UNIVERSITY OF JYVÄSKYLÄ

"SHINER THE SUN?" - QUESTION DEVELOPMENT IN THE WRITING OF FINNISH LEARNERS OF ENGLISH A Pro Gradu Thesis in English

by

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HUMANISTINEN TIEDEKUNTA KIELTEN LAITOS

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Kielen kehityksen tasoja on tutkittu jo vuosikymmenien ajan, ja kysymyslauseet ovat olleet yksi tutkimuskohteina olleista piirteistä. Aikaisemmat tutkimukset ovat osoittaneet, että kysymyslauseiden oppiminen etenee kuuden kehityksellisen tason kautta. Tutkielman tarkoituksena on selvittää, miten kysymyslauseiden tuottaminen kehittyy yläkoulun aikana kirjoitetussa englannin kielessä. Lisäksi tutkielma pyrkii kuvaamaan kysymyslauseissa esiintyviä virheitä. Kyseessä on poikittaistutkimus, joka vertailee 37 7. luokkalaisen ja 56 9. luokkalaisen tuottamia kysymyslauseita keskenään. Tutkimuksen aineisto koostuu oppilaiden kirjoittamista teksteistä, joita kerättiin kolmen eri tehtävätyypin avulla. Aineisto on osa CEFLING -projektia varten kerättyä pilottitutkimusaineistoa.

Tutkielmassa vastataan seuraaviin kysymyksiin: 1) Millä kehitystasolla oppilaiden tuotokset ovat ja montako kysymystä kultakin tasolta löytyy? 2) Kuinka hyvin oppilaat tuottavat kysymyslauseita, paljonko he tekevät virheitä ja mitkä virheet ovat tyypillisiä? 3) Kehittyykö kysymyslauseiden tuottaminen yläkoulun aikana sekä miten 7. ja 9. luokkalaisten tuotokset eroavat toisistaan?

Kysymyslauseet poimittiin teksteistä, jonka jälkeen ne jaoteltiin tehtävittäin ja ikäryhmittäin. Kaiken kaikkiaan kysymyslauseita kertyi 7. luokkalaisten aineistosta 250 ja 9. luokkalaisten aineistosta 685. Jokaisesta kysymyslauseesta analysoitiin, mille kuudesta Pienemannin, Johnstonin ja Brindleyn (1988, 217-243) määrittelemästä kehityksellisestä tasosta se kuuluu. Tämän lisäksi kysymyslauseet, joissa esiintyi virhe, erotettiin aineistosta, ja ne analysoitiin virhetyypeittäin.

Tulokset laskettiin yhteen ja niissä todettiin, että kuusitasoisessa kysymyslauseiden kehityksessä molemmilla ikäryhmillä suurin osa kysymyksistä jakautui 3. ja 4. tasolle. Tyypillistä 3. tason kysymyslauseelle on, että *do* sekä *wh*- alkuiset kysymyssanat on sijoitettu lauseessa ensimmäiseksi, mutta muuten lause on vielä kieliopillisesti virheellinen. 4. tason kysymyslause puolestaan on kieliopillisesti oikein muodostettu, eli lause noudattaa käänteistä sanajärjestystä. Näiden tasojen osuus oli 7. luokkalaisilla noin 70%, kun taas 9. luokkalaisilla vastaava luku oli 65%. Tyypillisin virhetyyppi oli kysymyslauseet, joista puuttui *do*, näiden osuus 7. luokkalaisten aineistossa oli 59% ja 9. luokkalaisten aineistossa 49%. Tulokset olivat muiltakin osin hyvin samankaltaiset eikä merkittäviä eroavaisuuksia esiintynyt. Näin ollen tulokset osoittivat, että merkittävää kehitystä kysymyslauseiden tuottamisessa ei yläkoulun aikana tapahdu.

Tutkielma antoi suuntaviivoja sille, millaisia kysymyslauseita yläkoulun oppilaat tuottavat. Jatkotutkimuksia kuitenkin tarvittaisiin selvittämään esimerkiksi sitä, miten kysymyslauseet kehittyvät samojen kohdehenkilöiden tuotoksissa pitemmällä aikavälillä.

Asiasanat: learner language, developmental stages, questions, written production, errors, lower secondary education

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1 INTRODUCTION

Language development has been widely studied in the field of second language acquisition (SLA). Previous research has shown that learners go through a series of predictable stages in their second language (L2) development. What is striking is that English learners all over the world go through the same developmental stages in the same order and in addition, they make similar mistakes. No matter what their age, language or educational background is.

As the developmental stages were discovered, the researchers questioned them and wanted to test whether they actually exist. Grammatical features that were present throughout the learning process from first few words to more complex sentences were studied. Therefore, questions were among the features that were chosen. At this point, the development of English questions has been studied for over 30 years. And in fact, many questions have been answered. Ravem (1973a, 1973b, 1978) and Cancino et al. (1978) were among the first pioneers in this research area. Their work was followed by Pienemann et al. (1988), who formulated the stages in English question development. Their theory was such an influential one that the later studies focusing on question development have based their work on it. This study makes no exception. Previous studies have found out that there are six stages in learning English questions as the development moves from one word utterances to wh- and yes/no questions until cancelled inversion is mastered.

Ellis (1994: 21) counts the existence of developmental stages as one of the most important findings of SLA research to date and adds that their occurrence is no longer questioned. Learners from various native languages have been studied and their question learning process has been interpreted. Therefore, it seems odd that no major studies focusing on the Finnish learners' of English as a second language (ESL) have not been conducted. In addition, most of the previous research has focused on oral communication,

whereas written question development has not been given that much attention. Thus, this study gives valuable information on question development both in written production as well as from the Finnish learners' point of view.

Pienemann et al. (1988) argued that it is impossible for the learner to skip developmental stages regardless of the amount and quality of the instruction he or she receives and continues that, however, with the help of appropriate instruction the learner can progress in the learning. Therefore, this study offers information on what learners can do and what structures are difficult for them to learn. This study helps to build a wider picture on the development of questions and it gives a better understanding on what the main difficulties are in learning them. As a whole, it sheds light on the learning process, which might interest especially the language teachers, since this information is valuable in planning English lessons and in evaluating students' products. If the teacher perceives a certain error a student has made as part of a wider process, he or she can support the learning better and help the student to master that structure and furthermore, give support in entering a new stage.

The outline of the present study is explained in the following. Chapter 2 explains how this study is related to SLA research, what are the main theories are and what the key terms used in this study are. In addition, the grammatical explanations for questions are described. The main findings of the previous studies are reviewed in Chapter 3. The research questions and motivation for this study are presented in Chapter 4, as well as details of the data, participants and data analysis. The actual findings of the present study are reported in Chapter 5. These findings are interpreted and compared to previous studies in Chapter 6. In the final chapter the major findings are summarised, this study is evaluated and implications for further research are given.

2 THEORETICAL BACKGROUND

Before focusing on the current study it is important to identify what field of study it is related to, what theories build its groundwork and what the main concepts involved in this study are. The following two sections (2.1 and 2.2) explain where this study is related to in SLA research. In section 2.1 the key terms, which are interlanguage, developmental sequences and errors, are explained in detail. The second section describes how various authors have explained the questions in the English grammar. These two sections create the theoretical basis of the current study and the terminology and the theories presented in this section are utilised in the chapters to follow.

2.1 Key terms

In brief, SLA is divided into four areas of interest by Ellis (1994: 17). The first area deals with the characteristics of learner language and tries to explain how acquisition takes place, in other words, it focuses on learner language. The second area covers the learner-external factors related to the social context of acquisition. Moreover, the third area is interested in the learnerinternal mechanisms, which focus on understanding how the acquisition takes place and how learners use their resources in communication. The fourth area focuses on individual learner differences and tries to explain what causes them, in other words, it focuses on the language learner. Of these four areas, this study will focus mainly on the first area, learner language. The main areas of interest are in errors, acquisition orders and developmental sequences. This study will deal with acquisition orders and developmental sequences since it focuses on finding out how questions develop during the grades in upper level of basic education. following, the main linguistic concepts relevant to this study are explained in more detail.

2.1.1 Interlanguage

The concept of interlanguage was first used in the 1970s by Selinker, whose work (1992, 2008) will be referred to in the following. Interlanguage is a language system which the learner creates as he or she is communicating and expressing meanings in an L2. It is a partly separate language system and has elements from both the native and the target language, but it also has elements that do not belong to either of the languages. All these different elements interlock as the learner utilises the available linguistic data to formulate an internalised system. During this process, interlingual identification and language transfer appear. In addition, learners are seen to construct mental grammars of the L2. Therefore, as the learner of the L2 makes errors, they can be interpreted as attempts to discover the structure of the language being learned rather than regarding them as errors or as attempts to transfer patterns of their first language (L1) to another language. According to Selinker (1992, 2008) interlanguage is closely linked to the term fossilization. Fossilization means that the L2 learner fails to reach the same level of competence as native speakers. Therefore, certain rules and items fossilize. However, in productive language use, these fossilized forms are likely to reappear, which is termed as backsliding. Also the linguistic level, use of the language and the discourse domains have an effect on how extensive the fossilization is. In addition, interlanguage is exposed to, for example, several types of linguistic universals, teaching and learning strategies and simplification and complexification strategies. Interlanguage theory is seen as dynamic and constantly adapting new information, however, so far it has provided new information on the development of SLA research and generated hundreds of studies.

2.1.2 Developmental stages

The developmental stages are one of the key concepts in this study. In the following, the description of the developmental stages is based on Dulay et

al. (1982: 5, 121). First of all, language learning can be seen as a process in which the learner goes through different stages. Before the language learner masters a new structure, he/she has to go through previous stages. Thus, the imperfect sentences produced by the learner are actually developmental stages which reveal the progress made. Secondly, regardless of their L1, age or learning context, most people acquire a working knowledge of certain structures in English in a fairly set order. In addition, this order is predictable although the actual process of learning the structures may vary from several months to several years. Some structures are learned almost immediately whereas others are learned later. To widen the concept of developmental stages slightly more, the observations of Lightbown and Spada (1993: 67) are summarised in the following. One of the observations was that the learner did not leave one stage behind when they entered another one; on the contrary, in some cases the learner used sentences typical of several different stages. Therefore, a developmental stage should be characterised by the emergence and increasing frequency of a particular form rather than as the disappearance of an earlier stage. The second observation was that although the learner was in a more advanced stage in the learning process, he/she might slipp back to an earlier stage because of stress or communicative complexity. The third observation was that the developmental stages were similar across learners from different L1 backgrounds; what is learned early by one is learned early by others. Moreover, it seemed that the most frequent language features were not always the ones that are the easiest to learn, although learners need to have opportunities to hear or read certain linguistic elements before they begin to use them. The final observation was that the learners who receive grammar-based instruction still pass through the same developmental stages and make the same types of errors as those who acquire a language in natural settings.

The stages of some basic L2 structures have been identified by using several methods, which will be explained citing Dulay et al. (1982: 121). First of all, the sentences produced in different stages were analysed. Secondly, the

developmental stages were compared between the L2 learners and young children acquiring their L1. Striking similarities were found between the groups, although some differences occurred as well. One of the differences was that many of the errors in developmental stages produced by the L2 learners had no relation to their mother tongue. Another difference was that since the L2 learners are older and mentally more competent, they produce a wider range of forms in one developmental stage than L1 learners do. The questions were among the first language structures for which the developmental stages were identified. These stages are thus explained according to Dulay et al. (1982: 127). There are four stages in the question development. The first stage occurs when the learner places a *wh*-word at the beginning of the sentence. Usually these sentences are grammatically inadequate with grammatical words and endings missing. In stage two early auxiliaries such as is, are and was will appear as well as some modals such as can and will. The auxiliaries are not inverted at first, but as learners move on to stage three, they become regularly inverted. However, there appears omitting of auxiliaries in the *wh*-questions in which late auxiliaries *do* and *am* are used. In the final stage the late auxiliaries such as has, been and am are acquired and inverted with subjects. To be more specific, the learner knows how to place *do* between the *wh*-word and the subject, despite the fact that it sometimes may be misformed.

