Online Reading Comprehension in English for Spanish University Students: Student and Teacher Strategies

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Abstract

The research we are reporting on here was carried out within a project financed by the *Universitat de València* on reading online in English for freshmen students. One of our main aims is to find out whether an online foundation course in reading comprehension in English would be welcomed by the students. A second objective is to gather insights into how students read online texts, especially with regard to the strategies they use to negotiate texts in English as only in this way can one design effective teaching materials. Finally, our research looks into whether it is necessary to provide students with guidance on how to read electronic texts in English. The research we discuss here covers objective two and three. In order to see what strategies non-native students use to tackle reading material in English we filmed six students while they carried out three exercises online, that is, a reading comprehension exercise, a cloze exercise and a synonym exercise. Due to space limitations we will only look at the reading exercise here. Our results point to the fact that students *do* need a certain amount of instruction to take advantage of the resources available and guidance in metacognitive monitoring and control.

1. Introduction

The research we are reporting on here was carried out within a project financed by the *Universitat de València* on reading online in English for freshmen students[1]. It was prompted by the authors' participation in the Innovation in Education Project (*Proyecto de Innovación Educativa*) which is part of our university's efforts to prepare both lecturers and students for European Convergence in Higher Education. One of our aims is to find out whether an online foundation course in reading comprehension in English would be welcomed by the students. A second objective is to gather insights into how students read online texts, especially with regard to the strategies they use to negotiate texts in English, as only in this way can one design effective teaching materials. Finally, our research looks into whether it is necessary to provide students with guidance on how to read electronic texts in English. The research we will be reporting on here covers objective two and three. In order to see what strategies non-native students use to tackle reading material in English we filmed six students while they carried out three exercises online, that is, a reading comprehension exercise, a cloze exercise and a synonym exercise. A questionnaire on the internet usage was also administered to the subjects. Due to space limitations we will only look at the strategies used in the reading exercise here but we will take into account the results for the reading, cloze and synonym test.

2. Online reading

Most writers on the subject of on-line reading agree that many of the reading strategies taught to tackle traditional texts can be used "as is" with electronic texts or modified to a certain extent even though, in certain respects, reading on-line texts can be quite different from their paper-based counterparts (Gillingham 1993, Kim and Kamil 2003). Schmar-Dobler (2003) compares Pearson, Roehler, Dole, and

[1] *Análisis de Las Estrategias de Lectura en el Aprendizaje Electrónico del Inglés como Lengua Extranjera* (Proyecto Precompetitivo Ref. UV-AE 20041031)

Duffy's (1992) synopsis of the seven comprehension strategies in the literature that identify strategic readers of conventional texts and compares them with the strategies needed in reading electronic texts. She finds that four of these: activating prior knowledge, determining important ideas, synthesizing and drawing inferences are similar in both types of texts. With regard to the other three, repair and monitoring of comprehension, asking questions and navigation, she finds important differences. In the case of repair and monitoring of comprehension she states that skimming and scanning are of vital importance given the amount of text to be processed. Asking oneself questions such as if what we are reading is relevant to the task in hand becomes even more important as it is so easy to get lost and navigation is radically different due to the very nature of hypertext. If reading electronic texts were radically different from reading conventional ones or if completely new skills were needed to tackle them, this would constitute a serious problem. There does not seem to be any evidence to back this up (Dillon 2004). Some research results seems to point to the fact that it takes longer for readers to find information in hypertext compared to conventional text (Gillingham 1993). But according to Kim and Kamil (2003: 167) we know very little "about the cognitive processes readers use with electronic documents, and most of these findings are tentative at best". We will assume here that until irrefutable evidence is provided, reading from paper and electronic texts share more similarities than differences.

2.1. Online reading in the teaching of English

As teachers we need to ask ourselves what the differences are between reading in one's own language in which we are proficient or reading to learn a foreign language. If we lose sight of the goals we may design materials which do not really pursue our main objective or strategic goal (Pennock and del Saz 2006), namely to teach English. So, if we use a reading text which is authentic, it might make it difficult to read and if we make it too easy, it might not help learners tackle authentic texts later on. As our material is for students who are not capable of reading authentic texts with ease, we are more interested in building up their confidence by making things a little easier for them than frustrating them because a text is too difficult. Reading to learn a language is different to reading for pleasure or reading to obtain information as the main or strategic goal of reading is the actual process itself because it is this way that students pick up the foreign language. The fact that reading activities are normally goal based, the aim being to answer the questions at the end of the text, is merely to give the students a purpose in their reading, which would constitute a tactical goal according to Pennock and del Saz (2006), but it is hoped that the learner will acquire vocabulary and structures while she/he scans, skims or reads for gist.

