Supporting language students' interactions in Web-based conferencing

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Abstract
In this study we look at online tutor strategies for the support of students learning a second language with the help of a Web-based asynchronous textual conference. Our previous research has shown us that in such a conference environment, communicative activities can be mixed with reflective tasks, where students are encouraged to exchange reflections on the language being studied, and on their own learning experience. While we have found that such a mix can be beneficial for language learning, nevertheless there are further efforts to be made in persuading learners to integrate linguistic task completion with reflective work, in an interactive mode. Online tutors have an important role to play in furthering this aim, and in this study we look at the strategies used by three tutors who participated in a project with students of French at the Open University in 1998. First we propose a categorisation - according to message-type - of interactions found in the project's three conferences. Then we compare interactions in the three groups and, based on the pattern and content of tutor intervention, we distinguish between two main tutorial styles, which we associate with two different types of student behaviour, one more oriented towards communication, and the other more reflective. We conclude by suggesting ways in which tutors could support online learners in trying to integrate those learning approaches more closely.

Supporting language students' interactions in Web-based conferencing

1 Introduction
In this study we look at teacher strategies for the support of students using Web-based conferencing to learn a second language. Learners are encouraged to reflect in the target language (here, French) on language-learning, both privately and in interaction with their peers. Getting students to externalise their reflection is part of our methodology, but although previous research has shown us that a mix of reflective tasks and communication in a virtual group can be beneficial for language learning (Goodfellow & Lamy, 1998, Lamy & Goodfellow, 1999) nevertheless there are further efforts to be made in persuading learners to work more integratively with the separate components of the resource, involving less of the teacher-student dialogue variety of exchange and more sustained conversations, leading to autonomous peer-exchanges.

One of the keys to achieving this improvement is the redefinition of the role of the teacher in the online environment. We take our lead from approaches to teaching in Open and Distance Learning which favour facilitation rather than direction, attention to process rather than to outcome and gradual withdrawal of support as learners become more autonomous (e.g: Salmon , 1998). In this paper, we study the way in which three different teachers have approached this role. In order to do this, we analyse messages from the three conferences which they ran in a project that spanned a 10-week period in Spring 1998.

Firstly we propose a categorisation of conference interactions according to message type. We then compare interactions - thus categorised - across the three
groups and relate our findings to the three different approaches by the tutors, based on the pattern and content of tutor interventions on the conference forums. Finally we show that the tutors' strategies met with differing degrees of success but in conclusion we identify a way in which those strategies that were most effective could be brought together to maximise the learning.

2. Identification of reflection and interaction in the conference

Our work on the relationship between interaction and language acquisition in the context of computer-mediated communication has led us to the view that, used as part of an appropriately designed learning environment, asynchronous text-based computer-conferencing can promote the sort of learning that integrates both reflection and interaction (Lamy & Goodfellow, 1999). By reflection, we mean having a critical internal conversation about our own understanding of linguistic structures and the processes of our own language learning (Little 1997, Broady 1996). By interaction, we mean both: the processes of negotiation of meaning that are thought to facilitate language acquisition (comprehension of input, focus on form, modification of output etc. e.g: Chappelle 1997), and the range of ways of speaking that may take place between learners and teachers, through which their educational experience is constructed in a contingent manner (van Lier, 1996).

Talking together online about vocabulary and vocabulary learning is thus the integrated activity which we seek to bring about with our students and tutors.

In our conferencing data, we identified three types of messaging activity. One of these, we believe, is more likely to achieve this kind of integration, while the others are more likely to favour the development of the separate components. Using metaphors derived from ‘real’ oral contexts, we called them ‘monologues’ (where learners report their work and reflect but do not interact), ‘social conversations’ (where interaction is lively but is not about language and reflection tends not to be a priority), and ‘reflective conversations’ (where learners integrate general talk about French and language-learning, with more focused talk about vocabulary).

