Interactive Educational Multimedia, IEM





An on-line journal published at the University of Barcelona ISSN 1576-4990

Interactive Educational Multimedia, Number 15 (October, 2007), pp. 37-51 http://www.ub.edu/multimedia/iem

From a WebQuest to a ReadingQuest: learners' reactions in an EFL extensive reading class

Ana Cláudia Barros

Escola EB 2,3 Egas Moniz abclaudia@gmail.com

Ana Amélia Amorim Carvalho

Universidade do Minho aac@iep.uminho.pt

Summary

Most students don't like reading in a foreign language. They find it a difficult task, mainly due to the high number of unknown words they encounter when reading a text. They consider reading classes boring and uninteresting and as a result our students are poor readers. Concerned with this situation, we conducted a study on the impact of a learning environment based on the WebQuest, a ReadingQuest, and on student engagement in an extensive reading task.

The results show that the ReadingQuest is a valuable environment for teaching extensive reading, in contrast to traditional reading classes, as it can enhance motivation and promote constructivist learning.

Keywords

WebQuest; EFL; extensive reading; engagement

1. Introduction

In our society we constantly receive huge amounts of information that we have to be able to select and deal with. The Internet allows this information to enter our houses at the pace of a click and contributes enormously to globalization, as it reaches every corner of the world. Castells (2004) synthesizes this idea mentioning that we live in the Internet Galaxy. In fact, the Internet allows us to communicate and quickly exchange information, do business, book or buy services anywhere and search for any kind of information.

In order to deal with this information we must be able to read, to understand it, and even more important, to use it significantly (Monereo, 2005; Albion & Maddux, 2007; Carvalho 2007a).

Nevertheless, this skill is simply not enough, as today other skills become important, broadening the literacy concept. We are referring to the digital literacy, which is the use of the information technologies and the foreign languages, where English stands out for its importance as the international language.

Our students often get low results when it comes to reading (Cardório, 2001) and even more in foreign languages. Due to their feeling of lack of efficacy and poor reading skills, they aren't motivated to English language tasks, and even less when we talk about extensive reading tasks. Research shows that extensive reading may help develop reading skills, if the students have success in the task (Nation, 1997, Day & Bamford, 2000, 2002; Takase, 2003; Nuttal, 2003; Bamford & Day, 2004).

In fact, reading demands not only a series of skills, but also motivation which plays an important role on the process (Cardório, 2001; Wigfield, 1997; Verhorven & Snow, 2001). Contemporary theories consider that the social context and the task influence the student engagement in the reading task (Turner, 1997). Different activities can offer different opportunities to use different strategies. This means the task and materials chosen can affect success. According to Turner (1997) we should choose open tasks where students have to make decisions about the process or the final product. Their mistakes are used constructively while they try to find solutions together with the other students they are working with.

Turner (1997) points out some important characteristics in a motivating task: it should be challenging, it must have a social component to allow interaction with the text and with other readers and it should promote autonomy, allowing the students to construct their knowledge.

Magalhães (2002) conducted a study comparing collaborative reading to individual reading in the English Class. She found out that the reading activity, as complex and less structured, is more effective and motivating when the task involves collaborative learning.

Looking closely at some resources on the Internet, the WebQuest inspired us as it seemed a balanced and structured activity for an extensive reading task. It can be motivating, having the potential to help students look at extensive reading differently. It constitutes a collaborative challenge, where interactivity and negotiation assume an important role, offering situations where the students, through collaboration have to search for information, negotiate and produce something (Dodge, 1995; 2001; 2006; March, 1998, 2003). It also allows the students to use information technologies and develop other skills in an integrated way.

WebQuests, if well conceived and structured, are a strategy that can contribute to an important change of our education system. It can give students an active role in their learning process by solving problems and by having the opportunity to work collaboratively (Costa & Carvalho, 2006). So, we can seize the resources offered by the Web to build open and motivating tasks and bring the school near to our student's lives.

