TEXT-BASED LANGUAGE TEACHING AND THE ANALYSIS OF TASKS PRESENTED IN ENGLISH COURSE BOOKS FOR STUDENTS OF INFORMATION TECHNOLOGY AND COMPUTING

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The paper describes the essential features of a connected text helping to raise learners' awareness of its structure and organization and improve their skills of reading comprehension. Classroom applications of various approaches to handling texts and text-based activities are also discussed and their main advantages and disadvantages are outlined. Tasks based on text transformation and reconstruction found in the course books of English for students of computing and information technology are analysed and their types are determined. The efficiency of the tasks is determined by considering the experience of the authors gained in using text-based assignments provided in these course books with the students of the above specialities. Some problems encountered in classroom application of the considered text-based tasks are also outlined.

Keywords: text-based activities, a connected text, reading comprehension, classroom applications.

Introduction

It is claimed that “language always happens as text and not as isolated words and sentences” (Thornbury 2005: 7–14). Therefore, teaching foreign languages should be based on handling texts, either written or oral. It is even more so for teaching a foreign language in a technical higher school. The ability to handle or interpret text is a complex interaction of a variety of skills. The learners should be able to communicate with texts in the process of ‘unpacking’ or ‘unlocking’ them. Therefore, the problem arises how to exploit texts for language teaching and skill development purposes. But first the question about what a connected text is should be answered. Other related questions concern the main features as well as linguistic and other means that make texts comprehensible.

The main goal of the present paper is to define the main features of a connected text which are important for students to develop skills which can improve their reading comprehension. The second objective is to analyse text-based assignments provided in the course books of English for students of information technology (Glendinning, McEwan 2002) and computing (Boeckner, Charles Brown 1996) and to describe the experience of the authors gained working with these tasks in the classroom.

Theoretical background

Prior to making the analysis, the main approaches to text in the language classroom should be outlined. It is well-known that approaches to teaching have changed over the years, so have the texts and their usage. In language teaching literature TALO, TAVI and TASP are
three acronyms that have been used to describe texts (Verster 2005).

- **TALO: Text as a linguistic object**
  A TALO text is used for language work, specifically grammar or vocabulary.
  TALO texts:
  - are written especially with a pedagogical purpose in mind,
  - could be authentic texts the teacher has chosen because they contain lots of examples of a particular feature of language,
  - could be authentic texts “adapted” to contain or highlight certain features of language.

- **TAVI: Text as a vehicle for information**
  A TAVI text has a different focus. Information within the text is seen as more important than the language. Students should understand the overall meaning of a text instead of (or at least before) the finer points of detail.
  TAVI texts:
  - can be chosen because they are motivating,
  - these texts are mainly authentic and based on communicative approach.

- **TASP: Text as a springboard for production**
  Another text acronym is TASP. TASP stands for Text as a Stimulus for Production. This means using a text as a springboard for another task – usually a reading or writing task. TASP approaches also fit well with the communicative approach.
  TASP type activities could be:
  - doing a role play on the text,
  - discussing issues raised by the text,
  - having a debate about the points of view presented in the text,
  - writing a similar text about something the students know about,
  - writing a response to the text.
  These activities are also based on communicative approach and authentic texts. Planning a typical text lesson in the 21st century teachers should try to get the most out of a text. One way is to combine the different approaches. However, the level of students' knowledge of a foreign language should be taken into account. Therefore, when the level of knowledge of English is lower than intermediate, it is hardly possible to use TASP, i.e. to expect students to produce similar texts, writing responses to the texts they have read or having a debate about them. It may be applied only to working with more advanced students.

  It should be emphasized that reading technical texts in the classroom is primarily aimed at getting the information, so text should be used as a vehicle for information, and TAVI approach seems to be most appropriate for achieving this aim. The elements of TASP may be used if the level of students' knowledge of English allows it. Handling lexical and grammatical issues is necessary to the extent ensuring text comprehension. Thus, it is not the aim but a means helping the students improve reading comprehension.

