Anna Kiszczak
Maria Curie-Skłodowska University,
Lublin, Poland

https://orcid.org/0000-0002-9394-3782

Halina Chodkiewicz
Pope John Paul II State School of Higher Education
in Biała Podlaska, Poland

https://orcid.org/0000-0001-7273-6496

Text-based Student Questioning in EFL Settings: Long-term Strategy Implementation in Reciprocal Reading Tasks and Its Perception

Abstract

It is common knowledge for contemporary teachers at all educational levels that reading literacy and learning attainment require adopting a strategic approach. This article reports the results of the classroom-based study in which a group of English Studies students were guided over a span of time in implementing text-based questions as a component of reciprocal reading tasks. The primary goal of the study was to trace changes appearing in the quality in the use of student-generated questioning in one-term reciprocal reading training and in delayed sessions, nine months later. Some changes were identified in the students' actual performance by assessing the quality of the questions the students asked throughout the training and delayed sessions. Also, the students' perceptions regarding the instruction routines they participated in were elicited by means of two interviews. The article puts forward some important insights from the study for organizing efficient classroom instruction in support of EFL students' reading and learning achievement.

Keywords: academic reading, reciprocal reading, students' generated questions, strategy training

Introduction

A strategic approach has been proved to play an important role in supporting L2/FL learners in text comprehension and disciplinary reading practice. It is broadly advocated in recent literature that the goals connected with compre-

hending academic text, building content-area knowledge as well as developing linguistic competence in the contexts of second/foreign language education can be substantially enhanced by means of the implementation of appropriate reading strategies by students representing all levels of language proficiency (Alexander & Jetton, 2003; Koda, 2005; Afflerbach, Pearson, & Paris, 2008; Grabe, 2009; Grabe & Stoller, 2014, 2019; Chodkiewicz, 2015, 2018; Dinsmore, 2017). Indeed, while exploring the role of a strategic approach in reading comprehension by means of theoretical considerations as well as empirical investigations, scholars report the influence of particular reading strategies on, among others, setting a clear purpose for reading, engaging more deeply in text analysis and information processing, building coherent text meaning, controlling text understanding, compensating for comprehension problems, and enhancing knowledge organisation and retention (Duke & Pearson, 2002; Kintsch, 2005; Graesser, 2007; Klingner, Vaughn, & Boardman, 2015; Handsfield, 2016; Koda & Yamashita, 2019). Therefore, the need for training students formally in the implementation of a range of strategies to be relied on in educational contexts should not be overlooked. It is vital that students are not only informed about the possibility of taking a strategic approach towards reading comprehension, but that they are given a solid strategy training in the use of particular strategies.

Theoretical Background of the Study

The concept of generating text-based questions by students that has gained considerable interest of teachers of different content areas at all educational levels has been acknowledged to be a fairly universal reading comprehension strategy. Much of the discussion of researchers on this strategy has focused on attempts at defining it and describing its role in the complex process of reading for the purpose of learning from text. As for the terminology used in the relevant literature, student questioning is referred to by a number of labels, among others "student self-generated questions," "question self-generation," "student own questions," "self-questioning," and "reciprocal questioning" (King & Rosenshine, 1993; King, 1994; Chin & Osborne, 2008; Taboada, Bianco, & Bowerman, 2012). All of the terms seem to concern the same idea of text-based questioning which can be broadly explained as "an environment in which learners are encouraged or compelled to ask questions while they study material" (Graesser & Wisher, 2001, p. 3).

The use of the strategy of questioning by students has already been the subject of investigation of several scholars representing diverse content-areas.

Key areas of their research concerned types of questions generated by students (e.g., Scardamalia & Bereiter, 1992; Watts, Gould, & Alsop, 1997; Taboada & Guthrie, 2006), the relationship between the quality of student-generated questioning and particular variables such as the level of prior knowledge or vocabulary knowledge (e.g., Harper, Etkina, & Lin, 2003; Taboada & Guthrie, 2006), the influence of students' use of the strategy of questioning on the level of their reading comprehension and the amount of content knowledge gain (e.g., King, 1994; Gunn, 2008; Taboada et al., 2012), or the comparison of the efficiency of student-generated questioning with other reading and learning strategies (e.g., King, Biggs, & Lipsky, 1984; Davey & McBride, 1986; Berry & Chew, 2008). However, a large body of those research studies concerned mainly L1 settings (e.g., Davey & McBride, 1986; Scardamalia & Bereiter, 1992; Taboada & Guthrie, 2006; Berry & Chew, 2008; Gunn, 2008), whereas the incorporation of this strategy into the context of L2/FL, especially at an academic level, seems to be still under-researched. Particularly scarce research has been done in order to trace the development of students' questioning skills even though such initiatives would be of immense importance for arriving at a more complete picture, not only of the use of the strategy by students, but also of the nature of text processing when accompanied by the strategy under discussion.

