An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities

Izabela Olszak
UMCS
Lublin, Poland

ABSTRACT

Students of Dual Language Programs tend to have greater readiness demands as their biliteracy, awareness of linguistic and cultural diversity and high academic achievement level are developed through instruction in two languages. This form of academic guidance contributes to the improvement of emerging literacy skills and comprehension of acquired reading strategies. Reading strategies have always aroused interest in the conducted research all over the world. Reading is perceived as one of the most important skills of DLLs (Dual Language Learners). However, it happens that their reading proficiency is far from satisfying though they have studied foreign languages for a long time. Therefore, the current situation of using reading strategies among DLLs at selected Polish Universities is studied in this paper.

The research aims to present the relationship between the use of reading strategies and the students' development of reading comprehension. The questionnaire is adopted in this study to collect data from the investigated students. The investigation may shed a new light on seemingly known and simple aspects of teaching foreign languages.

Keywords: Dual language students; reading skills; reading strategies; reading achievements

1

1. Introduction

Reading regarded as one of the four basic skills in teaching and learning a foreign language is very important not only as a language skill but also as language input for other skills to develop. The previous research on developing reading skills among DLLs shows that they cannot effectively comprehend what they read and still have difficulty in adapting proper strategies to master the skill. One leading reason accounting for this phenomenon is that these students have not mastered and applied effective reading strategies.

Drawing on scientific research in cognitive psychology, strategies are defined as learning techniques, behaviors, problem-solving or study skills which make learning more effective and efficient (Oxford & Crookall, 1989).

As for students of Dual Language Programs, reading proficiency is of utmost importance. However, numerous English students still feel that their reading proficiency is not satisfying after several years of studying a foreign language at various schools. Therefore, this research mainly focuses on investigating the usage of reading strategies by students of Dual Language Programs at selected Polish universities and attempts to find out which reading strategies are beneficial to English learners' reading comprehension proficiency while three main phases of reading comprehension process, namely planning the process, undertaking actions while reading and evaluating the process after finishing it.

The main objectives of the presented investigation indicate kinds of reading comprehension strategies in the first and second foreign languages among students of Dual Language Programs and find out whether there is interference of these strategies between the foreign languages. The results will be discussed on the basis of the analysis of the questionnaires concerning the questions about the usage of reading comprehension strategies among DLLs. It is assumed that the investigation will shed a new light on the commonly known aspect of reading comprehension strategies among DLLs.

2. Reading as a significant skill in learning a foreign language

In the modern times, the most important goal of teaching and learning a foreign language is the development of strong literacy skills, namely reading and writing. If these abilities are acquired perfectly students are able to gain access to knowledge or enjoy literature and films. It is crucial to master reading comprehension in order to produce written texts. Teachers have to be aware of the definition and components of reading process so that their students are taught properly and effectively.

2.1. Historical background on reading skills

Reading is a multi-factor complex process and has always been regarded as one of the most crucial skills in the process of foreign language teaching and learning. Within centuries scholars have posed the question about the definition of reading and its meaning. In fact, they explained the term in various ways. As Fan (2010) believes that research on explaining the meaning and nature of reading has had two periods.

The first dates back to 1950s when the theory of structural linguists took place. According to Bloomfield (1942) and Fries (1945) reading is a process of identifying the language signs and learning the proper pronunciation of these symbols. The theory of structural linguists concentrated more on the surface of reading than its nature.

The second period began in the 1960s with the psycholinguists' research in this field. These scholars introduced reading as an interaction between language structure and human thinking. Goodman (1988) perceives reading both as a receptive and psychological process, which starts with decoding the linguistic surface of information and ends with readers' construction of meaning. What is more, Baker and Brown (1984) claim that reading comprises of cognition and metacognition. According to their theory experienced readers do not only decode the reading materials unconsciously by using cognitive and metacognitive but they use reading strategies consciously and regulate this hidden process.

Furthermore, Silberstein (1994) adds that reading is a complex processing skill and readers' task is to interact with the text so that they create and recreate essential discourse. On the basis of the above mentioned research, there are two kinds of reading, namely the first is type of speaking or reciting a written text and the second called as silent reading aims to understand text's contents. The process of learning a foreign language requires the acquisition of some receptive and productive skills. According to Lightbown & Spada (2006) and Carrell (1989) reading has always been regarded as a fundamental skill to develop other skills, such as writing and speaking. It is commonly known that reading and listening belong to receptive skills and they constitute a basis to writing and speaking, which are treated as productive skills. A number of scientists claim that acquisition of any foreign language takes place when

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

learners first received comprehensible input through productive skills, namely listening and reading.

