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The Text Is Too Long:* Assisting University Students with Reading Academic Texts in a Foreign Language

Abstract: University studies rely primarily on written sources, which have to be read, comprehended and then discussed by students and teachers in class to become a part of an expanding knowledge system. For several years, the author has been teaching an introductory course on second language acquisition to first year BA English Philology students in Poland. She has noticed that throughout the years, the students have had more and more problems with comprehending the basic course-related texts and passing course tests. To help them, the author decided to change the way of working with the texts by implementing a support reading strategy based on generating questions to the texts by the students themselves. This intervention resulted in better text comprehension, which contributed to a development of knowledge, as evidenced by test results and reported by students in a post-course survey. Making text-based questions, the students worked in groups which supported their self-confidence and the feeling of success.

Keywords: academic text comprehension, reading strategies, student-generated questions, comprehension problems in a foreign language

Introduction

This article reports the effects of a pedagogic intervention that aimed at helping first year Polish university students enrolled in the BA English Philology programme

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* Internet users coined the acronym "TL;DR" which means "too long; didn't read" (Dukaj). This is connected with fast processing of online information. Internet users can locate short pieces of information, usually the size of the computer screen, and make connections between and among them, but they have problems focusing on longer texts, which may result in the loss of "the literary mind-set" (Tucker 61) that requires patience, concentration and engagement with the text. The first part of the title refers to this phenomenon.

to cope with reading academic texts. Since the programme is taught in English, the texts for reading are in English and so are the classes and discussions. It is important to note that the students had been learning English as a foreign language in formal educational settings, often for quite a long time, because such is the educational policy of the Polish government. On graduating from secondary school, they are expected to have reached the B1–B2 proficiency level in the leading foreign language. When they apply to universities and other tertiary education institutions, they are admitted on the basis of the results of the standardised secondary school leaving exam (the so-called *matura*), which also includes a foreign language.

First year students face a lot of challenges connected with being at a university, or any other tertiary education institution. Fresh from secondary school, they are expected to change into independent and self-directed persons who take responsibility for their own learning, behaviour, emotions, social relations, and for their life in its entirety. The manner of teaching and learning is different from what they are used to. They attend lectures, classes, seminars and workshops, but they also have to do a lot of work on their own. They have to practise their literacy skills extensively; they have to read a variety of discipline-specific academic texts to build and expand their knowledge, and they also have to write on topics related to issues addressed by the texts.

Moreover, the students are also widely experiencing the new forms of literacies referred to as "digital/silicon/electronic literacies" (Murray and McPherson 132) and "hyperreading" (Usó-Juan and Ruiz-Madrid 59) that the rapid development of Information and Communication Technologies (ICTs) have made possible. In contrast to traditional, printed texts, hypertexts are non-linear, multimodal, open-ended and dynamic (Coiro; Coiro and Dobler; Usó-Juan and Ruiz-Madrid), which means they include new elements and require new skills and strategies of reading. Therefore, a hypertext reader, apart from decoding the language in which the text has been written, needs to pay attention to the use of colour, hyperlinks, animated icons, dynamic pictures, maps, charts and graphs that change according to the information the reader wants to find (Leu et al. 1586). Since 92.4% of Polish households with people aged 16–74 have access to the Internet (Główny Urząd Statystyczny), the use of this source of information, communication and leisure activities is a common practice and contributes to the development and use of digital reading skills and strategies. The preferred way of reading the Internet texts is scanning, and only when the necessary information is located does close reading take place (Murray and McPherson). Thus, first year students come to the University with a range of reading skills and strategies, related both to reading traditional, print-based texts as well as digital hypertexts found on the Internet. They have become quite "competent in particular social practices (such as Facebooking, Instagraming, memeing, tweeting, and gaming of various kinds)" (Jones 288), which brings the questions of whether processing print-based texts is modified by reading digital hypertexts, and whether the possible modifications contribute to deeper comprehension of printed texts.