2. From a WebQuest to a ReadingQuest

Although inspired in the WebQuest, as we would like to emphasize the reading skills, we called this activity ReadingQuest. It changes slightly the nature of the WebQuest task as it is described by Dodge (2002).

The ReadingQuest has all the components of the WebQuest, as they are very useful to structure activities for students, but it also integrates the text to be read (the full text of the story) and the worksheet to help students in the reading task and to look for information in the story. This means that the ReadingQuest has all information on it, and little use is made of the resources on the Web. Students only have to surf the web to get information about the writer and about the main character.

The ReadingQuest has two main purposes. The first one is to motivate students to read the story and to understand it. The second one focuses on a challenging and complex task.

3. The ReadingQuest

The ReadingQuest (http://anaprof.no.sapo.pt) was developed for 8th grade Portuguese students (figure 1), considering their proficiency level.



Figure 1 - ReadingQuest homepage

We chose a story where the famous detective Sherlock Holmes assumes the main role, "A Scandal in Bohemia", according to the recommendations of the Portuguese official syllabus. The activity was thought to be solved in 5 sessions of 90 minutes each. The story is available on the website, as well as the exercises that will ensure a better understanding.

3.1 Structure

The ReadingQuest offers a linear structure from the homepage to the Introduction. Forward from this point the user has total freedom to navigate in the ReadingQuest given by the menu which always appears on the left side of the page. However, a linear navigation is always possible using the link that appears at the bottom of each page (Figures 2 and 3). This is for the less experienced users that can get lost otherwise.

On the homepage there is also a link to the page specially designed for the teacher ("Informação para o professor"). Information about the activity is provided and some recommendations about how to use it are offered.

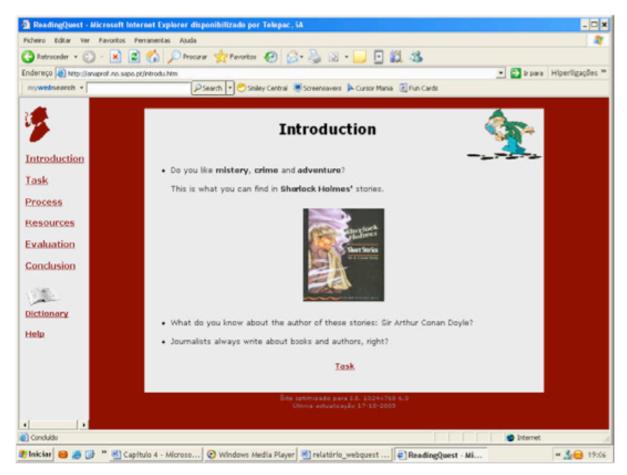


Figure 2 - Introduction of the ReadingQuest

3.2 Components

In the Introduction we defined the scenery and tried to motivate the student to read, referring to the mystery and suspense. The Task contextualizes the adventures. It is motivating and challenging, as it implies that the students assume the role of a journalist who writes book reviews, investigating about the author and giving their opinion about the book. The Process shows all the steps they have to follow in order to solve the task (Figure 3)

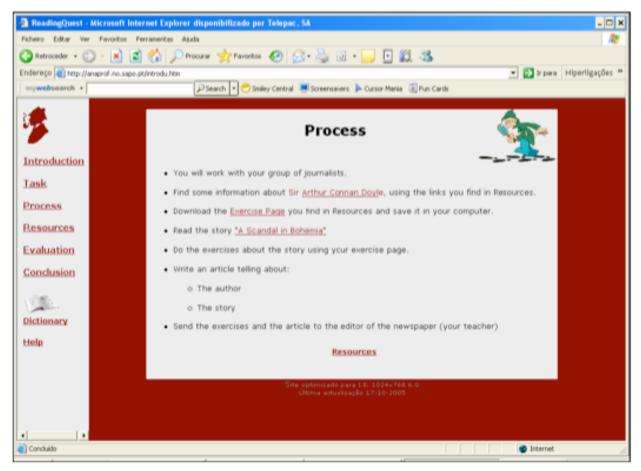


Figure 3 - Process of the ReadingQuest

Firstly, they have to follow the links and search for information about Sir Arthur Connan Doyle, the author of the story, and his main character Sherlock Holmes. Afterwards they access the story and the worksheet.