Moreover, as Grabe (1991) believes second language learners treat reading as a main way to gain information, to be accustomed with other cultures and to understand the traditions of English-speaking countries. What is more, Goodman (1988) adds that reading should also be regarded as a psychological process as it starts with decoding the linguistic information and ends with learner's construction of the meaning. Furthermore, Barrnett (1972) managed to establish a taxonomy of reading comprehension (Table. 1) taking into account the readers' purposes in reading.

Table 1. Taxonomy of reading comprehension Barrnett (1972)

Type of comprehension	Purpose of reading
Literal comprehension	reading in order to understand, remember or recall information explicitly appeared in a passage.
Inferential comprehension	reading in order to find information that is not explicitly contained in a passage and to use the reader's experience to infer information.
Critical evaluative comprehension	reading in order to get information in a passage which is based on the reader's personal knowledge as well as values.
Appreciative comprehension	reading in order to obtain an emotional or other kind of valued response from a passage.

3

The above mentioned table indicates that reading is a complex process consisting of various types of comprehension with different purposes.

2.2. Reading comprehension models

With great care of foreign language learners and the increasing understanding of the definition of reading, teachers have always paid much attention to the researches on the reading process. So far there have been three general models of reading processes distinguished by the scholars, namely bottom-up, top-down and interactive ones.

The above mentioned processes were constructed to help the learners understand the whole reading process. The first model, that is bottom-up, mainly focuses on the function of the text itself and is strictly related to behaviourism. Another name for this approach is a lower- level reading process that has some imperfections, namely it is text-based. As Gough (1972) expresses it, foreign language learners read letter by letter from left to right and then identify them and make the words meaningful on the lexical level.

The two commonly known as bottom-up reading theories are: One Second of Reading by Gough (1972) and A Theory of Automatic Information Processing by LaBerge and Samuels (1974). The former presents reading comprehension as a sequential and serial mental process where learners start from translation of the letters into speech sounds, next piece them to form words and finally piece the words to understand the author's written message (Gough, 1972). The latter model describes a concept termed automatic information processing which hypothesizes that the human mind functions are automatically, much like computer, placed in

the reader's mind (LaBerge & Samuels, 1974). This shapes humans like 'multitasking' machines which implies that they have a limited ability to shift attention between the processes of decoding and comprehending (LaBerge & Samuels, 1974). The described bottom-up models present reading as the analysis of the small text chunks and then added the next chunks until they are meaningful.

The next model is called the top-down, also known as psycholinguistic, was introduced in 1967. Goodman (1967) presents reading as a psycholinguistic guessing game. In this model learners are to make various predictions about the text taking into account their previous knowledge and experience. Another name for the model is the concept-driven reading model as it underlines the significance of the readers' background knowledge. This reading model stresses the importance of reading strategies and reading skills in order to infer the meaning. In this top-down reading model the reader does not process the text by the identification and interpretation of each letter but by the prediction of the meaning with the help of prior experience and knowledge. However, Carrell and Eskey (1988) pinpoint some limitations to the application of top-down model to L2 reading. They say that L2 readers do not have sufficient background knowledge so they have to pay much attention to the words and sentences in the text.

The top-down reading processing has a closely related theory, namely schema theory. It is commonly known that it greatly influenced students' reading instruction. The theory presents in detail the connection between the background knowledge of the learner and its interaction with the reading task. It is vital for students to use schemata in comprehending a text. According to Smith (1994: 14) schemes are the "extensive representations of more general patterns or regularities that occur in our experience". Anderson (1994: 469) presents that "a reader comprehends a message when he is able to bring to mind a schema that gives account of the objects and events described in the message". Comprehension is the process of "activating or constructing a schema that provides a coherent explanation of objects and events mentioned in a discourse" (Anderson, 1994: 473).

The third well-known reading model is the interactive model as the meaning of the text is received by an interaction the readers' stored knowledge and the written language information. It presents language readers as active information searchers and reconstructors. According to Rumelhart (1977) the interpretation of the text include the knowledge of the whole context, that is language patterns, syntax, vocabulary and semantics. This defines reading as a perceptual and cognitive process. Rumelhart (1977) also believes that L2 learners may encounter problems with reading comprehension that is why he encouraged them to use not only lexical, semantic and common knowledge, but also available reading strategies. Therefore, with time the interactive reading model has quickly become the central model to Second Language Reading Theory. Nowadays it is widely put into practice in the field of teaching foreign languages.