In what follows, we will illustrate what we mean by ‘monologue’ and by ‘reflective conversation’. In Figure 1 we see a message from a student who had been asked to decide which items of vocabulary he would like to work with during the first phase of the project.
Figure 1: a monologue

(French original)
Allo!!
[...] Ma liste pour premier travail. Il y a dix mots ou expressions que m'intéresse sur le texte Barbara. J'ai choisi: Ombre, Toucher, habillait, couleurs du deuil, abandonnant, pivoines, chiffonner, sa voix magique, dépistage.
Voil\' c'est tout.

(English translation)
Hi!!
[...] My list for the first task. There are 10 words or phrases which interest me in the text on Barbara. I have chosen Ombre, Toucher, habillait, couleurs du deuil, abandonnant, pivoines, chiffonner, sa voix magique, dépistage.
OK, that's all.

In this message, the learner simply reports and posts his selection for the whole group to see. He neither invites, nor receives replies. This contribution illustrates what we call a 'monologue'.

In contrast, Figure 2 shows an extract from a reflective conversation recorded over three days, in which student A-n shares with her group the thought processes that led her to the use of the project's concordander as a tool for learning. She ten calls for help, receives support from student M-j, and brings her own enquiry to a closure.
Le concordancer et le mot Enjeu.

Chers Grands Bavards. Je me suis promise de travailler davantage avec le concordancer et j'ai choisi un mot qui me rend toujours perplexe, le mot ENJEU. C'est un mot qu'on entend très souvent, mais la traduction du Collins Robert, STAKES, ne me semble jamais convenir. D'abord je l'ai cherché dans les dictionnaires monolingues[...]Peut être RISK est une meilleure traduction? Ensuite j'ai cherché enjeu dans le concordancer où j'ai trouvé huit entrées. Il n'y a qu'une entrée dont j'ai lu le texte. Quelquefois RISK me semble une bonne traduction, mais pas toujours et je ne peux pas trouver des autres idées, sauf CHALLENGE. [...]Finalement, j'ai rencontré le mot enjeu deux fois dans [a course book]. Pour le premier exemple, je pense que peut-être, 'challenge' soit mieux, et pour le deuxième exemple je ne peux pas trouver une bonne traduction.[...] Peut-être pour vous autres la signification de ce mot est claire et je serais très reconnaissante de recevoir vos idées, parce que je reste perplexe!

Amitiés A-n

Reponse à Anne le mot enjeu.

J'ai eu le même problème avec la traduction du mot enjeu. Je pense que, si le contexte ne donne pas un autre traduction, cela veut dire "issue".

Answer to Anne about the word ‘enjeu’

I have had the same problem with the translation of the word ‘enjeu’. I think that if the context does not point to a specific translation, it means ‘issue’.

[...] Merci de vos idées. Je commence à comprendre mais c'est difficile de trouver une bonne traduction anglaise.

Thanks for your ideas. I'm beginning to understand but it is difficult to find a good English translation.
In conversations such as this, learners are interacting at the socio-affective level, by exchanging the narratives of their learning experiences (A-n: “I am still puzzled”. M-j: “I have had the same problem”), and at the metalinguistic level (M-j: “if the context does not point to a specific translation”). The two learning goals - reflectiveness and interaction - are met, at least to some extent.

If tutors are to support the production by students of such reflective conversations, they need to know when to act as social facilitator, and when to stand back. Equally, they need to make sure that learners pay attention to the syllabus (in our case the vocabulary and lexical structures of French). To put it in the terms used by Kolb (1984, p 198), if the goal is to let the learner take charge according to his or her interests, then activities may vary from any prior schedule as a result of their needs. The teacher then has to relate to learners "on a personal basis and more often as a colleague than an authority" (i.e. be a social facilitator). However, if there is another goal, which is "to understand something; to be able to identify relationships between concepts, to be able to define problems for investigation, to be able to collect relevant information, to be able to research a question and the like", then this means that in class sessions there must be planned time spent on looking back at previous steps, events or decisions in order to guide the learner in future activities. It means in other words that an element of teacher control is present.

