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► **To cite this version:**

Christine Rodrigues. An Analysis of the Potential of a Computer-mediated learning Course for Vocabulary Learning in L2. Learning a Language in Virtual Worlds. A Review of Innovation and ICT in Language Teaching Methodology, Warsaw Academy of Computer Science, 2012. edutice-00674469

**HAL Id: edutice-00674469**

**<https://edutice.hal.science/edutice-00674469v1>**

Submitted on 27 Feb 2012

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Rodrigues, C. (2012). An Analysis of the Potential of a Computer-mediated learning Course for Vocabulary Learning in L2. In *Learning a Language in Virtual Worlds. A Review of Innovation and ICT in Language Teaching Methodology*. Warsaw Academy of Computer Science, Warsaw : Poland

## **An Analysis of the Potential of a Computer-mediated learning Course for Vocabulary Learning in L2**

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### **Abstract**

*This paper focuses on the contributions a computer-mediated blended course can make for learning vocabulary in French as a Foreign Language (FFL). This course included class and on-line sessions, using Computer Mediated Communication (CMC) tools (forum and chat), for a written macro-task by French-learning Cypriot students accompanied in distance learning by FFL tutors. In the first part we present difficulties in vocabulary learning as well as in written production. We also tackle two central notions for this study: the task in an action-oriented approach, and scaffolding to support the process of learning. In the second part we describe the blended learning course, the participants and the task involved. In the third part, we identify tutors' support for frequent lexical errors occurring during chat sessions and in some of the forum messages. Furthermore, we analyse traces of the tutoring activity in the final written production (which consists of a travel guide to Cyprus). We proceed by comparing the content of the guide and online interaction between learners and tutors in both synchronous (chat) and asynchronous (forum) sessions. The study shows that tutors mainly give no feedback for the most frequent lexical errors (written form and lexical units used in English instead of French), both in chat sessions and in the forum messages. We believe this might be a strategy intended to encourage students to communicate. The support provided for the use of an inappropriate lexical unit is varied in chat sessions, while no feedback has been given for this problematic point in forums. The research also reveals that effective support strategies vary, and are mostly delivered with the same CMC tool that the learner used in his/her error.*

### **1. Introduction**

Vocabulary learning and written production are usual and complex activities when learning a foreign language (L2). This study intends to identify the opportunities Computer-Assisted Language Learning (CALL) can present for these processes. Our research is based upon a blended course held in 2009, using chat sessions and forums for a written macro-task. The paper first exposes lexical and writing difficulties, and discusses the notion of the task in an action-oriented approach and scaffolding. Tutors' support during the experiment is investigated, in order to identify effective support strategies for vocabulary in written production, in order to show the potential and the limitations of Computer Mediated Communication (CMC) tools.

#### **1.1 Problematic Vocabulary Points**

L2 Learning involves meeting, understanding, memorizing and being able to use vocabulary items. Thus, the learning procedure follows several steps; each of them may represent a difficulty for the learner. In addition, vocabulary items, that is to say, lexical units [1] or LUs, have many characteristics that might be problematic in L2 learning, and have to be taken in consideration to support learners in an appropriate manner. We refer to many studies that specify LUs characteristics [2] [3] [4]. Figure 1 represents these points in the L2 learning process: the meaning of the LU, the meaning links between LUs of a language, as well as links between two languages, the context, oral and written forms, syntax, derived LUs, culture, language register and theme. We name these characteristics Problematic Vocabulary Points (PVPs).