When designing materials we have to bear in mind that students need to adapt to a new learning environment. When reading articles or books some students highlight chunks of texts or write notes in the margins or take notes and write them down elsewhere. Highlighting is also possible in some kinds of electronic texts and of course taking notes is relatively easy as students may keep more than one window open and take notes in Microsoft Word® or similar programmes. Note taking capabilities may even be built into a reading programme. Kim and Kamil (2003: 172) suggest that the mouse might replace a finger for those students who use their fingers to keep track of words when reading traditional texts.

3. Methodology

In our research we videotaped a computer screen while six students of different levels negotiated a reading comprehension exercise, a cloze test and a synonym test. The rationale behind this was to see what strategies and tools students use when doing online reading and if language proficiency made any difference in results. The students were given a reading text that was slightly more difficult than the texts they would come across in their final examinations. The reason for this was that they would, potentially, have a whole host of resources at their disposal through the internet to offset the complexity of the text. The students were told to do the reading exercise and send the answers to the server when they had finished. The text was on the right screen and the questions on the left. Both screens were scrollable. The 19-inch screen offered quite good readability. The students were told that they could use any internet resources, if they wished, or one or more of the traditional dictionaries in the room at the time. The camera only picked up what went on the screen.

4. Analysis and Results

Once the students had finished, we analyzed the videotape. Comparing the results of the reading comprehension test with the placement test administered to the students beforehand and also with the results of the online cloze and synonym exercises, the outcome is contradictory. If we compare the best two in the placement test, we see that subject two does very badly even though she has the highest score while subject four does very well. In a questionnaire administered after the filming subject two states that she was quite nervous about being filmed, which might have influenced her performance, while four was not nervous at all. Subjects one and five did very well in the reading exercise although they were just above and just below a pass mark respectively in the placement test while three, who had quite a poor placement test result was consistent in that she also produced poor results in the reading, cloze and synonym exercises.

Table 1.

Subjects	Placement Test (max. 10)	Reading Time (mins)	Reading Results (max.5)	Cloze Results (max.10)	Synonyms Results (max.10)	Total Results	Nervous	High-lights	Use of Internet	Re-reads	Takes notes
Subject 1	5,0	16.37	4	3	5	12	No	Yes	Yes	No	No
Subject 2	7,3	19.02	1	2	3	6	Quite	Yes	Yes	No	Yes
Subject 3	3,3	7.10	1	2	2	5	A little	No	No	No	No
Subject 4	7,2	22.41	4	5	8	17	No	No	No	Yes	No
Subject 5	4,8	25.00	4	5	3	12	A little	Yes	Yes	No	No
Subject 6	5,7	17.00	2	4	6	12	A little	No	Yes	No	No

With regard to time, taking longer to do the test did not seem to make any significant difference except perhaps in the case of subject three who takes under

half the time of the others. The use of internet resources produced inconclusive results. Subjects three and four did not use any resources —three doing very badly and four, very well. The results for the subjects who did use internet resources such as bilingual dictionaries, including the Google® language tools, were also mixed, two did well and two, poorly. Highlighting difficult words or phrases by dragging the cursor over them, which was used by four out of six, did not seem to improve results for all the subjects. Subject two, for example, seems to highlight in order to concentrate on the phrase she is having trouble with. Subject one was the only subject to use the copy and paste facility for words she had to look up. All the subjects used the cursor to some extent to signal their position in the text or questions they were reading. Subject two, more than the others, clearly uses her cursor to keep track of the text she is reading. Subjects four and five were the only ones who re-read the questions and changed some of their answers.

5. Conclusions

The results do not seem to show a correlation between strategies and outcomes. Each subject seems to have her own method of negotiating the text. What might seem to be good practices such as highlighting text, taking notes, copious or otherwise, or re-reading the questions, do not seem to affect the results. In some cases they work and in others they do not, depending on the student. What the results do show is that none of the students use the full potential that internet offers. For example, students rarely use monolingual dictionaries which abound. In the survey all the subjects state that they use bilingual dictionaries online and all of them only have bilingual dictionaries installed on their hard disks. Use of monolingual dictionaries might have avoided certain mistakes noted down by the students: "adherencia" for the verb "grip"; "asombrar" for "stagger back", and "agente de jamón" for "ham actor" which one student jokingly mentioned as a result of an online translation. Another result from the survey shows that none of the students use word processors or any other programme to save the notes they take. They all prefer paper. In any case, all the strategies they use are self-taught as, according to the questionnaire, none have received any instruction with regard to computers and internet during their stay at university.