Thus the question of reconciling the two learning goals arises: how can tutors address in full the requirement to increase the reflective capacities of the learners whilst leaving them free to determine the agenda, and how can the learning be supported in these two different models where time is used almost incompatibly, with departures from schedule encouraged in the one and planned time structured into the other?

Within the context of these learning outcomes, we will dedicate the rest of this paper to looking inside the facilitation process. First we will give an account of the environment within which our learners and tutors were working. Then we will examine data from the three conferences. Finally we will draw associations between tutor actions online, and students' interactions.

3. The Lexica Online project

The online support experience which we are about to discuss is based on a project called Lexica Online, designed as an optional activity for home-based students already studying an Open University second level (higher intermediate) French course. This course was designed to provide them with an average of 14 hours’ work a week, so the additional online commitment could only be modest. Volunteers undertook to give a further 2 hours a week to the project though some spent much more than this ultimately. The participants were geographically scattered and most had not met physically before. The project ran without benefit of any face-to-face introductory session, so the technical and social inductions were online.
The aim of the project was to provide an opportunity for students to increase their vocabulary through the use of a stand-alone CALL program (specially developed for lexical work, see Goodfellow 1994a and 1998; also Ebbrell & Goodfellow, 1997) and of the World Wide Web. The project also aims to promote reflection on vocabulary and vocabulary-learning strategies through group discussion.

The study process is a cyclical one, involving both private study and public sharing within the group. Students select vocabulary according to their individual interests, from a variety of texts. They organise the lexical material that they have selected into groupings (of their own choosing) for deeper processing and easier memorisation. They make notes and test their recall of these vocabulary items. To help with those activities, they can use a bilingual electronic dictionary (the Collins-Robert French-English Dictionary) and a concordancer, and they are encouraged to download their favourite texts from the francophone Web for further lexical processing with the stand-alone software. Whilst this preparation takes place in private, the main collective focus of the project is an asynchronous Web-based electronic forum where at any stage of the cycle learners can report and discuss their work in online interactions with tutors and peers, in French.

Support is provided in various ways. To support access, we provide instructions, and a small database of lexical material for helping production. For example, generic instructions for working with the CALL program are given in a course Guide posted on the Web site. They cover the use of technology, and the rationale and procedures for task-completion. Reference materials are also posted on the site. For instance a dedicated glossary provides help with the French vocabulary which students need in order to discuss their Web-visits and handling of Lexica software, and another specially-compiled glossary provides help with French words and phrases related to ‘analysing’, ‘classifying’, ‘inferring’, ‘generalising’, ‘hypothesising’ and reflecting in general. Motivation and knowledge construction, on the other hand, are supported by the tutors. Tutors offer both active and reactive support. For example they take an active role in starting off conversations by posting task instructions, they initiate changes in the task schedule to ease pressure on students if necessary, and they offer group feedback at the end of each stage of in the project. But they also react to student initiatives by picking up on topics that emerge from student-student exchanges.

Students are also supported through the modelling of tasks themselves, and the mediation of these tasks by tutors. For example in a report of the pilot version of the project, we showed that several students had had difficulty understanding the purpose of Lexica’s word-grouping tool (Lamy and Goodfellow, 1999). The grouping tool is now no longer presented to students simply as one of a number of vocabulary-processing activities, but it is singled out for detailed guided work, as part of a ‘warm-up’ activity. To back up this guidance and cater for those students who prefer to learn by example, a demonstration is also provided: students may read a conversation about the grouping activity between three fictitious students (adapted from anonymised material from pilot participants,
shaded in Figure 3 below). Both the detailed guided task and the demonstration are posted to the forums by tutors in the first stage of the project, providing an early opportunity for students to ask for clarification. We return to this modelling strategy in our conclusion.
Ah, vous voilà, cher Grand Bavard. Je savais que votre curiosité serait piquée! Voici donc mon petit exemple:

L'an dernier, j'avais demandé à Peregrine (je change son nom pour protéger son anonymat!) de constituer un groupe à partir du texte 'Malheur en Bulles' sur la princesse Diana. Peregrine a créé son groupe, intitulé 'Comportements humains' puis il est venu sur le Forum et il a dit:

Peregrine's message
"For my 10 phrases, I have chosen: renifle; étouffer un sanglot; prélassait; amère; racoleur ressentiraient; incontournable; plaident; ineffable; failles."