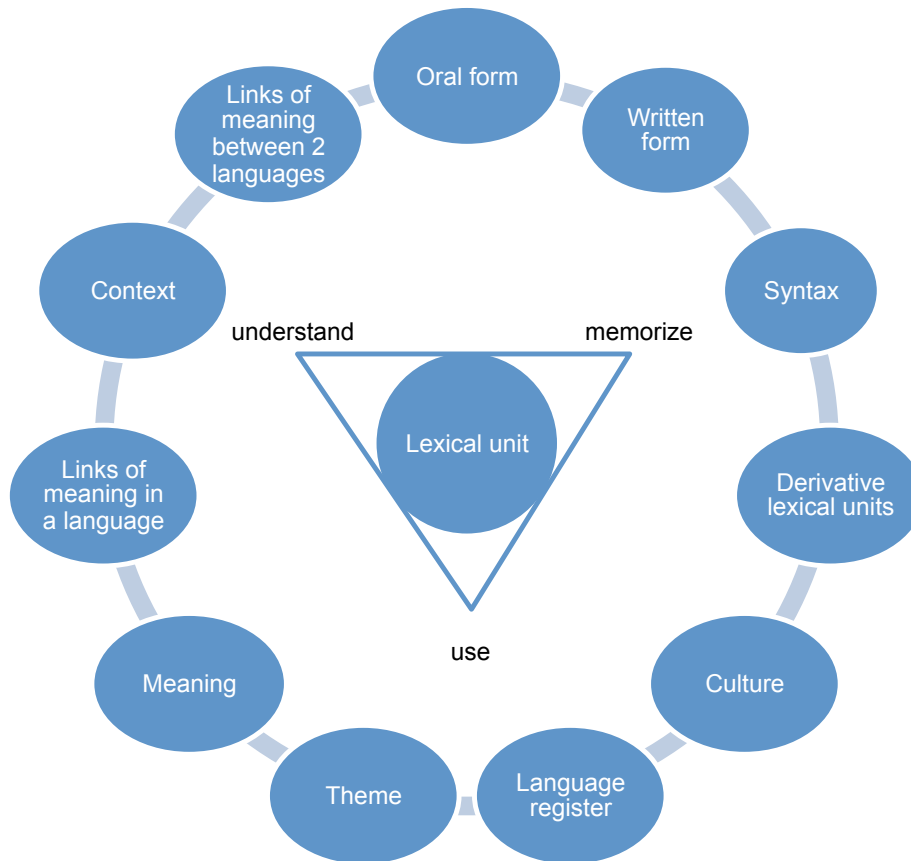


Fig. 1. Typology of PVPs in L2 Learning

### 1.2 Difficulties related to written production

According to researchers and educators [5], [6], the writing process involves several steps (see Figure 2), both in mother tongue and in a L2. In both cases, a support is needed to help learners in each step of the writing activity.

Any PVP may indeed emerge during these steps. In L2, for example, the pre-writing phase includes a brainstorming activity, in which learners must think about LUs linked to the topic (theme PVP), while in the drafting phase, LUs have to be written (written form PVP).