  In reading texts students should interact with them. Classroom activities that encourage interaction with texts, like directed activities related to text (DARTs), improve students’ reading comprehension. These activities include various tasks and assignments based on transformation or reconstruction of the particular texts. Therefore, according to the stated goals, we should analyse these assignments and their application in the classroom to evaluate their efficiency. However, prior to making the analysis we should define what a text is and what its characteristic features are. This knowledge will help students to analyse text for meaning.

**What is a text?**

It is assumed that learners approach texts from different directions and with different expectations. Therefore, teachers need to bear in mind that a text on the page may 'generate' very different texts in the mind of learners (Thornbury 2005: 7–14).

To be comprehensive texts should be cohesive. The text is made cohesive by a combination
of lexical and grammatical devices. The lexical connectors include repetition and the lexical chains of words that have similar meaning. The grammatical connectors are pronouns and linkers. But a text needs to do more than simply be cohesive. It also needs to make sense (Kress 1985: 114). This capacity of a text to make sense is called coherence. It should be emphasized that cohesion is a surface feature of texts, while coherence results from the interaction between the reader and the text. There are lexical clues that bind the texts together. But there are also implicit logical connections that help create the feeling that the texts make sense. Usually, the information in sentences is distributed in a predictable way. In English, sentences have a simple two-way division between what the sentence is about (its topic) and what the writer wants to tell you about the topic (the comment). The topic is associated with what is already known. The new information is typically placed in the comment position. In the next sentence this new information often becomes the given information or the same topic is carried over. Topic and comment are also referred to as theme. The tendency to place the new information in the latter part of a sentence is called end-weight. Writers mix and combine these patterns in order to carry their argument forward. By the way, the word ‘text’ is derived from the Latin texere, to weave. A text is unfolding in time. To understand texts we need clues. These clues are usually in the associated text, in the adjoining sentence or in the context. Since paragraphs in academic writing usually start by presenting the writer’s case, going on to elaborate it or give examples, before finally summarizing it, the attention of the learners should be focused on the beginnings and endings of paragraphs. Key words are the best indicators of the topic, while key sentences (which begin the text and reflect the content of the headline, title or subtitle) are clues to global understanding of the text. A ‘good’ text should be written with the reader in mind (Thornbury 2005: 7-14).

The analysis of text-based activities presented in course books of English for technical students

The essential principles of organizing texts described above may serve as a guide to putting text to work in the classroom. Text-based activities focusing on text analysis from the outlined perspectives and involving the use of synonyms, paraphrasing, gap-filling, text reconstruction, etc. are aimed at developing major skills of reading comprehension. Let us consider text-based tasks provided in the course books of English for students of computing (Boeckner, Charles Brown 1996) and information technology (Glendinning, McEwan 2002).

Tasks presented in these course-books are described in the tables given below. Table 1 presents the main tasks provided in the course book on information technology, while Table 2 gives the assignments found in the course book on computing that are not included in the IT course book but also seem very (or sometimes, even more important) for developing comprehension skills of the learners.

One can see that a great variety of tasks are presented in the considered course books. These tasks are aimed at developing both students’ reading comprehension skills and checking their comprehension of particular texts. The main principles the tasks are based on include text transformation and text reconstruction. Transformation in its turn includes linguistic changes and text conversion into another (e.g. graphical) form. Summarizing is based on text transformation and compaction. Identification of true and false statements is aimed at checking comprehension because students are not asked to make any changes in the text but should demonstrate their comprehension skills. However, the statements presented for identification may be transformed sentences. Summarizing text and presenting it in another form seem to be highly creative tasks requiring perfect comprehension and reproduction skills as well as the knowledge of the language.
Table 1. Text-based activities presented in the coursebook 'Information Technology'

