results are still surprisingly high. ". . . almost half of the respondents or 43% read English every day. A quarter read in English once a month or less" (Arnbjörnsdóttir, 2011, p. 5). Although these seem to be very high percentages, both hearing and reading are receptive skills. The person only needs to understand, and doesn't have to produce language himself. When it comes to speaking English, the results are 19% speak English daily, and 41% say they speak English once a month or less. (Arnbjörnsdóttir, 2011, p. 6). The figures for how often the respondents write in English were much the same as the results for speaking. The result to this study provides evidence that Icelanders use the English language in a passive way for the most part rather than productively.

A smaller study, examined what type of English exposure was encountered by a cross section of Icelander's. This small qualitative study supports the findings of the

quantitative study presented earlier. ". . . Icelanders are engaged in listening to English for over triple the amount of time that they spend speaking it. And they spend three times more time receiving English input (listening and reading) than they spend producing output (speaking and writing) (Arnbjörnsdóttir, 2011, p. 7). This exposure is largely of English colloquial everyday language. The question examined here is what effect does this exposure of colloquial language have on students' ability to comprehend written academic texts.

2.6.1 English education

English as part of a school curriculum does not have a very long history, but it is believed that the first English teacher in Iceland was Rasmus Kristján Rask, who instructed students in English for the school year 1813-1814 (Einarsdóttir, 2001, p. 20). In a directive from the Learned School (isl. Lærði skólinn) from the year 1846, teaching of English is stipulated as an elective course. It wasn't until the year 1877 that English was declared a mandatory subject (Hauksdóttir, 2007, p. 20-21).

In 1936 with the passing of laws on the education of children, the teaching of a foreign language was officially allowed in primary school (Hauksdóttir, 2007, p. 34). The stipulation that a child had to meet in order to be allowed to learn a foreign language (Danish or English) was that the child had to be well proficient in their mother tongue (Hauksdóttir, 2007, p. 35). Change in curriculum has always been a slow and difficult process and the matter of being allowed to teach English in the Icelandic primary school was no different.

Radical changes were made to the curriculum in 1974 and English was input as mandatory for all students from the sixth grade onward. Compulsory school attendance was moved up to the tenth grade in 1991, and instruction in English was moved down to

the fifth grade in 1999. Students in Icelandic compulsory schools are and have been receiving six years of English instruction since the year 1999 (Hauksdóttir, 2007, p. 44).

The Icelandic National Curriculum for foreign languages has developed in accordance with current theories. A change was put into place for the Icelandic National Curriculum for foreign languages in 1989 which put more emphasis on the communicative factor of language learning. Students were to be able to communicate clearly and effortlessly under everyday situations. As far as writing was concerned, students were to develop skills so that their writing could be easily understood. Students had to be able to organize their thoughts and be able to put them coherently down on paper in the target language (Aðalnámskrá grunnskóla, 1989, p. 42). One major difference from the curriculum stipulations from 1976 was that teaching methods were to be left up to the language teachers and students. Tasks had to facilitate everyday life, and students should have the opportunity to use the target language in class (Hauksdóttir, 2007, p. 43).

Yet another change was made to the Icelandic National Curriculum for foreign languages in 1999. With those changes came even more emphasis on communication than before. The curriculum now stipulates that English is to be the language of communication in the English Language Classroom (for 10th graders). Students are supposed to be able to work together in the target language and come to joint decisions based on group discussions. The student is now supposed to be able to express his or her opinion, and be able to give a short speech using notations as a guideline. (Aðalnámskrá grunnskóla, 1999, p. 31).

It is obvious that with the ever changing curriculum, more demands are being made on the student, and on the teacher as well. There are no set course books for

primary school English teaching. The responsibility of finding pertinent teaching material is left up to the teacher.

Ingvar Sigurgeirsson performed a widespread survey on teaching material in Icelandic schools, and to what extent the materials were used. When surveyed about how they chose teaching materials, English teachers answered that most teachers chose material based on the material's reputation (Sigurgeirsson, 1994, p. 51). The reason behind this most likely being that the schools have limited budgets and the teachers want to use reputable material that they will be able to use for a few years. Although I did not do a formal survey of teaching materials while I was administering the standardized examinations I did notice the same workbook in all but two of the classes. This informal observation leads me to believe that there is collaboration between teachers and schools in regard to chosing educational materials. Ingvar Sigurgeirsson came to the conclusion in his study that English teachers in primary schools use their course books for 97% of the time that they are teaching their class. This is the highest percentage of the different school subjects presented in the survey. Danish teachers use their course books 70% of the time they are teaching, and geography teachers use their course books only 46% of the time they are teaching (Sigurgeirsson, 1994, p. 32). Another interesting point to look at is that with each course book, a user's guide is included. Ingvar Sigurgeirsson in his study came to the conclusion that English teachers are proficient at following these users' guides. However, none of these course books have any kind of assessment guide. Therefore, the teachers are most likely teaching the same assignments and using the same task suggestions, but no one is testing in the same way (Sigurgeirsson, 1994, p. 139). Hafdís Ingvarsdóttir (2007) has seen a similar pattern when she writes about becoming and being an English teacher in a new age. "On the whole, however, the teaching was teacher- and text-book-centered. Very little in the

way of personalised instruction, project work, cooperative learning, or other constructivist learning, or other constructivist methods to enhance student autonomy was observed" (p. 337). This bleak, rather cookie cutter view of teaching English has the potential to not really give students with varying needs and proficiencies the chance to reach their ultimate potential in English proficiency.