Although scholars in the field point out at the need for providing FL/L2 students with solid training in generating their own questions, the amount of empirical studies reporting it is very limited. A relatively recent investigation of students' questioning behaviour as influenced by formal instruction was conducted by Taboada, Bianco, and Bowerman (2012) who set to explore some instructional steps taken in order to help students improve their text-based questioning ability. The study participants, a group of ten fourth-grade ELLs, was trained in generating text-based questions during a period of six weeks. The instruction was composed of three standard stages, that is, as teacher modelling, guided practice, and the independent use of the strategy. The findings of the research demonstrated positive outcomes of the intervention as it was proved that notwithstanding the initial skills of questioning and language proficiency, all the ELLs improved their ability to ask higher-level questions. Furthermore, a meaningful correlation between questioning and reading comprehension was found. The researchers arrived at the conclusion that the strategy of questioning, if introduced and trained in an explicit way, can constitute a tool for developing science knowledge by ELLs who experience problems with comprehending content-area texts. While analysing research into text-based questioning in L2/FL environments, one can notice that the study by Taboada, Bianco, and Bowerman (2012) may be perceived as an exception since most of researchers who examine students' questioning skills and their role in reading either abandon strategic training or organise it in a very limited span of time (cf. Miciano, 2004a, 2004b; Dorkchandra, 2013; Safarpoor, Ghaniabadi, & Nafchi, 2015).

Student text-based questioning is frequently referred to as an element of a multiple strategic approach to reading called reciprocal reading instruction. A frequently used form of reciprocal reading is based on the combination of four reading and learning strategies (summarising, questioning, clarifying, and predicting), which help learners participate in collaborative text-based discussions (Palincsar & Brown, 1984). Nowadays, many teachers and educators decide to narrow down or expand the number of strategies used (Klingner, Vaughn, & Boardman, 2015) but the characteristic elements of reciprocal reading that should always be present are: scaffolded character of instruction, reciprocal dialogue, and close reading (Palincsar & Brown; 1983; Brown & Palincsar, 1986; Pilkington, 2016). Despite the fact that the instructional approach to reading is commonly implemented into diverse educational contexts whose objective is to enhance students' general text comprehension skills as well as their ability of reading to learn (Rosenshine & Meister, 1994; Cooper & Greive, 2009), the amount of research studies concerning its use is limited as far as foreign language education is concerned. What is more, although the approach strongly advocates the value of text-based questioning and strategy training students should receive, the current authors are aware of only one research project (Yoosabai, 2009) which has thoroughly explored the use of the strategy of generating questions as an element of a reciprocal reading session in L2/FL settings. Hence, much remains to be done in order to fill this gap in research, preferably by means of longitudinal projects which would make it possible to trace not only the results of strategy training given to students but also the entire process of developing questioning skills by readers by means of performing reciprocal reading tasks. The current study is an attempt to look more deeply, although at a small scale, at how the strategy of generating students' own text-based questions can be introduced and implemented for an extended period of time in a regular academic content-area course.

The Current Study

Study Purpose and Research Questions

This study is an expansion of the authors' research on the use of the strategy of students' generated questions in support of the enhancement of academic reading skills and acquisition of disciplinary knowledge in EFL settings (cf. Chodkiewicz & Kiszczak, 2019). It was a small-scale classroom-based study which involved a group of undergraduate English Studies students in performing a sequence of reciprocal reading tasks which served the purpose of training

and practice in the use of the strategy of student text-based questioning. The aim of the study was twofold. First, it was to carry out a repeated assessment of the students' actual performance while generating their own questions as part of reciprocal reading tasks performed over 13 sessions. Thus the students' evaluation covered their participation in the training and practice sessions over a period of one semester of an academic course (ten sessions), and then in three delayed practice sessions nine months later. Second, of no less importance in the study was to elicit and explore the students' perceptions regarding their performance while generating their own questions in reciprocal reading tasks. To this end, the students were interviewed twice so as to handle their responses concerning respectively the one-semester training and practice sessions and the delayed practice sessions.

The following research questions were addressed in order to explore the students' text-based questioning behaviour in the ten training and practice sessions and in the three delayed practice sessions:

1. Were the students able to ask questions relevant to the content of the texts and clear to a recipient?
2. Did the students pay attention to the formal quality of the questions they asked?
3. What types of questions did the students tend to generate?
4. How did the students evaluate the procedure of asking text-based questions as part of reciprocal reading tasks and their own performance?

Participants and Study Context

Two intact groups of second-year undergraduate students of The Department of English, Maria Curie-Sklodowska University in Lublin, attending an obligatory EFL Didactics course, were introduced to a specially designed strategy training and practice sessions incorporated into their regular classes. Their general purpose was to support the enhancement of the students' academic skills by training them how to use the strategy of generating their own questions while performing reciprocal reading tasks. The students' language proficiency level was estimated to fall between B2 and C1 according to the standards of the Common European Framework of Reference for Languages (Coste, North, Sheils, & Trim, 2003).

In order to offer a comprehensive qualitative analysis of the students' actual performance and their self-reported perceptions of the procedure of asking text-based questions as part of reciprocal reading tasks, the data for the current study were gathered from a sub-sample of the population, that is, from five female and one male student. The six participants were chosen on the basis of their final exam scores in Introduction to EFL and in Practical English so

that the performance of students of varying language proficiency and content-area knowledge could be investigated. The students' agreement to participate in the interviews was also a crucial selection criterion taken into consideration. Focusing on the performance of this small group of the students over an extended period of time made it possible to trace and thoroughly examine the qualitative changes that appeared in the participants' questioning behaviour focused upon in this study.