2.1.3 Errors in second language acquisition

Ellis (1994: 47-71) has identified the main issues of errors and their analysis. Although there are several definitions, *an error* is commonly described as a deviation from the norms of the target language. Errors can be of three types: Firstly, a presystematic error occurs randomly and because the learner does not have knowledge of a certain rule in a certain language. Secondly, a systematic error is caused by the using of a wrong rule. Thirdly, a postsystematic error occurs as the learner makes a mistake, in other words, the learner knows a rule but uses it variably. In addition, a distinction

between errors and mistakes should be made. Thus, errors are caused by lack of knowledge, and since the learner does not master the rules of the L2, a systematic deviation is present. *Mistakes*, however, result when learners fail to perform in their competence, for example when they make a random slip caused by fatigue or excitement. In addition, mistakes are usually self-corrected.

Dulay et al. (1982: 150-163) have classified errors based on linguistic features. This classification is called *surface strategy taxonomy*. In this taxonomy, errors are interpreted to give information on the cognitive processes involved in the L2 learning. The taxonomy divides errors into four categories: omission, addition, misinformation and misorderings, which are explained in the following. Firstly, omissions occur as an item which would be part of a well-formed utterance is absent. Typically omitted structures are grammatical morphemes such as verb inflections, articles, verb auxiliaries and prepositions. Secondly, additions include an item that should not appear in a correctly formed utterance. Typical additional errors are double markings, such as in *She doesn't eats*. Another common type of an additional error is regularisation, in which the learner applies the rules in producing regular form to irregular forms, such as sheep becomes sheeps in the plural and eat becomes eated instead of ate. False use of prepositions or articles are also frequently used additional errors. Thirdly, typical for the misformations is that the wrong form of a morpheme or a structure is used. Occasionally the learner uses a member of a class of forms to represent all the forms, named as archi-forms. This is common in the use of demonstrative adjectives such as this and that and personal pronouns, such as Me hungry. In addition, archiforms may alternate in use such as *those dog* and using *he* for *she* or *her* for *she*. Fourthly, misorderings occur as a morpheme or a group of morphemes are placed incorrectly in an utterance, such as What Daddy is doing? Occasionally misordering errors are caused by the interference of L1 structures.

According to Ellis (1985: 42-74, 1994: 47-71) and Larsen-Freeman and Long (1991: 56-62) there are several explanations for what causes the errors, and these are divided into two main categories: interlingual and intralingual errors. In the first category, interlingual errors, differences between the structures of the L1 and L2 cause errors. For example, interference of a learner's L1 occurs as the learner uses elements from L1 instead of elements in target language. In addition, interlingual errors, also named as transfer errors, can appear as the learner misuses an item because it resembles a feature in the learner's L1. Another category is *intralingual errors*, which reflect the process of rule learning in the L2. Intralingual errors are also called developmental errors, which are errors that can be made by children acquiring English as L1 as well as learners studying ESL. Intralingual errors can be specified as, for example, overgeneralization or simplification. Overgeneralization occurs when the learner is trying to use a rule in a context where it does not belong. Moreover, in simplification the elements of a sentence are left out. The learner can also make communication-based errors or induced errors which are caused by the nature of instruction they have received.

Errors in the use of questions

In SLA there appears several types of errors, which are explained by Richards (1973a: 96-113, 1973b: 114-135). The focus of the study was on errors that were seen as developmental. Typical of the developmental errors is that they are frequent regardless of the learner's language background, but they also reflect the learner's competence in a particular stage. Speakers of various language backgrounds were included in the study, such as Japanese, Chinese, Burmese, French, Czech, Polish, Tagalog, Maori, Maltese and Indian and West African native language speakers. The study utilised previous studies of English errors produced by these above mentioned language speaker groups. The most common errors were categorised and discussed in terms of overgeneralization, ignorance of rule restrictions, false concepts

hypothesised and incomplete application of rules. Firstly, overgeneralization occurs as the learner creates a deviant structure on the basis of his or her experience of other structures in the target language, for example *He can* sings. Secondly, in some cases the learner fails to acquire the restrictions the existing structures have and therefore rules are applied in incorrect contexts, which is called ignorance of rule restrictions. Rule restriction errors are common in the use of prepositions and articles, such as He asked to me. Thirdly, false concepts hypothesized means the developmental errors that are caused by faulty rule learning at various levels in the target language. For example the form was may be interpreted as a marker of the past tense such as One day it was happened. And finally, incomplete application of rules is linked to the occurrence of deviant structures, which show the degree of development regarding a certain language forms. In this, the learner fails in the language learning process, because he or she prefers to use more simple rules to achieve efficient communication. These errors are typical especially in the question learning process. Consequently, the study identified the errors in questions typical of basically all ESL learners (see Table 1).

Table 1. Errors in the use of questions (adapted from Richards 1973a: 112-113)

Error type	Examples
1. Omission of inversion	What was called the film?
	How many brothers she has?
	What she is doing?
	When she will be 15?
	Why this man is cold?
	Why streets are as bright as day?
2. Be omitted before verb + ing	When Jane coming?
	What she doing?
	What he saying?
3. Omission of <i>do</i>	Where it happened?
	How it looks like?
	Why you went?
	How you say it in English?
	How much it costs?
4. Wrong form of auxiliary, or wrong form	Do he go there?
after auxiliary	Did he went?
-	Do he comes from your village?
	Which road did you came by?
5. Inversion omitted in embedded	Please write down what is his name.
sentences	I told him I do not know how old was it.
	I don't know how many are there in the box.

Richards (1973a: 96-113) divided the most common errors in questions into five error types. The first type occurs especially in wh-questions, which should be the of form wh + SVO? In this, inversion is omitted and thus either the verb or the subject is misplaced, such as What she is doing? The second error type is present in wh-questions, which should use the structure wh + copula + ing. However, be is omitted, like in What he saying? In the third error type do is omitted and therefore a correct form of wh + do + SVO? question is not constructed, for example Why you went? A wrong form of the auxiliary do or the wrong verb form after auxiliary is the distinctive feature of the fourth error type, like in Did he went? The final error type includes the cases when inversion is omitted in embedded questions, such as Please write down what is his name.

Although Richards (1973a: 96-113) introduced one of the first categorisations of errors produced in forming questions, and though his work is still referred to, his study had several inadequacies. First of all, the major lack of the study was that it did not quantify, how many people participated in the study or in total, how many errors were included in the data and neither did it specify, how many errors represented each error type. In addition, the ages or the social or educational background of the participants was not presented, furthermore, it was not clear, how many years the participants had studied English. It also was not mentioned, what sort of tasks, such as oral or written, were included in the study. However, despite its many lacks, the categorisation of errors in Richard's (1973a: 96-113) study is useful and it will be used as guideline as the errors in this study are analysed.

2.2 Questions in the English grammar

Since this study will focus on questions, it is important to find out how they are defined in the English grammar. According to Downing and Locke (2006: 165) in everyday interaction, while writing and speaking to each other, people perform acts through words, which are called speech acts. Speech acts

are divided into four general syntactic types: declarative, interrogative, exclamative and imperative. Interrogatives, which are in this study referred to as questions, are divided into three major classes based on the type of reply they expect: yes/no questions, *wh*-questions and alternative questions. In the following, the main types of questions are explained according to Biber et al. (2002: 249-254), Downing and Locke (2006: 185-192), Huddleston (1984: 365-377) and Greenbaum and Quirk (1990: 231-241).

In the first question type, *yes/no questions*, the speaker asks for verification or refusal of the clause content, to be expressed by yes or no. Yes/no questions are usually formed by placing the finite operator of the verb phrase before the subject and giving the sentence a rising information. The finite operator is typically a primary verb such as be or have or a modal verb such as can, could, will, would, shall, should, may, might and ought. If the clause has no previously mentioned finite operator, a form of do is brought in. Yes/no questions can be neutral, positive or negative. Thus, questions may indicate the kind of answer that is expected. Positive yes/no questions use assertive forms, like in Did someone call last night? whereas negative yes/no questions use a negative forms of surprise or disbelief, such as Don't you believe me? Another form of yes/no questions is tag questions. Tag questions are not questions as such, but they are formed by adding an ending to declarative, exclamative or imperative clauses. Tag questions are abbreviated yes/no interrogatives, which include an operator and a pronoun. Question tags are used to confirm a statement, and they consists of an operator, which is the same as in the preceding clause and a pronoun subject. If no operator is present, a dummy operator *do* is used, such as *Most people enjoy a beach holiday, don't they?* If the statement is positive, tag question is negative and vice versa, such as Joan recognized you, didn't she? and The boat hasn't left, has it?

The second question type, *wh-questions*, are clauses that try to elicit missing information which is embodied in the *wh-*word. The most commonly used *wh-*words are *who/whom/whose*, *what*, *which*, *when*, *where*, *how* and *why*. A *wh-*

question is formed by placing the wh-word in the beginning of a sentence and the finite verb before the subject, such as What did you buy? The third question type, alternative questions, can resemble a yes/no question or a whquestion. An alternative *yes/no* question differs from a *yes/no* question only in intonation, whereas alternative wh-question actually is a compound of two separate questions. In addition there is another question type, *indirect* questions. Indirect questions express, usually afterwards, what somebody asked. Indirect questions are formed by placing a reporting clause in front of the reported question. The reporting clause includes a verb that introduces the question, typically ask, demand, inquire or wonder. As indirect questions are formed, there occurs a shift in all deictic elements. First of all, first person pronouns referring to the speaker are shifted to the third, whereas second person pronouns referring to the listener are shifted to the first or third. In addition, demonstratives and deictic adverbs are changed as well, such as this to that and now to then. There also occurs a change in verb tenses as present forms are replaced by past forms. Furthermore, the mood type shifts from interrogatives to declaratives. An example of an indirect question is: He asked whether I had to go the next day.

Assessing grammatical knowledge

Grammar assessment is seen as a valuable source of information for both SLA researchers and language teachers. SLA researchers use the information for example to analyse the learning process and compare the results of one group to another group. Language teachers use the information in planning the education and to see how well each student masters certain course material. Therefore, it is important to define what is meant by grammar assessment.

Purpura's theory (2004: 49-99) consists of three general terms: grammatical knowledge, grammatical ability and grammatical performance. *Grammatical knowledge* consists of two components, grammatical form and grammatical

meaning. Grammatical form refers to the knowledge of linguistic forms such as phonology, lexicon and morphosyntax. Moreover, grammatical meaning refers to the literal meaning which is expressed by the sounds, words, phrases and sentences. Thus, grammatical forms are used to convey a variety of meanings. Grammatical form and meaning is present in all testing situation, but the grammatical ability differs based on the context, since grammatical type, range and scope are different in communicational situations. In a way, grammatical ability refers to the grammatical knowledge the individual has acquired through practice and experience, but it also refers to the capability to utilize that knowledge. Grammatical performance is the observable part of the language ability. "Thus, every instance of grammar use is a manifestation of grammatical performance, taking into account that the underlying ability may be masked by interactions with other attributes of the test-taker or the test task." (Purpura 2004: 87) These three terms are closely connected to each other, but also a central part of assessing the grammatical ability. In addition, grammatical knowledge can be assessed according to the different components, which are phonological, lexical, morphosyntactic, cohesive, information management and interactional form and meaning.

3 THE DEVELOPMENTAL STAGES IN LEARNING QUESTIONS

In order to understand a phenomenon in depth, one has to know its history. Therefore, to understand how questions are learned and to be able to use the current knowledge, it is important to see how the theory has been built. The development of questions has been studied for over 30 years, and the work still continues. In the following, the studies dealing with question development is explained. Since there is a vast amount of studies, the ones that were seen as essential, ground-breaking and relevant to this study, were chosen. At first, the question development in English as L1 is shortly reviewed. After that, the focus shifts to the studies which have concentrated

on ESL question development, starting with the early studies and then moving on to more current research.

3.1 Learning questions in English as L1

In the 1970s several first language acquisition researchers, e.g. Brown (1973), Cazden (1972: 48-56) and Klima and Bellugi (1966: 180-219) found remarkable similarities in the language learning behaviour of L1 English learners from different languages. The main findings were that children go through similar stages in different languages and that their language is rulegoverned and systematic. Moreover, several important facts of questions were recognised as well. That is, it was found that children acquire questions around the same age, approximately when they are two years old. In addition, the process of acquiring the questions is identical in different languages. The process of acquiring questions in divided into three stages. In the first stage, questions consist primarily of nouns and verbs without indication of tense or number: Typical question types are intonation questions and early forms of wh- questions, such as water? Sit chair? What doing? Where horse go? In the second stage, intonation questions still appear, but are fuller and more productive. The interrogatives have changed in the following ways: pronouns and verb phrases have developed, articles and modifiers are more often present and some inflections occur. Examples of utterances of this kind include: See my doggie? What book name? Why not he eat? Why you smiling? In the third stage, there appears remarkable grammatical development. Possessive markers, third person singular and do occur as well as grammatically correct negative questions. Inversion appears in yes/no -questions but not in wh-questions. All in all, the utterances in this stage are more complex than before, as seen in the following examples: Did I saw that in my book? Can I have a piece of paper? What I did yesterday? How that opened? It is a fact that even in the third stage, the interrogative utterances are not grammatically correct, on the contrary, the development still continues and children acquire for example inverted wh- questions and embedded *wh*- questions. However, these three stages show clearly that the questions are developed in stages, at least in English as L1. The following sections aim to find out whether these developmental stages occur in English as L2 as well.