However, Block (1992), strongly believes that there unnecessary to debate on "whether reading is a bottom-up, language-based process or a top-down, knowledge-based process." Furthermore, it isn't crucial to underline the influence of students' background knowledge. He claims that further research found some control of students to understand texts and he defined it as metacognition. In the context of reading comprehension, metacognition means thinking about reader's own actions in the three main stages of the whole process, i.e. is before reading, while reading and after reading.

2.3. Reading strategies as a crucial tool

There has been a number of research on the topic of reading strategies and still remain different opinions about their usage in the process of foreign language. According to Barnett (1972) reading strategies are crucial tools and foreign language learners apply them in order to get the meaning of the text. Anderson (1991) perceives reading strategies as tool to acquire, store and amend new information received from the text.

However, Cohen (1990) stresses that reading strategies are a kind of a psychological process which is consciously controlled by the foreign language learner in order to achieve established goals. They apply strategies to direct their process of learning and improve the reading comprehension. What is more, reading strategies help the learners to divide the whole process of reading into several stages and apply various techniques, namely scan or skim the text and use context to predict the hidden meaning (Carrell, 1998).

2.3.1. Classification of reading strategies

There has been a number of various definitions of reading strategies. Rubin (1981) identifies six general strategies that might contribute directly to language learning. These were clarification, guessing, deductive reasoning, practice, memorization, and monitoring. Oxford (1990) defines learning strategies as behaviors or actions which are consciously taken by learners to make language learning more successful and self-directed. She divided learning strategies into six categories: memory strategies, cognitive strategies, compensation strategies, metacognitive strategies, affective strategies, and social strategies.

O'Malley and Chamot (1990:1) say that "language learning strategies are the special thoughts or behaviors that individuals use to help them comprehend, learn or retain new information." They adopted the three-category learning strategies: cognitive, metacognitive, and social/affective strategies with subcategories under each main category.

5

Another definition of reading strategies is by Cohen (1990) who divides the strategies of SLL into two types, that is language learning strategies and language use strategies. The former are applied while learning a language which requires identifying the materials, distinguishing or grouping them. The latter are used by language learners to use a language, these are retrieval strategies, rehearsal strategies, compensation strategies and communication strategies (Cohen, 1990).

Grabe (1991) proposed six general reading skills and knowledge areas as follows: automatic recognition skills, vocabulary and structural knowledge, formal discourse structure knowledge, content or word background knowledge, synthesis and evaluation skills or strategies, and metacognitive knowledge and skills monitoring.

Furthermore, Shih (1991) and Baker-Gonzalize & Blau (1995) suggested three stages of reading strategy use: before reading, while reading, and after reading.

The reading strategies which are studied in this paper and adopted for the research are based on O'Malley and Chamot's learning strategies, that is the classification on metacognitive and cognitive reading strategies.

Table 2. O'Malley and Chamot's classification of metacognitive strategies

Strategies	Categories	Strategies
Metacognitive strategies	Planning	1. Advance organization. 2. Directed attention. 3. Selective attention. 4. Self-management.
	Monitoring	1.Comprehension

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

		monitoring. 2.Task monitoring.
	Self-evaluation	1. Performance evaluation. 2. Problem identification.

Below in the Table 3 there are all the metacognitive strategies include advance preparation, controlling reading speed and reading tasks, having a clear goal and evaluating the reading process.

Table 3: O'Malley and Chamot's classification of cognitive strategies

Strategies	Categories/Strategies
Cognitive strategies	Resourcing
	Deduction
	Translation
	Grouping
	Recombination
	Contextualization
	Elaboration
	Note-taking
	Inferencing
	Summarising

6

Table 3 presents that cognitive reading strategies encompass inferencing, scanning, skimming, grouping, translation, imagination, reviewing, note-taking, deduction and elaboration.

3. Aim of the research

The present study attempts to examine the current usage of reading strategies among students of Dual Language Programmes at selected Polish Universities who are trained to be future teachers, translators or both. The objective is to investigate the frequency of different kinds of reading strategies adopted by DLLs and to study the correlation between the adoption of reading strategies and the students' development of reading comprehension. This study will also ponder on the differences in reading strategies usage between future teachers and translators.