Research Instruments and Materials

The research instruments and materials used during the reciprocal reading sessions comprised a taxonomy of questions, thirteen practice texts, reading comprehension tests, questioning forms to be filled in by the students during each reciprocal reading session, as well as the recording and the transcripts of two semi-structured interviews.

The taxonomy of questions adopted in this study was developed by consulting a number of classifications of questions developed in relevant literature (Graesser & Person, 1994; Taboada & Guthrie, 2006; Taboada, et al., 2012). Its suitability for the present study's objectives and clarity for the study participants was checked by piloting it (see Chodkiewicz & Kiszczak, 2019). Taking into account the cognitive difficulty of the questions, their form and content, the questions were classified into five types, that is, factual information, description, explanation, pattern of relationships, and judgmental questions. The questions of the first type concern elementary information about the main ideas conveyed in the text and they are the least cognitively demanding kind of questions. Description questions, which require a global statement about a key idea, also seem to be relatively simple, yet describing a particular concept may cover multiple facts and generalizations. A more elaborate response is needed in the case of explanation questions, which most often address a specific aspect of a concept. Pattern of relationships questions, on the other hand, can be characterized as requests for information about connections or networks between two or more concepts or between their specific aspects. Judgmental questions, the most cognitively challenging question type dealt with in this study, demand that readers take a critical stance on the leading ideas discussed in the text and get engaged in a deeper reflection on the information processed.

Additionally, in order to make the procedure of generating questions easier to follow for the students, a handout containing the questions' classification, as well as a number of question stems and prompts widely recommended for this kind of instruction was prepared (Graesser & Person, 1994; King, 1994, 2008; Gunn, 2008; Taboada et al., 2012). The participants were encouraged to use it while creating their own questions. The taxonomy of questions established for

the study was used not only during the training and practice sessions by the students and by the teacher-researcher, but also in the process of data analysis by the two judges who evaluated the questions and identified the question types chosen by the students over the entire period of the study.

For the purpose of the ten training and practice sessions as well as three delayed practice sessions 13 expository academic texts were rigorously selected, one to be used per session. These were extracts of TEFL books' chapters on the topics which concerned teaching the four language skills, storytelling, the use of games, songs, and chants, and CLIL in a foreign language. As it was assumed that the students would work with authentic academic texts, no changes were introduced into the original academic texts. The average level of language difficulty of the texts was calculated to be 14.8 according to Coh-Metrix L2 Readability Index (Coh-Metrix 3.0; McNamara, Graesser, McCarthy, & Cai, 2014). The passages were on average 410-word long each. Each text was accompanied with a reading comprehension test consisting of five multiple-choice questions.

Special questioning forms mentioned above were constructed in order to help the students in writing up their questions in an organized way during each reciprocal reading session and to be of help in the process of data collection. While completing the questioning forms, the students were supposed to provide their three questions with the answers that they believed to be accurate. They also marked if their questions were answered and received peer feedback, and decided on the final versions of their questions.

Two semi-structured interviews served probing the participants' self-assessment of the efficiency of their performance in asking text-based questions, as well as their attitudes towards the implementation of the procedure of student text-based questioning in regular academic classes. In the first interview the students were asked six questions developed around the issues of the usefulness of the questioning strategy and reciprocal reading tasks, students' individual procedure of generating questions, and their opinions on the use of particular question types. The second interview, which contained four basic questions, focused on eliciting the students' perceptions regarding the development of questioning skills, changes in their personal questioning procedure, and potential plans of using the strategy of generating own questions in the future.

Research Procedure, Data Collection, and Analysis

The current research study was incorporated into the regular classes belonging to the EFL Didactics course and lasted a total of sixteen months. Whereas the first part of the project, a one-semester long strategy training, spread throughout ten classes, its second part, the delayed practice, took place

in three subsequent classes nine months later. This means that overall the participants attended thirteen sessions in which they performed reciprocal reading tasks with the key component of generating their own questions. It is important to note, however, that the three delayed practice sessions did not contain any further formal guidance for the students, who were supposed to draw on the questioning strategy competences they had already developed. One week after the first part of the project had finished and a week after its second part had been completed the students took part in individual semi-structured interviews. As already mentioned, the responses concerning their views and perceptions developed as a result of participating in the reciprocal reading sessions in the two parts of the study were recorded by the teacher-researcher. The long-term nature of the study enabled the researchers to discern the changes in the students' task performance and their perceptions regarding the innovative reading routines provided to them in an academic course.

The first two sessions of the study were of introductory character. More specifically, the participants were familiarised with the benefits of reciprocal reading and asking their own text-based questions, and were instructed how to formulate the five types of questions focused upon in the study. Moreover, the implementation of the strategy of text-based questioning as part of reciprocal reading tasks was explained and modelled by the teacher, and then taken up by the students. At the beginning of each reading session the participants read a selected text individually and answered a set of comprehension questions based on it. Then, they generated three questions related to the contents of the text and wrote them down in the questioning forms. The next stage of the session involved answering each other's questions in pairs and giving reciprocal feedback on their form and content. Subsequently, the participants worked individually again in order to correct or improve their questions, and decide on their final versions. A class discussion about the main ideas of the text read and the students' questions was the last stage of the procedure. All the questioning forms completed by the participants were collected by the teacher to be analysed by the judges, and given back to the students.