3.2 Learning questions in English as L2

One of the major questions for SLA research is to figure out whether learners in classroom settings follow the same developmental patterns and stages as learners in natural SLA settings. For several years researchers have tried to find out how questions develop in ESL. In the following, the main studies concerning this area will be discussed, the focus being on the studies carried out in recent years. In short, the studies began in the 1970s, when a number of morpheme studies were carried out to investigate the order of grammatical functors and inflectional endings. The main goal for these studies was to find out whether there was an acquisition order for certain English structures characteristic of L2 learners. Most of these early studies used the L1 acquisition theories as their reference points, (see section 3.1). Mitchell and Myles (2004: 43) note that the studies conducted in the 1970s made several major contributions. These include finding out that L2 development is systematic, independent of the learner's L1 and that it presents many similarities with L1 acquisition. The key theories focusing on question development are explained in the following, dividing them into to parts: early studies and recent studies. The first study under discussion is Ravem's (1974a, 1974b and 1978) work focusing on the ESL development of two Norwegian children. After that, the findings of a study focusing on natural and untutored acquisition of English questions conducted by Cancino et al. (1978) are reported. Their study is followed by the groundbreaking work of Pienemann et al. (1988), which formulated the six stages of the development of questions in English. The studies conducted after that of Pienemann et al. (1988), used these six stages as groundwork and therefore, in this study, they are entitled as recent studies. These studies

include the findings of White et al. (1991) and Spada and Lightbown (1993, 1999).

3.2.1 Early studies

Ravem (1974a: 124-133, 1974b: 134-155, 1978: 148-154) carried out one of the pioneering studies in this area. The main focus of the study was on the acquisition of English syntax in an L2 environment of two Norwegian children, aged roughly six and three. The studies concentrated at first on the older child, Rune, and later on as a follow-up study, on the younger child, Reidun. The studies had several common factors. Since the children lived in an English-speaking environment, they had been exposed to the English language, but they had not taken part in systematic teaching of it. In addition, Norwegian was usually spoken at home. The data consisted of tape-recorded interviews and free conversation, but also of translation and imitation tasks.

The analysis concentrated on two topics. The first topic was questions and negative sentences, which would require a *do*-transformation. The reason for choosing them was that the identical sentences in Norwegian are made by the inversion of the subject noun phrase and verb. In addition, they are particularly difficult for foreign language learners of English. The auxiliaries behave mostly the same way in Norwegian and English, but *do* does not have the same status as the modal auxiliaries. It was expected that the children would acquire modal auxiliaries before *do*. Four different types of questions were studied: sentences beginning with a *wh*-question word, *yes/no* questions, negative versions of *yes/no* questions and negative questions beginning with *why*. It was found that there were syntactic similarities between English and Norwegian in the use of modal auxiliaries and *have*. However, there was no equivalent for *do* (see Table 2).

Table 2. The absence of do in Rune's speech (adapted from Ravem 1974: 128)

1. What did he say?	Hva sa han? (What said he?)
2. Did you do it?	Gjorde du det? (Did you it?)
3. Don't you like ice-cream?	Liker du ikke iskrem? (Like you not ice-
	cream?)
4. Why don't you like ice-cream?	Hvorfor liker du ikke iskrem? (Why like you
	not ice-cream?)

It was noted that before *do* was acquired as a tense marker, Norwegian syntactic structures were used to form English sentences, in other words, by the inversion of the subject noun phrase (NP) and verb (V). Regardless, the development of *do* as a tense marker in questions seems to be a four step process. At first, *do* occurs only in the elliptical sentence *Do you?* Therefore, *do* seems to be mostly absent in this stage. Secondly, *do* appears as a variant of *you*, pronounced [dju:] e.g. Rune repeated the sentence *What d'you like?* as What *'you' like*. In the third stage, *do* emerged clearly as a tense marker, which can be seen as an effort to try out various ways to form sentences, e.g.

What d'you do to-yesterday? What d'you did to-yesterday? When d'you went there? What you did in Rothbury? What you do – in the hayshed? Like you ice-cream? Did you drive car to-yesterday? (Ravem 1974: 131)

In the final stage, *do* emerges as a separate element both in the present and past tense forms e.g. *Did you not say it to daddy?* and *Don't you like me, Reidun?* However, in this stage, the children were still not able to form correct negative questions beginning with *why*.

The second topic of analysis was the development of *wh*-questions. It seemed that the development of *wh*-questions was not traceable to Norwegian. It was predicted that the children would produce sentences such as *Where live Tom?* However, the children produced this sentence as *Where Tom live?* which is equal to the *wh*-sentences produced by L1 children. It was also found that in some cases the children used different strategies, for example, in learning

yes/no questions. Rune used Norwegian clause structure and inverted the main verb and the subject noun phrase e.g. *Know you? Like you school, Rannveig?* Reidun, in contrast, used declarative sentence structure with rising intonation, which is typical of L1 learners.

Ravem's work (1974a, 1974b and 1978) was one of the first studies to focus on question formation, and therefore it has a certain status in this research field. In fact, he was able to shed light on question learning process by for example identifying, how do emerges in English questions. In addition, some details of wh-question development were given. However, the major lack of his study was the narrowness of the data. Only two children participated in the study, both presenting different ages. Moreover, it was noted that the two children gave diverse results in several occasions, such as in learning yes/no questions. In addition, the effect of the L1 on SLA process was in some cases pointed out, and in some cases not, and again with varying results between the two participants. In addition, the objectivity of the study can be questioned, since a father is observing his own children in a home environment. It could also be questioned how well a three-year-old child can produce questions in his or her L1, not to mention questions in the L2. Therefore, this study gave little information that could for example, be used in ESL teaching.

Another pioneering study was carried out by Cancino, Rosansky and Schumann (1978: 207-230). The focus of the study was on the natural, untutored acquisition of English questions by six native speakers of Spanish. The participants in the study were two children, two adolescents and two adults. Typical of all the participants was that they had lived in an English-speaking country for less than three months when the study began and that they spoke Spanish at home. However, the participants differed in age, socioeconomical status, and also in their exposure to English. The data consisted of recordings of spontaneous speech in various situations and of pre-planned interaction tasks. Transformational rules for *wh*-questions were used as the

basis of the study. The transformational rules consist of three stages. The first stage is called the base, and an example of this is the sentence: He – is – going – where? The second stage is preposing, in which the *wh*-word is moved to the front of the string: Where – he – is – going? The third stage is inversion, in which the auxiliary is moved in front of the subject: Where – is – he – going?

The analysis concentrated especially on the development of inversion in questions, and in fact, several observations were made. Firstly, all of the participants used uninverted forms of wh-questions, which did not necessarily appear prior to inverted wh-questions. Secondly, all of the participants used uninverted yes/no questions, which repeatedly appeared before inverted yes/no questions. Thirdly, there did not appear to be a stage in which wh-questions were inverted and yes/no questions were not. The inversion of auxiliaries was also included in the study. Inversion is obligatory in wh-questions, e.g. What are you doing? cannot be presented as What you are doing? However, yes/no questions are more flexible, e.g. Are you going? can be presented as You're going? The results showed that some auxiliaries are inverted earlier, others later. The early inverted auxiliaries include is-copula, can and do. Their early inversion was explained by the fact that they usually are learned as memorized chunks, e.g. What is it? Can you swim? and Do you live in Boston?

The main finding was the discovery of a developmental sequence in the acquisition of *wh*-questions. This developmental sequence was divided into two stages. In the first stage, called undifferentiation, the learner does not distinguish between simple and embedded *wh*-questions. The learner proceeds from uninverted questions to variable inversion and after that to generalization. In the second stage, the learner distinguishes between simple and embedded *wh*-questions.

Stage I – Undifferentiation: Learner does not distinguish between simple and embedded *wh*-questions.

- a. uninverted: Both simple and embedded *wh-questions* are *uninverted*. simple: *What you study?* embedded: *That's what I do with my pillow*.
- b. variable inversion: Simple wh-questions are sometimes inverted, sometimes not.

inverted: *How can you say it?* uninverted: *Where you get that?*

c. generalization: increasing inversion in *wh-questions* with inversion being extended to embedded questions.

simple: How can I kiss her if I don't even know her name? embedded: I know where you are going.

Stage II – Differentiation: Learner distinguishes between simple and embedded *wh-*questions.

simple: Where do you live?

embedded: I don't know what he had. (Cancino et al. 1978: 222)

In *yes/no* questions a two-stage development was also noticed. In the first stage, no inversion occurs and questions are made by using rising information, for example *You go to school?* In the second stage, inversion gradually increases, but there appears great variation. In addition, it was speculated that as inversion is studied in *yes/no* questions including *do*, it should be considered whether it occurs only as a memorized chunk or in front of a declarative sentence. Therefore, these "*do* question markers" were excluded from the development of *yes/no* questions.

The study conducted by Cancino et al. (1978) was, like Ravem's study (1974a, 1974b and 1978), one of the key studies among the early research. The findings gave new information, for example, on the order of development in *wh*- and *yes/no* questions but it also studied the inversion of auxiliaries and introduced the concept of memorized chunks into this research field. However, the amount of participants was quite small and they also varied in their background and in the exposure to the English language. In other words, the heterogeneity of the group questions the reliability and generalisation of the results. In addition, as the results are analysed, it should be noted that if variability becomes too great there is no point in talking about development.

The work of Pienemann and his colleagues (1988: 217-243) is one of the most influential studies in the question development research. The focus of the study was on the morphological and syntactic structures in the acquisition of ESL. The study aimed at developing an observation procedure for assessing the development of these features in the production of speech. Moreover, the study was a test run of this developed observation procedure. The participants of the study were 16 Vietnamese and Polish adult learners of English. The data of the study consisted of natural speech samples, in other words, audiotaped, unstructured interviews. Certain morphological and syntactic structures were analysed from their speech by 15 assessors, who were ESL teachers and using observation forms as tools. These structures were interpreted to be the indicators of development and they were also predicted to be acquired in a certain order:

Stage 1: single words, formulae

Stage 2: SVO, plural marking

Stage 3: Do fronting, Topicalization, Adverb Preposing, Neg+V

Stage 4: Pseudo-Inversion, Yes/No-Inversion

Stage 5: 3rd-Sgl-S, Aux-2nd, Do-2nd (Pienemann et al. 1988: 228)

Next, these stages are explained in more detail. The first stage includes single word utterances and formulaic speech, which means ready-made chunks such as *What's this?* In the second stage of learning, sentences with the structure *SVO* (subject+ verb+ object) are mastered, for example *I eat rice*. In this stage the plural marker -s is also learned. The third stage of learning consists of four different structures. The learner uses *do*-fronting, such as *Does he work?* and topicalization, which means the placement of objects and subordinate clauses in the beginning of the sentence, such as *Because I know the situation I can't work here*. Also the adverb (*Tomorrow I will buy it.*) and the negator (*He doesn't eat meat.*) are placed correctly in the sentence. In the fourth stage the learner is familiar with pseudo-inversion, which means the inversion of the copula and the subject in *wh*-questions, such as *Where is my purse?* The learner also masters *yes/no* inversion, that is, places the auxiliary or modal auxiliary correctly in *yes/no* questions, for example, *Has she bought*

this? In the final stage the learner knows how to use the third person singular -s, such as *She comes home*. In addition, auxiliaries and *do* are placed in the second position in negative clauses and *wh*-questions.

In addition to general ESL acquisition stages mentioned above, Pienemann et al. (1988: 217-243) also identified the developmental stages in English questions, (see Table 3).