<table>
<thead>
<tr>
<th>Type of activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mark the statements as true or false</td>
</tr>
<tr>
<td>2. Fill in the gaps in the following statements</td>
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<tr>
<td>3. Link each pair of actions (denoting cause and effect) by a time clause</td>
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<tr>
<td>4. Match the terms in Table A with the statements in Table B</td>
</tr>
<tr>
<td>5. Make a list of the key features of the facility (device) you are reading about</td>
</tr>
<tr>
<td>6. Match these reviews of the facilities to their titles. Some words have been omitted. Try to replace them.</td>
</tr>
<tr>
<td>7. Write a brief evaluation of the phenomenon you have read about (at least by listing its good and bad points)</td>
</tr>
<tr>
<td>8. Try to guess the meaning of the given abbreviations</td>
</tr>
<tr>
<td>9. Try to paraphrase the following statements</td>
</tr>
<tr>
<td>10. Link each set of sentences to make one sentence (corresponding to the descriptions given in the text)</td>
</tr>
<tr>
<td>11. Complete the form to record the main details of the problem described in the text</td>
</tr>
<tr>
<td>12. Work in pairs. Advise your partner on his/her computing problem using the information from the text</td>
</tr>
<tr>
<td>13. What stories do you think followed these headlines?</td>
</tr>
<tr>
<td>14. Study the diagram to explain how a facility works</td>
</tr>
<tr>
<td>15. Put the described events in sequence</td>
</tr>
<tr>
<td>16. Find words or phrases in the table which mean what is given in the statements below</td>
</tr>
<tr>
<td>17. Decide on the relationships between the events described below. Then, link them using structures from the earlier units</td>
</tr>
<tr>
<td>18. Replace the verb in italics with a phrasal verb of similar meaning which has been used in this book</td>
</tr>
<tr>
<td>19. Study the extract from a database. Then, make a flowchart to show each step in the method described</td>
</tr>
<tr>
<td>20. Complete the table with the information from the text</td>
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<tr>
<td>21. Think of arguments for and against this statement</td>
</tr>
</tbody>
</table>

Table 2. Text-based activities presented in the coursebook 'Computing'

<table>
<thead>
<tr>
<th>Type of activity</th>
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<tbody>
<tr>
<td>1. Practise finding the main idea, major details, and minor details by completing the block diagram after reading the following paragraph</td>
</tr>
<tr>
<td>2. Read the statements below. Which do you agree with more? Why?</td>
</tr>
<tr>
<td>3. Each of the following comments from the text is followed by two paraphrases. Decide which paraphrase is closer in meaning to the original comment</td>
</tr>
<tr>
<td>4. Complete the following sentences, using the information in the table below</td>
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<tr>
<td>5. The table contains information about five products. Using the hints below, identify the products</td>
</tr>
<tr>
<td>6. Decide whether the sentences express equivalence, non-equivalence, or the superlative, then, underline the words expressing the comparison (of facilities)</td>
</tr>
<tr>
<td>7. Read quickly through the text below, then match each paragraph with the appropriate summary</td>
</tr>
<tr>
<td>8. Read the summary of the text and fill in the gaps using the list of words below</td>
</tr>
<tr>
<td>9. Which of the following characteristics does this flowchart refer to?</td>
</tr>
<tr>
<td>10. Indicate the line reference where the following ideas are found in the text</td>
</tr>
<tr>
<td>11. Using the table below, make a summary of the main points of the article in note form</td>
</tr>
<tr>
<td>12. Draw a diagram to show how the process is performed as described in the last paragraph of the text</td>
</tr>
</tbody>
</table>
to the extent allowing the speaker to use words and sentences different from given in the text but conveying the same meaning.

To do the tasks, the learners have to communicate with the text analyzing it mentally, selecting the main points and arranging them in the proper order. This implies that texts should be written with the reader in mind. They should activate a coherent mental picture (or schema) of the events in the heads of the readers. (Hoey 2001: 5).

**Classroom applications**

The experience of the authors gained in classroom applications of the material of the considered course books is described here. The authors have been working for several years with first-year students studying information technology and computing at Vilnius Gediminas Technical University on the basis of the material presented in the respective course books. Therefore, the authors think they can evaluate the efficiency of the tasks. The main problem arising in this work is not associated with the texts or tasks themselves but is connected with different levels of knowledge of the students. Some of them had much more English lessons a week at school than others and took a state exam in English. Undoubtedly, their knowledge of English is much better than that of the others who made little efforts in learning English and had much fewer lessons. This gap often prevents a teacher from taking more difficult material and using an approach requiring from the students reproduction and discussion of a particular text as well as creation of similar texts. However, in general, students could cope with the suggested texts and tasks. The teacher's assistance was needed for explaining some phrases or new technical terms. The information on technical text organization, approaches to its handling, ways of interpreting titles and subtitles when searching for the major and minor details, etc. was also very important.