In order to evaluate the efficiency of the students' performance, that is, the quality of all the questions formulated by the participants, special scoring system was adopted so as to assess each question on the basis on three criteria by two judges—university teachers. First, the judges decided whether a particular question was relevant from the perspective of the content of the text (1 vs. 0 points). Second, the questions were assessed in terms of their clarity from the point of view of the recipient (1 point for a clearly-stated question). Then, the linguistic accuracy of the question was checked—1 point was awarded if the question was correct and 0 points if it was incorrect. Additionally, the judges determined which type the particular question belonged to in accordance with

the taxonomy of questions established for the study. The two judges analysed the data during three conferencing sessions; the first one took place after the fifth reciprocal reading session, the second one—after the tenth, and the last one at the end of the study, that is, after the thirteenth session. Importantly, during the last conferencing session, the judges analysed all the sets of students' questions again in order to ensure that all their judgments were appropriately made.

The two semi-structured interviews made it possible to collect the relevant data at two points of time in order to observe the potential change in the students' views, opinions, and general perceptions concerning their performance in question generation and reciprocal reading tasks both during the training and practice part and in the delayed sessions. All the students' responses were recorded and then transcribed for the purpose of comprehensive analysis.

Results and Discussion

As a result of the analysis of all the collected data the aims of the study were successfully achieved and a number of significant findings concerning the issues focused upon were made. As intended in the study, the quantitative-qualitative analysis of the research data made it possible to (1) examine the performance of six advanced users of English as a foreign language on a set of reciprocal reading tasks involving the use of the strategy of asking and answering students' own text-based questions, and (2) get insight into the students' perceptions of their task performance and attitudes towards the procedure they got acquainted with and implemented in their academic reading practice. It was possible to increase the understanding of the development of the students' awareness and efficiency of the implementation of the question generating strategy, as well as its contribution to systematic practice in reciprocal reading tasks. Also, due to taking a micro-level perspective, the performance of the behaviour of individual students could be explored at more depth.

The first question in this study sought to determine whether the questions asked by the six participants of the study were relevant to the content of the texts and clear to a recipient. It was found that all of the 234 questions the participants generated, both during the first part of the project (180 questions) and during the second one conducted in the delayed sessions (54 questions), were relevant. In other words, the students did not encounter any problems with detecting the main ideas in the texts they read and addressing them in their questions. Similarly, they generally succeeded in posing clearly stated questions. As shown in Table 1, 89.4% of all the questions generated during the strategy training sessions and 96.2% asked in the delayed sessions fulfilled

the criterion related to the clarity of questions. These findings are consistent with those the researchers obtained from their previous study investigating the use of the strategy of generating readers' own questions in reciprocal reading instruction at academic level (Chodkiewicz & Kiszczak, 2019).

Table 1

Number of the students' questions across the texts assessed by the raters as relevant and clearly stated (n = 18)

| | Training and practice sessions | | | | | | | | | | | Delayed practice sessions | | | | Final |
| | Text | | | | | | | | | | Total | Text | | | Total | Total |
	1	2	3	4	5	6	7	8	9	10		1	2	3		
Relevant questions	18	18	18	18	18	18	18	18	18	18	180 100%	18	18	18	54 100%	234 100%
Clearly stated questions	18	14	16	15	15	13	18	17	18	17	161 89.4%	16	18	18	52 96.2%	213 91%

With regard to the second research question, the findings revealed that at the beginning of the study the participants struggled with posing linguistically correct questions. Overall, during the first part of the project 65 out of 180 students' questions, that is, 36.1%, were not correct in terms of the language used. It is important to note that the problem of formulating linguistically correct text-based questions by EFL students, even at an advanced level of language proficiency, has also been observed in other studies related to the topic under discussion (cf. Miciano, 2004a, 2004b; Dorchandra, 2013). An optimistic comment that should be made with reference to the results obtained is that the number of linguistically appropriate questions tended to increase in each task from the fourth to the ninth questioning sessions and was relatively high in the second part of the study. As demonstrated in Table 2, the amount of correct questions that appeared during the first four strategy training and practice sessions was considerably lower than the average, whereas during the last two training and practice sessions and the last two delayed practice sessions, the students' questions were formed correctly, with only one erroneous item found per text.

It may be speculated that the participants improved their ability of asking linguistically correct questions, which could have been attributed to the students' general development of language proficiency over time as well as to the systematic practice in generating their own questions on the basis of the EFL Didactics course materials and the increasing awareness of the problem.

Table 2

Number of the students' questions across the texts assessed by the raters as linguistically correct (n = 18)

| | Training and practice sessions | | | | | | | | | | | Delayed practice sessions | | | | Final |
| | Text | | | | | | | | | | Total | Text | | | Total | Total |
	1	2	3	4	5	6	7	8	9	10		1	2	3		
Linguistically correct questions	6	8	7	7	10	13	14	16	17	17	115 63.9%	15	17	17	49 90.7%	164 70%

The third question in this research study concerned the types of questions the students tended to generate. It is evident from Table 3 that the group of the six participants preferred to use two particular question types, that is, description questions and explanation questions. They did not change this preference even after a nine-month period of not working with the strategy of generating questions in the classroom. As a matter of fact, 30.3% of all 234 questions asked by all the participants throughout the study were description questions whereas 29.1% were explanation questions.