2.6.2 English in everyday life

The people of Iceland are subject to the sight and sound of the English language pretty much every day of their lives. The exposure is for the most part through the media, such as television or radio, but also through computer use on the internet. There is also some exposure through reading, such as magazines, books and short texts on products available for purchase in stores. It would seem that most English exposure to the everyday Icelander is of a colloquial nature.

The English Department at the University of Iceland has noticed this development with their students. Arnbjörnsdóttir (2007) notes, "The shift in levels and type of English proficiency has resulted in an increased number of students who speak conversational English with some facility but have neither the oral nor written discourse skills necessary to pursue an academic program of study in English and therefore require remedial assistance" (p. 53).

This problem of insufficient academic English skills has also been noticed in research in other Scandinavian countries. Hellekjær, in his study of academic English reading proficiency at University level in Norway, came to the conclusion that Norwegian EFL instruction at upper-secondary schools was not delivering students with enough academic English reading proficiency needed for higher education. Hellekjær (2009) emphasized, "Furthermore, considering that the Norwegian and English are

closely related, that Norway has had compusory EFL instruction for all in schools since 1959, that media exposure to English is extensive, and that all parties consider proficiency in English highly important, the reasons are ample for arguing that need for a critical examination of Norwegian reading instruction, in English as well as in the L1" (p. 211).

Studies in Iceland both nationwide on people from the ages of 18 to 75, and on grade school children show that over 90% of the people surveyed used English, and a majority of those surveyed claimed that most of their exposure to English was from movies and television (Lovísa Kristjánsdóttir, Laufey Bjarnadóttir, & Samuel Lefever, 2006; Tungumálakönnun, 2001).

A student in an elementary school classroom, especially in the upper levels, would have an average of 4 English lessons a week (Hauksdóttir, 2007, p. 45). Although, ideally speaking, the student should have an opportunity during his English lesson to interact with the teacher and speak the language, it is highly unlikely that much one-on-one interaction is going on between the student and teacher due to sheer class size. Based on the studies mentioned above, it would be safe to assume that most English exposure that a grade school student receives is then passively through television or radio. (Jóhannsdóttir, 2010, p. 14). Ellis (2004) in his research on the principles of instructed language learning noted that, "The opportunity to interact in the L2 is central to developing L2 proficiency" (p. 219). The amount of passive exposure to English to primary school children and the lack of opportunity to actively interact in the language is not conducive to developing optimal foreign language proficiency.

In regard to looking at receptive versus productive skills in language, and different levels of text complexity, (Hayes, 2006) the Hayes Lexical Analysis is a measurement and validation of a text's relative 'accessability'. The Hayes score for

Prime time television is -36.5. This score equates to the same level of lexical difficulty as a typical conversation of a child to its mother, an average popular childrens television show, and relatively the same difficulty level as a 6th grade reader. At first glance, it is difficult to understand why the United States would need to make their prime time television understandable at such a basic level, but when you think about the breadth and diversity of the population it makes sense from a marketing point of view.

Given that students in Iceland are mostly exposed to English in a passive manner, and at a basic level at that, it is not surprising to see the results that Birna Arnbjörnsdóttir, and Hafdís Ingvarsdóttir are finding in their research on coping with English at university level. “This study has shown that even though students, in general, are content with their English skills and their English language preparation, they acknowledge that working in English increases their workload and that they must employ different strategies to access the curriculum” (Arnbjörnsdóttir & Ingvarsdóttir, 2010, p. 13).

Anna Jeeves (2010) in her study exploring English at secondary school and the students’ perceptions of relevance has found that students of English in Icelandic secondary schools tend to find English a fun subject to study. The students in her study not only had positive feelings about English but they also felt that they attained acceptable grades with little effort (Jeeves, 2010, p. 5). Not only were the students that Jeeves interviewed confident in their English proficiency, they did not feel that they needed to improve much. Jeeves surmises that this self-confidence in their English ability may not be as all-encompassing as they say. “It seems unlikely that participants would talk about Icelandic in the terms they use about English; people have no need to ‘practice pronunciation’, or to seek improvement in ‘communication skills’ in their first language. Students talk about ‘getting by’ or ‘coping’ in English, suggesting that they

do not have the near native competency of level C2 of the European Language Portfolio (Europe, 2010), where a speaker 'Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situation'" (p. 12). As Anna Jeeves goes on to say, "Icelandic teenagers seem to be content with the more basic level B1, in which language users 'Can deal with most situations likely to arise whilst traveling in an area where the language is spoken'" (Jeeves, 2010 p. 12; Europe, 2010). These findings seem to suggest that students of English in Icelandic secondary schools believe that their passive knowledge of conversational English (level B1 of the European Language Portfolio) is enough to get them by, and they are happy to leave it at that. The fact that the students feel that they are having an easy time in English and that the work is not challenging, would seem to suggest that the current instruction seems to support what they already know.

2.7 Vocabulary readability

Everyday high frequency words are not necessarily the ones needed for academic study especially reading comprehension. One way of measuring how easy or difficult a text is to read is the Flesch-Kincaid test of the readability of written text. The difficulty of the text is assessed by analyzing sentence length and the number of syllables per word. Davies (2003), states that the "Flesch-Kincaid test can also be used to assess the difficulty of texts for EFL students" (p. 3). Davies goes on to state that "for students with scores below TOEFL 500, Flesch scores in the range 5.0- 8.0 are appropriate" (p. 3). The Flesch-Kincaid test does not measure word content meaning. As Curtis (2006) points out, " . . . the extent of one's knowledge of word meanings directly affects how much is understood" (p. 44). The Flesch scores for the tests used in this study ranged

from 3.82 up to 12.00 with the resulting student scores reflecting higher scores for the less difficult readability texts, and lower scores for the more difficult readability texts.