3.1. Material and Method

The questionnaire for students concerning the usage of reading strategies consisting of ten questions concerning open and close-ended questions regarding various aspects of reading strategies applied by DLLs. There have been a number of advances over the centuries that enhanced the understanding of the reading process, however it is still perceived as a complex cognitive process as the reader's task is to interact with the text in order to construct meaning. The present author aims to investigate the applied strategies in three stages involved in the process of reading comprehension, namely while organizing and planning, strategies applied while reading and in the evaluation after reading.

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

3.2. Participants

The participants in this pilot study are 98 first- and second-year students of Dual Language Programmes at selected Polish Universities, namely the University of Białystok, the Jagiellonian University in Cracow and the Maria Curie-Skłodowska University in Lublin. Most of the investigated students were female (77.6%) and the rest male (22.4%) of first and second year of undergraduate studies of English or Applied Linguistics. First-year-students constitute 62.2 % and second-year-students encompass 37.8 %. The greatest number of the investigated population studied English as a first language (68.4%) whilst 31.6 % of them studied German. These students have taken similar English courses at the mentioned universities, that is they study English Philology with German as a foreign language or Applied Linguistics with various language combinations. The investigated students studied various second languages, namely English (34.7%), German (37.8%), French (15,3%) and Russian (12.3%). Moreover, they underwent different specialization programmes, that is teacher (23.5%), translator (38.8%) and both (33.7%). In general, the present author assumes that they acquired some reading strategies as they mastered at least two foreign languages. The following tables are the background information of the collected data about the investigated students.

3.3. The questionnaire

In this study, there was one questionnaire involved. According to Parrot (1993), the questionnaire serves as a crucial tool in all scientific studies as it helps to collect basic data about the investigated learners, that is their general and common attitudes towards learning foreign languages and all processes of their foreign language learning. The first questionnaire was created for the students in order to examine the usage of metacognitive and cognitive reading skills while reading various texts in a foreign language. The adopted questionnaire consists of 10 questions that aim to elicit the reading strategies among DLLs, the frequency of the application of the strategies as well as other actions engaged in the process of reading comprehension.

4. The results of the conducted research

The questionnaire was conducted among 98 university students who were to indicate which reading strategies they apply while organizing their process of reading comprehension in their first and second studied foreign language. They were asked to tick reading strategies they apply in four of the indicated stages of the whole reading process, namely organizing and planning reading, actions undertaken while reading, evaluation after reading and dealing with encountered problems. The conducted research presents that students regularly use reading strategies before beginning the process of reading. However, there are some crucial differences to be elaborated on. As far as the reading comprehension in the process of acquiring the first foreign language is concerned, 35 % of the respondents do not use any reading strategies, whereas in the second language it constitutes 54%. The participants were to indicate what reading strategies and how often are they used in the process of reading comprehension, the frequency was indicated by the adjectives of frequency "never", "rarely", "sometimes", "usually", and "always". In the first phase of the reading comprehension process in the first foreign language students use " sometimes" or "usually" the below mentioned reading strategies:

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

Table 4. Reading strategies applied by DLLs in planning reading

	First Language	*%*	*Second Langauge*	*%*
1.	*I reread the given questions to the text if I do not understand them*	*49%*	*I reread the given questions to the text if I do not understand them*	*45%*
2.	*I am aware of the aim of the reading tasks*	*38%*	*I am aware of the aim of the reading tasks*	*40%*
3.	*I pay attention to the questions and try to remember them before reading*	*36%*	*The title of the text helps me to get a general idea of what the text is about*	*33%*
4.	*I analyze the structure of the sentences when they are long and hard to understand*	*34%*	*I skim the text quickly to have general understanding of it*	*31%*
5.	*The title of the text helps me to get a general idea of what the text is about*	*32%*	*I pay attention to the questions and try to remember them before reading*	*30%*
6.	*I skim the text quickly to have general understanding of it*	*31%*	*I analyze the structure of the sentences when they are long and hard to understand*	*30%*
7.	*I plan how to complete the test before doing it*	*29%*	*I plan how to complete the test before doing it*	*26%*

8

In comparison to the second foreign language the usage of the reading strategies, used in frequency "sometimes" or "usually", is as follows: The above presented list of applied reading strategies adapted in two foreign languages presents that two most favoured strategies are the same and they are use by almost 50% of all respondents. The least popular reading strategy seems to be "I plan how to complete the test before doing it", only about 30% of respondents tend to use it.

