ISSN 2177-0948

THE DEVELOPMENT OF INSTRUMENTAL ENGLISH ACTIVITIES VERSUS LEARNING STRATEGIES¹

O DESENVOLVIMENTO DE ATIVIDADES EM INGLÊS INSTRUMENTAL VERSUS ESTRATÉGIAS DE APRENDIZAGEM

Diego Vicente², Dione Dupont Eckhardt², Eliangela Sagiorato de Oliveira², Jacson Luis Krotz², Mateus Berlatto da Rosa², Natiel Cazarotto Chiavegatti², Ricardo Antunes Vieira², Elisa Pivetta Cantarelli³ e Cárla Callegaro Corrêa Kader³

RESUMO

Neste trabalho, tem-se por objetivo descrever uma experiência de ensino de Língua Inglesa Instrumental, contemplando a produção de alunos do segundo semestre do curso de Computação de uma escola federal do Rio Grande do Sul. Para que o projeto ocorresse, foi utilizado, como ferramenta de apoio, o *software Hot Potatoes* (2009) e seus cinco aplicativos, que resultaram na produção de um CD ROM com as atividades de cada aluno envolvido no projeto.

Palavras-chave: motivação, ensino-aprendizagem, língua estrangeira, informática na educação.

ABSTRACT

This paper has the goal to describe an Instrumental English teaching experience, regarding the production of students of the second semester of a Computing Course in a federal school in Rio Grande do Sul. For the execution of the project, it was used a base tool, the software Hot Potatoes (2009) and its five applicative tools, which resulted in the production of a CD ROM with the activities of each student involved in the project.

¹ Trabalho de Iniciação Científica.

² Acadêmicos do Curso Superior de Tecnologia em Sistemas para Internet - CAFW/UFSM. E-mail: vicentediego@gmail.com

³ Professoras - CAFW/UFSM. E-mail: carlackader@gmail.com

Keywords: motivation, foreign language teaching-learning, computing in education.

INTRODUCTION

This paper will report an experience working with the free software Hot Potatoes (2009) with students of a Computing Course who were studying English in a federal school, in Rio Grande do Sul (RS).

This work takes into account that social factors to do with the context of learning have an effect on how successful individual L2¹⁰ and foreign language learners are, and possibly on how interlanguage develops as well. It considers the psychological dimensions of difference, especially the affective factors such as learners' personalities can influence the degree of anxiety they experience and their preparedness to take risks in learning and using L2 and foreign language.

Learners' preferred ways of learning may influence their overall, orientation to the learning task and the kind of input they find it easier to work with (ELLIS, 2000). We will focus on two dimensions here – language aptitude and motivation - an also explore how differences in learning strategies can affect development.

LANGUAGE APTITUDE

It has been suggested that people differ in the extent to which they possess a natural ability for learning an L2 as well as a foreign language. This ability, known as language aptitude, is believed to be in part related to general intelligence but also to be in part distinct (CARROLL, 1960).

Carroll (1960) led to the identification of a number of components of language aptitude. These are: phonetic coding ability, grammatical sensitivity, inductive language learning and rote learning ability.

The phonetic coding ability allows the learners to identify the sounds of a foreign language so they can be remembered later.

Grammatical sensitivity is the ability of recognizing the grammatical functions of words in sentences while inductive language learning permits the learner to identify patterns of correspondence and relations between form and meaning.

Rote learning ability forms and makes it possible to remember associations between stimuli (which are important in vocabulary study).

Research involving language aptitude has focused on whether and to what extent language aptitude is related to success in L2 and foreign language learning.

In this study, we will focus on grammatical sensitivity, inductive language learning ability and rote learning ability. In the next section, we will discuss the role of motivation in the foreign language learning process.

MOTIVATION

Whereas language aptitude concerns the cognitive abilities that underlie successful L2 and foreign language acquisition, motivation involves the attitudes and affective states that influence the degree of effort that learners make to learn an L2 or a foreign language.

According to Ellis (2000, p. 75), there are several kinds of motivation, such as: instrumental, integrative, resultative and intrinsic.

When learners make efforts to learn an L2 or a foreign language for some functional reason - to pass an examination, to get a better job, or to get a place at university, we have an instrumental motivation. In some learning contexts, this motivation seems to be the major force determining success in L2 or foreign language learning. For example, in settings where learners are motivated to learn them because it opens up educational and economic opportunities for their lives.

But when some learners choose to learn a particular L2 or foreign language because they are interested in the people and cultures represented by the target language group, we have the integrative motivation.

Resultative motivation is considered the *result* of learning when learners who experience success in learning may become more, or in some contexts, less motivated to learn.