The work with the text-based tasks provided in both course books was also rather successful though some problems were met in working with particular assignments. This primarily refers to tasks requiring the identification of true and false statements. It should be admitted that the answers suggested in the course books are often subjective. Therefore, the approaches to the provided statements may vary, especially if there is only a slight difference between false and true sentences.

Let us consider the following example. In the text 'Online Services' from the 'Computing' course book it is said: "Price is important to some people while the number of files available for download is important to others." The task provided to this text requires to decide whether the following statement is true (T) or false (F): "Most people choose an online service because of the price or the number of the available files." The course book's answer is "F", while the students argue that it is "T" because "some + some" gives "most". It is evident that the difference here is very slight. Perhaps, the emphasis should be placed on the word "or" but some doubt still remains.

In general, in doing the assignments to this text students made rather many mistakes. It should be noted, however, that this text is informal compared to others because it is written by a reporter experienced in using online services but who is not a specialist in computing and is aimed for a general magazine. Therefore, it may be a case when the text fails to activate in the students' minds a coherent mental picture (or schema) of the events.

Some paraphrases also present difficulties to students when they should decide which of them is closer in meaning to the statement of the text. This may also be accounted for by very slight differences between the provided sentences. More practice is needed to feel the subtle distinctions between the statements.

Most of the texts in the course book of Oxford English for Information Technology can be equally well understood both by less or more
able students in the group. The best way of reducing text difficulty is to pre-teach key vocabulary items in advance of reading. Moreover, tasks presented in this course book lack diversity.

Most effective tasks are those which require to complete the text or the description of the process using words from texts for reading. This type of task is challenging for students as they find it difficult to select key words, especially if they need to substitute the words with synonymous expressions.

The advantage of short texts over long ones can be emphasized because the former require less time for reading and allow more time to be devoted to linguistic as well as grammatical analysis and subsequent practice.

However, it may be concluded that the considered text-based activities are diverse and effective in developing reading comprehension skills of a learner as well as in checking the comprehension of special texts contained in English course books for students of computing and information technology.

Conclusions

1. The essential features of a connected text helping students to raise their awareness of its structure and organization and to develop reading comprehension skills are defined.
2. Various approaches to handling texts in the classroom are described and the role of text-based activities is determined.
3. The analysis of text-based assignments found in the course books of English for students of computing and information technology is made and the types of activities are determined.
4. Classroom applications of the considered assignments by the authors in practical work with VGTU students of computing and information technology as well as the main benefits and drawbacks of the tasks are also discussed.
5. It is concluded that the effectiveness of text-based activities depends on the level of students’ knowledge of English, their awareness of text structure and organization, linguistic guess and quality of the tasks.
6. In general, text-based activities are creative and thought-provoking, thereby raising the interest of students in language learning.

References

Teksto pratybų įtaka kalbų mokymui ir teksto užduočių, pateiktų informatikos ir kompiuterijos vadovėliuose, analizė

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Straipsnyje pateikti rišliojo teksto ypatumai, padedantys besimokantiesiems analizuoti perskaityto teksto struktūrą ir prasmę bei tobulinti skaitymo suvokimo įgūdžius. Pateikiami įvairūs tekstų interpretavimo būdai, analizuojami teksto užduočių privalumai ir trūkumai, jų naudojimas per paskaitas. Straipsnyje nagrinėjamos tekstų perfrazavimo (transformavimo) užduotys informatikos ir kompiuterijos vadovėliuose ir įvertinamas jų efektyvumas, remiantis šio streipsnio autorių patirtimi, įgyta dirbant su šios specialybės studentais. Taip pat iškeliamos problemas, su kuriomis susiduria autoriai per teksto pratybas.

Reikšminiai žodžiai: darbas su tekstu, rišlusis tekstas, tekstų skaitymas, supratimas, mokomoji medžiaga.

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