Reading strategies applied by the DLLs in the second phase of the reading process are shown in the list below. The strategies were also used "sometimes" or "usually" by the DLLS. The most often used strategies in the process of learning first foreign language are:

Table 5. Reading strategies applied by DLLs while reading

	First Language	*%*	*Second Language*	*%*
1.	*I verify what it necessary to be done and how to do it*	*45,9%*	*I verify what it necessary to be done and how to do it*	*43,9%*
2.	*I monitor the understanding of the reading materials and reading tasks*	*42,9%*	*I am aware of my ongoing reading tasks*	*41,8%*
3.	*I am aware of my ongoing reading tasks*	*42,9%*	*I monitor the understanding of the reading materials and reading tasks*	*36,7%*
4.	*I attempt to understand the hidden meaning of the given text*	*42,9%*	*I read the text fast to find out the information of reading tasks*	*36,7%*
5.	*I guess the meaning of unknown*	*38,8%*	*I stop and think whether I have*	*35,7%*

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

	words or phrases according to the context		understood the contents I have read	
6.	I stop and think whether I have understood the contents I have read	36,7%	I guess the meaning of unknown words according to their roots or affixes	35,7%
7.	I know what to read carefully and what to avoid	36,7%	I control my own progress to complete the questions on time	34,7%
8.	I correct mistakes immediately when I think I have misunderstood the text or tasks	35,7%	I am aware of how much of text remained to be completed	34,7%
9.	I read the text fast to find out the information of reading tasks	35,7%	I know what to read carefully and what to avoid	33,7%
10.	I modify reading speed depending on different reading purposes	35,7%	I attempt to understand the hidden meaning of the given text	31,6%
11.	I am aware of how much of text remained to be completed	34,7%	I correct mistakes immediately when I think I have misunderstood the text or tasks	30,6%
12.	I control my own progress to complete the questions on time	31,6%	11) I guess the meaning of unknown words or phrases according to the context	30,6%
13.	I use my grammar knowledge to analyze sentences so as to help get meaning	31,6%	I modify reading speed depending on different reading purposes	30,6%
14.	I make use of transitional words, such as first, second, however, but, because etc. to understand the logical relations among the main points in the text	28,6%	I take notes when reading to help memorize information	28,6%
15.	I guess the meaning of unknown words or phrases according to the context	28,6%	I make use of transitional words, such as first, second, however, but, because etc. to understand the logical relations among the main points in the text	27,6%
16.	I guess the meaning of unknown words according to their roots or affixes	28,6%	I use my grammar knowledge to analyze sentences so as to help get meaning	26,5%
17.	I take notes when reading to help memorize information	27,6%	I underline key words, expressions while reading	23,5%
18.	I underline key words, expressions while reading	24,5%		

The usage of reading strategies among DLLs in the process of second language acquisition is a bit different. These students tend to adapt the below listed strategies also in frequency

"sometimes" or "usually". The conducted research shows that a great amount of students, that is 30,6% for the first language and 28,6% for the second rarely highlight the topic sentences of every paragraph while reading. The students use cognitive and metacognitive strategies.

The respondents use also various strategies in the last phase of reading, that is in the evaluation after reading. The strategies adapted in the process of the first foreign language acquisition are as follows:

Table 6. Reading strategies applied by DLLs in evaluation after reading

	First Language	*%*	*Second Language*	*%*
1.	*I reread the given text if I do not understand it*	*41,8%*	*I reread the given text if I do not understand it*	*36,7%*
2.	*I determine what the goal of the test tasks and questions was*	*40,8%*	*I determine what the goal of the test tasks and questions was*	*34,7%*
3.	*I evaluate whether the reading plans are achieved*	*38,3%*	*I revise the expected information based on the text context*	*34,7%*
4.	*I check the answers of reading tasks carefully before submitting the text*	*37,8%*	*I evaluate whether the reading plans are achieved*	*33,7%*
5.	*I revise the expected information based on the text context*	*36,7%*	*I evaluate whether the reading plans are achieved*	*32,7%*
6.	*I evaluate the effectiveness of strategies I used while doing the reading*	*34,7%*	*I asses my own performance and progress while completing the text*	*29,6%*
7.	*I predict the content of the upcoming passage while reading*	*30,6%)*	*I check the answers of reading tasks carefully before submitting the text*	*29,6%*
8.	*I asses my own performance and progress while completing the text*	*29,6%*	*I predict the content of the upcoming passage while reading*	*29,6%*
9.	*I summarise the main ideas of the text*	*28,6%*	*I translate what I have read into Polish*	*28,6%*
10.	*I translate what I have read into Polish*	*21,4%*		

It is worth to pinpoint that the DLLs almost "never" write a summary of the given text in order to remember important information, in the first foreign language that is 24,5% and in the second language 27,6%. It is commonly known that DLLs often, besides reading strategies, try to undertake other actions to make the reading comprehension process easier. The participants of the questionnaire were also questioned to check what actions are undertaken in the process of improving their reading skills, both in first and second language. The table below presents the results.