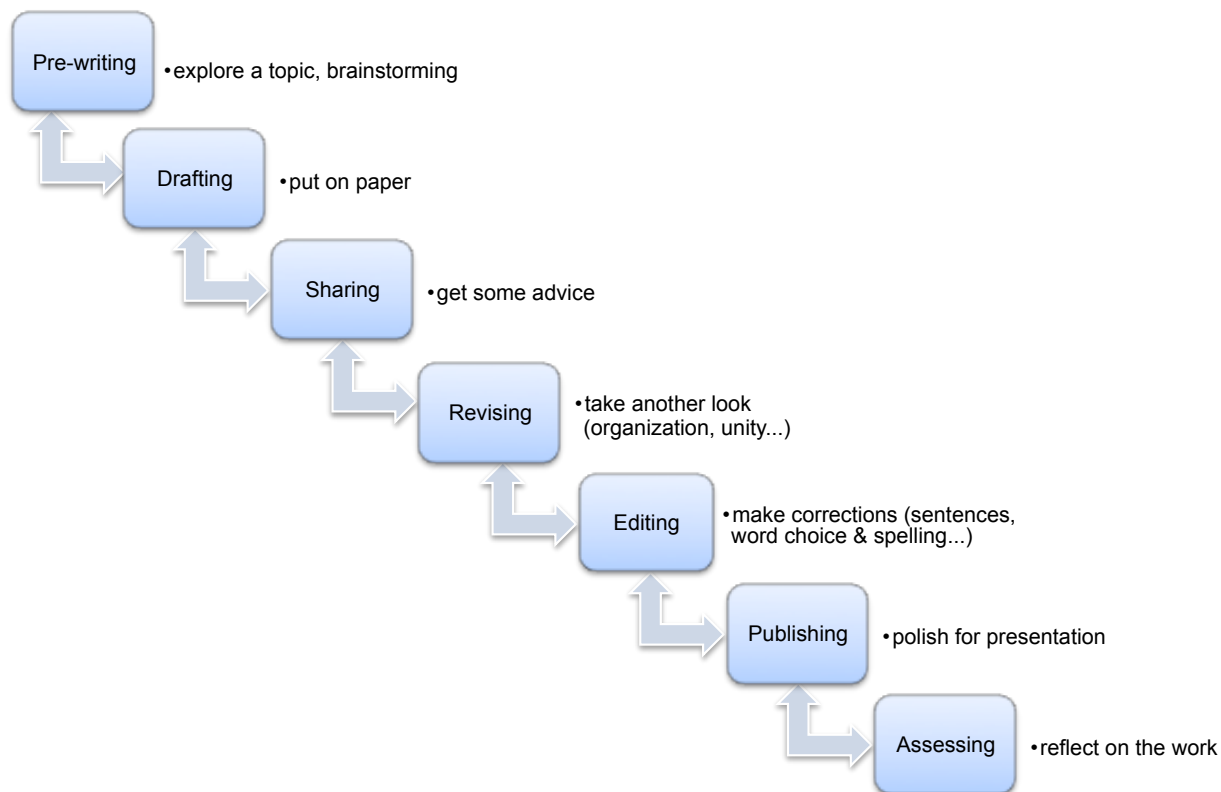


Fig. 2. The writing process

### 1.3 Action-oriented approach and task

In 2001 the Council of Europe produced a document of recommendations for L2 learning, named The Common European Framework of Reference for Languages (CEFR) [7]. It presents an action-oriented approach, based on the notion of a task, still used by many institutions in Europe as a base for teaching, testing, and distant L2 learning. As explained in this report, action-oriented approach “considers that learners are social actors with tasks to accomplish as a social agent, each individual forms relationships with a widening cluster of overlapping social groups, which together define identity.” (CEFR, p.1).

For Ellis [8], “a task is intended to result in language use that bears a resemblance, direct or indirect, to the way language is used in the real world” (p.16). He also distinguishes outcome (which may consist in a written production, for example) and aim of the task (its pedagogical objective): “It is useful to distinguish between the ‘outcome’ and the ‘aim’ of a task. ‘Outcome’ refers to what the learners arrive at when they have completed the task, for example, a story, a list of differences, etc. ‘Aim’ refers to the pedagogic purpose of the task, which is to elicit meaning-focused language use, receptive and/or productive. This distinction is important. It is possible to achieve a successfully outcome without achieving the aim of a task” (p.8).

Nunan [9] states that a task can be modified: “means would be established for deciding whether the content has been learned and the goals achieved. This final evaluative step would allow us to decide whether our goals, content and tasks need to be modified” (p.16).

Another distinction exists between micro-task (limited, self-consistent) and macro-task (wider) [10]. Micro-tasks can contribute to the achievement of a macro-task.

### 1.4 Scaffolding

According to social-constructivism, a tutorial process – scaffolding - consists in the relationship between an expert helping a novice: “This scaffolding consists essentially of the adult “controlling” those elements of the task that are initially beyond the learner's capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence” ([11], p.90). This support is provided in the zone of proximal development [12], where the learner can't complete a task without assistance.

Lepper et al. [13] also identify various types of effective scaffolding: ignoring (not taking minor errors into account), forestalling (be attentive to errors that might occur and let it happen if it allows the learner to discover a rule), intervening (correct immediately if the error impedes problem solving), and

debugging (lead the learner to a correction through general and more and more specific questions if needed).

## 2. The study

The study presented in this paper concerns the learning of French as a Foreign Language (FFL) in a blended course using chat sessions and forums, for a written macro-task.

### 2.1 Participants

Participants in the experiment were 13 FFL learners, studying at the Middle East Technical University in Güzelyurt (Cyprus) to become English teachers, 21 would-be teachers enrolled in the second year of a Didactics of Languages and Cultures (DLC) Master's programme at Blaise Pascal University (BPU, Clermont-Ferrand, France), a researcher in France supervising the project and a Cypriot teacher. Figure 3 shows the organization of the participants and their roles in the experiment.

FFL learners had to elaborate a travel guide to Cyprus (which was the written macro-task). Their interest in the project concerned the possibility to communicate with French speakers that might help them with their learning. BPU students' participation helped them to gain experience in distant tutoring (as an accompaniment of the written macro-task through synchronous and asynchronous interaction).