The text is divided into the 4 original chapters, that the students can read separately and do the exercises or read the full story and only then solve the worksheet. The worksheet is a Word file, which can be downloaded in the computer or can be printed. It is also divided into four parts and the exercises were chosen to guide the students to the global understanding of each chapter, not focusing on specific language aspects as the idea is not to practice grammar or syntax. In extensive reading

tasks, the students don't have to understand each word, but the whole in order to infer meaning and predict (Grellet, 1987; Day & Bamford, 2002).

In the end they write the story review which will be published in a newspaper. The students have to give their opinion and be creative. This activity was taken from a list of extensive reading activities elaborated by Clandfield and Budden (2004).

In the resources we offered a series of links we believe are important and relevant about the author. There are external links and internal links to the worksheet and to the chapters of the story.

In the Evaluation we defined a proportional value for the worksheet and the story review. Because we considered it as the most important component, and the worksheet was considered as a help for the text understanding, to the first it was given the weight of 60% and to the second 40%.

There is always available in the menu an external link that opens a dictionary in a pop-up window and which the students can minimize and manipulate as they wish. This is an important resource because it reinforces the student autonomy in learning and it represents one of the possibilities of using the Internet for educational purposes. According to Stemler (1997) the use of pop-up windows can be beneficial, as they can give additional information.

The menu always offers a link to Help which is written in Portuguese. With "Help", Portuguese students with English difficulties may understand each of the ReadingQuest components. We also give some information about navigation in the website, explaining how to find what they are looking for and how to download the worksheet.

3.3 Usability Testing

Usability refers to a quality of the website that allows the users to use it with satisfaction, efficacy and efficiency (Carvalho, 2001) and it is directly related to the interface.

During the development phase of the website we used the Bellofatto et al. (2001) rubric for evaluating a WebQuest. After that, usability tests were conducted with users and by experts.

The users were students with the same profile of the target audience. They went through the website and answered to some questions about the webpages and their orientation.

The website was evaluated by 3 experts and 5 students with the same profile as the participants in the experimental group.

Some changes were made according to the usability tests results. We felt the need to change the "Help" to Portuguese as the students couldn't understand it in English, making it useless. Another change was made in the worksheet, available only in the webpage, it was made available as a word file to facilitate its use.

4. The study

In this study we intended to verify if in a learning environment based on a WebQuest, a ReadingQuest, the students would engage in an extensive reading task. The aims were the following:

- i) To verify if an interactive constructivist environment would make a difference in an extensive reading task;
- ii) To verify if the orientation given in the ReadingQuest would promote reading understanding;
- iii) To verify if the students would be interested in reading other texts in English.

We also intended to know the students' opinion about this approach to the extensive reading and to analyze the differences between tests results of the control and experimental groups.

4.1 Sample

The sample was constituted by two groups belonging to two different classes attending the 8^{th} grade. Class F was the experimental group (n=26), they worked on the ReadingQuest, mainly due to the timetable that allowed the use of the computer lab. Class D was the control group (n=27). These students read the same story under the guidance of the teacher and did the same worksheet as the experimental group.

The groups were similar in terms of gender (table 1) and age (table 2). Both groups had more females than males.

Group Gender	Experimental Group (n=26)		Control (n=	•
Gender	f	%	f	%
Female	15	57,7	15	55,6
Male	11	42,3	12	44,6

Table 1 - Gender distribution in both groups

In what concerns students' age their mean is similar (13,62 years old in the experimental group and 13,33 years old in the control group) as well as their standard deviation (Table 2).