High frequency vocabulary, or vocabulary that most often occurs in a text is one of the first things a learner of a foreign language learns. But as Nation (2001) points out, "There is a very important specialised vocabulary for second language learners intended to do academic study in English. This is the Academic Word List" (p. 17). The Academic Word list affects the discourse of textbooks in that the list contains 570 word families that are not in the most feequent 2,000 words of English but which occur reasonably frequently over a very wide range of academic texts. (Nation, 2001, p. 17). The vocabulary in the Academic Word List are specialized words that because they are not part of the 2,000 most frequent words of English are words that do not commonly occur in casual conversation. This is vocabulary that specifically needs to be learned for the student to be able to cope with the learning burden of academic texts.

In regard to reading comprehension in Iceland, Anna Jeeves (2008) has stated in her MA thesis on the subject that "Poor reading skills in Icelandic may be the main source of difficulties of reading in English for some Icelandic readers" (p. 33). She notes that average reading competence in Iceland has in fact decreased. If reading competence is on the decrease and Icelandic teenagers seem to be content with the more basic level B1 conversational competence of the European Language Portfolio then the results of Birna Arnbjörnsdóttir's and Hafdís Ingvarsdóttir's (2010) study on how students are coping with English at University make perfect sense. 90% of textbooks used in Iceland are in English. "Clearly, although students claim to have very good English proficiency and generally feel prepared to use English texts in their studies, a different picture emerges when probed specifically about their language use and learning strategies" (p. 13). The students overerestimate their English abilities and have

to increase their work load significantly by using dictionaries or glossaries. It seems safe to surmise that students are running into problems because of limited academic vocabulary knowledge and not enough academic reading skills.

Other Scandinavian countries are having the same problems with reading comprehension that Iceland is experiencing. Percorari (2011) found that Swedish readers of academic texts in English took longer and had difficulty acquiring specialized vocabulary when reading in English. Albrechtsen, Haastrup and Henriksen (2007) in their major study in Denmark on how cognitive learning skills transferred between the subjects' first language of Danish and their second language of English found that "The data within individuals suggested that the use of advanced processing was three times greater in the first language than the second language" (p. 96).

It was therefore interesting to examine whether, and if so how, the English proficiency of students in Iceland had changed over the last 25 years given the amount of English today's students are exposed to by examining tests from 1983, 1997, 2008 and comparing the earlier test results to results of test takers in the same age group today. It was interesting to see what type of language the texts of the different reading comprehension texts contained, how they differed between the years and how today's students fared with these different texts. I am hoping to shed some light on whether there is a difference over time from 1983 to 2008 in students' performance in reading comprehension on standardized exams in Iceland.

3 Methodology

In the last chapter, I presented a review of current research on the nature of reading and especially second language reading comprehension. In this chapter, I present the study itself. This study aims at exploring how students' English reading comprehension has evolved in Icelandic primary schools. The research question is: Is there a difference over time (from 1983 to 2008) in students' performance in reading comprehension on standardized exams in Iceland? This chapter discusses the methodology used in the study; the subjects and how they were chosen, what kind of data was used and how it was collected. These were then compared with test results from over a 25 year period from 1983, 1997 and 2008 respectively.

3.1 The Subjects

The subjects of this study were 146 9th grade students in 4 primary schools in Reykjavik, Iceland. Due to the limitations set by the requirements of the thesis , it was not feasible to include schools from all parts of Iceland for this study.

Permission was initially granted from the headmaster at each school, and from the English teachers of the subjects. At each school I explained the purpose of the study, and emphasized that in order to protect the identity of the participants, they were only to put their initials, or a mark that they could recognize again on the test. This was done so that they could identify their own paper to see how they did on the test when I returned them back to the school after they had been marked. Then as I marked the tests, I numbered each one with the year of the test, plus the order in which they were marked for identification purposes for the information being sent to Námsmatsstofnun. The reason that I didn't want the test to be completely anonymous, was that I wanted to

respect the laws of the Icelandic National Data Protection Authority (i. Persónuvernd), but I also wanted the students to be able to identify their own test later on so that they could get their own test back to see how they did so that they would be motivated to perform to their utmost potential. I was afraid that if they had no hope of seeing the test come back to them, they would not be concerned with the result.

3.2 The data

Preparation for this study was done in close cooperation with Námsmatsstofnun, which is a professional independent institution overseeing standardized assessment in Icelandic primary and secondary schools on a national basis. Assessment material for the testing was provided by Námsmatsstofnun. Data collected was put through Námsmatsstofnun's data base so that comparison results showed as accurate a picture as possible of how reading comprehension has evolved in Icelandic primary school students.

Initially, I had wanted to see if there is a difference over time from 1960 to 2009 in students' performance in reading comprehension on standardized exams in Iceland, but after a meeting with Námsmatstofnun's examination experts, it became apparent that although test result data was available from 1960, physical copies of actual examinations were only available from the year 1980. In order to perform an actual comparison to see how reading comprehension has evolved, I needed to be able to have today's students retake the reading comprehension standardized exams that were actually taken by prior students. Upon close examination, it was decided that I would have today's students retake reading comprehension portions of exams from 1983, 1997 and 2008.