Reading academic texts, however, is a demanding activity. It is more than general comprehension, finding information or skimming, because the purposes of reading are different. In educational settings, people read to learn, to integrate information from different sources and to develop a critical approach to concepts, issues and ideas presented in the texts (Grabe 9). In reading to learn, students need to recognise and remember main ideas and supporting details, identify rhetorical devices that structure the text and integrate new knowledge with their existing knowledge system. In addition, students frequently read various texts on similar topics, which means that they have to select relevant information from different sources, analyse it in terms of similarities and differences and interpret it. This, in turn, is possible when readers can not only interpret but also question ideas included in the text (Abbott). Critical reading is significant for building knowledge from reading expository texts and it leads to the recognition of the author's intentions, interests and ideologies (Janks 22). It is interconnected with critical thinking, which is the core of university education and also links with the concept of critical literacy that is "a distinct and growing body of technical knowledge about textuality" (Freebody and Freiberg 433), which includes the knowledge that texts may appear in various modalities; they are interpreted, evaluated and critically comprehended against the background of social and textual contexts.

Academic reading is a component of academic literacy that refers to "ways of thinking, reading, speaking, and writing dominant in the academic setting; involves ways of receiving knowledge, managing knowledge and creating knowledge for the benefit of a field of study" (Neely 8). In addition, it is a sociocultural practice shaped by a variety of such contextual factors as text, audience and purpose (Hirano 179). The development of ICTs has made access to many digital and digitalised sources of information easy and unproblematic, extending the range and variety of texts that students can read for learning and for pleasure. Ways of reading, thinking and speaking about texts concerning a field of study—second language acquisition in this case—are of great relevance for this paper. Therefore, the next section briefly describes reading in academia and addresses the role of reading strategies in this context.

1. Reading in academia

The texts most frequently assigned for reading are expository texts—the main genre of academic discourse—but they also include lecture notes, maps, Power Point presentations, and information brochures, as well as electronic science-related media (Graesser, Leon and Otero 6). Black calls expository texts "the meat and potatoes of the textual world, because … [they] convey new information and explain new topics to people" (249). The reading purpose is passing on new information and explaining it so that it becomes a part of the reader's knowledge system.

Expository texts contain new knowledge that is represented by means of academic language that can be conceptualised as "the braiding of three strands of langage–everyday language, abstract language and metaphorical language with the shape of the braid determined by factors such as topic, context and purpose. Any text is an instantiation of a particular braiding, with certain strands more heavily present in some texts than in others" (Fang 325). These characteristics of academic language used in authentic expository texts, abstract and metaphorical language in particular may cause comprehension problems for users of English as a foreign language, even though their proficiency may be at a relatively high level. Another possible obstacle to comprehension may be the cognitive complexity of expository sources. Moreover, the readers' prior knowledge may be insufficient to let them form meaningful links between what they know and what they are expected to learn from texts. Thus, two levels of problems connected with reading texts may be distinguished—that is, text-based (related to linguistic aspects of the text) and knowledge-based (pertaining to the information included in the text) (Otero 51). Still, the students have to meet the challenges and cope with the problems.

This is where reading strategies (RS) become crucial. They are defined in many different ways, but the definitions show that they are intentional, contextually conditioned, interactive and purposeful. Their purpose is text comprehension or the construction of meaning (Piasecka 149). They are used when problems with text comprehension both on the linguistic and conceptual levels appear, regardless of text format (printed or digital).

RS have been classified into three groups:

— global RS used to plan and monitor the reading process; examples of such strategies include establishing a reading purpose, previewing the text to see how it is organised and how long it is, or using typographical information (boldface, italics) to identify key information.

— problem-solving RS related to text comprehension. These strategies are observed when readers re-read unclear or confusing fragments, when they guess the meanings of unknown words, when they adjust their reading speed to the level of text difficulty, and when they critically evaluate what they read.