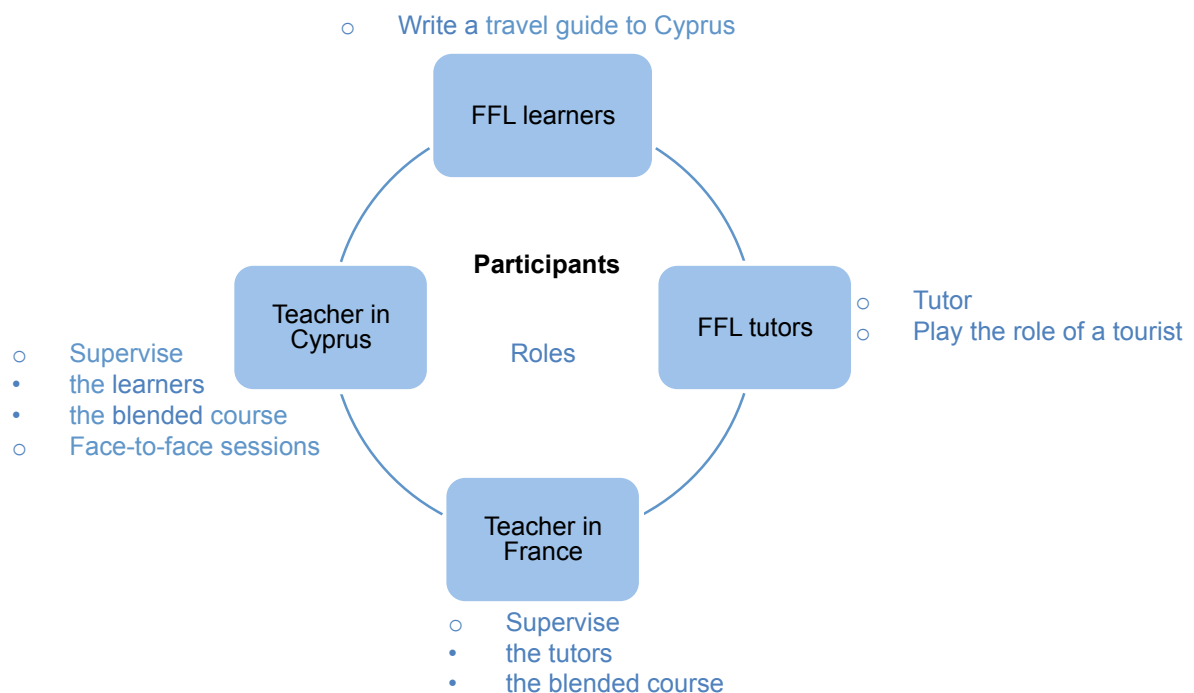


Fig. 3. Participants and roles in the project

### 2.2. The course design

The blended course consisted of six face-to-face sessions between the French teacher and FFL learners, as well as six chat sessions between learners and tutors, and a forum. The system used for synchronous and asynchronous communication was BPU's version of the Claroline platform (a Learning Management System).

The intention was to create interaction between experts and novices to lead to scaffolding situations. Also, the use of CMC tools for distant communication was chosen as they appear to be interesting for L2 and collaborative work: "The research literature on foreign and second language learning reports that this type of electronic discussion encourages learners to construct knowledge collaboratively" ([14], p.83).

Both synchronous and asynchronous communication intended to support the writing process. For example, discussions about the topic during a chat session would help in the pre-writing step, posting the draft on the forum could be useful during the sharing phase.

Each learner had to write a text intended to be one part of the guide (about traditions, restaurants, sports, tourism, music, towns, language, receipts, transports, shopping and weather). Face-to-face sessions were dedicated to pre-writing (explore topics, brainstorming) and publishing (putting together all text to form the final written production). Distant sessions concerned pre-writing, sharing, revising and editing the text. The chat was used to discuss themes and writing problems, the forum was utilised for the presentation of participants, to post draft productions and for assessment (tutors and learners giving their opinion about the final written production and the experiment).

For these distant sessions, groups were organized (one, two or three tutors for one or more learners), but tutors could interact with other learners than those from their initial group, as the number of students in each of the two classes was different and some learners were sometimes absent.

### 2.3. Task and course design

The project's macro-task was intended to be a collaborative activity, based on recommendations of the CEFR: FFL learners had thus to realize written production but also to communicate with other learners and with tutors (asking questions, presenting Cyprus for instance). This guide represents the outcome of the task. The aim was to allow students to acquire cultural, grammatical lexical and writing skills. The final written production is a slideshow, composed of 97 slides containing various texts and illustrations (Figure 4 represents two pages of the document).