Now, dear member of [group name]. Let's imagine three fictional students, Joël, Raymond et
Lavinia. Here are the sorts of messages they might send to Peregrine:

<table>
<thead>
<tr>
<th>Joël’s message:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Hi, Peregrine, I have the same list as you except for ‘ineffable’. In my list, I included ‘oppressée’ because I think that the meaning of that word is not the same as ‘oppressed’ and I want to learn about faux-amis.”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lavinia’s message:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Me too, Joël, I put in ‘ineffable’ because I don’t really understand its meaning in the article. My dictionary translates ineffable by ‘ineffable’!!! Really helpful!!! Has anybody got a better idea?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Raymond’s message:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hello, “In the text, I found the phrase ‘le malheur comme une sorte de bain moussant tiède’ and also ‘pencher la tête comme une Madone’. I have never come across these phrases before. Can anyone tell me whether they are common in French? Or were they invented by the author of Je n’ai jamais vu ces expressions. Quelqu’un peut me dire si elles sont courantes? Ou bien c’est une invention du journaliste qui a écrit ‘Malheur en bulles’?”</td>
</tr>
</tbody>
</table>

End of the example! The story doesn’t say what Peregrine – or the others - said next! Your turn now … See you soon on the forum.

In the next section, we analyse some of the interaction in the three tutor-group forums. We will then discuss findings relating specifically to the role of the teacher as member of the online learning community, and as subject expert.

4. Analysis of interaction

4.1 Relationship between exchange type on the forum and group success

Because of the requirement that learners should integrate interactivity with reflection, we define success in terms of both the number of messages and sustained threads, and the quality of reflection contained in them. Firstly, here are some quantitative indicators of success:

Students were divided into 3 groups, each group having a tutor and its own conference area where tutorial work was supposed to take place. There was also a ‘Café’ or plenary conference for general social interaction. In addition to the 3 tutors, there was a French-speaking moderator whose role was to deal with technical issues. There was an initial enrolment of 15 students per group. Figure 4 shows overall figures for the number of messages sent to the tutorial areas:

Figure 4: activity in the three forums of Lexica Online

<table>
<thead>
<tr>
<th>Active students</th>
<th>Student messages</th>
<th>Tutor/moderator messages</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 3</td>
<td>11</td>
<td>94</td>
<td>120</td>
</tr>
<tr>
<td>Group 2</td>
<td>6</td>
<td>27</td>
<td>43</td>
</tr>
<tr>
<td>Group 1</td>
<td>9</td>
<td>46</td>
<td>55</td>
</tr>
</tbody>
</table>
As far as the quantity of online activity is concerned, Group 3 is the most successful. It has retained the greatest number of participants and has produced the most messages: it has more than three times the number of contributions of Group 2, and more than twice that of Group 1. Approximately the same ratio also applies to the numbers of messages to each group from the tutor and the moderator. As the messages from tutors and moderator did not always fall neatly into our original categorisation (monologues, social conversations and reflective conversations), a further category was added called ‘class management’, in which we included organisational messages from tutors (or the moderator). In that category we also also included messages acting as ‘empty markers’, typically brief interventions from tutors saying something like: “Thank you for your latest message. I have downloaded it and will give it some thought. I will get back to you tomorrow”.

Group 1 had the smallest volume of class management (38% of all tutor messages). Group 2 was the least active group, and had the highest level of class management messages (58%). Group 3 - very active, very well attended - had the next highest level of those management messages (46.5%), many of which were ‘empty markers’. Tutor 3 promised to give lots of offline attention to messages and always re-appeared online on the appointed day with individual feedback. We speculate that this strategy must have kept group-members motivated to keep logging on. However, too much classroom management may have proved an obstacle to the creation of a group atmosphere in Group 2. Although we must point out that Group 2 also suffered from added problems due to Tutor 2’s initial technical difficulties and later - temporary - absence for family reasons, the lesser success of the group may be attributed in part to the management approach by the tutor. This interpretation is supported by findings from a formative experiment with a telematics classroom in Australia which showed that pupil talk (in the native language) increased from 36% to 45% as a result of teachers making it a policy to minimise ‘procedural talk’, i.e. classroom management (McLoughlin and Oliver, 1998).