Table 7. Actions undertaken to improve reading skills

What kind of action do you undertake in order to improve your reading skills / comprehension?	Answers		% of observation
	N	**%**	

10

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

Read texts in a foreign language on the Internet.	92	9,5%	93,9%
Watch videos, movies.	90	9,3%	91,8%
Listen to podcasts, songs and other audio materials.	86	8,8%	87,8%
Read books in a foreign language.	85	8,7%	86,7%
Analyse teachers advice and corrections.	82	8,4%	83,7%
Go o authentic websites to analyse and collect language samples used by native speakers.	78	8,0%	79,6%
Use social networking sites to practise English. (e.g. Facebook)	74	7,6%	75,5%
Play (online) language games in English.	65	6,7%	66,3%
Read feedback information after an activity if there is one given.	63	6,5%	64,3%
Reformulate / paraphrase the language samples found on the Internet. (I do not plagiarise)	58	6,0%	59,2%
Contact native language speakers to practise.	54	5,6%	55,1%
Analyse visuals accompanying some texts.	50	5,1%	51,0%
Take part in discussion od forums and present my arguments in a foreign language.	45	4,6%	45,9%
Make my own materials (videos/presentations) in a foreign language.	43	4,4%	43,9%
Other actions	7	,7%	7,1%
Ogółem	972	100,0%	991,8%

DLLs seem to be deeply involved in the process of expanding their reading skills as they are also involved in various forms of learner training. Table 8 presents the collected results.

Table 8. Forms of learner training

Have you ever been engaged in any of the below mentioned forms of learner training?	Answers		% of observation
	N	**%**	
Collaboration (working with friends to complete tasks).	78	31,5%	79,6%
Web based communication.	69	27,8%	70,4%
Computer - assisted training.	56	22,6%	57,1%
Hypermedia tools.	45	18,1%	45,9%
General	248	100,0%	253,1%

5. Discussion

In this section, the data collected from the questionnaire conducted among DLLs form selected Polish universities are analyzed. It consists of the frequency of metacognitive and cognitive reading strategies among DLLs and correlation between reading strategy used in the first and second studied languages. The conducted research helps us to state that DLLs at

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities

Izabela Olszak

the selected universities apply various reading strategies and they use them regularly in both first and second foreign language. Moreover, they apply numerous actions to improve their reading and reading texts in a foreign language on the Internet seems to be most favourable one.

As far as the usage of the reading strategies in different phases of the reading process is concerned, based on the statistical analysis (M – arithmetic mean), it is important to notice that students of first foreign language more often apply the below mentioned strategies. The strategies are listed according to the three stages of the reading process.

I. Type of strategy - actions applied in organizing and planning reading (first/second foreign language):

	First Language	M	Second Language	%
1.	1) I reread the given questions to the text if I do not understanding of it	M: 4,20	I reread the given questions to the text if I do not understanding of it	M: 4,13
2.	I am aware of the aim of the reading tasks	M: 3,99	I pay attention of the questions and try to remember them before reading	M: 3,70
3.	I pay attention of the questions and try to remember them before reading	M: 3,97	I analyze the structure of sentences when they are long and hard to understand	M: 3,62
4.	The title of the text helps me to get a general idea of what the text is about	M: 3,81	I am aware of the aim of the reading tasks	M: 3,53

II. Type of strategy - actions undertaken while reading (first/second foreign language):

	First Language	M	Second Language	%
1.	I verify what it necessary to be done and how to do it	M: 4,06	I verify what it necessary to be done and how to do it	M: 3,81
2.	I correct mistakes immediately when I think I have misunderstood the text or tasks	M: 4,02	I monitor the understanding of the reading materials and reading tasks	M: 3,67
3.	I guess the meaning of unknown words or phrases according to the context	M: 4,02	I guess the meaning of unknown words or phrases according to the context	M: 3,67
4.	I use my grammar knowledge to analyze sentences so as to help get meaning	M: 3,80	I am aware of my ongoing reading tasks	M: 3,59