— support RS serve to clarify meaning and construct comprehension, for example by underlining or highlighting the text, taking notes, making text-related questions or using dictionaries (Mokhtari and Sheory 4).

Substantial research has been carried out on reading strategies both in the first (L1) and the second/foreign language (L2/FL) at various educational levels, in many socio-cultural contexts, with respect to paper-based and digital reading. Thus, Munro, focusing on L1 able and at-risk readers, discovered that a combination of reading strategies, for example visual imagery and verbal elaboration in the form of self-questioning, enhances the level of text comprehension. Taboada, Bianco and Bowerman investigated the influence of student-generated questions on general vocabulary in English-only speakers and English language learners and found that the questions predicted reading comprehension of both groups of

participants. Another study revealed that English language learners who received instruction on how to make questions improved their questioning skills. In addition, a correlation was found between types of questions and reading comprehension. The authors concluded "that text-based student questioning is a reading strategy that contributes to ELLs' reading comprehension and conceptual knowledge in the content area of science" (87).

Brevik investigated the use of reading strategies, reading instruction and metacognitive awareness among Norwegian teachers of L1 Norwegian and L2 English in Norwegian upper secondary schools. She was also interested in how teachers taught reading strategies and how learners used them and reflected on their use. Her findings show a close relationship between L1 and L2 reading and imply that reading strategies can support L2 learners in developing their comprehension. The supportive effect is even stronger when the strategies are used in combination rather than individually and when they are taught explicitly. Students are supposed to use them purposefully, individually and independently.

Li et al. carried out a meta-analysis of 23 experimental and quasi-experimental studies that focused on reading interventions based on the use of four reading strategies: scaffolding, graphic organizers, interactive read aloud and leveled questions. The participants of the interventions were learners of English. The researchers found that each strategy supports learners' reading comprehension and the effect is stronger when the strategies are combined.

A study of RS used in reading academic texts online (Piasecka 153) revealed that the participants most frequently use problem-solving RS and implies that they encounter most comprehension problems when they actually handle the text. Support RS are used less frequently, but they are also important because of their function: they help to clarify meaning and thus enhance text comprehension. It appeared that many participants printed a hard copy of the online text and then underlined or circled information (a support strategy) because it helped them to remember it better. Self-questioning has been classified as a support reading strategy which may be used to overcome both language and content-related comprehension problems. It has been recognized as "a fairly universal reading comprehension strategy" (Kiszczak and Chodkiewicz 40).

Another study on learning from academic texts (Kiszczak 259–261) has shown the important role of student-generated questions, both for text comprehension and the development of subject-specific knowledge. The questions the participants made while working on expository texts allowed them to engage with the text more deeply, to gain knowledge, as well as to improve their language proficiency and reading skills. Needless to say, reading is one of the key academic skills indspensable for achieving success at the university. This success is related to how students understand content knowledge but also how they cope with a variety of assessment situations, including new technologies (Mulcahy-Ernt and Caverly 181).

The selected empirical studies briefly reviewed above show that reading strategies are an important tool in the development of reading comprehension in any language and therefore they should be explicitly taught and then used by learners because they support text comprehension and the growth of subject knowledge. They are used across a range of educational levels (primary, secondary, tertiary), both with printed and digital texts. However, when digital texts are read for learning, their printed form may be more suitable for some L2 readers.

Theoretical considerations and empirical evidence both reveal that using a combination of reading strategies when processing a long text for learning support comprehension. However, not much is known about the effect of working on questions generated by groups of readers and then checking their validity and appropriacy with other readers. This is a niche that the study described further on in the paper is meant to occupy.