Table 3. Developmental Stages in English Questions (adapted from Pienemann et al. 1988: 217-243)

Stage	Structure	Example
Stage 1	Single words and formulae	How are you?
Stage 2	SVO with rising intonation	The tea is hot?
Stage 3	Do-fronting	Do he work?
	<i>Wh-</i> fronting	What the boy is throwing?
	Other fronting	<i>Is the boy beside the bus?</i>
Stage 4	Pseudo-inversion Where is my purse?	
	Yes/no questions with Have you car?	
	auxiliary inversion	
Stage 5	Auxiliary second Where can he go?	
	Do second	Why didn't he understand?
Stage 6	Tag questions He's Polish, isn't he?	

These developmental stages are explained more closely in the following. In the first stage, the learner forms questions by using single words or with the help of formulaic constructions. Formulaic constructions are ready-made chunks or sentences that are learned as such, e.g. *How are you?* In the second stage, the constituents of a sentence are used in a canonical order. This is the case even in sentences that would grammatically demand the rearrangement of the constituents, e.g. *You go home now? The tea is hot?* The third stage is called fronting, which is used in asking direct questions, where, for example *do-* and *wh-*words are placed at the beginning of a sentence, e.g. *Do he work? What the boy is throwing? Is the boy beside the bus?* There occurs a word-order phenomenon in wh-questions with a copula, called pseudo-inversion, in which the learner inverts the copula and the subject, e.g. *Where is my purse? Where is the station?* In the fourth stage, there also appears inversion in *yes/no-*questions in which the learner places the auxiliary or modal in the front of the sentence, e.g. *Have he seen it? Have you car?* As the learner proceeds to the

fifth stage, the auxiliary and modal verbs are placed in the second position in wh-questions, e.g. Where has he seen you? In the sixth and final stage, the learner is familiar with tag questions, e.g. He's Polish, isn't he? It's expensive, isn't it?

During the analysis of the data, each participant's ESL acquisition level was determined, in other words, a profile analysis of his or her grammatical development was constructed. In addition, this profile analysis was compared to the assessor's observations. The result was that the same criteria were used in the linguistic observation and the linguistic analysis. However, since the study was a test run of the procedure, it had several weaknesses, such as the assessors varied in their observation criteria and also the linguistic structures chosen for the study needed revising. It should also be noted that the purpose of the acquisition-based procedure is not to predict the student's future learning success, in contrast, it aims at providing information on the learner's developmental stage and assistance in planning the language teaching.

As was previously mentioned, the work of Pienemann et al. (1988) was remarkable for the development research on ESL questions, since it produced a classification of the stages. This classification has been used in the majority of studies followed by it. However, this study conducted by Pienemann et al. (1988) focused on other issues, not specifying on the development of questions. In a way, the developmental stages in questions came as a side-product in this study and as a summary of previous studies conducted by the research group. Therefore, the study gave little information on the acquisition of questions that would be useful for this study. However, in the following chapters this topic is widened slightly more, since the findings of the recent studies using the classification of Pienemann et al. (1988) as groundwork are discussed. In addition, the strengths and weaknesses of the classification are treated.

3.2.2 Recent studies

After the developmental stages in ESL question formation were identified by Pienemann et al. (1988), a range of research followed. For several years various studies (White et al. 1991, Spada and Lightbown 1993, 1999) investigated the contributions of form-focused instruction and corrective feedback on the development of English questions. All of these studies had common target groups. To be more specific, the participants in these studies were francophone learners of English, aged 10-12, participating in an intensive L2 program in Canada. The participants represented beginner levels of ESL development since they had had little prior instruction in English and they had had only a few contacts with the English language outside the classroom. The intensive program provided five hours of ESL instruction every day for a 5-month period in one school year. In the classrooms, the students asked questions spontaneously to get information from others, but they were also encouraged to do so with the help of certain activities such as guessing games. The studies concentrated mainly on two linguistic features: adverb placement and question formation, which were measured on a variety of paper-and-pencil tasks through short- and longterm testing. The main findings of these studies will be explained in more detail in the following.

White et al. (1991: 416-432) tried to find out what kind of effect input enhancement had on ESL question formation. The term input enhancement means that the learner's attention is drawn to a certain characteristic in the input that might otherwise pass unnoticed, for example, by focusing on a form or grammatical aspect of the L2. In addition, input enhancement may also be used to give the learner information about forms which cannot be used in the L2. The study consisted of two phases. In the first phase, two classes (n=53) received form-focused instruction on question formation, while three other classes (n=76) were given instruction on another structure, but no information on questions. The test consisted of 15 written wh-

questions, which had a mixed word order, subject auxiliary inversion or had an already correct word order. The participant had to fix the sentences in the correct order. In the second phase, four additional classes of intensive program learners were studied. Again, three classes received form-focused instruction whereas one class functioned as an uninstructed control group. In this second phase, the participants were tested by means of two written tasks and an oral communication task. The written tasks included a scrambled word task and a preference task in which the participants had to determine which sentences were grammatically correct. In the oral communication task the participants had to look at sets of four pictures and by asking questions they had to figure out which picture the experimenter was holding. When comparing the phases one and two, the main difference is that in the latter phase the teaching of questions expanded considerably. The results show that instruction that focused on question formation had an immediate impact on syntactic accuracy.

Spada and Lightbown (1993: 205-224) investigated the effects of formfocused instruction and corrective feedback on the interrogative constructions in the oral performance of ESL learners. Two experimental classes and one comparison group was included in the study. The comparison group continued the regular intensive teaching program whereas the experimental classes received approximately 9 hours of formfocused instruction and corrective feedback on English question formation over a two-week period. The form-focused instruction consisted of instructional materials emphasizing questions with the auxiliaries can, be and do in the present tense and the question words what, where and why. The instructional materials included various types of tasks, for example, unscrambled questions, guessing games and preference tasks. The materials were taught by regular classroom teachers. The data of the study consisted of audio-recorded oral production tasks and of the learners' oral production in classroom interaction. The students were pretested a day before instruction and posttested a day after, 5 weeks after and 6 months after the instruction.

The participants had no ESL instruction at all between the last two testing dates.

The analysis concentrated on two aspects: accuracy and developmental stage. In analysing accuracy, the percentage of well-formed questions was calculated. A sentence was defined as well-formed if the *wh*-word and the auxiliary verb were placed correctly in relation to the subject. Table 4 shows the total number of questions and accurate questions produced by the students in each group.

Table 4. Accuracy of question formation in oral communication task (experimental and comparison groups) (adapted from Spada and Lightbown 1993: 211)

Group	Total number of	Percent accurate	Standard deviation
	questions		
Experimental			
A (N=27)			
Pretest	471	44.5	26.6
Posttest	479	57.6	27.0
Follow-up	455	66.1	20.3
Long term	405	74.5	19.2
B (N=24)			
Pretest	434	36.4	24.0
Posttest	435	52.5	22.5
Follow-up	429	58.4	21.7
Long term	398	71.8	23.0
Comparison (N=28)			
Pretest	554	59.0	26.2
Posttest	507	63.2	22.6
Follow-up	471	79.7	15.9

Note: Pretest = day before instruction; Posttest = day after instruction; Follow-up = 5 weeks after instruction; Long term = 6 months after instruction.

The results indicate that the learners in all groups produced a greater proportion of accurate questions on the postest than on the pretest and it is evident that the progress continued even six months after the instruction. The results also show that the comparison group had higher levels of accuracy than the experimental group to begin with. In addition, they outperformed the experimental group on both the posttest and follow-up test by achieving higher levels of accuracy.

In addition to accuracy, the analysis concentrated on developmental stages. The student was considered to master a stage, if he could produce at least two different question types of that stage. Therefore each student's questions were studied individually and assigned to the appropriate stage category. Table 5 presents the results of the developmental stage analysis.

Table 5. Analysis by stages: Number of students who produced questions in each of the stage categories at each test session (adapted from Spada and Lightbown 1993: 213)

Group	Stage 2	Stage 3	Stage 4	Stage 5
Experimental				
A (N=27)				
Pretest	21	23	15	2
Posttest	13	26	24	3
Follow-up	14	26	25	6
Long term	6	23	25	2
B (N=24)				
Pretest	16	21	16	3
Posttest	16	23	23	7
Follow-up	16	23	22	5
Long term	11	21	23	5
Comparison				
(N=28)				
Pretest	15	24	24	1
Posttest	11	25	26	6
Follow-up	4	19	28	3

Note: Pretest = day before instruction; Posttest = day after instruction; Follow-up = 5 weeks after instruction; Long term = 6 months after instruction.

It was found that nearly all students produced questions from at least two different stages, and that most produced questions from three or more stages. Between the pretest and the posttest, the majority of the students advanced at least one stage. In addition, between the posttest and the follow-up test most students maintained their level of performance while some students advanced or went down in terms of developmental stage. Again it seems that the comparison group outperformed the experimental group since more of these students produced question forms at higher developmental stages than the experimental group. The superiority of the comparison group came as a surprise, but it could not be interpreted as overall superior proficiency in English. The superiority of the comparison group was explained by remarkable instruction performed by the teacher. It

was noted that the learners in the comparison group received a considerable amount of exposure to correctly formed questions as well as consistent corrective feedback on question forms.

The work of Spada and Lightbown (1993) is useful for this study since it focused on the same features, such as developmental stages and accuracy. However, their work concentrated on oral production, and the results cannot be compared with written production as such. If the results of the study are analysed, it can be noticed that intensive programmes are efficient ways to learn a language. Nonetheless, the study failed in its actual purpose, which was to highlight the effectiveness of form-focused instruction in question development. On the contrary, the comparison group outperformed the test group. This fact was explained by the superior teaching techniques of the comparison group teacher, which is rather unbelievable since it is seen as more influential than using instructional material emphasising questions. All in all, the work of Spada and Ligtbown (1993) produced diverse results, but it is useful in analysing the results of this study, since it has used the same categorisation and given new insights into question development research.

The work with the same age groups of francophone children continued as Spada and Lightbown (1999: 1-22) investigated how a learner's developmental readiness interacted with instruction in L2 acquisition. A total of 150 students from five intensive ESL classes participated in the study. The students were pretested a day before the intervention began. The intervention lasted for two weeks and it was followed by immediate posttest and a posttest four weeks later. The classes were given high frequency exposure to stage 4 and stage 5 questions through a series of activities and tasks. The instructional units contained hundreds of questions, which were prepared as complete material packages. Data elicitation consisted of four task types. The first type, the oral production task, was used to get the students to use questions spontaneously in a communicative activity. The second task type was a scrambled question task, in which the students had to

fill a blank cartoon bubble with scrambled words to form a correct question. In the third task type, the preference task, the students had to figure out which sentences were grammatical and which were ungrammatical. The fourth task type was a picture-cued written question, which had a picture of a busy airport. The picture also had blank speech balloons, and the students were instructed to imagine questions typical of that situation and write them down.

Each task type was analysed separately. Moreover, every question each student produced was coded in terms of the developmental stage it represented. Again, if the student produced two different questions from a certain stage, it was interpreted as progress. Table 6 shows how the students were divided into each stage in the oral production task.

Table 6. Oral production task: percentage of students at each stage (adapted from Spada and Lightbown 1999: 10)

Pretest stage	Number of students/144	Posttest stage		
		Up one stage	No change	Down one stage
2	79a	23 (29%)	54 (68%)	0
3	39	7 (18%)	22 (56%)	10 (26%)
4	25b	0	10 (40%)	14 (56%)
5	1c	n.a.	1 (100%)	0

a= Two students (of 79) went up two stages, from stage 2 to stage 4

The table shows that the majority of the students were in stage 2 and stayed in that stage. However, of the 79 students who were in stage 2 during the pretest, 23 (29%) progressed to stage 3 on the posttest. Moreover, of the 39 students who were in stage 3 during the pretest, only 7 (18%) moved to stage 4 whereas 10 (26%) students went down one stage. The table also shows that the majority, to be more specific, 87 (60%) students made no progress during the research. All in all, a total of 30 (21%) students moved up one stage and two students went up two stages. However, a number of students, as much as 24 (17%), went down one stage, one student regressed even two stages. It seems that the experiment was not as effective as it could have been as it had

b= One student (of 25) went down two stages, from stage 4 to stage 2

c= The only student who was at stage 5, remained at stage 5.

a positive effect only on 30 students. The results would have been more useful if the number of the students in each stage would have been more even to begin with. As such the results are focused on stage 2. However, the study also included two paper-and-pencil tasks and a written production task and it is interesting to see how they differ from this oral production data. Table 7 shows how well the student could construct stage 2, 3, 4 and 5 questions in the scrambled question task. In addition, Table 8 shows how well the students accepted questions from different stages.