III. Type of strategy - actions undertaken as evaluation after reading (first foreign language):

	First Language	M	Second Language	%
1.	I check the answers of reading tasks carefully before submitting the text	M: 3,83	I reread the given text if I do not understand it	M:3,69
2.	I reread the given text if I do not	M:	I check the answers of reading	M:

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

	understand it	*3,83*	*tasks carefully before submitting the text*	*3,53*	
3.	*I determine what the goal of the test tasks and questions was*	*M: 3,69*	*I determine what the goal of the test tasks and questions was*	*M: 3,34*	
4.	*I evaluate whether the reading plans are achieved*	*M: 3,47*	*I evaluate whether the reading plans are achieved*	*M: 3,28*	

What is more, DLLs indicated their solutions to encountered problems while reading texts in foreign languages. The results seem to be quite surprising as they are almost the same in the first and second foreign language. In the first language students relate their previous knowledge to new information to better understand the text (M: 3,73) and use the available handy information to guess the new information (M: 3,69). In the process of acquiring second language they tend to analyze the relationship between the given reading text and reading tasks (M: 3,49) and relate my previous knowledge to new information to better understand the text (M: 3,47).

The conducted analysis helps us find differences between the usage of reading comprehension skills of female students in the three above mentioned phases of the reading comprehension process. The statistical analysis (M-mean) and Mann-Whitney U Test indicate that female students pay more attention to the questions and try to remember them before reading in the first language while planning and organizing the reading process, in contrast to the second language. Moreover, in the process of second language acquisition they often reread the given questions to the text if they do not get the understanding of it in the first language and in the second language. Furthermore, Dual Language Female Students often analyze the structure of sentences when they are long and hard to understand in the first language than in the second language.

13

I. Planning and organizing reading.

Gender Female	Mann-Whitney U Test First Language			Mann-Whitney U Test Second Language		
1. I pay more attention to the questions and try to remember them before reading						
	M	Z	p	M	Z	p
	4,04	-1,500	0,134	3,89	-2,966	0,003
2. I often reread the given questions to the text if I do not get the understanding of it.						
	4,25	-1,577	0,115	4,25	-2,109	0,035
3. I often analyze the structure of sentences when they are long and hard to understand.						
	3,83	-1,092	0,275	3,83	-3,000	0,003

As far as the actions undertaken while reading, female students in the first language more often verify what it necessary to be done and how to do it than in the second language. They

also read the text fast to find out the information of reading tasks. Moreover, in the first language female students usually read the text fast to find out the information of reading tasks in contrast to second language. What is more, in the first language females generally underline key words, expressions while reading in comparison to second. Furthermore, female students often stop and think whether they have understood the contents they have read in the first language than in the second language. Another difference indicated between female students in the first and second language is that they often guess the meaning of unknown words according to their roots or affixes in the first language than in the second one. It is also more common for female students to take notes when reading to help memorize information in the first language than in the second language.

II. Strategies applied while reading

Gender Female	Mann-Whitney U Test First Language			Mann-Whitney U Test Second Language		
1. I verify what it necessary to be done and how to do it.						
	M	Z	p	M	Z	p
	4,04	-0,659	0,510	3,97	-2,250	0,024
2. I read the text fast to find out the information of reading tasks.						
	3,49	-2,536	0,011	3,49	-2,536	0,011
3. I underline key words, expressions while reading						
	3,37	-2,565	0,010	3,24	-3,296	0,001
4. I stop and think whether they have understood the contents they have read.						
	3,59	-1,617	0,106	3,66	-3,291	0,001
5. I guess the meaning of unknown words according to their roots or affixes.						
	3,55	-0,489	0,625	3,16	-2,762	0,006
6. I take notes when reading to help memorize information.						
	2,84	-0,354	0,724	2,75	-2,074	0,038

In the last phase of reading comprehension process, namely strategies undertaken to evaluate the whole process, there remain only one significant difference to be mentioned. In the first language female students more often check the answers of reading tasks carefully before submitting the text (M: 3,87 ; Z: -0,956; p: 0,339) in contrast to the second language (M: 3,67 ; Z: -2,190; p: 0,029)

6. Conclusion

The paper has examined the use of reading strategies by Dual Language Learners at selected Polish universities. The following findings are summarized through the conducted analysis.