Table 3

Number of particular question types generated by the students across the texts (n = 18)

| | Training and practice sessions | | | | | | | | | | | Delayed practice sessions | | | | Final |
| | Text | | | | | | | | | | Total (180) | Text | | | Total (54) | Total (234) |
Question types	1	2	3	4	5	6	7	8	9	10		1	2	3		
Factual Information	2	2	8	3	2	3	1	1	1	2	25 (13.8%)	2	1	2	5 (9.3%)	30 (12.8%)
Description	8	4	3	6	10	8	3	4	4	4	54 (30%)	5	6	6	17 (31.5%)	71 (30.3%)
Explanation	4	2	4	7	2	5	5	6	6	7	48 (26.7%)	6	8	6	20 (37%)	68 (29.1%)
Pattern of Relationships	3	3	0	1	4	1	8	4	5	5	34 (18.9%)	4	2	2	8 (14.9%)	42 (17.9%)
Judgmental	1	7	3	1	0	1	1	3	2	0	19 (10.6%)	1	1	2	4 (7.4%)	23 (9.8%)

In a similar vein, the students' resistance to the use of judgmental questions did not change across the study and only 9.8% of all the questions posed were classified as representative of this category. As for factual information questions, a slight decrease in their number could be observed from the seventh

training and practice session in the first part of the project. The questions of this type were also rarely asked during the delayed practice sessions as they constituted only 9.3% of all the questions generated at this stage of the study. This may have resulted from the instructions and explanations given by the teacher-researcher to the students who encouraged them to ask more cognitively demanding questions instead of questions addressing solely facts and figures. Overall, the tendencies noted in the group may suggest that the students found it important to ask and learn about descriptions and explanations of main concepts and about some relationships between key ideas, however, they were not able to take a critical stance on the information conveyed in the texts. These results reflect those of Miciano (2004a, 2004b) and Taboada, Bianco, and Bowerman (2012) who also found that students tend to ask intermediate questions, which require text understanding but do not demand the activation of critical thinking skills.

In order to answer the last research question the students' personal evaluation regarding reciprocal reading practice and their performance in it was gained through two interviews that accompanied the two parts of the study. The analysis of the students' responses has shown some remarkable insights into the way the students approached the procedure of asking text-based questions while accomplishing reading tasks and self-assessment of their performance. When asked about their opinion on the usefulness of the procedure of reciprocal reading, the participants were unanimous in the view that it helped them organise their reading and learning process and stay focused on the content of the text in order to identify the main ideas and remember them. As one of the participants, Paulina, highlighted in the post-study interview, generating own text-based questions and performing reciprocal reading tasks *definitely helped to systematize knowledge and organise it.* She explained her view in the following way:

> I had to plan my goal and as a result, I focused on information which was in the text more deeply because I knew why I should do it. And I memorised better information because it was in the text and also in the questions and discussions. And it was really helpful to read the short texts like summary. I think the whole procedure helped to focus on information which was crucial for understanding the text and to organize knowledge from the whole course, and helped to prepare for the tests.

What is important to emphasize is that the participants' positive standpoint on the use of the strategy of generating their own questions while reading academic texts did not change over the course of the study, even when in the delayed practice sessions no further support in the students' strategy implementation was formally offered. Indeed, the students shared the same opinions

and provided similar justifications supporting their views during both of the interviews. However, only two students expressed their plan to ask text-based questions on their own in the future. Even though the remaining participants were convinced about the benefits of working with the questioning strategy, they found it applicable mainly only while studying short texts, that is, of similar length to those they read in the classroom, and not to entire book chapters or academic articles.

Another strand of the interviews was to get some insight into potential changes in the participants' questioning behaviour across all the reciprocal reading sessions. In the accounts of their individual procedures of generating questions, the six students declared that they adhered to the same cycle throughout the thirteen sessions and found it practical not to introduce any changes into it. Out of the students' descriptions of their ways of working with the texts in order to ask questions based on them, two main patterns of behaviour have emerged. Four students (Paweł, Michalina, Izabela, and Monika) claimed that first they read the target text in order to perform the multiple choice comprehension task. Yet, bearing in mind the next step of the procedure which concerned generating their own questions, the students already attempted to identify and underline the information they could ask about later. Having answered the reading comprehension questions, they read the text again very slowly to make sure whether the ideas they had underlined were worth being asked about and learning about. They stopped reading each time when they arrived at such an idea and wrote their questions addressing it together with their own answers to them. Paweł and Monika finished the procedure of generating questions at this point, whereas Michalina and Izabela went through the text once again to ensure the relevance of their questions. Slightly a different questioning routine was adopted by Paulina and Agata, who read each target text for the first time only with a view to answering the comprehension questions, without any reflection on the text in terms of ideas which they could subsequently address in their own questions. Then, they read the text carefully and generated three questions referring to it. The last step of the procedure concerned reading the texts for the third time in order to provide answers to those questions. All of the study participants admitted that when they found the texts more demanding in terms of content, they had to read them more times. Importantly, regardless of the order of the steps the students took while reading the texts and generating questions on their basis, all of the participants automatically embarked on the strategy of re-reading.