3.2.1 The tests

The standardized examination of English for the year 1983 was chosen because it was the earliest exam available that did not concentrate on reading comprehension by deriving meaning from pictures. It would seem that in the early 1980's it was popular to test student's reading comprehension by having them write down a story by interpreting comic book style pictures. Every effort was made to choose comparable tests that included academic or semi academic vocabulary and discourse. By this I mean that we eliminated passages that were pure narratives from everyday life and chose instead expository texts that we felt were closer to texts of academic textbooks. This proved challenging as the bulk of the texts from the tests were in fact very often simple narratives. The 2008 exam was chosen because Námsmatsstofnun puts the three previous year's exams on the internet so that students can take practice exams to prepare for their upcoming standardized exams, and therefore the 2008 exam was fairly current, but not available for download from Námsmatsstofnun. The 1997 exam was chosen because it was somewhat in between the 1983 and 2008 exams, plus its reading comprehension text had a relatively high academic vocabulary value.

The reading comprehension portion of the 1983 standardized test of English is comprised of 3 sections. Section A is a short 158 word exercise which describes a game of tenpins, and the reader is directed to put numbers into a picture in accordance with what is being described in the text. In accordance with the Flesch-Kincaid readability grade level index, the text is fairly simple, with a grade level of 4.65. In accordance to Nation (n.d.) Web Vocabulary Profiler, in The Internet TESL Journal's database which analyzes text, section A of the 1983 reading comprehension portion of the 1983 standardized test of English does not carry a single word from the Academic Word List.

Section B is a gap fill type exercise which is comprised of 469 words when completed. The test taker is instructed to read the whole section to get a gist of the story before beginning to fill in the blanks. This type of exercise relies on the test taker's sensitivity to story structure. As Perfetti, Landi and Oakhill (2005) point out in their research, "The less-skilled comprehenders also had difficulties in using linguistic elements to make their stories well structured and integrated" (p. 236). Oakhill et. al., imply that readers with poor narrative understanding have problems with causal connectives and have problems using referential ties such as is required in exercise B of this test. The Flesch-Kincaid readability grade level index for this section is compatible to grade level 4.89. In accordance to Nation (n.d.) Web Vocabulary Profiler, section B has one word in the text from the Academic Word List. Section C is comprised of two short 100 word paragraphs followed by multiple choice reading comprehension questions. Each short question has three answer options. The text in these two sections bears a Flesch-Kincaid readability grade level index for this section that is compatible to grade level 3.82. Neither paragraph has a single word from the Academic Word List. All instructions on what to do in each section of this test are given in Icelandic only.

The reading comprehension portion of the 1997 standardized test of English is also comprised of three sections. Section A is a 625 word text which bears the Flesch-Kincaid readability grade level of 5.96. In accordance with Nation (n.d.) Web Vocabulary Profiler, this section has nine words from the Academic Word List. The text is a narrative that describes the life of a 17 year old girl in England and her racist family. The multiple choice questions that follow the text have 4 answer options. The second section of this test has a 427 word text that describes scientific research on dinosaur bones. This text bears a Flesh-Kincaid readability grade level of 10.72. This section has in accordance with Nation (n.d.) Web Vocabulary Profiler 10 words from

the Academic Word List. The multiple choice questions that follow this text also have four answer options. The third and last section of this test contains excerpts from the contents page or samples of texts from various magazines. The reader is to decide what type of magazine is being described. Each question has 5 magazine types to choose from. Instructions on what to do in each section of the test are given in both Icelandic and English.

The reading comprehension portion of the 2008 standardized test of English is comprised of 3 sections as well. The first section of the test starts out with three short approximately 100 word paragraphs; followed by a few multiple choice questions with three answer options after each section. Even though the paragraphs are short, the Flesch-Kincaid readability grade level is around 10.00. In accordance with Nation (n.d.) Web Vocabulary Profiler, the first paragraph does not have any words in the Academic Word List, the second paragraph has one, and the third short paragraph in the first section of the 2008 test has seven words from the Academic Word List. The second exercise in this test is a 468 word text about Rudyard Kipling and his son John Kipling's death in the Great War. The text has a Flesch-Kincaid readability grade level of 9.79. The paragraph is followed by multiple choice reading comprehension questions with three answer options. The second exercise in this test bears an Academic Word List tally of seventeen words in accordance to the Nation (n.d.) Web Vocabulary Profiler. The third and final section of this test is a 677 word text about the perils of fame which has a Flesch-Kincaid readability grade level of 11.98. The multiple choice reading comprehension questions that follow this text has questions with four answer options. In accordance with Nation (n.d.) Web Vocabulary Profiler, this final exercise in the reading comprehension portion of the 2008 standardized test of English includes twenty

three words from the Academic Word List. All instructions on what to do in each section are given in Icelandic only.

3.2.2 Data Collection

During a three week time period starting on the 26th of February 2012, I personally visited four primary schools in Reykjavik and administered the reading comprehension standardized examinations myself. The English teacher of each class that I visited was always present, but did not participate during the examination administration. I wanted to make sure that every student received the same set of instructions, and had the same time period allotted for the exam (Hauksdóttir, 2007, p. 34). I also wanted to get a realistic sense of what the students were going through during the exam and I wanted to have the opportunity to personally thank them for their participation. I passed out the exams in the classroom so that there was always an equal amount of each year's exam being taken, and they were distributed around the classroom so that if a student was taking the 1997 exam, the students on either side of him were taking 1984 and 2008 examinations.

I personally marked the exams by using an answer key which had been provided to me from Námsmatsstofnun. I double checked the examination results the next day to make sure that I had not made any mistakes the first time around.

Test results were forwarded to Námsmatsstofnun by test year and number of exam only to protect students' privacy. Test results were then calculated by Námsmatsstofnun and returned to me for the purposes of this study.