Fig.4. Slides from the travel guide to Cyprus realized by FFL learners

### 2.4. Data collection and analysis

The corpus analysed for this study is composed of the content of the guide, and the content of the interactions between participants using CMC tools (chat sessions and forum messages).

## 3. Results

### 3.1 Type and number of PVPs

Our analysis of the PVPs encountered by students shows that most problems are related to the written form and LUs used in English instead of French, during chat sessions, in the forum and in the guide (see Figure 5). This may not be surprising: communication and macro-task were in written form, and learners master and study English language in order to teach it. We also noticed some reaction when a learner uses an inappropriate LU.

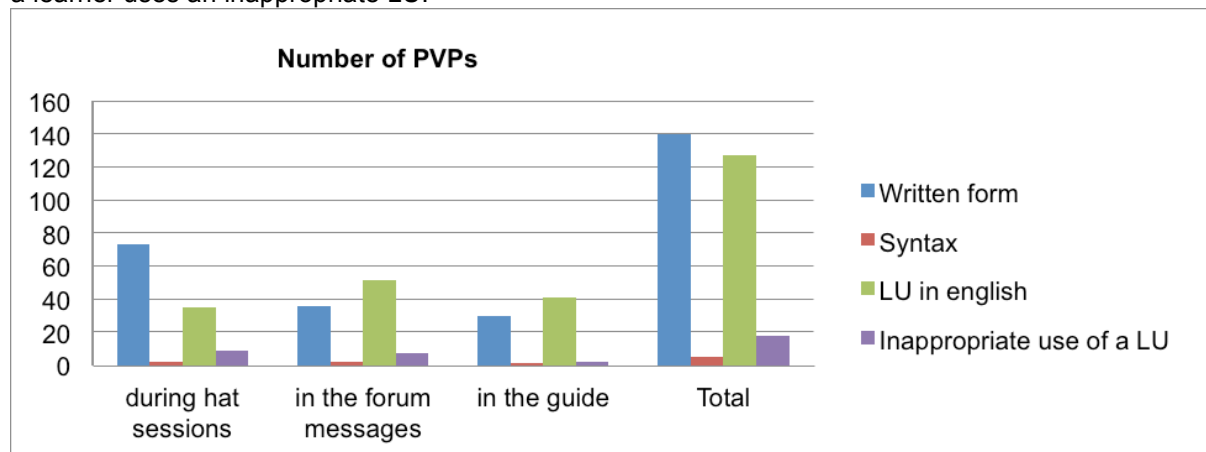


Fig. 5. Type and number of PVPs in distant communication and in the guide.

### 3.2 Categorization of most frequent PVPs collected in the corpus

We systematically noted frequent errors in order to categorize them and make assumptions about the reasons which caused them (see Table 1). Some of the errors in the written form may be typos, as the learner didn't take time for editing his text before publishing it. It is interesting to notice learners use English LUs whether their form is similar or not to the equivalent French LUs. The inappropriate use of a LU shows the importance of the context (for example, "lourd" in French can be used for weather, not for clothes).

Category of errors		Examples	
Type of PVP	Supposed cause	Incorrect LU	Correct form in French
Incorrect written form	error in the order of letters	sturctures	structure
	A missing letter in the word	<b>Ma</b>	Mai
	A letter is used instead of another	<b>abondontes</b>	abondantes
	Confusion in the writing form because of the spelling of a proximate word	<b>Fraid</b> = fresh, analogy with <i>froid</i> (= cold)	frais
	Error in the writing transcription of a sound	<b>excellante</b>	excellente
LU in English instead of French	LU in English similar to the LU in French	<b>complicated</b>	compliqué
	No similarity between English and French	<b>british</b>	anglais
Inappropriate use of a LU	Error coming from an incorrect translation	<b>Peine</b> (translation of sentence <i>Sentence = peine</i> in a juridical sens)	phrase
	Use of a LU inappropriate in the context	(vêtements) <b>lourds</b> (= warm clothes)	chauds

Table 1. Typology of most frequent errors

### 3.3 Tutors' support in asynchronous and synchronous sessions

Table 2 shows that tutors' support could be explicit or implicit, and didn't take into account some lexical errors: we suppose it was a scaffolding strategy to motivate learners (for example, ignoring an error by answering "Cool" intends to continue the conversation).