As discussed above, the students did not modify their individualised ways of working with texts with the use of the questioning strategy over time, however, they reported some other changes related to their questioning behaviour. All of the students, apart from Michalina, mentioned that they started paying more attention to the clarity as well as to the linguistic correctness of the

questions they posed. In the cases of Monika, Paweł, and Izabela, the increase of linguistic awareness was caused by the collaborative part of the reciprocal reading procedure, that is, by the fact their questions were to be answered by their peers. Monika's comments are as follows:

> When I noticed that Paweł didn't understand my questions I knew it was something wrong with them. So I knew I had to change their language or be more clear what I mean. And next times I was more careful. So now, after so many classes I think that my questions are more correct than at the beginning.

Agata and Paulina, on the other hand, claimed that it was the teacher-researcher's feedback that they received on the quality of their questions which helped them notice some basic linguistic problems that regularly appeared in their questions. Practising asking questions proved to be helpful for them to work on their linguistic performance. A crucial point needs to be raised here, namely, the participants' perceptions related to the linguistic correctness of their questions were consistent with the objective evaluation of the questions performed by the judges, as already reported in this paper.

As far as the types of questions generated by the participants are concerned, all of the students admitted that they had their own preferences for given categories of questions. What is more, the students, who participated in this study, were able to explain their preferences by referring to the characteristics of the particular types of questions they usually opted for and their role in text processing. By way of illustration, Paweł, who most frequently posed judgmental questions, justified his preference by stating that:

> I like questions which would require personal thinking. The best would be critical thinking like you have to think about the idea in many different ways, look at this in many different views. So it requires you, for example, to compare one to another or to give your own thoughts or just to think from experience because we had those practices already so I like to ask some questions also about real-life experience and text. For me scanning the text is not enough.

Five out of the six study participants stated that they made attempts at using a number of question types apart from those they personally preferred, yet, they did it for different reasons. Two students experimented with question categories as they felt that were expected to do it rather than make choices out of their own willingness, two students did it to test themselves on the ability of asking questions of different types, and one student did it to introduce some variety to her sets of questions. Four students, Agata, Paulina, Monika, and Izabela

indicated that the handout with the taxonomy of questions was an important source of help for them in the process of generating questions representing different categories both during the one-semester strategy training as well as in the delayed sessions. Overall, it may be inferred from the students' views that they personalised the strategy of generating text-based questions and developed their own preferences and opinions concerning particular question types they drew upon over the period of the study.

Conclusion

The present study, although limited in its size, has confirmed that asking text-based questions by EFL students can be both an effective and instructionally manageable strategy in academic settings. Such a view can be supported with reference to the results obtained in both the training and practice sessions, with explicit explanation and guidance provided by the teacher, and in the delayed sessions, when the students worked independently using the already practiced procedure. Generally, with the appropriately chosen difficulty level of content-area texts, as also shown by the results of this study and in Chodkiewicz and Kiszczak (2019), EFL students are capable of asking questions relevant to the content of texts, answerable and clear to the recipient, which undeniably shows that having understood the texts students are able to effectively address the text content in their questions.

Of some problem for English language learners, as it has been demonstrated even at an advanced language proficiency level, is to formulate linguistically correct questions (cf. Miciano, 2004a, 2004b; Dorchandra, 2013; Chodkiewicz & Kiszczak, 2019). However, the current study has also revealed that the number of linguistically appropriate questions tended to increase as a result of the amount of practice the students completed. One can conclude, then, that the use of the strategy of text-based questioning can play a role in overcoming students' language deficiencies when this interactive element is added to receptive reading tasks. Worth emphasizing is the data informing about the participants' choice of different question types. The students showed preference for asking description and explanation questions, that is, the ones at a lower cognitive level while resisting the use of judgmental questions. This confirms the tendency observed by Chodkiewicz and Kiszczak (2019), as well as the results obtained by Miciano (2004) and Taboada, Bianco, and Bowerman (2012), who found that students choose to ask intermediate questions as those that do not require enacting critical thinking skills.

The findings from the interviews generally matched those from the objective analysis of the quality of the students' questions, apart from the fact that some valuable information regarding the students' views and perceptions of the use of text-based questioning was added. The participants of this study unanimously underlined that generating their own questions contributed to organising their reading and learning from text. They expressed a positive standpoint on the use of the strategy of generating their own questions over the whole course of the study. They also declared the strategy to be helpful in adopting a more individualized processing of the texts they read. As for the use of different question types, the students showed preferences for some of them, giving different reasons for their choices. Among them they mentioned the role of a given question in text comprehension and content processing, satisfying the requirement of using different question types, experimenting with different question types, or testing the ability to ask particular question types. Of interest has also been the description of the cycle in which the particular students implemented the strategy of text-based questioning since they embarked on varying pathways to reach their goals.

To sum up, proper guidance offered by the teacher can make students more responsive to the texts they read and more reflective on the use and contribution of question generating strategy to the reading and learning process. It is also important to make students aware of taking a more critical approach in asking their own questions, as well as improving their linguistic accuracy of verbal expression. Text-based questions generated by students while reading and learning from expository texts can undoubtedly play a key role in enhancing reading literacy skills by fostering the strategicness of the reading process.

References

Afflerbach, P., Pearson, P. D., & Paris, S. G. (2008). Clarifying differences between reading skills and strategies. *The Reading Teacher, 66*(6), 440–448.

Alexander, P. A., & Jetton, T. L. (2003). Learning from traditional and alternative texts: New conceptualizations for the information age. In A. C. Graesser, M. A. Gernsbacher, & S. R. Goldman (Eds.), *Handbook of discourse processes* (pp. 199–24l). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.