In some learning situations, some learners' general reasons for learning an L2 or foreign language may be crucial in determining their motivation, indeed, it is possible that many learners do not hold distinct attitudes, positive or negative, towards the target language group, such is probably the case of intrinsic motivation.

Ellis (2000) emphasizes that motivation is clearly a highly complex phenomenon. These four types of motivation should be seen as complementary rather than as distinct and oppositional. Learners can be both integratively and instrumentally motivated at one and at the same time. Besides that, motivation can result from learning as well as a cause of it. Furthermore, motivation is dynamic in nature; it is not something that a learner has or does not have but rather something that varies from one moment to the text depending on the learning context or task.

This paper focus on the instrumental and the resultative motivation, related to the objective of a group of students, involved in a class project work.

This project offered them the opportunity to do something meaningful with their English knowledge, using the free software Hot Potatoes as a tool to create different activities in Computing Instrumental English.

THE SUITE HOT POTATOES

The *Hot Potatoes* suite (2009) includes six applications, enabling the user to create interactive multiple-choice, short-answer, jumbled-sentence, crossword, matching/ordering and gap-fill exercises for the World Wide Web. Hot Potatoes is freeware, and anybody may use it for any purpose or project the user likes.

This software comprises a package of five applicative tools (authorship tools) which enable the creation of dynamic activities through the insertion of texts, questions, answers, pictures, temporizer, among others, using Web pages.

These applicative tools are: *JCloze*, which creates exercises such as fill in the blanks; *JCross*, which creates crosswords; *JMatch*, which creates exercises such as match the columns with text or images; *JMix*, which creates exercises that enable learners to analyze sentences and *JQuiz*, which creates exercises of multiple choices.

It is possible to visualize a series of activities with the software which may be used to enrich the teaching-learning process, helping students and teachers in their challenges of everyday school life. Besides that, it is important to mention that the use of the program may get students and teachers closer to each other and to the digital environment, which contributes for the teaching quality.

This paper focuses on the contribution of this software for the development of the language learning-process, emphasizing the need to provide learners with real communicative and interactive experiences and production.

LEARNING STRATEGIES

According to Ellis (2000), learning strategies are the particular approaches or techniques that learners employ to try to learn an L2 or a foreign language. They can be behavioral (for example, repeating new words aloud to help remembering) or they can be mental (for example, using the linguistic or situational context to infer the meaning of a new word). They are typically problem-oriented. Therefore, learners employ learning strategies when they are faced with some problem, such as how to remember a new word. Learners are generally aware of the strategies when they use and, when asked, and when they can explain what they did to try to learn something.

There are different kinds of learning strategies, and here we will consider

three of them, namely: Cognitive strategies, Metacognitive strategies and Social/affective strategies.

The cognitive strategies are those that are involved in the analysis, synthesis or transformation of learning materials. An example is recombination, which involves constructing a meaningful sentence by recombining known elements of the L2 or foreign language in a new way.

Metacognitive strategies are those involved in planning, monitoring and evaluating learning. An example is selective attention, where the learner makes a conscious decision to attend to particular aspects of the input.

Social/affective strategies concern the ways learners choose to interact with other speakers. An example is questioning for clarification (i.e. asking for repetition, a paraphrase or an example).

There have been various attempts to discover which strategies are important for L2 or foreign language acquisition. One way is to investigate how *good language learners* try to learn. This involves identifying learners who have been successful in learning an L2 or a foreign language and interviewing them to find out the strategies that worked for them.

Ellis (2000) asseverates that one of the main findings on such studies is that successful language learners pay attention to both form and meaning and they are also very active (i.e. they use strategies for taking charge of their own learning), show awareness of the learning process and their own personal learning styles and, above all, are flexible and appropriate in their use of learning strategies. They seem to be especially adept at using Metacognitive strategies.

She also says that different strategies are related to different aspects of L2 or foreign language learning.

Thus, strategies that involve formal practice (for example, rehearing a new word) contribute to the development of linguistic competence whereas strategies involving functional practice (for example, seeking out native speakers to talk to) aid the development of communicative skills. Successful learners may also call on different strategies at different stages of their development.

The study of learning strategies is of potential value to language teachers, and in this paper we focus on the three strategies already mentioned to develop the language school project in a federal school in Rio Grande do Sul.

METHODOLOGY

One of the goals of this school project was to improve language learning and to show the impact of the learning strategies on the production of a CD

ROM, considering the students' production, using Instrumental English in the Computing area.

For this, initially it was selected the theory that was going to orient the students' work. As seen in the former sections, we regarded the language aptitude, the instrumental and the resultative motivation and the three learning strategies, namely: Cognitive, Metacognitive and Social/affective strategies.