Group	Exeprimental Group	Control Group	
Age	(n=26)	(n=27)	
Mean	13,62	13,33	
Standard deviation	0,75	0,73	
Mode	13 e 14	13	
Minimum	12	12	
Maximum	15	15	

Table 2 - Age in both groups

Description of the study

The study conducted was a quasi-experimental one (Ghiglione & Matalon, 1993), which evaluated the effect of the ReadingQuest in extensive reading. Two groups were compared, one of them subjected to the ReadingQuest, the experimental group and the other, the control group, subjected to a traditional reading class using the book as a single resource. In this case the teacher read the story and helped the students solving the exercises.

This study took place in the school year 2005/2006 during the second term and simultaneously in both groups. Table 3 presents the groups' treatment and the tasks during the 9 sessions.

Sessions	Experimental group	Control group
1	Characterization questionnaire	Characterization questionnaire
2	Test A	Test A
3-7	ReadingQuest	Book/ traditional class
8	Test B	Test B
9	Questionnaire about the ReadingQuest and the story	Questionnaire about the story

Table 3 - Sessions in both groups

Both groups answered to a characterization questionnaire to analyze their attitude towards reading and specifically reading in English. Test A was also solved by both groups to evaluate the reading skills and complete the characterization of the groups. During 5 sessions, the groups received their treatments; they read and analyzed the same story, and they solved the same exercises.

The experimental group solved the ReadingQuest in 5 sessions, during which we took some field notes about students' reactions and attitudes. They worked in groups of six students, due to the number of computers connected to the Internet. Simultaneously the control group, during five sessions, read the same story under the guidance of the teacher. After this both groups had to solve a knowledge test (Test B) about the story.

From the beginning the reactions of both groups were very different. The students of the experimental group thought initially they would never accomplish the task. Everything was in English and the teacher wouldn't help or translate. But after the initial panic, they started working. This reaction was also reported in other studies about the integration of WebQuests in learning (Carvalho & Cruz, 2005; Guimarães, 2005; Cruz, 2006; Martins, 2007). Students got a responsibility they are not used to.

In this study, while they were reading, they kept calling the teacher, asking her to translate the difficult words, mentioning that the use of the dictionary online represented an additional effort. In four years of English classes, they were used to make little effort and to rely on the teacher when they encountered a problem. Teachers usually translate the words and help with whole sentences ensuring

the understanding of the story. After some time they got used to the idea and started working hard on the task. However some comments were made about the difficulty of working without the teacher's help.

Panic came back when students realized they had a final task to accomplish: to write a review about the story to the newspaper. They kept saying they had never done anything like that and it was strange, they were asking why they couldn't just simply tell the story as they were used to. In the end, despite all the difficulties, all groups finished the story review.

In session 8, both groups answered the Test B which is about the story. Finally, in the last session, each group answered to a questionnaire, related to the treatment they received. The experimental group gave its opinion about the ReadingQuest and its activities, and their interest in reading other texts in English. The control group answered to the questions about the story and their interest in reading other texts in English.

Results

In the characterization questionnaire results showed that the majority of students in both groups had some difficulties in reading in English (61,5% in the Experimental group and 59,3% in the Control group) (table 4). They had some difficulties mainly due to the existence of unknown and difficult words, showing also little interest in any reading activity in this foreign language. Students' usually read texts that are only in textbooks and, in the Internet, they try to find pages in Portuguese.

Group It is difficult to read in English	Experimer (n=	26)	(n	ol Group =27) f %
Yes	9	34,6	3	11,1
More or less	16	61,5	16	59,3
No	1	3,8	8	29,6

Table 4 - Sessions in both groups

Knowledge test

a) Test A

This test was applied to both groups before beginning with the treatment. The results show that they were similar. The mean is slightly higher in the experimental group (55,80) as well as the standard deviation (table 5).