In Figure 5 we show the breakdown of all message types for each of the tutorial conferences, according to the types: monologues, social conversations and reflective conversations. Percentages are expressed out of the total messages for each set of participants. For example in the top left cell, 3.3% shows the percentage of Group 3 Tutor & Moderator monologues, out of all Group 3 Tutor & Moderator messages.
Figure 5: types of exchanges in the three Lexica Online forums

<table>
<thead>
<tr>
<th></th>
<th>Monologues</th>
<th>Social Conversations</th>
<th>Reflective Conversations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1 (9 active students)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutor 2 &amp; moderator</td>
<td>1.8%</td>
<td>1.8%</td>
<td>58%</td>
</tr>
<tr>
<td>Students</td>
<td>36.9%</td>
<td>8.6%</td>
<td>54%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Monologues</th>
<th>Social Conversations</th>
<th>Reflective Conversations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 2 (6 active students)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutor 1 &amp; moderator</td>
<td>11.6%</td>
<td>0</td>
<td>30%</td>
</tr>
<tr>
<td>Students</td>
<td>48%</td>
<td>7.4%</td>
<td>30%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Monologues</th>
<th>Social Conversations</th>
<th>Reflective Conversations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 3 (11 active students)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tutor 3 &amp; moderator</td>
<td>3.3%</td>
<td>14%</td>
<td>36%</td>
</tr>
<tr>
<td>Students</td>
<td>32.9%</td>
<td>16%</td>
<td>51%</td>
</tr>
</tbody>
</table>

The tables show that social conversation levels are highest in Group 3, and lowest in Group 2. The level of reflective conversations is highest in Group 1 (note the amount of those in the tutor column). They are almost as high among the students of Group 3, with Group 2 not doing very well in this respect either.

Overall in Group 1, 63% of the total input (students and tutors, including ‘management messages’) was in the form of contributions to ‘conversations’, both reflective or social. The corresponding figure for Group 2 was 33%, and 67% in Group 3. On the basis of these levels of interaction, we look upon Group 3 as the most successful, Group 1 the next best group for volume of interaction, and Group 2 the 'least successful' of our three groups.

4.2 Characterisation of tutoring styles

Group characterisation leads us towards us a characterisation of tutor styles. Even bearing in mind that each tutor adopted a variety of strategies, overall we
see a set of issues around the greater success of Group 3 and the socially-based approach favoured by its tutor and student members. We will also ask ourselves questions about the more moderate success of the 'analytical' approach used by the tutor of Group 1.

In the next section, we will study Groups 3 and 1, and their tutors. For the sake of the description, we have labelled them respectively the 'social' and the 'cognitive' tutor, using the term 'cognitive' in the restricted sense of subject-knowledge-oriented. We will compare their two approaches and say how we think they impacted on group behaviour. For each of these two tutors, we will now look at:

- group induction
- type of tutor intervention
- student behaviour and quality of interaction

The social tutor: induction

Induction into the online work is an important part of the project. Technical induction (carried out by the moderator) had taken place two weeks before the start of the project proper. A general exchange of personal introductions and brief autobiographies had also taken place in the 'Café' or plenary area of the conference, the course designers' plan being for students to then 'move into' their assigned tutor group areas, where linguistic work and discussion could start.