Some of our subjects seemed to lack what Weinert (1995: 183) calls metacognitive monitoring, that is, checking to see if their answers are correct –most did not seem to re-read after finishing the questions. This, of course, could and should apply to traditional reading too. Weinert (1995) also suggests metacognitive control, that is, deliberately choosing strategies to aid one's learning process. Asking oneself questions is an example of both these strategies. Metacognitive strategies can help students learn more effectively (Palinscar and Brown 1994). Therefore, before the students start to read, we propose instructions, guide questions and pre-reading tasks that include exercises to prepare the students for the main text so as to not only test the students on their comprehension of the text but also attempt to make them aware of whether they are fulfilling the tasks set out initially. Thus we hope to improve the way students confront the texts while instilling in them the need for metacognitive monitoring and control, that is, "metacognition should not be promoted as a **goal** in **itself**, taught in isolation, but rather as a means to an end, integrated with comprehension instruction" (Baker 2002: 82; see also Baker 1994, Paris and Winograd 1990).

We see no need for the actual online texts themselves to be anything other than well designed TEFL reading comprehension texts. Oliver and Herrington (1995) state that we need to make the most out of internet-based texts but design is crucial if we do not wish to fall into many of the traps that hypertext involves. One of the

problems may lie in what may seem to constitute its greatest advantages: the use of links. As Kim and Kamil (2003: 168) point out, it is not always clear when a link may lead the reader to relevant or useful information and the reader might have to "gamble" on the information being useful. Students should be able to choose for themselves what words or phrases they should look up. The task of the designer is to make the text relevant and offer the students strategies that might aid in its understanding without losing sight of the fact that the ultimate goal of the exercise is to improve reading comprehension skills while the students acquire, among other things, new structure and vocabulary.

References

Baker, Linda 1994. "Fostering metacognitive development". *Advances in Child Development and Behaviour*. Vol. 25. H. W. Reese *Ed.* 201-239. San Diego: Academic Press.

Baker, L. 2002. "Metacognition in comprehension instruction". *Comprehension Instruction: Research-Based Best Practices.* C. Collins Block and M. Pressley. *Eds.* 77-95. New York: Guildford.

Dillon, A. 2004. *Designing Usable Electronic Text.* (2nd ed.) Boca Raton, London, etc.: CRC Press.

Gillingham, M. 1993. "Effects of question complexity and reader strategies on adults' hypertext comprehension". *Journal of Research on Computing in Education* 26. 1-15.

Kim, H. S. and M. L. Kamil 2003. "Electronic and Multimedia Documents". *Rethinking Reading Comprehension.* A. Polselli Sweet and C. E Snow. *Eds.* 166-175. New York: The Guildfor d Press.

Oliver, R. and J. Herrington 1995. "Making the most of the media in multimedia". *The Proceedings of the 4th Annual Teaching Learning Forum Edith Cowan University.* L. Summers *Ed.* 194-198. <http://www.ascilite.org.au/ajet/ajet11/oliver.html>

Palinscar, A. S. and A.L. Brown 1984. "Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities". *Cognition and Instruction* 1. 117-175.

Paris, S. G. and P. W. Winograd 1990. "How metacognition can promote academic learning and instruction". *Dimensions of Thinking and Cognitive Instruction*. B.J. Jones and L. Idol. *Eds.* 15–51. Hillsdale, NJ: Lawrence Erlbaum Associates.

Pearson, P. D., L. R. Roehler, J. A. Dole and G. G. Duffy 1992. "Developing expertise in reading comprehension". *What Research Has to Say about Reading Instruction.* S. J. Samuels and A. E. Farstrup. *Eds.* 145-199. Newark, DE: International Reading Association.

Pennock-Speck, B. and M. M. del Saz-Rubio. 2006. "A genre approach to goals and their implementation applied to a TV programme for the Virginia Farming Community." *Ibérica: Revista de la Asociación Europea de Lenguas para Fines Específicos (AELFE).* 11. 7-28.

Schmar-Dobler, E. 2003. "Reading on the internet: The link between literacy and technology". *JAAL* 47: 1. 80-85.

Weinert, F. E. 1995. *Memory Performance and Competencies: Issues in Growth and Development.* Lawrence Erlbaum and Associates.