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak

14

Firstly, it has been noticed that DLLs use various cognitive and metacognitive reading strategies in the three indicated phases of reading comprehension process, namely planning an organizing, actions undertaken while and after reading. The frequency of adopted strategies seem to be rather high as students use them mostly "sometimes" and "usually". The students are aware of the cognitive and metacognitive strategies both in the process of acquiring first and second foreign language.

Secondly, there are differences in the adoption of reading strategies between female DLLs in various phases of reading comprehension process the first and second language. The former seem to be more aware of the whole ongoing process, they pay more attention, reread the text if not understood or devote more time to deeper analysis of the text.

Furthermore, the present author aims to expand the pilot study to more representative amount of Students of Dual Language Programs in order to compare and verify the results of the research.

Reference

Alcantara, R.D. 2003. *Teaching Strategies 1: For the Teaching of the Communication Arts: Listening, Speaking, Reading and Writing*. Makati: Katha Publishing Co., Inc.

Anderson, N.J. 1991. Individual differences in strategy use in second language reading and testing. *The Modern Language Journal*. Vol.75, No.4, 460-472.

Anderson, N.J. 2003. *Exploring Second Language Reading: Issues and Strategies*. Beijing: Foreign Language Teaching and Research Press.

Anderson, R. 1994. Role of the reader's schema in comprehension, learning, and memory. In Ruddell, Ruddell, and Singer 1994, 469–82.

Barnett, M. 1988. *More than Meets the Eyes*. Englewood Cliffs, N.J: Prentice Hall Regents.

Baker-Gonzalize, J., & Blau, E. K. (1995). Building understanding: A thematic approach to reading comprehension. UK: Addison-Wesley Publishing Com.

Bloomfield, L. 1942. Linguistics and reading. Elementary English Journal.

Baker, L & Brown, A.L. 1984. Metacognitive Skills and Reading In P.D. Person (Ed.), *Handbook of Reading Research*. New York: Longman.

Cohen, A.D. 1990. *Strategies in Learning and Using a Second Language*. Shanghai: Foreign Language Teaching and Research Press.

Carrell, P.L. 1989. Metacognitive Awareness and Second Language Reading. *Modern Language Journal*. Vol.73, No.2, 121-134.

Carrell, P.L. & Eskey, D. 1988. Interactive Approaches to Second Language Reading. New York: Cambridge University Press.

15

Fries, Charles C. 1945. TEACHING AND LEARNING ENGLISH AS A FOREIGN LANGUAGE, University of Michigan Press,

Fan, Y. 2010. *A Rearch on Cognitive Reading Strategies and Teaching of English Reading for Non-English Majors*. Sichuan: Sichuan Normal University.

Grabe, W. 1991. Current Development in Second Language Reading Research. *TESOL Quarterly*. Vol.25, No.3, 375-406.

Goodman, K.S. 1988. *Report Card on Basal Readers*. New York: Richard C. Owen Publishers, Inc.

Gough, P.B. 1972. *One Second of Reading in Language by Ear and by Eye*. Cambridge, Mass: MIT Press.

LaBerge, D., & Samuels, S.J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*

Lightbown, P. M. & Spada, N. 2006 *How Language are Learned* 3rd ed. Oxford: Oxford University Press.

Oxford, R.L. 1990. *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbery House Publishers.

Oxford, R.L. & Crookall, D. (1989). Research on language learning strategies: methods, findings, and instructional issues. Modern Language Journal, 73, 404-419.

O'Malley, J.M & Chamot, A.V. 1990. *Learning Strategy in Second Language Acquisition*. Cambridge: Cambridge University Press.

Parrot, M. 1993. *Tasks for Language Teachers.* Cambridge: Cambridge University Press.

Rubin, J. (1981). The study of cognitive processes in second language learning. Applied Linguistics, 11, 118-131.

Rumelhart, D.E. 1977. Toward an Interactive Model of Reading. In S. Dornic (Eds). *Attention and Performance VI*. Hillsdale, NJ: Lawrence Erlaum.

Shih, S.C. (1991). A causal model on factors affecting EFL reading comprehension of two-year college students in Taiwan. *Journal of National Taipei Teachers College, 4*, 25-110.

Silberstein, S. 1994. *Techniques and Resources in Teaching Reading*. Oxford: Oxford University Press.

Smith, F. 1994. *Understanding reading.* 5th ed. Hillsdale, NJ: Lawrence Erlbaum.

16

An investigation into the use of reading strategies among students of Dual Language Programs at selected Polish Universities
Izabela Olszak