Table 7. Scrambled questions task: construction of stage 2, 3, 4 and 5 questions (number of students= 144) (adapted from Spada and Lightbown 1999: 10)

Stage	No. of questions	Pretest	Posttest	Pretest-Posttest
_	_			difference in SD
2	10	648 (45%)	432 (30%)	-11.44*
3	8	599 (52%)	576 (50%)	-1.36
4	12	778 (45%)	1089 (63%)	15.04*
5	7	464 (46%)	484 (48%)	1.27

*p<.001.

Table 8. Preference task: questions at each stage accepted by students (number of students = 144) (adapted from Spada and Lightbown 1999: 11)

Stage	No. of questions	Pretest	Posttest	Pretest-Posttest
				difference in SD
2	5	403 (56%)	353 (49%)	-3.78*
3	16	1382 (60%)	1498 (65%)	4.90*
4	11	998 (63%)	1156 (73%)	8.24*
5	9	622 (48%)	804 (62%)	10.09*

*p<.001.

The results show that there was some improvement between the testings. In the scrambled questions task, the frequency of stage 2 questions decreased as the frequency of stage 4 questions increased. In addition, in the preference task, there was great improvement in the acceptance of stage 4 and stage 5 questions. Therefore, as these results are compared to the oral production task, it seems that the students are more able to recognize than to produce questions at higher stages of development.

The fourth task type, picture-cued written question task, was carried out only once, during the delayed posttest. Table 9 shows, most of the students,

total of 75%, was in stage 4, whereas 21% of the students was in stage 5. As the results are interpreted, it should be noted that, for example, most of the stage 5 questions appeared to be formulaic questions such as *What are you doing* and *Where do you live?* Therefore, these results show that the students can produce questions from stage 4 and stage 5 in certain contexts.

Table 9. Picture-cued written questions task: percentage of students at each stage. (adapted from Spada and Lightbown 1999: 13)

Stage	Percentage N= 144
3	3%
4	75%
5	21%

In sum, the results show that while students are in stages 2 and 3 in their oral production, their written production may approach stages 4 and 5. The results also confirm the previous assumption that the learner progress through an acquisition sequence without skipping stages. This is the case for example in oral performance, where most stage 2 learners progressed to stage 3 though the input concentrated on stage 4 and stage 5 questions. It would be useful, if the picture-cued written task would have been performed more than once, since it was the only task dealing with written questions. Thus, the development could be interpreted and compared to this study as well.

4 RESEARCH DESIGN

The research design of this study is descriptive in nature, which is explained in more detail with the help of Seliger and Shohamy's (1989) discussion of SLA research methods. Typical of descriptive research is that it deals with naturally occurring phenomena connected with language development and processing. In addition, the data are usually taken from already existing sources such as student records. In this study, the phenomenon is question development and the data consists of written tasks produced by various

students, (see section 4.3). Descriptive research is used to find out, whether a certain phenomena exist or it may also provide measures of frequency. This study aims at finding out, whether question development occurs in stages and how many utterances in different stages a certain amount of students produce, (see section 4.2). The data in descriptive research usually focuses on certain aspect, which is considered even in the data collection. The data in this study were collected using written tasks which were specifically planned to generate questions, (see section 4.4). In descriptive research the data is usually analysed by using descriptive statistics. In fact, this study provides information on frequencies (see section 4.5).

Although the data are analysed descriptively, a qualitative analysis is also included. In this, the focus is on the differences and variation in the data especially concentrating on certain issues. First of all, the peculiarities in the data are explained as well as the cases that could not be included in the descriptive analysis because of, for example, problems in categorisation. Secondly, the results of the 7th and 9th graders are compared. In this, the focus is on finding answers how the two groups differ and whether the other group outperforms the other.

4.1 Motivating the study

Previous research has shown that there clearly exist developmental stages in learning the interrogatives. However, the previous research has mainly concentrated on question development in oral communication. Moreover, Spada and Lightbown (1999) suggested that the development is different in recognizing, understanding, speaking and producing questions in writing. Therefore, there seems to be a lack of studies when it comes to written question development. In addition, Finnish learners of English have not been studied much in this respect. As well as providing valuable information to the SLA research, this study can be helpful for English teachers, since it gives information on what students can do, which increases our understanding of

the learning process. In addition, if the study focuses on what the learners can do, it also reveals something of the quality of the teaching. It may also be used as a tool in planning education as well as supporting students in progressing in their learning. Moreover, errors are typically seen as failures and this study can give a new understanding of them. Although errors are discussed in this study, they are seen as indicators of development.

4.2 Research questions

This study aims to find out how well Finnish teenagers can produce English questions in writing. To be more specific, it aims to find out what developmental stages produced by Pienemann et al. (1988), (see Table 3) are found in the material. It describes the frequency of questions and performance of Finnish learners in them. This study also wants to give information on what the typical errors Finnish learners make in producing English questions are and what the frequency of errors is. In addition, this study wants to shed light on the process of learning a foreign language. Therefore, the study aims at finding out what happens in the learning process during two years, by comparing the results of 7th and 9th graders are compared with each other. Since 9th graders have studied English for a longer period of time, it could be hypothesised that they perform better in the tasks. In sum, the research questions of this study are:

- 1. What developmental stages can be found in the written texts produced by Finnish learners?
 - a) How many questions are produced in different stages?
 - b) Are the learners in beginner or advanced stages?
- 2. How well do the learners master questions in writing?
 - a) How many errors occur in the data?
 - b) What are typical errors the Finnish learners make while producing English questions?

- 3. How do the questions develop during lower secondary education?
 - a) What are the similarities and differences found in the question production of 7th and 9th graders?
 - b) What are the similarities and differences in the errors produced by the 7th and 9th graders?
 - c) What kind of indicators of development can be found in the data?

In order to find answers to these questions three different types of written tasks were performed by 7th and 9th grade students. The data, the participants and the data analysis are introduced in more detail in the following sections.

4.3 Data

The data for the present study consists of 180 written texts produced by 7th and 9th graders from various comprehensive schools in Finland. The data were collected during the spring of 2007 and it was originally used as pilot material for a project entitled CEFLING. CEFLING is an ongoing project run by scholars working in the Department of Languages in Jyväskylä University and the Centre for Applied Language Studies in Jyväskylä University. The aims of the project are explained in detail in their web page, http://www.jyu.fi/hum/laitokset/kielet/cefling/en:

The CEFLING project addresses fundamental questions in how second language proficiency develops from one level to the next. These proficiency levels, or scales, are a central component of the Common European Framework of Reference for Languages (CEFR). The results of the study will provide a new theoretical model for connecting the CEFR "can do" type proficiency level descriptions with linguistic characteristics of actual language data.

The CEFR scale describes what language learners can do in a foreign language at different levels ranging from beginning to advanced learners. The CEFR is currently being adopted throughout Europe as the international yardstick for curricula, examinations, materials and courses. Finland has pioneered in using the CEFR: it has been adapted for the new National Core Curricula for schools and for the National Certificates language examination.

Describing language learners and their abilities – as is done in the CEFR requires theoretical and practical knowledge of both language acquisition and language assessment. Rarely, however, do these two well established but independent areas of study communicate, and therefore it is uncertain to what extent the CEFR, or other scales, reflect actual language learning. This project, which is a part of a wide European network of researchers, brings second/foreign language acquisition and language testing experts together to investigate common concerns about the CEFR.

This study is connected to the CEFLING project since it utilizes the same data and focuses on language proficiency development as well. In addition, members of the project have given guidance for and support to this study.

The data were collected during regular English lessons with the help of English teachers. Each group of students produced three different texts during three sessions. The CEFLING project used eight different text types for their purposes, but for this study only three text types were chosen. The reason for this was that most of the texts did not have interrogatives in them. Therefore, the text types, which had most questions in them, were chosen for this study. These text types were: a postcard, an e-mail message and a translation task. In the postcard task, the students wrote a thank you card for an English friend. In the e-mail message the students had to cancel and rearrange a meeting with a friend. The translation involved a grandmother's letter to an American cousin which had to be translated from Finnish to English. The task assignments in Finnish are found below.¹

Task 1. Postcard

Olet sopinut englantia puhuvan ystäväsi kanssa tapaamisen kahvilassa. Serkkusi, joka asuu Ruotsissa, tuli kuitenkin yllättäen käymään, ja joudut perumaan tapaamisen. Lähetä ystävällesi sähköpostiviesti, jossa selität, miksi et pääse tulemaan.

 $^{\rm 1}$ The task assignments are listed according to their original order in the CEFLING project.

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Task 2. E-mail message

Sait syntymäpäivälahjan ystävältäsi Englannista. Kirjoita hänelle kiitoskortti. Kerro kortisssa seuraavat asiat:

- kiitä muistamisesta ja saamastasi lahjasta.
- kerro syntymäpäiväjuhlistasi: missä juhlat vietettiin ja keitä siellä oli
- mainitse ainakin yksi hauska/ikimuistoinen tapahtuma juhlistasi
- kutsu ystäväsi käymään luonasi

Muista aloittaa ja lopettaa kortti sopivalla tavalla.

Task 3. Letter translation

Isoäitisi, joka ei osaa englantia, on pyytänyt sinua kirjoittamaan kirjeen serkulleen Yhdysvaltoihin. Käännä hänen kirjeensä englanniksi niin tarkasti kuin osaat.

Hyvä Mary-serkku,

Kuinka voit? Millainen sää siellä on? Paistaako aurinko? Täällä Suomessa on hyvin kylmää. Toivottavasti siellä on lämpimämpää.

Oletko kuullut mitään Jaakko-serkusta, joka muutti Floridaan vuosi sitten? Missä hän asuu? Onko sinulla hänen osoitteensa? Voisitko pyytää häntä kirjoittamaan minulle?

Muistatko Liisan, josta Jaakko piti niin kovasti? Liisa asui naapuritalossa. Hän oli vuoden vanhempi kuin Jaakko. Hänellä on nyt 10 lapsenlasta, joista nuorin syntyi viikko sitten. Kertoisitko Jaakolle?

Pistän mukaan kirjeeseen valokuvan, jossa on Jaakon sisar Alma. Alman vieressä on Raija, jonka nukeilla aina leikin lapsena ja jolle annoin nallen. Raija muutti Espanjaan. Hänen mielestään se on kaunein paikka maailmassa! Miksi niin monet vanhat ihmiset muuttavat pois Suomesta? Itse en halua lähteä minnekään.

Entä sinä itse? Milloin tulet käymään Suomessa? Haluaisin niin kovasti nähdä sinut.

Terveisin, Aliina

4.4 Participants

The participants were 7th and 9th graders from two comprehensive schools in western and central Finland. The participants were aged from 13 to 16 and they had started their English studies in the third grade. A total of 37 7th graders and 56 9th graders participated in the study.

4.5 Data analysis

The 180 written texts were transcribed with CHILDES program by the students participating in a course organized around the CEFLING project. With the help of this program, questions were collected for detailed study. A total of 250 questions were found in the 7th grade data, whereas 9th graders produced 685 questions. The questions were grouped into two different categories. Firstly, the two age groups were kept separate. Secondly, the interrogatives were organised by the task types: the postcard, the e-mail message and the translation task. Every question that was produced was coded in terms of the developmental stage it represented. The categorisation of the developmental stages was based on Pienemann et al. (1988), who divided question development into six stages. In addition to these six stages, two categories, such as *unclear* and *information missing* were added in order to make the analysis more reliable. In addition, the erroneous questions were collected and categorised based on Richards (1973a) with an additional category of *unclear* cases.

5 FINDINGS

The three task types (explained in detail in 4.3) were used to collect information on the subjects' abilities in producing written English questions. The tasks used in this study were low in their explicitness, in other words they were used to collect language data produced rather spontaneously. However, the task assignments were formed to elicit questions. Therefore, the tasks used in this study were controlled in some parts but also gave the writer an opportunity to produce texts freely. When analysing the results, they were divided into three parts. Firstly, they were divided by task type, then by age, and lastly, they were analysed both descriptively and qualitatively. With the help of this categorisation the large amount of data could be handled more conveniently and it also enabled the comparison of

results of different age groups in different tasks. Moreover, the data were analysed both descriptively and qualitatively in order to have a wider understanding of question development. Tables were used to add readability and to show the results in a straightforward manner, whereas detailed analysis of the data is found in the running text.