3.2.3 Analysis

After receiving the test results back from Námsmatsstofnun I compared the results of the original test takers 1983, 1997 and 2008 tests to the results of the survey sample test takers that took these same tests in the year 2012. I analyzed each year's test paying close attention to the difficulty and the length of the texts being tested. There was an anomaly in one section of the 1983 test, and I analyzed that section with regard to that going back to the schools for further clarification. I looked at each year's reading comprehension test and located and discussed common errors that I perceived that the 2012 survey sample test takers were making.

4 Results

To make the performance of the three groups comparable, their scores were converted to standard scores (z-score). The standard reflects the position of an individual in population or sample, but is independent to the distribution of each timepoint. Such value is found by subtracting an average from each raw score and dividing the variance from the average and standard deviation. To find the standard value of the sample that took the test from 1983, the average and standard deviation for the students in Reykjavik on the 1983 test was used. The comparable values for the 1997 cohort were used for the sample that took the test from 1997 and average and standard deviation from Reykjavik from 2008 for the sample that took the test from 2008. By this method, the performance of each individual sample is standardized with it's relative position in the student performance from the time that each of the three tests were originally taken.

Table 1: Averages and standard deviations for student performance in the sample on standardized tests from 1983, 1997 and 2008.

	Average	Std. Deviation	N
1983	29,5	9,2	48
1997	20,8	7,2	48
2008	17,3	5,7	50

Table 1 shows the average scores with standard deviations for the 2012 sample test takers of the three older tests that were used in the study.

Table 2: Averages and standard deviations for student performance in the class year in Reykjavik on standardized tests for each year that was used in the study.

	Average	Std. Deviation	N
1983	28,8	11,3	48
1997	26,7	7,2	48
2008	23,9	5,6	50

Table 2 shows the averages and standard deviations for the students that originally took the tests in the years that they were given.

As can be seen in the two tables the 2012 sample test takers of the 1983 test achieved a marginally better point average, or .07 points better than the students' average in 1983. The 2012 sample test takers of the 1997 test achieved a lower point average, or 5.9 points lower than the original 1997 test takers. The 2012 sample test takers of the 2008 test also received a lower point average, or 6.6 points lower than the original 2008 test takers.

Table 3: Averages and standard deviations for mean standard value of students in the sample on standardized test from 1983, 1997 and 2008.

Group	Average	Std. Deviation	N
1983	0,06	0,82	48
1997	-0,82	1,00	48
2008	-1,18	1,02	50

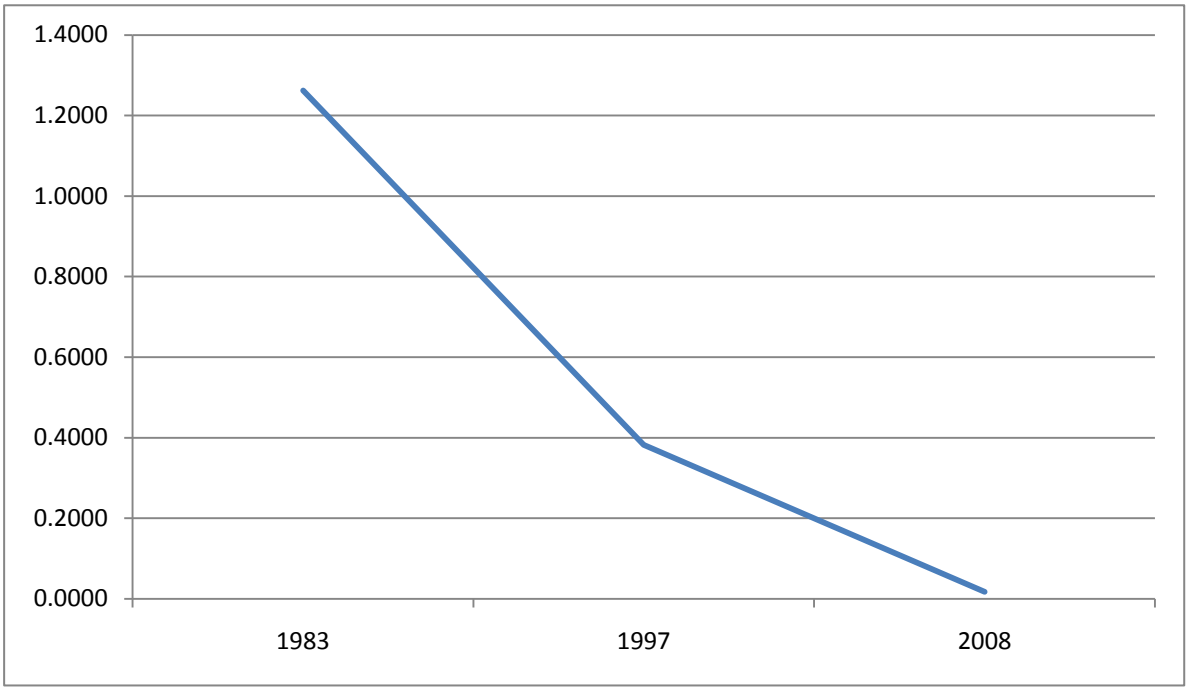

Figure 1: Average performance of students in the 9th grade during the year 2012 in the reading comprehension portion of three older standardized tests of English, comparison based on average performance in Reykjavik for each year listed. (N.B. to cancel out the negative values in the figure, the constant 1,2 was added to all averages before the figure was made).

Compared to the performances of students in standardized tests of English in Reykjavik in the years 1983, 1997 and 2008, the performance of the study sample was best in the 1983 test, poorer in the 1997 test and poorest in the 2008 test.