Berry, J. W., & Chew, S. L. (2008). Improving learning through interventions of student-generated questions and concept maps. *Teaching of Psychology, 35*(4), 305–312.

Brown, A. L., & Palincsar, A. S. (1986). *Guided, cooperative learning and individual knowledge acquisition. Technical report no. 372.* Cambridge, MA: Illinois University, Urbana Center for the Study of Reading, Bolt, Beranek and Newman Inc.

Chin, C., & Osborne, J. (2008). Students' questions: A potential resource for teaching and learning science. *Studies in Science Education, 44*(1), 1–39.

Chodkiewicz, H. (2015). Some insights into the academic reading experience of English philology students. *Konin Language Studies, 3*(1), 9–30.

Chodkiewicz, H. (2018). Rola czytania w języku obcym i uczenia się z tekstu akademickiego w rozwijaniu wiedzy przedmiotowej. In D. Gabryś-Barker, R. Kalamarz, & M. Stec (Eds.), *Materiały i media we współczesnej glottodydaktyce* (pp. 11—26). Katowice: Wydawnictwo Uniwersytetu Śląskiego.

Chodkiewicz, H., & Kiszczak, A. (2019). Investigating the use of student-generated questions in disciplinary reading practices in higher education environments, *SOCIETY. INTEGRATION. EDUCATION: Proceedings of the International Scientific Conference. Volume I, May 24th–25th, 2019*, Rezekne Academy of Technologies: Rezekne, Latvia, 119–130.

Cooper, T., & Greive, C. (2009). The effectiveness of the methods of reciprocal teaching: As applied within the NSW primary subject human society and its environment: An exploratory study. *TEACH Journal of Christian Education, 3*(1), 45–52.

Coste, D., North, B., Sheils, J., & Trim, J. (2003). *Common European Framework of Reference for languages: Learning, teaching, assessment*. Council of Europe.

Cuccio-Schirripa, S., & Steiner, H. E. (2000). Enhancement and analysis of science question level for middle school students. *Journal of Research in Science Teaching*, *37*(2), 210–224.

Davey, B., & McBride, S. (1986). Effects of question-generation training on reading comprehension. *Journal of Educational Psychology*, *78*(4), 256–262.

Dinsmore, D. L. (2017). *Strategic processing in education*. New York and London: Routledge.

Dorkchandra, D. (2013). The effects of question generating strategy instruction on EFL freshmen's reading comprehension and use of English tenses. *Journal of Liberal Arts*, *5*(2), 32–45.

Duke, N. K., & Pearson, P. D. (2002). Effective reading practices for developing comprehension. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (pp. 205—242). Newark, DE: International Reading Association.

Grabe, W. (2009). *Reading in a second language: Moving from theory to practice*. New York: Cambridge University Press.

Grabe, W., & Stoller, F. L. (2014). Teaching reading for academic purposes. In M. Celce-Murcia, D. M. Brinton, & M. A. Snow (Eds.), *Teaching English as a second or foreign language. Fourth Edition* (pp. 189—287). Boston, MA: National Geographic Learning Heinle Cengage.

Grabe, W., & Stoller, F. L. (2019). Reading to learn: why and how content-based instructional frameworks facilitate the process. In K. Koda & J. Yamashita (Eds.), *Reading to learn in a foreign language: An integrated approach to FL instruction and assessment* [e-book version]. New York, NY: Routledge.

Graesser, A. C. (2007). An introduction to strategic reading comprehension. In D. S. McNamara (Ed.), *Reading comprehension strategies: Theories, interventions, and technologies* (pp. 3–26). New York: Lawrence Erlbaum.

Graesser, A. C., & Person, N. K. (1994). Question asking during tutoring. *American Educational Research Journal*, *31*(1), 104–107.

Graesser, A. C., &. Wisher, R. A. (2001). *Question generation as a learning multiplier in distributed learning environments. Technical Report 1121.* Alexandria VA: United States Army Research Institute for the Behavioral and Social Sciences.

Gunn, T. M. (2008). The effects of questioning on text processing. *Reading Psychology, 29*, 405–442.

Handsfield, L. J. (2016). *Literacy theory as practice: Connecting theory and instruction in K-12 classrooms*. New York, NY: Teachers College Press.

Harper, K. A., Etkina, E., & Lin, Y. F. (2003). Encouraging and analyzing student questions in a large physics course: Meaningful patterns for instructors. *Journal of Research in Science Teaching, 40*, 776–791.

Kintsch, W. (2005). An overview of top-down and bottom-up effects in comprehension. The CI perspective. *Discourse Processes, 39*, 125–128.

King, A. (1994). Guiding knowledge construction in the classroom: Effects of teaching children how to question and how to explain. *American Educational Research Journal, 31*(2), 338–368.

King, A. (2008). Structuring peer interaction to promote higher-order thinking and complex learning in cooperating groups. In R. M. Gilles, A. F. Ashman, & J. Terwel (Eds.), *The teacher's role in implementing cooperative learning in the classroom* (pp. 73—91). New York, NY: Springer.

King, A., & Rosenshine B. (1993). Effects of guided cooperative questioning on children's knowledge construction. *The Journal of Experimental Education, 61*(2), 127–148.