The following sections are divided into three parts, which aim at finding answers to the three research questions. More specifically, section 5.1 describes the developmental stages found in the data, focusing on the amount and quality of different questions and finding answers to the first research question: what developmental stages are found in the written texts produced by Finnish learners? In section 5.2 the errors are categorised and counted, which gives answers to the research questions focusing on how well do the learners master written questions. Section 5.3 includes the cross-sectional analysis of the data as it compares the results of 7th and 9th graders with each other and aims to find answers to the third research question, that is, whether there occurs development over the two years.

5.1 The developmental stages in questions

The core of the analysis is in the developmental stages, which are explained with the help of the classification of developmental stages in English questions described by Pienemann et al. (1988), (see Table 3). The reason for using this classification is that it is the most extensive and reliable categorisation. In addition, the majority of the studies (see section 3.2.2) following the work of Pienemann et al. (1988) have used the same classifications. Therefore, it is convenient to compare the results of this study with the previous ones. In the following the findings of this study are explained in detail. In section 5.1.1 the focus is on the postcard task; in section 5.1.2, on the e-mail message task, and in section 5.1.3 on the translation task.

5.1.1 Task 1: Postcard

In writing task 1, the students were not concretely directed to produce questions, but they, however, produced some questions. In the task assignment the students were reminded to begin and end the postcard appropriately and for example asked to invite the recipient to pay a visit. Therefore, some questions were expected to appear in the data. In the following, the results concerning this task are discussed firstly, in a descriptive manner and secondly, qualitatively.

Descriptive analysis

A total of 17 7th grade students produced 11 questions, whereas 54 students in 9th grade elicited 30 questions. The distribution of question types found in the present data is shown in detail in Table 10 below:

7th grade 9th grade Stage 1 2 (18.2%) 4 (13.3%) 2 2 (18.2%) 1 (3.3%) 3 3 (27.3%) 7 (23.3%) 4 (36.4%) 13(43.3%) 4 5 0 2 (6.7%) 6 0 0 Unclear 0 3 (10%) Total 11 (100%) 30 (100%)

Table 10. Postcard: The questions in different stages by frequency

Of the 11 questions produced by the 7th graders, 18.2% (n=2) were stage 1 and 18.2% (n=2) stage 2 questions. The majority of the questions were in two stages: stage 3 had 27.3% (n=3) questions and stage 4 had 36.4% (n=4) questions. The narrowness of the data might have an effect on how reliable and general the results are, nevertheless, it shows a tendency towards those two stages. As is evident no stage 5 and stage 6 questions occurred.

A total of 30 questions were produced by 54 students in the 9th grade participating in this task, (see Table 10). The most frequent question type was stage 4, with 43.3% (n=13) of all 30 questions, followed by stage 3 with 23.3% (n=7) and stage 1 with 13.3% (n=13.3) of all questions. In this data, stage 5 appeared in 6.7% (n=2) of all questions whereas stage 2 was present in 3.3% of the cases (n=1). Therefore, the main question types were the same with both the 7th and 9th grade data. In addition, the 9th grade data has percentually less stage 1 and stage 2 questions. A couple of stage 5 questions were also present in the data.

Qualitative analysis

In the following, examples of different stages in the 7th grade data are given. A classic example of stage 1 question is *How are you?* which occurred only twice in the data. Since *How are you?* is one of the first expressions taught in English lessons and used frequently in communication, it came as a surprise that only two students had used it. In addition, in the task assignment the students were asked to begin and end the letter appropriately. Therefore, this sort of a polite question could have occurred more often in the data. An example of a stage 2 question is So, would you? Although this question has the correct word order, in other words, auxiliary/modal auxiliary + S structure, it was interpreted as a question which is produced with a rising intonation if spoken. Also the fact that the question had no verb in it led to it being classified as a stage 2 question. Typical of the stage 3 questions in the data was that they had a *do/wh-/be* +*SVO* structure, for example: *Do you remember* Carita? In the data, most of the stage 4 questions were yes/no questions with the structure auxiliary/modal auxiliary + SV such as Could you come in the summer? In the data, a stage 4 wh- question also occurred: What's the weather like?

In the following, examples of the 9th grade data and different stages are reported. As an example of stage 1 question *How do you do?* appeared. A

good example of a stage 2 question, which is constructed in oral communication with a rising intonation, was found in the data: *Next summer?* Examples of stage 3 questions include: *What you think?* and *Do you remember when I telling you my best friend,* which have a typical stage 3 structure *wh-/do* + *SVO*? Stage 4 questions represented the majority of the data and they were all *yes/no* questions with the structure *auxiliary/modal auxiliary +SV*. Examples of these questions include: *Can you come to Finland next summer?* and *Could you please come to visit me?* In addition, two stage 5 questions were also found. Both of them were *wh-* questions with the structure *wh +auxiliary +SV*, for example *Why wouldn't you come here next month*. Furthermore, no stage 6 questions were found in the data, but three unclear question types were analysed. All of these were similar as they all had a question mark in the ending, but otherwise they were conditional sentences. Therefore, they can be interpreted as mistakes, like in *It would be nice if you could be visit me sometimes?*

5.1.2 Task 2: Electronic mail message

The electronic mail message task was similar to Task 1 in that the writer could decide whether or not to ask questions. However, this task elicited a greater number of questions both in the 7th graders and the 9th graders than the previous one. In this task, the students had to rearrange a meeting with a friend with the help of electronic mail. Their task was to suggest when and where they could meet. Consequently, the clear majority of the questions in this task were some sort of suggestions.

Descriptive analysis

A total of 35 questions were produced by 20 students in the 7th grade along with 31 questions produced by 21 9th graders. Again, the questions were analysed and classified by stage (see Table 11).

Table 11. Electronic mail message: Questions in different stages by frequency

Stage	7th grade	9th grade
1	6 (17.1%)	8 (25.8%)
2	1 (2.9%)	1 (3.2%)
3	3 (8.6%)	0
4	17 (48.6%)	16 (51.6%)
5	1 (2.9%)	1 (3.2%)
6	1 (2.9%)	1 (3.2%)
Unclear	6 (17.1%)	4 (12.9%)
Total	35 (100%)	31 (100%)

In the 7th graders data, 17.1% (n=6) were stage 1 questions, 2.8% (n=1) stage 2 questions and 8.5% (n=3) stage 3 questions. The majority, in other words 48.5% (n=17) of the questions were in stage 4 whereas stages 5 and 6 both had 2.8% (n=1) questions. Proportionally a large number of the questions, 17.1% (n=6) were marked as unclear, which means that they could not be classified as any of the stages explained in the theory of Pienemann et al. (1988).

In the 9th grade data, a total of 25.8% (n=8) of questions were in stage 1 whereas 3.2% were in stage 2. Furthermore, 51.6% (n=16) of the questions were in stage 4 while both stages 5 and 6 had 3.2% (n=1) of the questions. In this task, 12.9% (n=4) were unclear cases.

Qualitative analysis

Examples below summarize how questions are expressed in the different stages in the 7th grade data. In stage 1 several questions formed with a couple of words occurred such as in *Monday o'clock half seven?* Furthermore, an example of stage 2 questions shows how *SVO* + rising intonation pattern is once again used: *It is okey?* A beginner level of a *wh*- question, in other words, a stage 3 question was found in the data: *But where we meet?* In stage 4 one *yes/no* question appeared: *Is this good time for you?* However, most of

these questions were of the form auxiliary/ modal auxiliary + SV and an example of these is: Shall we meet at next week? Only one stage 5 question occurred in the data, this was of the form wh + auxiliary: But when shall we meet? Questions in stage 6 were quite challenging to define. However, a question such as Can we meet then? has been inverted to form an example of cancelled inversion: Maybe we can meet then. Again, there were several questions, which could not be classified as belonging to any of the six stages suggested by Pienemann et al. (1988). These unclear questions are analysed in the following. The first unclear case was the following question: If we can meet in town what do you think? The former part of the question If we can meet in town could be interpreted as a stage 2 question since it has SVO structure and the question is formed with a rising intonation. However, the latter part of the question is clearly a stage 3 question: What do you think? Therefore, this question was analysed as an unclear case. Another unclear case was the question Shall we on Wednesday at 17.45 in café? The problem with this question was that in addition to a modal auxiliary shall, it does not have any verb in it. If the writer had placed a verb in the correct position, a stage 4 question could have been formed. The rest of the four unclear cases were similar in structure, like in *How about in the Park three o'clock?* In the English grammar (Downing and Locke 2006: 208), this kind of questions are classified as moodless wh-question as an invitation and a suggestion. In the previous studies, no examples of the use of how about appeared. Therefore, these questions could not be classified based on the work of Pienemann et al. (1988).

As the data are studied in depth, it gives information on how the 9th grade students have succeeded in forming questions from different stages. It can be noted that stage 1 questions occurred frequently in the data, although they are such beginner level questions and it could be expected that the students in the 9th grade constructed more questions from the higher stages. An example of a question in this stage: *Or Sunday?* A stage 2 question with the structure *SVO* + rising intonation, was also found: *You know Jonna?* There

appeared two varieties of stage 4 questions. One of them was yes/no questions with auxiliary inversion, such as Is it ok if we go to shoping on next week? Questions like these could easily be analysed as stage 2 questions, however, typical of that stage yes/no questions is that they are ungrammatical whereas these are grammatical. Other stage 4 questions were of the type auxiliary/modal auxiliary + SV, for example, Would you then like to go cafe? The one question in stage 5 was word-for-word identical with the stage 5 question in the 7th grade data, But when shall we meet? Nonetheless, the stage 6 question was unique: I'm very sorry but could be possible, that you wouldn't come here yet. This question was analysed as having cancelled inversion.

Again, unclear cases occurred. First one of them was a moodless whquestion as an invitation and a suggestion: How about if we meet in front of the cinema at Friday at nine o'clock? The other three unclear cases were grammatically such incorrect that it was difficult to determine what the writer wanted to express and to which stage these questions should belong, such as How it would be a new meeting in an new place and with a new time?

5.1.3 Task 3: Letter translation

The letter translation task differed from the previously mentioned task types in that it was intentionally made to contain several questions from different stages. Therefore, this task type elicited clearly more questions than the other two tasks. In addition, this task was also performed by more students than the previous tasks. Because this task differs from the previous two tasks, the results are explained in a slightly different way. However, the number of questions in different stages is given similarly as was done in the previous tasks. In addition, the most frequent translations per question are reported in the form of a table. This was done because it enabled a more detailed analysis of question development and it gave a wider picture of how the students in the same grade comprehended and translated the same questions.

Descriptive analysis

A total of 204 questions were produced by 17 7th grade students in addition to a total of 624 questions produced by 52 9th grade students. The questions were analysed and divided into different stages, (see Table 12)

Table 12. Letter translation: The frequency of questions in different stages

Stage	7th grade	9th grade
1	32 (15.7%)	102 (16.3%)
2	2 (1.0%)	9 (1.4%)
3	87 (42.6%)	239 (38.3%)
4	62 (30.4%)	171 (27.4%)
5	13 (6.4%)	58 (9.3%)
6	0	0
Unclear	5 (2.5%)	21 (3.4%)
Information missing	3 (1.5%)	24 (3.8%)
Total	204 (100%)	624 (100%)

In the 7th grade data, a total of 15.7% (n=32) of all questions were in stage 1, whereas stage 2 was weakly represented with only 1% (n=2) of all questions. The majority, to be more specific, 42.6% (n=87) of the questions were in stage 3 which was followed by stage 4 with 30.4% (n=62). Stage 5 had 6.4% (N=13) of the questions. A total of 2.5% (n=5) of the questions were analysed as unclear cases, in other words, not belonging to any of the stages in the theory of Pienemann et al. (1988). With this data, the cases where the writer had not translated a question at all, were identified as information missing. In this data, there appeared 3 (1.5%) cases, which were left blank.

As can be noticed in the 9th grade data, the majority of the questions are in stages 3 (38.3%), 4 (27.4%) and 1 (16.3%). Especially the amount of stage 1 questions was surprising since it is such a beginner stage question type. Again, some writers had not translated certain question at all, therefore a total of 3.8% (n=24) of all questions were these *information missing types*. In addition, 21 (3.4%) unclear questions occurred.