2. The study

The study reported in this section of the paper was inspired by the problems Polish university students of English Philology encountered while reading expository academic texts assigned for the course (Introduction to Second Language Acquisition, or SLA) that was taught in the spring term of the academic year 2018/19. The aim of the course was to introduce students to basic concepts, terms and issues in the field of SLA and thus to develop the terminological and conceptual framework for further study in this area. The content was based on selected chapters from classical textbooks pertaining to SLA (eg., *How Languages are Learned* by Lightbown and Spada, and *Second Language Learning and Language Teaching* by Cook). Students' knowledge of the subject matter was tested twice (a mid-term and the end-of-term tests) and they had to pass both tests to get a credit for the course.

The tests covered the subject matter that the students read about and discussed in class, which accounts for their reliability. Each test had three sections. In section one, the testees had to match terms and their definitions, in section two they had to explain selected concepts, and in section three they were expected to answer specific questions pertaining to SLA. The tests followed the testing format used in previous courses also taught by teachers other than the current author. Their form and content were discussed by all the teachers involved in teaching the course and unclear items were removed. The tests differed in scores because the material they tested differed in range. Both tests were equally important because they had to be passed to get credit for the course.

Since the study aimed at solving real problems that university students face when reading to learn, it may be called action-research. It was also a mixed-design study, as it allowed for collecting both quantitative (tests results) and qualitative (students' answers to survey statements and questions, and field notes) data. This

design was deliberately chosen, as it allowed for not only seeing the development of students' subject knowledge over time, but also probing their opinions about reading academic texts in a foreign language, as well as the effects of the pedagogical intervention. The fact that the texts were written in a foreign language may additionally complicate comprehension and cause learning problems.

2.1. Manner of instruction before intervention

At the beginning of the course, the students received a list of texts to read before class, with dates indicated. A discussion was held on what it means to read a text and how to solve problems that refer to unknown vocabulary or to fragments difficult to understand. The students agreed that in such cases, it is necessary to consult a dictionary and to reread sections of texts that are unclear or incomprehensible, thus showing they they realise what strategic reading consists of.

In class, basic terminology and issues addressed in the texts were discussed. The students were encouraged to refer to their personal experiences and observations concerning learning native and foreign langauges. Moreover, the teacher prepared Power Point presentations, video clips, activities and tasks to explain new and/or difficult issues, to engage students and to personalize the content. The students were also informed that they would have to take two tests to get credit.

When the students came to class, they all had the assigned text available on mobile devices, mostly phones. The quality of digital texts was high, as these were original texts in PDF format. Few had printed copies of the text. The teacher asked questions and waited for volunteers to answer them. However, most frequently, silence was the only answer. It appeared that the students were nervously scrolling the text to find the relevant information. Since there were no volunteers, individual students were nominated to answer the question or define and describe a concept or a problem. The answers were formulated by the students and the teacher and the studentes were invited to reflect on the meanings discussed in class. Since this was quite a frustrating experience for the students and the teacher alike, the students were asked about problems they had with comprehending the assigned texts. They declared that the difficulties resulted from the length of the texts, difficult content, and difficult language. Then ways of solving the problems were discussed, like, for example, breaking the text into shorter sections, paying attention to the layout of the text, drawing mind maps to find relations between different concepts, making lists of important terms and definitions, consulting reference materials such as dictionaries when the meaning is unclear. This way, problem-solving reading strategies were reviewed. At the end of each class, the teacher asked if the content covered in class was clear and if the students needed some additional information. They assured the teacher that everything was clear and that they did not need any extra information.

Then, a mid-term test was administered. Before the test, the students were informed about the form, content and passing criteria. 35% of students passed the

test on the first administration. This was an extremely stressful situation for all, so the teacher decided to take steps to change it. Therefore, a quasi-expriment was devised to help the students overcome the difficulties with reading and learning from academic texts they were expected to read for classes. It was hypothesised, on the basis of theoretical underpinnings and empirical studies, that text comprehension and learning might be enhanced when students, working in small groups, generate text-related questions and ask them to the rest of the group to check understanding of the text. Thus, the following research questions were formulated (RQ):

RQ1: Do text-related questions made by the students reading in class, in groups, enhance comprehension and contribute to the growth of knowledge, as evidenced by knowledge test results?