Group 3's 'social' tutor did not entirely follow the policy, and socialisation continued in her tutorial area. Students were talking to students, as is shown in Figure 6 (message 72 onwards). Message headers show that they are exchanging greetings, and 'making small talk', with chat ranging over topics like Indian cooking, salmon fishing in Scotland, water-colours and what they did at the weekend. Only 3 (out of the 11) students are engaging at this point, but socialisation continues after the 20th May, with further students coming online.
By allowing the process of socialisation to continue throughout the project, the tutor enabled the members of Group 3 to become thoroughly acquainted with each other. She contributed from time to time, keeping her input personal and friendly, as we shall see in the next section.

The social tutor: type of intervention

Earlier we observed that 14% of this tutor's contributions to the tutorial conference were in the context of social conversations (Figure 5), but she also incorporated social elements into more learning-oriented messages, for example:

Figure 7: 'socio-affective' contributions (in bold) from the 'social' tutor

Message 1 (French original)

Salut R-g - vous nous avez manqué! Merci de ce message fascinant sur l'apprentissage des enfants à l'âge de 2-4 ans. L'histoire de votre ami est étonnante, n'est-ce pas? En lisant votre message, je pensais aussi aux gens qui trouvent qu'ils ont le don de parler des langues inconnues, par exemple quand ils sont hypnotisés ou gravement malades. Est-ce que vous en avez une explication?

(English translation)

Hi, R-g - we've missed you! Thank you for this fascinating message on how children of 2 to 4 years old learn (languages). The story of your friend is really extraordinary, isn’t it? Reading your message, I was also thinking about people who discover that they are capable of speaking an unknown language when they are under hypnosis or gravely ill. Do you have an explanation for this kind of thing?
Message 2 (French original)
Malheureusement (de ce point de vue, au moins!) je n'ai pas d'enfants, alors je n'ai jamais eu l'occasion d'observer le développement linguistique des enfants. Ce que vous racontez est très intéressant, mais je crois que l'apprentissage d'une langue étrangère par un adulte est autre chose. Personnellement, j'apprends souvent le vocabulaire sans m'en rendre compte, en écoutant la radio française. Là, la gamme des registres etc est beaucoup plus étendue! Mais quand j'ai commencé à écouter RTL, à l'âge de treize-quatorze ans, j'écoutais toujours les mêmes programmes, pour m'habituer aux mêmes mots. [...] J'attends la réponse de nos camarades à vos observations.

(English translation)
What a fascinating story, A-c, thank you. Unfortunately (at least from that point of view) I have no children so I have never had an opportunity to observe the linguistic development of children. What you have said is very interesting but I think that adults learning a foreign language is something quite different. Personally, I often learn vocabulary without even noticing that I am doing so, by listening to a French radio station. There, the range of different styles is very much broader! But when I started listening to RTL, aged 13-14, I used to always listen to the same programmes, in order to get used to the same types of words. [...] I look forward to our friends' responses to your observations.

The 'social' tutor refers to people and to their experiences, brings in examples from her own life, and is inclusive of her other students as well as addressing her individual student directly. Her online world is characterised by an abundance of personal relationships.

The 'social' tutor: quantity and quality of interaction
In the 'social' tutor’s group, interaction is characterised by sustained conversations, as shown in the two examples in Figure 8. This first one has 13 conversational turns (with 4 students involved, over 22 days), the second has 17 turns and 5 students over 9 days and each runs through a single topic.