Group	Experimental group	Control Grup
Statistics	(n=26)	(n=27)
Mean	55,80	50,15
Standard deviation	18,5752	14,2551
Minimum	0	21
Maximum	97	78

Table 5 - Test A results in both groups

According to the non-parametric Mann-Whitney U test, no statistical difference is obtained (p=0,182), the groups are similar (table 6).

Group	Mean ranking	Z corrected for ties	Statistical significance
Experimental	29,88	-1,3335	n=0 193
Control	24,22	-1,3333	p=0,182

Table 6 - Test A results (Mann-Whitney U Test)

b) Test B

Test B was applied in the end of the study. We intended to check the acquired knowledge and the understanding of the story.

Group	Experimental group (n=26)	Control group (n=27)	
Statistics			
Mean	50,96	47,67	
Standard deviation	24,000	18,5369	
Minimum	2	10	
Maximum	92	84	

Table 7 - Test B results in both groups

After the study, the experimental group obtains a mean of 50,96% and the control group of 47,67% (table 7). Standard deviation is also higher in the experimental group.

Group	oup Mean Z correct ranking for tie		Statistical significance
Experimental	28,21	0.501	. 0 575
Control	25,83	-0,561	p=0,575

Table 8 – Test B results (Mann-Whitney-U Test)

The non-parametric test Mann-Whitney-U (table 8) shows that there is no statistical difference between the groups (p=0.575). These results indicate that both approaches lead to learning and both are valuable teaching strategies.

Students' opinion about the ReadingQuest

Results of the questionnaire, answered in the end of the study, show that students liked the ReadingQuest, recognizing that it enhanced learning and it is fun. In fact 69,2% enjoyed the activity and none of the students answered negatively to this question (table 9). They mentioned also the fact that they can get out of the classroom, go to the computer lab and that the ReadingQuest allowed them to use the Internet.

Did you like the	Experimental Group (n=26)		
ReadingQuest	f	%	
Yes	18	69,2	
More or less	8	30,8	
No	0	0,0	

Table 9 - Students' opinion about the ReadingQuest

Students mentioned they enjoyed the story as it was interesting and containing mystery and adventure. However, they found it difficult (93,3%) because of the vocabulary they had to look for in the dictionary. In fact, only 2 students (7,7%) thought it presented no difficulty. The story review and the exercises were considered important and relevant and according to 50% of the students the worksheet helped them to understand the story.

It is interesting to notice, that in spite of the difficulties, 81% of the students mentioned they would like to get involved in similar activities, as it helped them, and it is interesting and funny.

4.3.3 Opinion of the students of the control group

The students liked reading this story (81,5%), mentioning it is interesting (63,0%) and contains mystery (29,6%). They considered that the story was not difficult as only 11,1% of the students answered affirmatively to this question.

They mentioned the fact that they had the teacher's help when they found a difficult word. Maybe this explains why they didn't give so much importance to the worksheet or the exercises they had to solve. Only 33,3 % of the students considered it helped while 63,0% answered it helped more or less.

4.3.4 Interest in reading other texts in English

It is important to understand if the activity increased the interest in further reading in English as we supposed it could do. In fact, looking closely at the answers of the Experimental group (table 10) we verify that in spite of the difficulty encountered, the number of students that answered positively to this question is high (69,2%) compared to those who said they might (23,1%) or they wouldn't like to repeat the experience (7,7%).

Group Would you	Experimental Group (n=26)		Control Group (n=27)	
like to read another story	f	%	f	%
Yes	18	69,2	13	48,1
Maybe	6	23,1	13	48,1
No	2	7,7	1	3,8

Table 10 - Opinion on further readings in English

The opinion of the control group is mainly divided between yes and maybe (48, 1%). This means that the number of students that show motivation in reading other extensive texts in English is higher in the experimental group and the difficulty they got initially did not influence negatively.