RQ2: What are the most frequent problems related to academic text comprehension?

RQ3: What are the students' opinions about the experimental approach to reading academic texts?

To answer the RQs, a pedagogic intervention was designed and implemented. It was spread over six weeks. After the intervention, the students took the end-of-term test and then were asked to fill in a survey (see the appendix) related to the intervention. It included statements about the intervention that the respondents agreed or disagreed with as well as open questions asking for their personal opinions.

2.2. Intervention

In the second half of the spring term 2018/19, the manner of working with the texts was changed. 37 students, 29 females and 8 males were involved in the study. They were aged between 20–23 years (mean = 20.77), and on average, they had been learning English for 13.77 years (10–15 years). First of all, the students were asked to always have printed versions of the text with them. During classes spanning six weeks, they were divided into groups of three–four persons, and were assigned sections of the texts to read and formulate three questions that would refer to the most important information included in their sections. A time limit of 15 minutes was set for this activity. The students agreed that the time limit made them more motivated and more focused on the task.

When the questions were ready, each group asked their questions and the other groups were supposed to answer. The questions were checked for correctness and clarity and corrected when not clear. If the students were not able to answer a question, a member of the group that formulated the question had to answer it. The procedure was followed till the whole text was discussed. When comprehension problems emerged, other students and/or the teacher tried to explain them. The students also observed that finding information in the printed texts was easier than on the mobile screens.

The results of the second test taken at the end of the six-week period were rewarding: 70% of the students passed the test on the first administration.

The intervention was of a quasi-experimental nature, which means that there was no control group. The decision not to have a control group was based on the premise that all the participants should have equal opportunities to participate in the intervention, improve their academic reading skills and develop subject-specific knowledge.

During the study, both quantitative and qualitative data were collected. The quantitative data were analysed by means of a *Statistica 12* package, while the qualitative data were analysed in terms of frequencies of occurence and recurring patterns with respect to open, opinion questions. The results of the analyses are shown in the following section.

2.3. Results

As mentioned above, the inspiration of the study came from the lack of success in learning from academic texts. To show how the pedagogic intervention affected reading and learning, desciptive statistics for two tests are presented and the results are compared. Since the tests did not have identical scores (they differed in the range of material covered), the raw scores were turned into percent scores to allow comparisons. To pass the tests, the students had to achieve 60% of correct answers.

Table 1: Test 1 and Test 2 per cent scores—descriptive statistics (n = 37, 29 females, 9 males)

	Mean	Minimum	Maximum	Standard Deviation
Test 1	46.86	8	97	21.57
Test 2	62.60	9	96	22.57

As the table shows, the mean percentage score on Test 1 was well below the passing level, 60%. A distribution of grades reveals that the most frequent grade for Test 1 was Fail. Only one student received the highest grade, scoring 97% of the correct answers. Descriptive statistics also show that the group is extremely varied in terms of their knowledge, as the range (the difference between the lowest and the highest score) is 91, which is also supported by a high standard deviation.

The mean percentage score of Test 2 is 62.60, which is slightly above the passing level, and almost 70% of the participants passed the test. However, other statistics (range and standard deviation) are very close to these of Test 1. It means that the groups have not changed much in terms of their variability; there are very strong differences among the members of the groups.

A comparison of grades and scores of both tests carried out by means of a t-test for dependent samples shows that the differences in results are statistically significant. The probability level has been established at $p < .01$. The results are included in Table 2.

Table 2: T-test results for dependent samples: test 1 and test 2 grades and scores; p < .01

	Grades	Per cent scores
Test 1	2.51	46.86
Test 2	3.24	62.60
t	-5.84	-6.17
df	36	36
p	.000001	.000000

The students taking Test 2 scored statistically significanty higher than on Test 1. Consequently, their grades improved at a statistically significant level. The results clearly show that the students were more successful on Test 2.