An analysis of variance was used to compare the difference in student performance on the tests from the years 1983, 1997 and 2008. The results show a significant difference between groups in the overall comparison, $F_{(2,143)} = 21{,}949$, p □ 0,001. Since the overall comparison *F*-test does not show between what groups a significant difference lies, the Tukey follow-up test was carried out. It showed that performance on the 1983 test was significantly better than the performance of students on the test from 1997 and on the test from 2008. There was not a significant variance on student performance on the tests from 1997 to 2008.

Table 4: Results of analysis of variance of mean standard value for student sample the year 2012.

	Variance	Degrees of freedom	Mean square	F-value	p-value
Betw. Groups	39,84	2	19,918	21,949	0,000
Within groups	129,77	143	0,907		
Total	169,61	145			

Table 5: Results of follow-up correlation with the Tukey-method .

(I) group	(J) group	Average variance	Standard error	p-value	95% confidence interval	
					Lower bound	Upper bound
1983	1997	0,88	0,19	0,00	0,42	1,34
	2008	1,24	0,19	0,00	0,79	1,70
1997	1983	-0,88	0,19	0,00	-1,34	-0,42
	2008	0,36	0,19	0,14	-0,09	0,82
2008	1983	-1,24	0,19	0,00	-1,70	-0,79
	1997	-0,36	0,19	0,14	-0,82	0,09

5 Discussion

The results of this survey supports my hypothesis. Participants in the survey who took the 1983 test performed marginally better than the original 1983 test takers, M= 0,06. This result is in disagreement with my original hypothesis although just marginally. This comes as a bit of a surprise especially since the original 1983 test takers had only studied English in school from the 6th grade onward, while the student sample taking the test have been studying English since the 4th grade. The 1983 standardized test was unique in that the B section, which also awarded the most points, had a cloze test consisting of a text of 469 words with 50 word fill in blanks. Test takers who were able to complete the cloze test with only 0-2 incorrect words were awarded a full 20 points for this exercise. The least amount of errors you could have and still be awarded 3 points for was 23-25 incorrect words. This part of the test presented the biggest problem for the 2012 test takers of this 1983 standardized test. 31% of the test takers, or 15 of 48 received 0 points for this section. When it became apparent that so many of the students were having problems with this particular testing form, I went back to the teachers to see if they still used this exercise or testing method. Three of the four schools responded that they did use this exercise form as it was included in the exercises in the course workbooks for their English classes. The fourth school whose teacher reported avoiding this type of exercise contained 5 of the 15 zero point grades, or 33% which could imply that the students at that school were unfamiliar with this type of testing method. The cloze test section of the 1983 test does not have a fixed ratio between the gaps. The gap-filling procedure in this test is deleted according to linguistic criteria and not a fixed-word deletion. This type of test measures a reader's comprehension of inter-sentence and inter-clausal connected discourse. This cloze test

section of the 1983 test tells a simple story about an experiment with an ant. The instructions are very clear; the reader is asked to read the whole text before beginning the test. The instructions even suggest that the pictures that accompany the story give hints to help figure out the story structure. Furthermore, the instructions clearly state that many words that are already given in the sentences fit into the gap spaces. Yet even with these very clear instructions, it was my observation during the test administration that most of the test takers started filling in the blanks without reading through the story first. One example of a common error is in the sentence: "The other end of the string was tied round a pot of *jam.* Then the ant was put into the open pot of jam, and it made some unpleasant discoveries" (Námsmatstofnun, 1982, p. 6). It was not uncommon that the answer *ant, gold or honey* was placed in the space instead of the word *jam* which is clearly stated in the very next sentence. Perfetti, Landi & Oakhill (2005) have found that sensitivity to story structure is a key component of reading comprehension."Thus, less-skilled readers appear to have less explicit awareness of the features of stories that might help scaffold their mental representation of the text" (p. 237). The overall poor performance of the 2012 test takers in the cloze test section of the 1983 test points to a deficiency of story structure understanding in many of the test takers It is also possible that the test taker's vocabulary may not be large enough to support effective reading comprehension.

How then is it possible for the 2012 takers to average a marginally higher score than the original 1983 test takers with such a poor result in the cloze test section of the test? Since Námsmatstofnun only has available the overall results of the reading comprehension portion of the 1983 test, and does not have statistics for the individual sections, I would like to say that the answer lies in the overall high scores on the other two sections of the test. The A section of the 1983 reading comprehension test consists

of 11 sentences containing a total of 158 words in which the reader is instructed to follow simple directions that list rules to a homemade game of ten pins and answer ten questions with a possibility of 10 points for this section. Of the 48 test takers in the survey sample, 39 of the 48 test takers or 81% received a score of 8 points or higher. The C section of the 1983 reading comprehension test consists of two short 100 words texts. The first text contains 5 multiple choice questions, and 6 multiple choice question follow the second text with a possibility of a 15 point score total for this section. Of the 48 test takers in the survey sample, 38 students or 79% received a point score of 13 or higher. Academic vocabulary certainly was not a hindrance to the test takers as there is not a single word out of the Academic Word List in any of the 3 sections of this 1983 reading comprehension standardized test.

The 2012 test takers of the reading comprehension part of the 1983 standardized test of English scored an average of 29,5 points out of 45 points available. The original 1983 test takers had an average of 28,8 points out of 45 points available.