After choosing the theoretical purpose, we started studying the facilities of the free software Hot Potatoes (2009). We considered all its applicative tools and the students involved in the project created one activity for each applicative tool.

It is important to mention that there were seven students working on the project, and they all were on the second semester of the Computing course.

Their interest was born in the idea of using English in a real situation and learning context and also wanted to take part in academic writing, reporting what was done during the project.

So, in the next section, we will discuss the results and the facilities used to write the activities, making reference to the learning strategies, motivation and learning aptitude.

DISCUSSION OF THE RESULTS

In this section we will show some images of the students' work and discuss about the possible learning strategies they used and explain the facility of the software. Besides that, we will emphasize the benefits this experience caused for the learning process of L2 or foreign language acquisition.

JCLOZE ACTIVITY

The first applicative tool to be analyzed is the *Jcloze*, where students could apply Cognitive, Metacognitive and also Social strategies, considering the kind of exercise they created, i.e. filling in the blanks to complete a sentence with cohesion and coherence.

In this activity the students could insert the technical vocabulary they learned in the classes and according to Carrell (1984), Scaramucci (1995), Laufer (1997), Schmitt and McCarthy (1997), Khaldieh (2001), among others, there is a strong relation between lexical competence and reading comprehension in L2 or foreign language acquisition. They say that even if the learner shows good cognitive strategy in the mother tongue, it will not be enough for the L2 or foreign language learning if they do not achieve a good lexical base.

In other words, the authors explain that without a minimum linguistic knowledge or a vocabulary background, it is difficult for the reader or learner to activate any schema, use skills or develop proficiency.

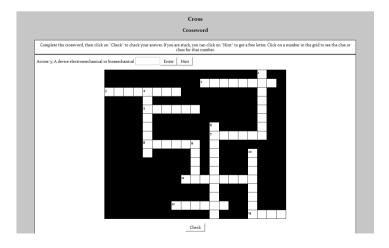
So the aim of this exercise was to use and activate the vocabulary in the computing area, making students who created the activities could apply their background knowledge and also the possible users of the CD-ROM.

Computer			
	Gap-fill exercise		
Fill in all the g	aps, then press "Check" to check your answers. Use the "Hint" button to get a free letter if an answer is giving you trouble. You can also click on the "[?]" button to get a free letter if so answer is giving you trouble. You can also click on the "[?]" button to get a free letter if an answer is giving you trouble. You can also click on the "[?]" button to get a		
Computer is a	[?] capable of several types of automatic processing of information or data processing. Examples of computers include the abacus,		
	[?] , computer analog and digital computer. A computer can provide up of many attributes, including data storage, data processing, calculation on a large scale,		
industrial desig	n, graphic imaging, virtual reality, entertainment and culture.		
In the	[?] the term has been applied to people responsible for some calculation. In general, it is understood by a computer system that performs some sort physical		
computing. There is also a rigorous mathematical concept used in the theory of computation.			
It is assumed that personal computers and [?] are icons of the Information Age, and this is what many people consider as "computer". However, currently the most			
common forms	of computer use are embedded systems, small devices used to control other devices such as [?] digital cameras and toys.		
	Check Hint		
	Cneck Filmt		

Picture 1 - Activity Gap-fill exercise.

JCROSS ACTIVITIES

In this activity the students used their knowledge of the vocabulary, and so Cognitive, Metacognitive and also Social Strategies, especially when they had to write the tips to the possible users get the right word or answer.



Picture 2 - Crossword.

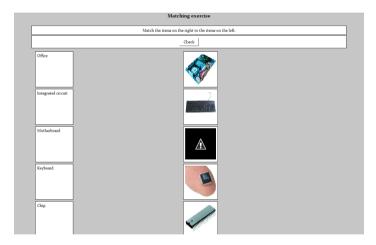
The tips created by the students try to clarify the users' minds, avoiding wrong inferences or misunderstanding the meaning.

Schmitt and McCarthy (1997) emphasize that students get frustrated when they make mistakes because of a fragile lexical base, trying to guess the meaning by the context, resulting, most of the times, in wrong inferences and misunderstanding the meaning.

So with this activity, the users could use productive vocabulary (active) in an appropriate and profitable way.

JMATCH ACTIVITIES

In this sort of exercise the students had to use their vocabulary knowledge, besides the Cognitive Strategy, it employs two ways of organizing the exercise, that is: using text or images. The students used both of them, and showed what they wanted the user to test, i.e. the ability to form and remember associations between stimuli (we can consider the images as a kind of stimuli).



Picture 3 - Match the items.