A survey was emailed to the participants when the term was over and this may be the reason for the low return rate. Thirteen students (11 females and 2 males) filled in and sent the questionnaire back.

The first question of the survey (9 items) addressed the problems the respondents identified when reading academic texts. The problems indicated by the students are listed below in terms of frequency.

1. Length of texts.
2. Lack of interest in texts.
3. Identifying the most important information.

The second question in the survey (7 items) was to gather the participants' opinions on the implemented pedagogic intervention. They agreed that working in groups to make text-related questions had the following positive effects (in terms of frequency):

1. They could discuss unclear or difficult parts of the text together (11 persons—85%).
2. They could check if they knew the answers to the questions their group prepared (11 persons—85%).
3. They had a feeling of success (11 persons—85%).
4. Their understanding of the text was supported by the fact that the fragments they worked on were shorter than the whole text (10 persons—77%).
5. Other students helped them to solve comprehension problems (10 persons—77%).
6. They felt more confident working in groups (9 persons—70%).

This was followed by two open questions (Nos. 3 and 4) concerning the process of question making in groups and the quality of questions prepared by other groups. Seven respondents wrote that they read the text together, identified the most important information and prepared the questions. Six students worked in a different way, They divided the text into shorter sections and worked individually to make the questions which they then presented to the rest of the group and analysed

the answers. One student wrote the following: "Everyone was involved in the work. It was great because it made us learn from one another" (Student No. 2).

Another student added:

> We had different strategies of working on the questions. Sometimes we divided the text into shorter fragments, and then each person had to read one of them and prepare some questions. Finally, we chose the appropriate ones. However, we also used the second method. We read the whole text and together decided about what question to ask. (Student No.13)

From the students' point of view, most of the questions were appropriate, relevant and well-formulated, so they did not have major problem with answering them.

The fifth question in survey (9 items) concerned the preferred ways of working on academic texts. According to the respondents' choices, they prefer the teacher to highlight the most important information in the text and to explain unknown vocabulary and expressions (10 persons–77%). Seven respondents (54%) prefer the teacher to summarize the text and six (46%) would like the teacher to ask questions about the text. Five respondents (38%) liked working in groups and preparing questions related to the text. Other options that referred to students' working on unknown vocabulary, working on their own and identifying the most important information were selected by two (15%) and one (8%) respondents.

The survey ended with demographic information and a self-rating of the participants' English language proficiency. Interestingly, language problems were indicated by only two respondents. In general, the respondents self-rated their knowledge of English as excellent (5 persons–38%) and very good (8 persons–62%), which may explain why they did not declare having had problems with unknown words, expressions and structures.

2.4. Discussion

The results presented above show the positive effects of the pedagogic intervention and allow the corroboration of the hypothesis formulated for the purpose of the study. As regards RQ1, student-generated questions did enhance text comprehension. This was due to close reading of shorter passages in class and discussing their content with other group members, who helped one another to solve comprehension problems that appeared in the process. The students also recognised the fact that working with the printed text is beneficial for finding relevant information because it is easier to navigate a printed text than a text displayed on a screen, which has to be scrolled up and down. Scanning and skimming, so widely used when online texts are read (Murray and McPherson 2006), are not sufficient to probe deeply into the meaning of a subject-specific text, or to remember and recall the most important information. In addition, digital texts displayed on small mobile screens have small fonts, which may result in more effort necessary to decipher and decode them, and eventually may result in eyestrain (Usó-Juan and Ruiz-Madrid 2009).

A new way of working with academic texts seems to have contributed to the growth of subject knowledge. The results of tests clearly show a statistically-significant increase in the results of Test 2, taken after the intervention. This change, however, may have been caused not only by the effects of student-generated questions but also by many other factors, such as for example, the students' growing experience with reading academic texts, developing knowledge about issues pertaining to SLA, higher language proficiency and growing academic literacy as well as the experience with test taking. Moreover, contextual factors (Hirano 179) might have also impacted this sociocultural reading process.