Qualitative analysis

As the results are analysed in depth, it is obvious that there appears a great variation in the data. Since the data in this task are more extensive, it is more reliable in making generalizations than the previous tasks. In contrast to the previous tasks and because of the nature of this task the results are analysed question by question.

Table 13 shows the most popular translations per question in the 7th grade data. It also shows which stage those questions belonged to and how many of the writers had used that version. The stages are expressed in numbers, in addition, in stages 3, 4 and 5 the questions are marked with symbols, wh representing wh-question and y/n marking yes/no questions. Moreover, do represents questions with do; other marks the cases with other fronting and aux sentences with auxiliary inversion. The data shows that there occurred a great variation between the participants' products. For example, although the students were asked to produce, for example, a stage 3 question, they had produced questions from various stages, even from three different stages. An example of this variation is *Is sun shining?* which is a stage 4 yes/no question. In addition, the learners produced questions from two different stages; *Does the sun shine?* which is a stage 3 question with do and *Sun shine?* which is a stage 2 question formed with rising intonation.

Again, some unclear questions appeared in the data. One of them was *Does it sunny?* which could not be categorised into any of the stages. Another was: *Did Jaakko tell do you?* in which the writer had misunderstood the question in addition to it being grammatically incorrect. The third unclear question was *Please tell it for Jaakko.* in which the writer had translated the question as a request. In the fourth unclear case the writer knew where the question word

belonged to, but obviously could not figure out what it was: _____ you come in Finland? Without the writer pointing out that he/she knows that the question word is missing, a stage 2 question could have been formed: You come in Finland?

Table 13. Translation task: The most frequent questions in the 7^{th} grade data

Example questions	Stage	Number of Questions
1. How are you?	1	15
How you are?	1	1
Is everything OK?	1	1
2. How is the weather like in there?	4wh	2
What's the weather like there?	4wh	4
What kind of weather is there?	3wh	5
What kind of wether there is?	3wh	5
3. Is sun shining?	4y/n	7
Does the sun shine?	3do	8
Sun shine?	2	1
4. Have you heard anything of cousin Jaakko, who moved to Florida a year ago?	4y/n	14
Do you hear anything about Jaakko cousin, how move to Florida year ago.	3do	2
Are you hear something about Jaakko? Last year he moves from florida.	3other	1
5. Where does he live?	5wh	6
Where he lives?	3wh	11
6. Have you got his address?	4y/n	2
Do you have his address?	3do	14
Have you his address?	3other	1
7. Could you ask him to write to me?	4y/n	7
Can you ask him to write to me?	4y/n	9
Would you ask him to write to me?	4y/n	1
8. Can you remember Liisa, how Jaakko likes very much.	4y/n	1
Do you remember Liisa, whom Jaakko liked so much?	3do	15
You remember Liisa josta Jaakko liked very much?	2	1
9. Could you tell that to Jaakko?	4y/n	4
Would you tell to Jaakko?	4y/n	6
Can you tell Jaakko?	4y/n	5
10. Why does so many old people move away from Finland?	5wh	1
Why so many old people move away from Finland?	3wh	16
11. How about you?	1	8
What about you?		6
And what you yourself?		1
12. When will you come to visit Finland?	5aux	1
When do you come to visit Finland?	5do	5
When you come to visit here in Finland?	3wh	10
J	- · · · - ·	~

Table 14 shows a closer analysis on the different question types in the 9th grade data. In the table, examples of the most popular question types are given and their stage is analysed, expressed in numbers, and marked with symbols explained above. The table also shows how many of the 52 students wrote that type of a question.

In the data, several unclear cases occurred and four types were identified of them. The first type was questions with verb missing, such as *What the weather like in there?* The second type was questions with incorrect question word like in *Where weather that is?* The third group contained the cases where the writer had used conditional forms instead of forming a question, such as *Could you ask him, if he could write me.* The fourth type was codemixing with Swedish as, for example, in *Be du he write for me?*

Table 14. Translation task: The most frequent questions in the 9th grade data

Example questions	Stage	Number of	
• •		questions	
1. How are you?	1	31	
How do you do?		7	
How are you doing?		5	
2. What's the weather like there?	4wh	15	
What kind of weather there is?	3wh	14	
What kind of weather is there?	3wh	10	
How is the weather there?	4wh	3	
3. Does sun shine?	3do	15	
Is sun shining?	4y/n	14	
Shiner the sun?	2	4	
Sunny?	1	4	
4. Have you heard anything about cousin Jaakko, who	4y/n	37	
moved to Florida a year ago?	19/11	37	
Are you hear anything about your cousin Jaakko, who	3other	11	
travel live in Florida about year ago?	Some	11	
Do you heer anything about causon Jaakko, who move	3do	4	
in Florida years ago?	300	T	
5. Where does he live?	5do	24	
Where he live?	3wh	24	
6. Do you have his address?	3do	29	
Have you got his address?	4y/n	9	
Have you his address?	3other	6	
7. Could you ask him to write me?	4y/n	27	
Can you ask him write to me?	4y/n	9	
Would you ask him to write me?	4y/n	5	
8. Do you remember Liisa who Jaakko liked so much?	3do	42	
Remember you Liisa, who Jaakko like so hard?	3other	5	
Can you remember Liisa, whos Jaakko likes so much?		2	
•	4y/n	22	
9. Would you tell to Jaakko?	4y/n	16	
Could you tell to Jaakko? Can you tell for Jaakko?	4y/n	7	
	4y/n	33	
10. Why so many old people move away from Finland?	3wh		
Why old people moved off i Finland?	3wh	7	
Why does so many old people move away from	5do	6	
Finland?	1	01	
11. How about you?	1	21	
What about you?	1	19	
How you?	1	6	
12. When you come to visit in Finland?	3wh	22	
When do you come here in Finland?	5do	11	
When will you come to Finland?	5wh	6	
When are you coming to Finland?	5wh	6	

5.2 Errors in questions

Like in the previous sections, when analysing the errors found in the data, the productions of 7th graders and 9th graders were kept separate. In addition, the errors were analysed task by task and then categorised based on the work of Richards (1973a), (see chapter 2.1.3). In short, Richards (1973a:

96-113) identified five error types in using questions. In the following, different error types with examples are listed. Error type 1 is omission of inversion (When she will be 15?) and error type 2 is be omitted before verb + ing (When Jane coming?). Error type 3 involves omission of do (Why you went?) whereas error type 4 is a wrong form of an auxiliary or a wrong form after an auxiliary (*Do he go there?*). Error type 5 include inversion omitted in embedded sentences (I told him I do not know how old was it.) The reason for using this classification is that it differed from the other error classifications in that it actually focused on errors in questions from a developmental point of view, whereas several others concentrated on defining errors as such. In addition to Richards (1973a), there does not seem to be a lot of research focusing on errors in the question development process. However, this study aims at finding out, what kind of errors occurred in written questions and how they could be categorised. In the following the findings are explained in detail. In section 5.2.1 the focus is on the results of the postcard task, followed by the results in the e-mail message task in section 5.2.2 and section 5.2.3 that discusses the results in the translation task.

5.2.1 Task 1: Postcard

Since in writing task 1 the students were directed to write a postcard and begin and end it in a correct manner, some questions were elicited. However, in both groups, the data were not as wide as was expected. From this data, the erroneous questions were located and analysed both descriptively and qualitatively.

Descriptive analysis

A total of 11 questions were produced by 17 students from 7th grade in addition to 30 questions produced by 30 9th graders. Errors in these questions were analysed and classified, (see Table 15). ² As is evident, the majority of

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² Because of the narrowness of the data the percentages were not calculated.

the questions were correct, since both the 7th and 9th graders made only three errors. Therefore, 27.2% of the questions were erroneous in the 7th grade data, whereas 10% in the 9th grade. As is evident, these errors were in both groups either inversion errors or omission of *do* errors. In this, the narrowness of the data has a great effect on how reliable and general the results are, nevertheless, it shows how these two groups performed in this specific task.

Table 15. Different error types by frequency

Error types	7th grade	9th grade
1	2	1
2	0	0
3	1	2
4	0	0
5	0	0
Total	3	3

Qualitative analysis

The narrowness of the data affects the qualitative analysis as well. However, examples of the errors in the data demonstrate this phenomenon in detail. A typical type 1 error, that is, an inversion error, occurred in both groups, such as *When you can come to Finland with me?* A type 3 error, in other words, omission of *do* error was found in the data of both groups as well, such as *What you think?*

5.2.2 Task 2: Electronic mail message

The electronic mail message task was similar to Task 1 in that the writer was given a chance to produce the text rather freely. The students were asked to write an electronic mail message in which a meeting with a friend had to be rearranged. In fact, this task elicited a greater number of questions both in

the 7th graders and the 9th graders than the previous one. Again, erroneous questions were located and analysed both descriptively and qualitatively.

Descriptive analysis

The data in this task consists of 35 questions produced by 20 students in the 7th grade and 31 questions produced by 21 students in the 9th grade. The erroneous questions were identified and analysed (see Table 16). ³ In this, an unclear type was also added, since there were erroneous questions that did not fit into any of the error types but were interpreted as having to do with question development. These unclear cases are explained in detail in the qualitative analysis below.

Table 16. The different error types by frequency

Error types	7th grade	9th grade
1	1	2
2	0	0
3	1	1
4	1	0
5	0	0
unclear	1	2
Total	4	5

In this task like in the previous task, the majority of the questions were correct. However, 11.4 % of the questions were erroneous in the 7th grade data, whereas 16.1% of questions were erroneous in the 9th grade. These errors were in both groups either inversion errors, omission of *do* errors or auxiliary errors. In addition, one unclear question type was found in the 7th grade data, whereas in the 9th grade data there were two unclear cases.

 $^{^{\}rm 3}$ Because of the narrowness of the data the percentages were not calculated.

As was noted in the analysis of Task 1, the data are narrow in this task as well, however, these errors shed light on question development and indicate the performance of these groups. A typical type 1 error, that is, an inversion error, occurred in both groups. An example of this is *It is okey?* An example of omission of *do* error, which is categorised as error type 3, is *You know Jonna?* In this data a type 4 error, which is related to auxiliary occurred, such as *But could we met at Friday seven o'clock in front of cinema?* An example of an unclear case in the 7th grade data is *Shall we on Wednesday at 17.45 in cafe?* In this, the writer has probably forgotten to place a verb *meet* in the question. An example of an unclear case in the 9th grade data is *So I cant come today but if is possible that we make a deal for a new day.* In this, the question would be correct if the learner had placed *it* instead of *if* and inverted them. Therefore, this is not a clear case of an inversion error.

5.2.3 Task 3: Letter translation

If in the previous tasks the data were narrow, that is not the case with Task 3. In the letter translation task the students were instructed to translate questions from Finnish into English. Therefore, this task type elicited clearly more questions than the other two tasks, but the amount of questions was also greater because many more participated in it than in the previous two tasks. In the following, the data concerning this task are analysed descriptively and qualitatively.

Descriptive analysis

A total of 204 questions were produced by 17 7th grade students, but in three cases the information was missing, therefore errors in 201 questions were analysed. In addition, a total of 624 questions were produced by 52 students

in the 9th grade data. However, in 24 cases the information was missing, thus, errors in 600 questions were analysed and categorised, (see Table 17).

Table 17. The frequency of different error types

Error types	7th grade	9th grade
1	7 (13.2%)	19 (10.2%)
2	0	4 (2.1%)
3	34 (64.2%)	94 (50.3%)
4	4 (7.5%)	15 (8%)
5	0	0
unclear	8 (15.1%)	55 (29.4%)
Total	53 (100%)	187 (100%)

In the 7th grade data, 26.4% (n=53) of the questions were erroneous, the main error type being type 3 presenting 64.2% (n=34) of all errors. It is followed by unclear types with 15.1% (n=8) and type 1 questions with 13.2% (n=7). Only 7.5% (n=4) of the errors were type 4. However, in the 9th grade data 31.2% (n=187) of the questions had errors in them. More specifically, the main error type was type 3 with 50.3% (n=94). Another great error type group was unclear error types representing 29.4% (n=55). Other error types were type 1, which had 10.1% (n=19) of all errors and type 4 which had 8% (n=15) of errors. 2.1% (n=4) of errors were categorised under type 2.