5. Conclusion

According to the results obtained in this study we may say that the ReadingQuest is a valuable environment for an extensive reading activity. It pleases the students and they show a higher interest in reading other texts in English. It develops autonomy as students do their work. Students have to solve the problems and have to share points of view, construct the meaning of the text by negotiating it with their peers. It is an interesting and engaging alternative for learning.

However not everything is easy. As we verified in this study and is reported in other studies (Guimarães, 2005; Cruz, 2006; Martins, 2007), this is a more difficult and demanding activity for students than the situation they are used to, where they are helped by the teacher and usually do not have to make effort to understand the meaning of the text.

They also rejected the activity initially when they found the ReadingQuest was written in English and it wouldn't be translated by the teacher.

We have to consider carefully all the aspects of the task we propose, as a balanced and motivating learning environment.

References

- Albion, P & Maddux, C. (2007). Networked Knowledge: Challenges for Teacher Education. *Journal of Technology and Teacher Education*, 15 (3), pp. 303-310.
- Bellofatto, L.; Bohl, N.; Casey, M.; Krill, M. & Dodge, B. (2001b). *A Rubric for Evaluating WebQuests*. Available at http://webquest.sdsu.edu/webquestrubric.html
- Bamford, J. & Day, R. (Eds.) (2004). Extensive *Reading Activities for Teaching Language.* Cambridge: Cambridge University Press.
- Cardório, L. (2001). O gosto pela leitura. Lisboa: Livros Horizonte.
- Carvalho, A. A. (2001). Usability Testing of Educational Software: methods, techniques and evaluators. *Actas do 3º Simpósio Internacional de Informática Educativa*. Escola Superior de Educação, Instituto Superior Politécnico de Viseu: CD-ROM [ISBN 972-98523-4-0], 139-148.

- Carvalho, A. A. (2007a). Rentabilizar a Internet no Ensino Básico e Secundário: dos Recursos e Ferramentas Online aos LMS. *Revista Sisífo*, *3* (no prelo).
- Carvalho, A. A. (2007b). A WebQuest: evolução e reflexo na formação e na investigação em Portugal. In F. Costa & H. Peralta (eds), *AS Tic em Educação em Portugal.* Porto: Porto Editora (no prelo).
- Castells, M. (2004). *A Galáxia Internet: Reflexões sobre Internet, Negócios e Sociedade*. Lisboa: Fundação Calouste Gulbenkian.
- Clandfield, L. & Budden, J. (2004). Using Readers in the ESL, EFL classroom. In *The Onestop Mazine*. Available at http://www.onestopenglish.com/News/Magazine/Archive/usinggradedReaders
- Costa, F. & Carvalho, A. A. (2006). WebQuests: Oportunidades para Professores e Alunos. In A. A. Carvalho (org). Encontro sobre WebQuest. Braga: CiEd, Universidade do Minho, 8-25.
- Cruz, I. (2006). A WebQuest na sala de aula de Matemática : um estudo sobre a aprendizagem dos "Lugares Geométricos" por alunos do 8º ano. Master Dissertation. Braga: Universidade do Minho.
- Cruz, S. & Carvalho, A. A. (2005). Uma Aventura na Web com Tutankhamon. In A. Mendes, I. Pereira e R. Costa (eds), *Simpósio Internacional de Informática Educativa*. Leiria: Escola Superior de Educação de Leiria, 201-206.
- Day, R. & Bamford, J. (2000). Reaching Reluctant Readers. In Forum, 38 (3), 12.
- Day, R. & Bamford, J. (2002). Top Ten Principles for Teaching Extensive Reading. Reading in a *Foreign Language*. *Volume 14, Number 2*. Available at http://nflrc.hawaii.edu/rfl/October2002/day/day.html
- Dodge, B. (1995). WebQuests: A Technique for Internet-Based Learning. The Distance Educator, I, 2.
- Dodge, B. (2001). FOCUS: Five rules for writing a great WebQuest. *Learning & Leading with Technology, May, 28* (8), 6-9, 58.
- Dodge, B. (2002) WebQuest Taskonomy: A Taxonomy of Tasks. Available at http://edweb.sdsu.edu/webquest/taskonomy.html
- Dodge, B. (2006). WebQuests: Past, Present and Future. In A. A. Carvalho (org), *Actas do Encontro sobre WebQuest*. Braga: CIEd, 3-7.
- Ghiglione, R. & Matalon, B. (1993). O Inquérito: Teoria e prática. Oeiras: Celta Editora.
- Grellet, F.(1998). Developing Reading Skills: A practical Guide to Reading Comprehension Exercises. Cambridge: Cambridge University Press.
- Guimarães, D. (2005). A WebQuest no Ensino da Matemática: Aprendizagem e Reacções dos Alunos do 8º Ano de Escolaridade. Master Dissertation. Braga: Universidade do Minho.
- Magalhães, M. (2002). Aprendizagem colaborativa versus aprendizagem individual em aula de Língua Inglesa diferenças de desempenho na utilização de Hipertexto de Flexibilidade Cognitiva. Master Dissertation.