These findings are consistent with the empirical findings reported by Munro, Taboada, Bianco and Bowerman, Li et al., and Kiszczak. The gathered evidence implies that a consistent use of reading strategies enhances reading comprehension and accounts for the growth of subject matter knowledge. It is also important to note that reading strategies operate across languages in one learner and explicit training in their use may affect reading both in L1, L2 and any other language a person knows (cf. Brevik).

Since academic expository texts are demaning in terms of language, structure and contents, understanding them may be problematic. The greatest problem related to academic text comprehension (RQ2) refers to their length; the students are not used to reading long texts. This requires concentration, engagement and learning new information included in the texts so that the subject knowledge may be acquired. In addition, many students were not interested in the texts and thus lacked motivation to read them. They also had difficulties with identifying most important information, although they were advised and shown how to use the structure and the layout of the text to decide what the focal issues are. This may explain why they prefer the teacher to summarise the text, explain unknown expressions and highlight the most important information. Such a situation may be one of the effects of scrolling online texts, which makes readers feel disoriented, confused and lost. There is also a risk of information overload when online readers check the hypertext links, evaluate them, make navigational choices and may be distracted by popping up adds and hyperlinks (Murray and McPherson; Usó-Juan and Ruiz-Madrid; Carr).

Overall, the students were satisfied with the new way of working with academic texts (RQ3). They noticed that finding information in the printed texts was easier than on small mobile screens. They felt more confident and successful when working in groups, which is a positive aspect of the intervention because it supported the formation of interpersonal relations, co-operation and the development of social skills. They had a chance to monitor text understanding and clarify meanings they were not sure they understood properly. They became more critical about their own questions, as well as the questions proposed by other groups in terms of form and content (cf. Kiszczak). Breaking a long text into shorter passages allowed for solving one of the greatest problems the students reported; namely,

the text length, which seems to be the most serious obstacle in reading academic texts (cf. Dukaj) and which is signalled in the title of this paper. The participants also showed flexibility in making text-based questions and modified them when these were unclear.

The teacher's field notes revealed an interesting phenomenon. When asked to bring printed texts to class, the majority of the participants did as requested and many had highlighted important information in them and put glosses in the margins to ask about problematic issues during classes. They showed more skills and confidence when they navigated the printed text than when they were trying to locate information on screens of their digital devices despite all the skills they have presumably developed for "Facebooking, Instagraming, memeing, tweeting, and gaming of various kinds" (Jones 288). Moreover, expository academic texts, printed or digital, require time and concentration to allow the reader to focus and find the relevant information. As already noted, the abundance and ease of access to numerous online texts may distract the reader and make their mind wander and lose track of what they are looking for.

3. Conclusion

Student-generated questions seem to have beneficial effects on academic text comprehension, the acquisition of knowledge and the development of academic literacy. They also contribute to the development of critical thinking through the selection and analysis of information, then its synthesis and communication to other students. Talking to others about new concepts and phenomena allows all the parties involved to develop a deeper understanding of them. When comprehension problems emerge, both language and content based, they may be discussed and solved with the assistance of other group members and the teacher as well. Group work made students cooperate and share their understanding of the contents of the texts, but also their doubts about problems covered in the text and outside it. They also received immediate feedback about the appropriacy, relevance, and correctness of the questions that reflected their comprehension.

The strategy of student-generated questions may be used for working with a variety of academic and non-academic texts that are read at different language proficiency levels and in different age groups. Primary and secondary school learners of foreign languages process various texts that are usually accompanied by comprehension tasks prepared by coursebook authors. Teachers may change this and ask the learners to make text-related questions as this allows them to identify what are real comprehension problems that their learners may encounter. Besides, this strategy engages the readers with the text and they decide what information is important and relevant. Thus, they become more responsible for their learning

and feel more satisfied with what they do. Satisfaction makes them feel successful, which, in turn, motivates them to learn more.