In accordance to the ideas of Melka (1982), both receptive and productive vocabulary learning are important, so the students tried to sum up this conception in the activities they created, treating the learning of a lexical item as a process in which the notion of the receptive and productive methods interact in a continuous dynamic of the L2 or foreign language learning.

The studies of Chun and Plass (1996) reveal that the hypermedia application in teaching a foreign language contributes for the vocabulary learning, considering the integration of text plus image, resulting in better learning.

JMIX

This activity allows users to analyze sentences, ordering words, using their grammar knowledge, besides Cognitive, Metacognitive and Social Strategies for a good communication, written or spoken.



Picture 4 - Exercise work with Jmix.

This exercise tries to apply the grammar and lexical knowledge of the user besides the reading and comprehension skills. It reinforces what Lewis (1993, 1997) advocates about the lexical competence of learning a foreign language. He points out that in written or oral language lexical competence determines higher or lower proficiency of the learner.

JQUIZ

This sort of exercise offers students to write questions of multiple choices, making them use Cognitive, Metacognitive and Social Strategies, especially when they have to think about the possible answers, create a coherent question and execute their previous knowledge about the computing area.

Index =>			
	Quiz Quiz		
	_ <u< th=""><th>Show all questions</th></u<>	Show all questions	
Integrating a large number of small transistors			
A. ? Memory			
B. ? Process			
C ? _ Chip			
	Index ->		

Picture 5 - Exercise about peripherals.

This quiz tests the learners' background knowledge besides the grammatical one and attends what Souza (2008) defends about the multimedia environment used for teaching languages by the computer. She claims that the multimedia environment exploits the linguistic and multimodal resources for the L2 or foreign language learning and asserts that researchers have dedicated considerable attention to the role that hypermedia has in the development of lexical knowledge.

CONCLUSION

This article tried to describe and show that it is possible to motivate language students to increase their fluency and skill with the target language by the means of interaction and the use of learning strategies.

To achieve this goal, that is, creating an interactive language classroom, the teacher discussed with the students some possibilities to develop language using the technology in class.

For this, it was used the free software Hot Potatoes and its five applicative tools, namely JCloze, JCross, JMatch, JMix and JQuiz, which allowed students to achieve their goals and made them use the Cognitive, Metacognitive and Social Strategies, besides activating instrumental and the resultative motivation.

Considering this subject, the first motivation was observed since the beginning of the task and on the way students tried to execute their objectives and the second one was showed when the successful result of learning in the classroom context motivated them to produce the CD ROM.

So, this project offered students and their teacher the most important key to motivate the study of language that is to create an interactive language classroom, providing stimuli for continued interaction, because the group involved in the project, could develop a repertoire of learning strategies to produce language comfortably and using previous knowledge in the area of computing.

REFERENCES

CARREL, P. Schema theory and ESL reading: classroom implications and applications. **The Modern Language Journal**, n. 68, p. 332-343, 1984.

CARROLL, J. B. Foreign languages for children – what research says, **The Natl. Elem. School Principal**, v.39, n. 6, p. 12-15, 1960.

CHUN, D. M.; PLASS, J. L. Effects of multimedia annotations on vocabulary acquisition. **The Modern Language Journal**, n.80, p. 183-198, 1996.

ELLIS, R. Second language acquisition. Oxford: Oxford University Press, 2000.

HotPotatoes. **Software Hot Potatoes**. Disponível em: http://hotpot.uvic.ca, acesso em 04/2009.

KHALDIEH, S. A. The relationship between knowledge of I'raab, lexical knowledge, and reading comprehension of nonnative readers of Arabic. **The Modern Language Journal**, n. 85, p. 416-431, 2001.

LAUFER, B. The lexical plight in second language reading. In: COADY, J.; HUCKIN, T. (Org.). **Second Language vocabulary acquisition.** Cambridge: Cambridge University Press, 1997. p. 20-34.

LEWIS, M. (Org.) **The lexical approach.** England: Hove, 1993. (Language teaching publications).

_____. **Implementing the lexical approach.** London: Language teaching publications, 1997.

MELKA, F. Communication in the language classroom. Oxford: Oxford University Press, 1996.

SCARAMUCCI, M.V.R. **O papel do léxico na compreensão em leitura em língua estrangeira**: foco no produto e no processo. 1995. Tese (Doutorado) – Universidade Estadual de Campinas, Campinas, 1995.

SCHMITT, N.; McCARTHY, M. **Vocabulary**: description, acquisition and pedagogy. Cambridge: Cambridge University Press, 1997.

SOUZA, P. N. de. A hipermídia como uma ferramenta de ensino: uma revisão da literatura sobre o aprendizado implícito de vocabulário em língua estrangeira. In: **Linguagem e Ensino.** V. 11. N. 1. Jan-Jun, 2008.