Type of support	Support from the tutor/examples
Explicit	Explains/corrects <i>Il y a quelques mots en anglais dans ton texte mais nous comprenons ton idée. Pour t'aider, « because » = parce que</i> [There are a few words in English in your text but we understand your idea. To help you, "because" = because]
	Asks for an explanation <i>Je n'ai jamais entendu parler du pradingling (...), tu peux nous expliquer ce que c'est ?</i> [I've never heard about pradingling (...), can you explain what it is?]
Implicit	Uses the LU in his/her answer <i>Vous conduisez comme en Angleterre, alors</i> [You drive like in England then]
Help with another problem (motivation, written or oral production)	Doesn't take into account the PVP <i>Cool</i>
No help	No feedback

Table 2. Type of support for PVPs and examples

### 3.4 Tutors support for most frequent PVPs

We focused on the three most frequent PVPs and identified for each the strategies used by tutor during chat sessions (see Figure 6) and in the forum messages (see Figure 7). Table 3 shows examples of tutors' support for most frequent PVPs.

The results displayed in Figure 6 show frequent feedback in chat sessions when the learner doesn't use the appropriate item. The support of tutors for these three major problems vary.

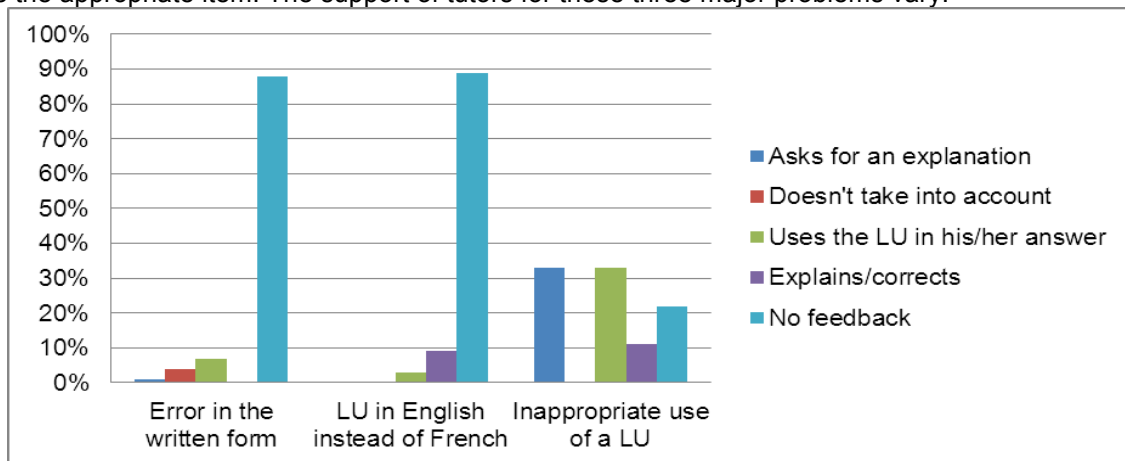


Fig. 6. Tutors' support for most frequent PVPs in chat sessions



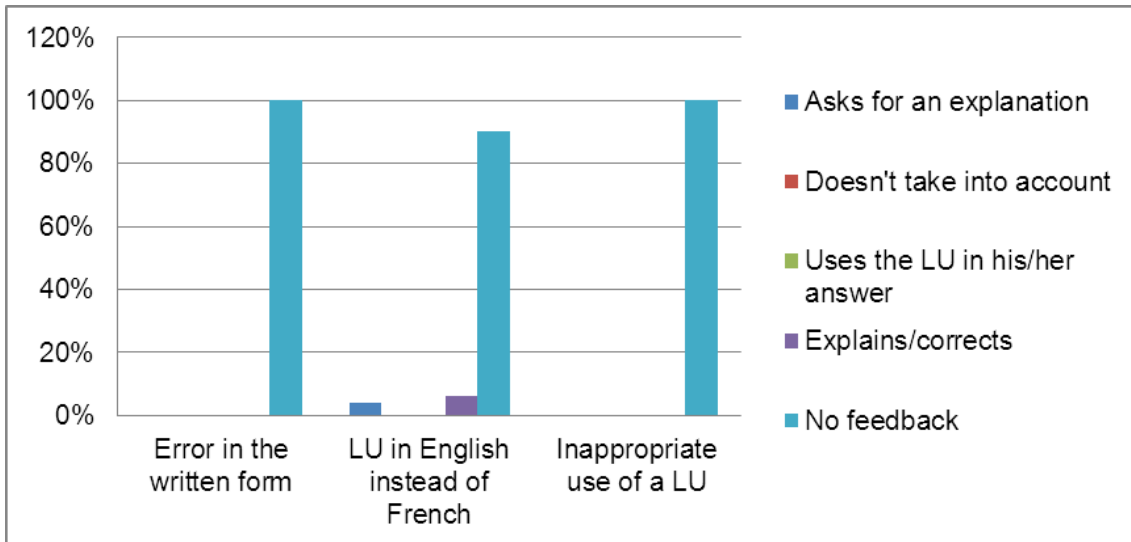


Fig. 7. Tutors' support for most frequent PVPs in the forum messages

	Tutors' scaffolding	Form	CMC tool used	Traces in the final written production
<b>PVP: written form (chat)</b>				
<b>Passaport (Passeport)</b>	Uses the LU in his/her answer <i>on a le choix : faire un passeport</i> [We can choose to make a passport]	Assertion	Forum	Correct LU
<b>La barre (Le bar)</b>	Asks for an explanation <i>à la barre ? je ne comprends pas, tu peux m'expliquer ?</i> [at the bar? I don't understand, can you explain it to me?]	Question	Chat	
<b>Langle (l'anglais)</b>	Doesn't take into account <i>cool</i>			
<b>PVP: LU in English instead of French</b>				
<b>driving Chat</b>	Uses the LU in his/her answer <i>Vous conduisez comme en Angleterre, alors</i> [You drive like in England, then]	Assertion	Chat	
<b>paragliding forum</b>	Asks for an explanation <i>Je n'ai jamais entendu parler du pradipling (...), tu peux nous expliquer ce que c'est ?</i> [I've never heard about pradipling (...), can you explain what it is?]	Question	forum	<i>parapente</i>
<b>Because forum</b>	Explains/corrects <i>Il y a quelques mots en anglais dans ton texte mais nous comprenons ton idée. Pour t'aider, « because » = parce que</i>	Assertion	forum	LU suppressed