The participants of the quasi-experiment who completed the survey appreciated the use of student-generated questions for text comprehension. Possibly, the ones who completed the survey were also the ones who cared about their education and who were motivated to share their opinions with the teacher after they had completed the course. Hopefully, the ones who declined to complete the survey also learned how to approach academic texts and what to do to learn from them.

Last but not least, it seems that reading for learning is more effective and learner-friendly when it is done from paper rather than from a computer screen (cf. Piasecka 153). The reader may highlight relevant and/or unclear fragments, focus on text layout, grammatical structures and vocabulary, look for clues that clarify the meaning. This obviously can also be done with the text on a screen and many people do it, yet not much is known about the effectiveness of such actions. Thus, another research niche is waiting to be occupied.

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Appendix

Survey on reading academic texts

Dear Students,

Last semester we worked on basic problems related to Second Language Acquisition. To prepare for classes, I asked you to read some texts related to these problems which we then discussed in class.

Below, there are some questions that I would like you to answer. They refer to the texts you read, to the problems related to their understanding and to ways of handling them by you.

The information you will provide will be used only for research purposes and you will remain anonymous.

Thank you for your cooperation.

1. In the first half of the semester you were expected to read academic texts on Second Language Acquisition. What were the problems you had when reading the texts (choose the options that refer to your problems):
   a. Length of the texts
   b. Topics discussed in the texts
   c. Language used in the texts:
        i. Difficult
        ii. Unknown vocabulary
   d. You were not interested in the topics
   e. You had problems with identifying the most important information
   f. You had problems with identifying the main ideas
   g. You did not have enough time to read the texts
   h. You had no problems
   i. Other (specify): _____ _____
   _____
   _____

2. In the second half of the semester we changed the way of working with the texts. To remind: you were divided into groups, given sections of the texts and asked to read and formulate three questions that would refer to the most impotrant information included in your fragment. The questions were then anwered by other groups reading other fragments of the text. What do you think about this way of working on academic texts? Choose the answers that best reflect your opinions (circle Yes or No). You may choose more than one option:
   a. I felt more confident working in groups.

   Yes   No

   b. The fragments were shorter than the whole text. This supported my understanding.

   Yes   No

   c. Other students helped me when I had problems with text comprehension.

   Yes   No

d. We could discuss unclear or difficult parts of the text together.

                                                 Yes   No

e. I could check if I knew the answers to the texts that my group prepared.

                                                 Yes   No

f. I had a feeling of success.

                                                 Yes   No

g. Other comments _____ __
_____

3.   How did you work on the questions? Did every group member prepare their own questions, then you compared them and chose the most appropriate ones? You read the text and together decided about what question to ask? Please, describe the process of question making in your groups: _____
_____ __
_____
_____
_____
_____

4.   What do you think about questions prepared by other groups? Were they appropiate? Well formulated? Did they refer to the most important information in the fragments of the texts? _____
_____ _____
_____
_____
_____

5.   Which way of working on academic texts do you prefer (underline)? You may choose more than one option:
    a.   The teacher summarizes the text.
    b.   The teacher highlights the most important information from the text.
    c.   The teacher asks questions about the text.
    d.   The teacher explains unknown vocabulary and expressions.
    e.   The students ask questions about the text content individually.
    f.   The students work in groups and prepare the questions referring to the text (as we did in the second half of the previous semester).
    g.   The students identify unknown vocabulary and expressions and then ask the whole class about them.
    h.   The students work on the text on their own and try to select the most important information.
    i.   Other: _____

6.   If you have other comments, opinions and ideas about working with academic texts, write about them here: _____
_____ _____
_____

7. Age _____
8. Sex (underline)   F   M   Non-binary
9. Nationality _____
10. How long have you been learning English? _____
11. How do you estimate your knowledge of English? Choose one option:
a. Excellent
b. Very good
c. Good
d. Average
e. Poor

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION