



Developing Vocabulary for Specific Purposes and Reading Comprehension Using CALL

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Abstract

In the context of learning language for specific purposes, vocabulary acquisition and reading comprehension are receiving increased attention. The underlying reasons according to David Nunan (1999) are the influence of comprehension-based approaches to language development and the exciting possibilities opened up by the development of computer-based language learning possibilities. [4]. It has been pointed out by several researchers that there is a significant relationship between vocabulary knowledge and reading comprehension. [1], [7].

Modern language learning is closely connected to using computer technologies with an intention of supporting learning. Most research on vocabulary acquisition and computer assisted language learning (CALL) has focused on the effects of using multimedia glosses and the same on reading comprehension, although multimedia is not used only for that single purpose. [1]. For example, multimedia resources (combination of text, pictures, sound, tables, graphs, simulations, videos) help learners become aware of their previous knowledge through meaningful communication.

Research was conducted among the students of Tallinn Health Care College in order to acquire knowledge about what is considered the most important in terms of vocabulary learning and reading comprehension. The answers to the questionnaire revealed that when reading texts for specific purposes, online dictionaries are used as a first tool, but as they sometimes fail to provide an exact term, images are searched from the Internet to clarify the term, sometimes followed by watching relevant explanatory videos. Furthermore, several graphs and other visual help were mentioned as helpful tools for the students.

Undoubtedly, lecturers should encourage the use of CALL tools not only in language lectures but also in speciality lectures to help students acknowledge the benefits of integrating technology into learning process.

1. Introduction

The ability to function in today's working world is affected by our language skills and word knowledge. The need to learn languages and acquire knowledge of professional vocabulary is an inevitable and essential part of self-development. Modern language learning has provided the learners as well as teachers with possibilities to support and facilitate the learning process, mainly by making text comprehension and vocabulary acquisition more effective, more visual and multifaceted. Computer assisted language learning with the use of multimedia resources help learners become aware of their previous knowledge and promotes the emergence of meaningful connections.

2. Vocabulary and reading comprehension

The lexicon plays a central part in second language acquisition and students use glossing as a support in L2 lexical acquisition and also for reading comprehension. It is easier to remember the vocabulary when using semantic field tables and collocational grids. The semantic grouping of words lend itself to the organisation of vocabulary learning into thematic webs or word networks which can help students to associate words, remember them and extend the network themselves. [2]

R. R. Jordan (1997) has presented the strategies of academic reading focusing on strategies concerning traditional reading from paper and all of them play part in text comprehension:

- Prediction
- Skimming
- Scanning
- Distinguish between important and less important information;
- Relevant and irrelevant information;
- Explicit and implicit information.
- Drawing inference and conclusion
- Deducing unknown words. [2]



While all the strategies are helpful, they take much more time on paper and handling many resources at once can be uncomfortable and sometimes confusing. Finding relevant information quickly is made difficult by the abundance of paper.

There are several Internet environments designed to facilitate reading, one of the most helpful on which is diigo.com. On the page it is possible to underline text when reading, add comments, organize, archive, save parts of the text, create one's own personal library, group article and find everything very quickly. The page is best to be used for independent work or when writing reports, course papers, etc. as its usage in the classroom would require technical equipment.

2.1. CALL in L2 Learning

Using computers allows students to choose the pace and time of work. The computer records the work of each student which allows teachers assess the needs and problems of individual students. Thus, teacher can guide the learners through the process of their reading comprehension skills development. Multimedia activities are more challenging, interesting and motivating offering the text accompanied by video, sound and images which make both the text and reading more appealing to the student. Text can also be accompanied by direct references to a dictionary, by clicking a word with a mouse, the student receives the definition of the word or its native language equivalent. In the case of so called glosses, which are also very often applied in reading comprehension tests, it is enough to point with a mouse at a word to receive its translation.

Online dictionaries can encourage students to look up more words. The process of looking up words is simply made much easier and more time efficient with computer assistance. Because of such fast access, readers may look up more words. Faster access may also motivate readers to feel more capable of tackling L2 texts.

Alan Taylor presents arguments for and against Using CALL L1:

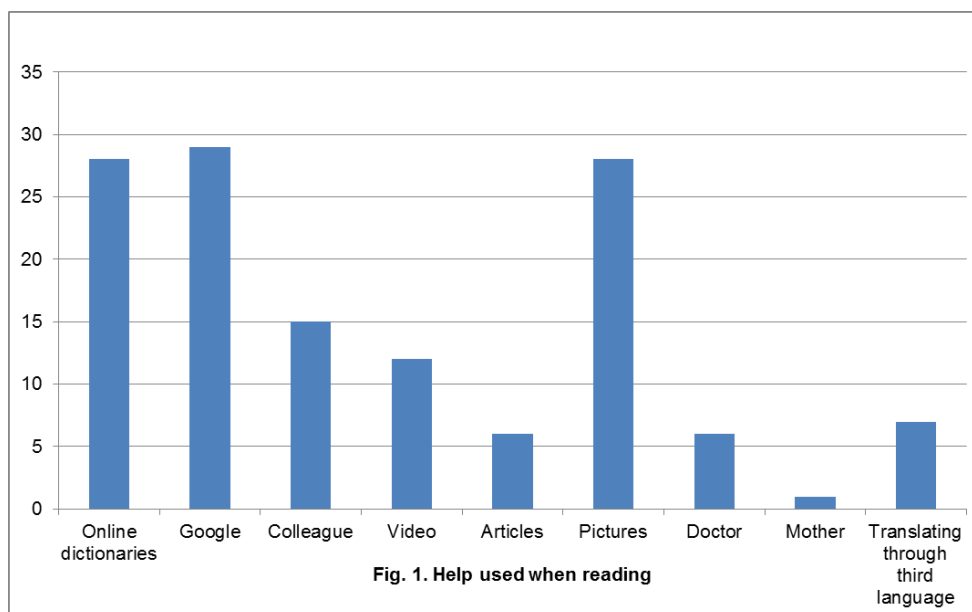
<i>Glosses Arguments for using CALL L1 glosses</i>	<i>Arguments against using CALL L1 glosses</i>
1. Like a bilingual dictionary	1. Naive lexical hypothesis
2. Faster access	2. Too little effort; not enough deep processing
3. Motivational; encourages look-up behaviour	3. What about paraphrases?
4. Better comprehension in short term	4. L1 to be avoided
5. Attentional resources can be used elsewhere	5. Creates bad habits
6. Pointless to use other glosses	6. Long term not conclusive

Lomicka (1998) explored how multimedia annotations influenced the level of FL reading comprehension for students enrolled in a second semester French course. Three conditions were used when students were reading a text on the computer screen: full glossing, limited glossing, or no glossing. The results indicated that the students who had access to full glossing improved better than those who had access to either limited glossing or no glossing. [3] Similar results were also suggested by Sakar and Ercetin (2004), who went even further and explored 44 adult intermediate-level EFL learners' preferences for hypermedia annotations. The results suggested that students preferred visual annotations to textual and audio annotations. Video and graphic annotations were accessed when students wanted to retrieve background information about the topic, and graphic annotations were used to illustrate the meanings of words. [5]

3. Students' Opinions on Multimedia Usage

Research was conducted among the students of Tallinn Health Care College in order to acquire knowledge about what is considered the most important in terms of vocabulary learning and reading comprehension and which kind of help was used when reading speciality texts containing new vocabulary. The sample consisted of 28 first and second year students of Tallinn Health Care College. Estonian was the mother tongue of 12 students, the rest spoke Russian as their native language. Students were asked what kind of help do they use when reading a text and encounter a term that is completely new or unclear. All students admitted using computers assistance in understanding new terminology especially when reading professional texts concerning their field of studies.

Everybody claimed to be using online dictionaries, the only dictionary which was admitted to be used on paper is Medical Dictionary which is not available online in Estonian. The diagram below illustrates students preferences of help used when reading for special purposes.



An internet page that was mentioned most often is *eki.ee* which provides a list of online dictionaries of various fields. Estonian – Russian dictionary was given extra credit for its multiple examples of the words usage.

Google was used when other dictionaries are helpful, that is to understand especially difficult terms or if the student is not proficient enough in English to understand thesauruses. Students in Tallinn Health Care College have hospital practices on every course, at the same time they write reports and course papers. During their practice it is convenient to turn to more experienced colleague for help. In some cases it was mentioned that it was uncomfortable to ask for help as it would have meant admitting one's poor language skills.

Videos were mentioned as a sometimes helpful tool, but in cases where students with Russian as their mother tongue tried to search for explanatory videos in their native language, the terms were too different from the ones used in Estonia thus making the direct translation impossible. Videos in English were easier to comprehend than the ones in their native language.

Articles on the same topic in different languages were searched and read to understand the professional terms not found in online dictionaries.

One Russian-speaking student mentioned the help of her mother who is more proficient in Estonian than the student herself.

Pictures were mentioned as most useful when understanding a term or notion. The word was unfamiliar both in their native language and English, but seeing the picture created a connection between previous knowledge and new information helping to remember it.

As for turning to doctors for help, similar comments were given to those about using colleagues help: it was seen as uncomfortable and doctors were considered to be too busy.

Some students speak 3 – 5 languages, which enables them to translate through another language if they do not understand the main language. Different multimedia resources are also more accessible as they can compare different materials.

4. Conclusion

To sum up, vocabulary and reading comprehension are closely related and many studies have focused on them in connection how they are influenced by multimedia. Vocabulary plays an important part in reading comprehension and techniques that are used in understanding the new words also aid reading comprehension.

Picture + text annotations produce the best results in reading comprehension as can be concluded from the students' opinions and theoretical sources. Multimedia resources are popular among students as they enable fast reading and immediate search for unknown or unclear terms. Also, images or videos or just searching for connected literature to understand the content is mentioned as valuable help. Students' opinions clearly revealed that CALL is irreplaceable and easily accessible method. Lecturers should thus encourage the use of multimedia resources and work towards even more effective use of it in language learning.



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