The 48 2012 test takers in the survey who took the 1997 reading comprehension standardized test performed significantly worse than their 1997 counterparts; M= -0,82. The first section of the test starts out with a daunting 625 word text which is followed by 13 multiple choice questions for a possible 13 points available in this section of the text. I use the words daunting, because of my observations of the test subjects during the test administration. I heard several complaints of text length and this seemed to put off some of the test takers. Of the 13 points available in this section 38 of the 48 test takers received 7 points or higher which is 79% of the test takers. 28 of the 48 test takers received 9 points or higher which is 58% of the test takers, and one person scored all 13 of the points available for this section. Cohen (2001) in his article on Second Language Assessment discusses the element of test format in length. Cohen states, “Yet if

respondents experience failure too frequently at the outset of a test because of difficult items, they may be discouraged from attempting the remainder of the items in a section" (p. 524). Cohen suggests a way of hindering this problem by starting with relatively easy items, and then interspersing easy and difficult items. The 1997 reading comprehension portion of the Standardized test of English in Iceland does not take heed of this suggestion because the longest text is in the beginning of the test. There are 9 words from the Academic Word List in this section of the test.

The second section of the 1997 test consists of a 427 word text containing 10 words from the Academic Word List. This section is followed by 16 multiple choice questions for a total of 16 points available. This text about dinosaur bones proved to be a challenge to the 2012 test taking sample of this 1997 exam. 23 out of 48 students, or 48% of the students scored 7 or higher out of the possible 16 points. 17 out of 48 students, which is 35% of the students scored 8 or higher out of 16 points possible. Only 1 student received a full 16 point score.

The most prominent problem that I could discern from this section of the 1997 reading comprehension standardized test was with inferencing. As an example, I will look at question 13 in this section. "The word 'they' in line 16 refers to?" Line 16 in the text is: "As valuable as they are, fossil discoveries did not, until recently, provide scientists with good answers to such extremely important questions as:" (Námsmatstofnun, 1997, p. 12). Only 7 out of the 48 test takers marked the correct answer, *discoveries*. Many, or 19 of the 48 students marked the answer *dinosaurs*. Cain, Oakhill, Barnes & Bryant (2001) describe this type of inference failure as an integration failure. "Integration failures occur when children fail to integrate the two relevant pieces of information when retrieved. In addition, individuals may generate an incorrect inference in order to make sense of the text and establish coherence by, for instance,

integrating the premise information with other knowledge" (p. 855). In this case the test takers are not aware that the word *they* refers to fossil discoveries, and chose to use the word *dinosaurs* which is in the title of the text.

The third section of the 1997 reading comprehension standardized test is comprised of 6 questions with excerpts from the contents page of magazines, and then 5 questions with samples of text from various magazines. 18 of the 48 test takers, or 37% received 8 points or higher. 32 of the 48 test takers, or 67% received 6 points or higher. Only 1 test taker received a score of 11 out of the possible 11 points available.

The 2012 test takers of the reading comprehension part of the 1997 standardized test of English scored an average of 20,8 points out of 40 points available. The original 1997 test takers scored an average of 26,7 points out of 40 points available.

The 50 2012 test takers in the survey who took the 2008 reading comprehension standardized test performed worse than their 2008 counterparts; M= -1,18.

The first section of the test starts out with three short texts of around 100 words each. Each section is then followed by a few multiple choice questions. This standardized exam is more in keeping with Cohen's (2001) suggestion of starting out with relatively easy items on a test such as this. There are no words from the Academic Word List in the first text, one in the second text, and seven words from the Academic Word List in the third text. Therefore, the test increases in difficulty as it progresses.

The second section of the 2008 standardized test of English is a 469 text about Rudyard Kipling and his son John's perils in World War I. This text contains a challenging 17 words from the Academic Word List. 21 students out of 50, or 42% received 5 points or higher out of 10 points available. Only 9 students out of 50 or 18% received 7 points or higher out of a possible 10 points. 1 Student received 10 points out of 10 possible.

The third and final text in this 2008 reading comprehension portion of the standardized test for English contains a 678 word text about the predicaments of fame. It talks about actors and actresses that the 2012 test takers are more than likely familiar with. Of the 678 words out of the text, 23 of them are from the Academic Word List. So although the subject matter is something that the students are familiar with, the vocabulary used is more difficult than in the previous sections of this test. 27 students or 54% received 7 points or higher of a possible 15 points. 10 students or only 20% received a grade of 9 points or higher of a possible 15 points. Not a single student received a grade of 15 points out of 15 points available.

The 2012 test takers of the reading comprehension part of the 2008 standardized test of English scored an average of 17,3 points out of 35 points available. The original 2008 test takers scored an average of 23,9 points out of 35 points available.

I had hypothesized that reading comprehension scores would be on the decline rather than improving, which proved to be the case. What could be a possible reason for this ?

I recently tested two pairs of English students at upper secondary school level in oral proficiency. These students are in their fourth English course which is the minimum English requirement to graduate from secondary school and receive a Student's degree. To start out the oral examination, I asked the pairs warm up questions that included simple questions like, name, birth place, hobbies and plans after graduation. The first pair that I spoke to was not certain what their plans were after graduation, and they stated that computer games were their main hobby. The second pair that I spoke with was both planning on school abroad and stated that reading was a hobby among other hobbies. As a part of the oral proficiency examination, I had the pairs look at photographs and asked that they describe them by comparing and contrasting the

photos. The first photo was of a homeless man, and the comparison photo was that of a business man. The difference in oral proficiency between the pairs was startling. The computer game pair answered only in short one word answers and only talked about what they literally saw on the photographs. The pair that stated that reading was a hobby expressed themselves in complete sentences, and speculated about the photograph in an intellectual way using broader vocabulary than the first pair. After seeing the results of this study, I am beginning to wonder whether people realize how debilitating not being motivated to read extensively is. The pair that I tested above that listed computer games as a hobby will probably pass their secondary level course without a problem. I do not think they even realize that the vocabulary they use is in fact quite conversational and simple. Even though they were only asked to state their opinions of what they saw in pictures, the vocabulary was very simple and lacked depth and showed no signs of deeper thinking. I am sure they would have been able to express themselves quite differently in their mother tongue.