Qualitative analysis

In the following, examples of different error types are given. When analysing the results, it is obvious that same errors are typical of both groups. As was noted above, the main error type in both groups was omission of *do*, such as *Why so many old people move away from Finland?* In some cases *do* was omitted in the beginning of the question, such as *You remember Liisa*, who Jaakko did like so much? Error type 1 was also well represented in the data of both groups, and an example of this is *What kind of wheather there is?* In addition, errors related to the use of auxiliaries occurred, such as *Can you told hem to write for*

me? Error type 2 was only present in the 9th grade data, for example *Where he living*?

The second largest group of errors were unclear cases, which reveals that the categorisation of errors in questions by Richards (1973a) is not extensive enough. Thus, more error types need to be included in that categorisation. In fact, the unclear cases could be divided in three groups. One group involved the omission of the verb, such as in *What the weather like in there?* and *How you doing?* Another group was the omission of the subject, such as in *Can ask him to write to me?* The third error group was the use of the wrong verb, such as in *Do you heard anything about Jaakko who has living in Florida.* or *Does it sunny?* These three groups represented at least the majority of the unclear cases in this study, although some unclear cases still remained, such as *Are you he's address?* and *What look like weather there is?*

5.3 Question development during lower secondary education

The previous two sections concentrated on reporting the results of the first two research questions. The data in the 7th and 9th grade were analysed separately to be able to compare them with each other. Therefore, this section aims at finding answers to the third research question. That is, it aims at pointing out what similarities the two groups have and how they differ from each other both in question development and errors produced. In addition, this section focuses on whether any indicators of development are found in the data. In other words, an attempt is made to find out examples that would show how the 9th graders have progressed as compared to the 7th graders. Moreover, it is hypothesised that 9th graders should perform better since they have studied the English language longer. Since the amount of data were not even, the analysis is based on differences in percentages.

It should be noted that an attempt was made to run statistical analysis on the data. However, the quality of the data became a hindrance, to be more

specific, the fact that all stages did not have questions in them caused difficulties in the statistical analysis. Moreover, it had such an effect that the results of the analysis were either unreliable or it did not show any difference between the two groups. However, since the frequency of questions in the whole data did not have any zero values in it, a statistical analysis was performed in it and the results are shown in Appendix 1. If the results of the statistical analysis in this task and the percentual differences in other tasks are interpreted, it is clear that no major differences between the two groups appears in the data. Therefore, this indicates that no development in the formation of written questions occurs during the lower secondary education.

In this study, a total of 250 questions produced by 44 7th graders and 685 questions produced by 127 9th graders were examined in terms of developmental stages. All questions in all tasks were calculated in order to find out what stages the questions in the whole data represent, (see Table 18)

Table 18. The frequency of questions in different stages in the whole data

Stage	7 th grade	9 th grade
1	40 (16%)	114 (16.6%)
2	4 (1.6%)	11 (1.6%)
3	93 (37.2%)	246 (35.9%)
4	83 (33.2%)	200 (29.2%)
5	14 (5.6%)	61 (8.9%)
6	1 (0.4%)	1 (0.1%)
Unclear	12 (4.8%)	28 (4.1%)
Information missing	3 (1.2%)	24 (3.5%)
Total	250 (100%)	685 (100%)

As is evident, the results in both groups were almost alike. The majority of the questions in both groups, that is, 70.4% in the 7th graders data and 65.1% in the 9th graders data were in stages 3 and 4. The third most common stage was stage 1 representing approximately 16% of questions in both groups.

All questions in all tasks were calculated together in order to find out what errors were common in the data as a whole, (see Table 19):

Table 19. The frequency of error types in the whole data

Error type	7 th grade	9 th grade
1	10 (16.9%)	22 (11.3%)
2	0	4 (2.1%)
3	35 (59.3%)	97 (49.7%)
4	5 (8.5%)	15 (7.7%)
5	0	0
Unclear	9 (15.3%)	57 (29.2%)
Total	59 (100%)	195 (100%)

What is striking is that in the 7th grade data, of the total of 250 questions 23.6% (n=59), were erroneous. In the 9th grade data the number was even larger, 28.5% (N=195) of the total of 685 questions were incorrect. If the error types are studied more closely, it can be pointed out that the majority of errors, 59.3% in the 7th graders data and 49.7% in the 9th graders data are caused by the omission of *do*. Inversion errors are common as well, representing 16.9% and 11.3% of errors in the data.

6 DISCUSSION

The purpose of the present study was to find out, what developmental stage the Finnish lower secondary education students are in their English question production in writing. Therefore, the focus was on analysing the questions the students produced in terms of developmental stages and in addition, describing the errors the students produced. The study had three major research questions and they are discussed in the following with the findings from the data.

The first research question was: what developmental stages are found in the written texts produced by the Finnish learners of English? The developmental stages were explained in the study by Pienemann et al. (1988), and a range of research (White et al. 1991, Spada and Ligthbown 1993, 1999) following it supported the existence of developmental stages in questions. Thus, in this study, the existence of developmental stages was not questioned, on the contrary, it aimed at finding out how these stages occur in the data of Finnish learners. In addition, the focus was on finding out how many questions in different stages are produced and whether the learners were in beginner or advanced stages. Spada and Lightbown (1999) investigated a group of francophone students aged from 10 to 12 and found that 75% were in stage 4, 21% in stage 5 and 3% in stage 3 in the written production of English questions. In comparison, in this study the students were aged from 13 to 16 and as the results of both groups are summed up, it was found that 36% were in stage 3, 30% in stage 4 and 16% in stage 1. All in all, if the results of this study are compared to the results of Spada and Lightbown (1999), it seems that the students in their study performed better than the participants of this study. However, as the results are compared, it should be noted that in their study, the participants were exposed to a high frequency of English questions, whereas the participants in this study performed the written tasks as part of regular classroom activities.

When using the classification of Pienemann et al. (1988), it became clear that it was not as inclusive as it was thought to be. Moreover, during the analysis, several unclear cases appeared. Thus, these unclear cases appeared to be useful for this study. To be more specific, an additional stage was suggested to the theory of question development. The additional stage was *moodless wh-questions*, which are used as invitation and a suggestion. Moodless *wh-questions* begin for example with *how about*, *what to* or *what if* -structure. *How about* -structure was found in this study, such as *How about in the Park three o'clock?* In the previous studies, no examples of the use of *how about* were found. However, in this data, moodless *wh*-questions were clearly present. In

addition, it could be interpreted to represent beginner stages in the question development and it is suggested to be included in the developmental stages of questions between stages 2 and 3.

All in all, this study supports the observation of Lightbown and Spada (1993: 63) in that the learner does not leave one stage behind when they entered another one; on the contrary, in some cases the learner used sentences typical of several different stages. Lightbown and Spada (1993: 63) also mentioned the influence of stress and communicative complexity. Therefore, it could be considered whether the participants in this study felt stress while they performed the task. That is, whether they felt that they were participating in a test, which was evaluated. However, the tasks were performed during regular English classrooms and taught by regular English teachers, and they resembled the writing tasks used in English classrooms in general. Therefore, it is not probable that the tasks caused stress to the participants. However, some of the tasks used in the study were presumably demanding for students who are not so competent in English, which might be one factor causing stress. In addition to questions, the students had to produce vocabulary and other grammatical features. Thus, if the tasks had focused only on questions and were of different types, the students may have performed better.

The second research question aimed at finding out how well the learners mastered questions in writing. The reason for analysing this was that in the theory of developmental stages, errors are seen as indicators of development. Moreover, questions can contain certain errors, but still they can be interpreted as being in the same stage as correct questions. Therefore, this study aimed at finding out what kinds of errors are typical of English questions produced by Finnish learners and how many errors occurred in the data. For this purpose, the categorisation of errors by Richards (1973a) was used as a basis for the analysis. During the analysis, the amount of errors came as a surprise. In the 7th grade data, 59 questions of 250, in other words,

23.6% percent of questions were erroneous, and in the 9th grade data the number was even larger, 28.5% (N=195) of the total of 685 questions were incorrect. The main error type was omission of *do*, but inversion errors were also common.

In analysing the developmental stages, several unclear cases occurred. In fact, unclear cases were the second largest group of errors. This reveals that the categorisation of errors in questions by Richards (1973a) is not comprehensive enough. Thus, more error types need to be included in the taxonomy. Three groups of additional types were suggested. The first group comprises of *omissions of the verb*, such as in *What the weather like in there?* Another group was *omission of the subject*, such as in *Can ask him to write to me?* The third error group was *the use of wrong verb*, such as in *Do you heard anything about Jaakko who has living in Florida*.

The third research question sought to find out how questions develop during lower secondary education and what similarities and differences the two groups had. As was noted, because of the amount of the data, statistical analysis could not be performed. That is, all stages did not have questions in them, in other words, there appeared zero values in the data, which made the statistical analysis either unreliable or it did not show any difference between the two groups. Therefore, similarities or differences between the two groups could not be confirmed with statistical analysis.

In the study by Spada and Lightbown (1993) the students progressed in the question production one or even two stages during six months. Therefore, it was expected that some development would occur in the data of this study as well. However, the results in both groups were almost alike. As was mentioned above, the main stages in both studies were the same, even in the amount of questions in them. As the errors in the data are compared, it was found that 9th graders produced more errors in questions than the 7th graders. All in all, the results of this study indicate that no major

development in producing questions in writing occurs during the years in lower secondary education. In sum, the Finnish learners of English did not perform as well as was expected. The results indicate that the learners do not progress in their learning, on the contrary, they stay put and produce more errors. This result should be noted and considered in the English language teaching, since the questions are one of the basic structures in the English language and a necessary tool in communication.

7 CONCLUSION

This study aimed at providing information on how Finnish upper secondary school students produce written questions in the English language. In fact, information in several aspects was given, such as on different types of questions as well as errors. Hopefully this study could affect the attitude towards errors. That is, errors should be seen as attempts to discover the structure of the language being learned rather than focusing on what the learner has failed in. The main focus should be on the development, not errors.

It should be noted that this study had some weaknesses and problems. The main weakness was the amount of the data. If the data had equal amount of products in each stage and in both age groups, it would have enabled the statistical analysis and made the results more reliable. However, the data in this study includes 935 questions, in other words, it is extensive enough to enable generalisations. In addition to not being able to utilise statistical methods in the analysis, other problems occurred in the data analysis. That is, in the categorisation of both the developmental stages and the errors there appeared cases that could not be included in any of the categories. Therefore, some additional categories and interpretations were added and explained with examples. However, since they have not occurred in other studies, the reader should consider the reliability of those categories.

Although developmental stages are no longer questioned and the theory is quite stable, it is important to conduct studies that give current information on the topic. And as was noticed in this study, some new insights are gained in the process. The fact that a new stage in the question development theory was found out, as well as several new aspects to errors occurring in questions appeared, should encourage other research continuing with this area. In fact, further studies could focus on how the questions produced by the same students develop during several years, thus conducting the study from a longitudinal point of view and focusing on individual variation. In addition, in the study by Spada and Lightbown (1993) the benefits of intensive programs were indicated. Therefore, it would be interesting conduct a similar intensive program in Finland. The ongoing CEFLING project focuses on the development of second language proficiency and has several aspects closely linked to this study.

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Appendix 1. Statistical analysis on questions in the whole data

Case Processing Summary

	Cases					
	Va	Valid Missing				tal
	N	Percent	N	Percent	N	Percent
stage * group	935	100,0%	0	,0%	935	100,0%

stage * group Crosstabulation

		-	group		Total
		-	7th grade	9th grade	
stage	1	Count	40	114	154
		% within group	16,0%	16,6%	16,5%
	2	Count	4	11	15
		% within group	1,6%	1,6%	1,6%
	3	Count	93	246	339
		% within group	37,2%	35,9%	36,3%
	4	Count	83	200	283
		% within group	33,2%	29,2%	30,3%
	5	Count	14	61	75
		% within group	5,6%	8,9%	8,0%
	6	Count	1	1	2
		% within group	,4%	,1%	,2%
	Unclear	Count	12	28	40
		% within group	4,8%	4,1%	4,3%
	Information missing	Count	3	24	27
	_	% within group	1,2%	3,5%	2,9%
Total		Count	250	685	935
		% within group	100,0%	100,0%	100,0%

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7,729(a)	7	,357
Likelihood Ratio	8,481	7	,292
Linear-by-Linear Association	,615,	1	,433
N of Valid Cases	935		

a 3 cells (18,8%) have expected count less than 5. The minimum expected count is ,53.