 Porto: Universidade do Porto.
- March, T. (1998). Why Webquests?, an introduction. Available at http://tommarch.com/writings/intro_wq.php
- March, T. (2003). The Learning Power of WebQuests. Educational Leadership, 61 (4), 42-47.
- Martins, H. (2007). A WebQuest como Recurso para Aprender História: um estudo sobre significância histórica com alunos do 5º ano. Master Dissertation. Braga: Universidade do Minho.
- Monereo, C. (2005). Internet, un espacio idóneo para desarrollar las competencias básicas. In *Internet y competências básicas. Aprender a colaborar, a comunicarse, a participar, a aprender*. Barcelona: Graó, pp. 5-26.
- Nation, P. (1997). The Language Learning Benefits of Extensive Reading. The Language Teacher, 21 (5), 13-16.
- Stemler, L. K. (1997). Educational Characteristics of Multimedia: a Literature Review. *Journal of Educational Multimedia and Hypermedia*, 6, _, 339-359.

- Takase, A. (2003). The Effects of Extensive Reading on Motivation of Japanese High School Students. New York: Temple University. Available at http://www.umi.com/umi/dissertations
- Turner, J. (1997). Starting Right: Strategies for Engaging Young Literacy Learners. In J. T. Guthrie & A. Wigfield (eds.), *Reading engagement: Motivating Readers trough Integrated Instruction*. Newark: International Reading Association, 183-204.
- Wigfield, A. (1997). Children's Motivations for Reading and Reading Engagement. In J. T. Guthrie & A. Wigfield (eds.), *Reading Engagement: Motivating Readers Through Integrated Instruction*. Newark: International Reading Association, 14-33.
- Verhoeven, L. & Snow, C. (2001). *Literacy and Motivation. Reading Engagement in Individuals and Groups.* London: Lawrence Erlbaum Associates.

In order to reference this document

Barros, A. C. & Amorim Carvalho, A. A. (2007). From a WebQuest to a ReadingQuest: learners' reactions in an EFL extensive reading class. *Interactive Educational Multimedia, IEM, 15*, 37-51. Retreived dd/mm/yyyy, from www.ub.es/multimedia/iem

Copyright

If the opposite does not indicate itself, the texts published in Interactive Educational Multimedia, IEM, are under a license *Attribution-Noncommercial-No Derivative Works 2,5 Spain*, of *Creative Commons*. All the conditions of use in: http://creativecommons.org/licenses/by-nc-nd/2.5/es/deed.en US

In order to mention the works, you must give credit to the authors and to this Journal.

Interactive Educational Multimedia, IEM, does not accept any responsibility for the points of view and statements made by the authors in their work.

Subscribe & Contact IEM

In order to subscribe to IEM, please fill out the form at www.ub.es/multimedia/iem (link: REGISTER)