The main problem that I saw with the 2012 test takers of these older examinations was the exasperation that the students expressed when faced with texts of any significant length. The test takers did fairly well when asked to answer questions from shorter texts, but seemed to become frustrated when faced with longer texts. Perhaps the problem that I observed with the secondary school level students is also in place with the primary school students. The fact that you can understand shorter texts on a computer screen is giving the students a false sense of confidence that they really know the language when in fact the results of this study show otherwise. Another significant factor is related to vocabulary. Students performed worse on the standardized examinations that had a higher concentration of academic words. These scores reflected a proficiency in conversational English skills,where the reader’s vocabulary and in

particular academic vocabulary may not be large enough to support effective reading comprehension.

6 Conclusions

The aim of this study was to look at how reading comprehension in the English language has evolved in primary school students in Iceland. I hypothesized that reading comprehension was on the decline which was supported by the results of the study.

A factor to consider when looking at 2012 test taker sample grades is whether the high-stakes effect is a reason for lower grades in the 2012 test taker sample. "High-stakes testing is standardized tests whose results have powerful influence when used by school managers, other officials or employers to make decisions" (Woolfolk, Hughes & Walkup, 2008, p. 643). When the original test takers took these standardized tests, the results of the tests determined their placement level at seconday school, so therefore, the test carried high stakes for the test taker. The 2012 test taker sample had no such consequence to worry about when they took the test. I discussed the high-stakes effect with Sigurgrímur Skúlason, Examination Supervisor at Námsmatsstofnun and he agreed that the fact that the sample test takers were not influenced by the high-stakes effect, their grades would be somewhat lower, but he stated that the difference would not be substantial enough to affect the results of the survey.

The results of this study have in fact opened more questions in my mind than provided answers. Questions as to why in fact reading comprehension is on the decline? Do the results demonstrate general reading skills rather than English reading skills, specifically? What is the role of instruction when students seem to have adequate conversational skills but are lacking in academic reading skills? I believe it would be helpful to test a larger and more representational sample than was done in this survey. I also believe that further research as to why reading comprehension seems to be on the decline would be helpful. Perhaps a study of the types of texts being used in schools or

the effects of computer usage on students of English would be helpful or even research on how to get students to increase their reading.

It is clear to me as a prospective teacher of English that we need to raise curriculum goals and to ensure that their objectives are being met. I sincerely believe that the students that I tested in oral proficiency at the secondary school level had skills to satisfactorily pass their course requirements. But am I convinced that these skills were enough for all of these students to successfully handle English text books at university level? No, I believe that the student pair that gained most of their English proficiency from computer games are going to struggle, or at least have more problems than the avid readers if they decide to further their education. I believe that we need to raise curriculum goals not just at the upper secondary level but we need to do this at the primary school level as well.

As Anna Jeeves (2010) observed when looking at the question of perceived relevance of secondary school English studies, students felt that their English studies left them feeling self confident about themselves. It is a fun language, that they find quite easy compared to the academic work load in their other classes. (p. 5). These observations suggest to me that not a lot of additional knowledge is being added on to what they already know. The fact that the course is fun and easy seems to indicate that students are not being challenged and that the school curriculum reinforces what they already know. When speaking about developments in the English classroom in Iceland Ingvarsdóttir (2007) states, "The teaching was teacher-centered and textbook-bound, most pupils and teachers were using Icelandic in class as the primary means of communication, and all pupils were working on the same assignments at the same time" (p. 338). These observations confirm Ingvar Sigurgeirsson's observations from 1994 where he concluded that English teachers use their course books for 97% of the time

that they are teaching. This type of teaching leaves very little room for personalised instruction or cooperative learning and certainly does not promote learner autonomy. This study has shown a decline in English reading comprehension suggesting that literacy skills are not emphasized enough in the Englsh curriculum.

Although it is difficult to generalize about why reading comprehension is declining, we have the resources to look at what teaching methods are being used in English language classes in Icelandic schools today (Hafdís Ingvarsdóttir, 2007), and since these methods are not conducive to reading compehension growth, it is safe to say that something needs to change. Course books are good tools but they can be a hindrance as well. The teacher may need to rely less on a course book and provide more individualized instruction. "Accepting each learner's uniqueness and individual pace in the acquisition process requires a restructuring of lessons that moves towards a more personalized approach" (Ingvarsdóttir, 2007, p. 334). The teaching methods described in (Ingvarsdóttir, 2007) listed above show a very teacher focused approach to teaching. Teaching needs to become more student focused, curriculum goals need to be raised, and students made to be more responsible in planning and monitoring their own individual learning process. Another way to raise curriculum goals and to improve reading comprehension is to require the students to read more books and scientific articles in English, and to teach academic vocabulary specifically. Too much emphasis is being put on shorter texts. Students have widely different interests and abilities, and the goal should be to let students pursue their interests through avid reading. I believe that avid reading and reading for pleasure should be synonymous terms. Once a student gets into the habit of reading, he can gain vocabulary to build on, to be able to read and understand different types of texts with higher levels of complexity.

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