<b>PVP: inappropriate LU (chat)</b>				
<b>Exécuter (courir)</b>	Uses the LU in his/her answer <i>Courir dans une forêt</i> [to run in a forest]	Assertion	Chat	
<b>Matériel (ingrédients) Peines (phrases)</b>	Asks for an explanation <i>Euh qu'est-ce que vous voulez dire par « matériel » ?</i> [What do you mean by material?] <i>C'est quoi les « peines » ?</i> [What are the pains?]	Question	Chat	<i>Ingrédients</i> LU not corrected
<b>Est à droite (a raison)</b>	Explains/corrects <i>Chez nous, quelqu'un qui est à droite, c'est quand on parle de politique</i> [Here when someone is on the right, it concerns politics]	Assertion	Chat	

Table 3. Examples of tutors' support for most current PVPs

### 3.5 Effective support strategies using CMC tools for the editing step

Table 4 presents our analysis of effective support strategies for the text editing step. For this analysis, we selected PVPs occurring during chat sessions and in the forum messages, that were corrected in the final text published in the guide, and compared them with answers displayed by tutors in synchronous or asynchronous sessions.

Results show that tutors used the same CMC tool to deliver feedback, except for the written form PVP, for which the articulation of chat and forum has also been employed. Our analysis also indicates that tutors provide support randomly with questions or assertions.

Although these results can't be generalized (the evidence supporting these results being limited within to one corpus), they give interesting leads for reflection and investigation about the articulation of means of communication and CMC tools used.

PVP occurring in chat sessions or in the forum		Strategy	Type	CMC tool
Written form	Chat	Use the lexical unity in an answer	Question or assertion	Forum or chat
Lexical units in English	Chat	Explain/correct Name the problem	Question	Chat
	Forum	Explain/correct Name the problem	Assertion	Forum
		Ask for an explanation	Question	Forum
Meaning: inadequate use of a lexical unity	Chat	Ask for an explanation	Question	Chat

Table 4. Effective support strategies for PVPs (corrections made in the guide) in the case study

#### 4. Perspectives

The results presented in this paper could be furthered by extending this study to another experiment, in order to compare results when another macro-task is proposed (with the use for example of other tools to include oral macro-tasks), as well as for the identification of other or recurrent PVPs. It would also be interesting to focus on specific problematic points to propose micro-tasks in order to solve those problems.

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