King, A., Biggs, S., & Lipsky, S. (1984). Students' self-questioning and summarizing as reading study strategies. *Journal of Reading Behavior, 16*(3), 205–218.

Klingner, J. K., Vaughn, S., & Boardman, A. (2015). *Teaching reading comprehension to students with learning difficulties*. New York, NY: The Guilford Press.

Koda, K. (2005). *Insights into second language reading: A cross-linguistic approach*. Cambridge: Cambridge University Press.

Koda, K., & Yamashita, J. (2019). Reading to learn in a foreign language: An integrated approach to FL instruction and assessment. In K. Koda & J. Yamashita (Eds.), *Reading to learn in a foreign language: An integrated approach to FL instruction and assessment* [e-book version]. New York, NY: Routledge.

McNamara, D. S., Graesser, A. C., McCarthy, P. M., & Cai, Z. (2014). *Automated evaluation of text and discourse with Coh-Metrix*. Cambridge, MA: Cambridge University Press.

Miciano, R. Z. (2004a). Self-questioning and prose comprehension: A sample case of ESL Reading. *Asia Pacific Education Review, 3*(2), 210–216.

Miciano, R. Z. (2004b). The content and form of reader-generated questions: Implications for teaching questioning strategies. *Asia Pacific Education Review, 5*(2), 149–156.

Palincsar, A. S., & Brown, A. L. (1983). *Reciprocal teaching of comprehension-monitoring activities. Technical report no. 269*. Cambridge, MA: Illinois University, Urbana Center for the Study of Reading, Bolt, Beranek and Newman Inc.

Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 2*, 117–175.

Pilkington, R. (2016). *Discourse, dialogue, and technology enhanced learning*. New York, NY: Routledge.

Rosenshine, B., & Meister, C. (1994). Reciprocal teaching: A review of the research. *Review of Educational Research, 64*(4), 479–530.

Safarpoor, L., Ghaniabadi, S., & Nafchi, A. M. (2015). The effect of the self-questioning strategy as a generative learning strategy on Iranian intermediate EFL learners' reading comprehension. *The Asian Journal of English Language & Pedagogy, 3*, 66–87.

Scardamalia, M., & Bereiter, C. (1992). Text-based and knowledge-based questioning by children. *Cognition and Instruction, 9*(3), 177–199.

Taboada, A., & Guthrie, J. T. (2006). Contributions of student questioning and prior knowledge to construction of knowledge from reading information text. *Journal of Literacy Research, 38*(1), 1–35.

Taboada, A., Bianco, S., & Bowerman, V. (2012). Text-based questioning: A comprehension strategy to build English language learners' content knowledge. *Literacy Research and Instruction, 51*(2), 87–109.

Watts, M., Gould, G., & Alsop, S. (1997). Questions of understanding: Categorizing pupils' questions in science. *School Science Review, 79*(286), 57–63.

Yoosabai, Y. (2009). *The effects of reciprocal teaching on English reading comprehension in a Thai High school classroom* (Unpublished doctoral dissertation). Thailand: Srinakharinwirot University.

Anna Kiszczak, Halina Chodkiewicz

**Stellen von eigenen Fragen in Anlehnung an einen fremdsprachigen Text:
Zur langfristigen Anwendung und Wahrnehmung dieser Strategie
beim Lesen im Team**

Zusammenfassung

Der strategische Ansatz zur Entwicklung der Lesefertigkeit ist derzeit eines der wichtigsten Konzepte in der Sprachdidaktik. Dieser Beitrag widmet sich den Ergebnissen einer Studie, in der Studierende der Anglistik einem Langzeittraining unterzogen wurden, in dem sie ihre eigenen Fragen auf der Basis eines Textes formulierten, der beim Lesen im Team verwendet wurde. Diese Studie bestand aus zwei Phasen: in einem Semester erhielten die Studierenden detaillierte Erklärungen und Hilfe beim Verfahren der Fragestellung, wobei der Schwerpunkt auf den Fragen unterschiedlicher Tiefe der kognitiven Textverarbeitung lag. Neun Monate später machten sie dieselben Aufgaben ohne Hilfe einer Lehrkraft. Ziel der Studie war es, Veränderungen in der Qualität der Fragen zu bewerten, die sich die Studierenden in den späteren Lesephasen zu zweit stellten, sowie von Studierenden – mittels eines Interviews – Informationen über die Wahrnehmung von Aufgaben zur Fragestellung und über die Nützlichkeit dieser Strategie bei dem Verstehen eines wissenschaftlichen Textes und der gezielten Verarbeitung seines Inhalts zu bekommen. Die Studie zeigte, dass die Studierenden keine Probleme damit hatten, solche Fragen zu stellen, die aus der Sicht des Empfängers klar und inhaltlich relevant waren. Durch die Teilnahme an mehreren Team-Lesesitzungen konnten sie die sprachliche Form von Fragen auf Englisch besser beherrschen. Nach Meinung der Befragten ist die Strategie, Fragen durch den Lesenden auf der Grundlage des wissenschaftlichen Textes zu stellen, hilfreich für das Verstehen und das Beherrschen des Fachwissens in Anlehnung an seinen Inhalt.

Schlüsselwörter: akademisches Lesen, gegenseitiges Lesen, Fragen von Studierenden, Strategietraining