Figure 8: two self-sustaining conversations in group 3

Conversation 1: students take up an idea for an open-ended debate

#73 APPRENTISSAGE DU VOCABULAIRE 7/5/98, P-m MODERATOR
#75 Que c'est difficile! 8/5/98, A-n STUDENT 1
#86 D'autres messages à retrouver 3/6/98, J-w TUTOR
#95 réflexions sur l’apprentissage des mots.. 13/5, A.-d STUDENT 5
#101 L’apprentissage des enfants 13/5/98, J-w TUTOR
#102 Autres réflexions sur l’apprentissage des mots 14/5, A-n STUDENT 1
#137 apprendre une nouvelle langue 27/5/98, C STUDENT 6
#131 L’apprentissage des langues 23/5/98, R-g STUDENT 2
#133 L’apprentissage, suite 23/5/98, J-w TUTOR
#138 l’apprentissage des langues 27/5/98, C STUDENT 6
#141 Encore l’apprentissage. 29/5/98, R-g STUDENT 2
#143 Ne soyez pas déprimé! 29/5/98, P-m MODERATOR
#145 Bravo R 29/5/98, J-w TUTOR
The content of those conversations is focused on language: the 13-turn thread is a general debate about how we learn vocabulary, and the 17-turn thread is an evaluation of the Lexica project itself, launched by a student and taken up by four others. This online behaviour is therefore getting close to that which we have been seeking to promote. It is interactive, sustained, student-centered and focused on language. We may well feel that it is a great achievement for learners to be narrating the story of their own language-learning experiences, and reviewing critically not only the tasks which we have constructed, but also the environment which we have provided for them and even the level of engagement of their peers and teachers, all of this in French. However, development of these general critical skills is not the only aim that Lexica Online set out to achieve. As is made clear to learners in the project Guide, we are interested in persuading them to approach vocabulary not merely as a shopping list of items to remember, but rather to focus their attention on the structures and links that can be established between elements of the lexicon, so that the load is not on their memories but on their inductive and deductive powers. Despite the level of interaction here, therefore, we did not find much evidence of these learners rising to the challenge of the project's syllabus: that of reflecting on linguistic forms and vocabulary structures.

In contrast, the tutor of Group 1 dedicated many of her interventions to the pursuance of the more formal teaching objectives, as the next section will show.

The 'cognitive' tutor: induction into the tutor group

The conversations in Figure 9 below took place in Group 1 during the same period of time as those in Group 3, the 'social tutor's' group. There are only 10 exchanges in this group, as opposed to 18 in Group 3. Although four students participated during this phase, whereas only three took part in the induction of
Group 3, the maximum length of a learner-learner thread is two turns here, as opposed to seven in the more 'social' group.

Figure 9: early exchanges in the cognitive tutor's group

This teacher takes it for granted that personal introductions made at an earlier stage in the 'Café' area are sufficient by way of social induction. Her approach to the beginnings of the Group 1 forum discussion is work-oriented and not socially based. Message headers indicate this. From the second message onwards, the topics are "travail" (work), "coup d’essai" (first attempt), "indice" (clue), "liste" (wordlist), and "comportements humains" (human behaviour - the semantic field being studied as part of the prescribed task).

The cognitive tutor: quantity of student interaction

Conversations in Group 1 are different in terms of duration and content from those which we have just examined. Typical of these conversations are the threads illustrated in Figure 10.

Figure 10: two form-focused reflective dialogues in the cognitive tutor's group

The brevity of the threads and the pattern of exchange - with only two student responses triggered by the tutor's intervention in each case - shows that this group has a more conventionally dialogic way of interacting than their peers in Group 3. Message headers show that the topics are more focused on the project
The participants are talking about research ("recherche"), about lexical tools ("le concordancier"), and about French morphology (the prefix 'dic-').

The cognitive tutor: type of intervention and quality of student interaction

Figure 11 shows the way in which the cognitive tutor chose to pick up on a learner statement about how difficult she found it to work out the meaning of the (admittedly rare) French word ‘dicible’, within the (even more rarefied) context "au-delà du dicible".

Figure 11: the cognitive tutor’s approach

(French original)

Pensées sur le travail de C-met d'E-h
Merci, vous deux, car avec de courts messages, vous avez posé des questions importantes. D'abord, prenons le problème des informations qui ne sont pas dans le dictionnaire. Dicible n'y est pas. [...] . Mais réfléchissons: nous avons tous dans la tête des connaissances qui peuvent nous servir. Par exemple: DICible est de la famille de DICtée, DICtion, et même bénéDICité. Quel est le sens qui est en commun à tous ces mots? Pouvons-nous par conséquent déduire le sens de: au-delà du dicible? QUI VA REPONDRE? [...] 

(English translation)

Thoughts on the work of C-m and E-h
Thank you to both of you, because, in your short messages, you have asked important questions. First, let’s take the problem of when the dictionary just doesn’t have the information you’re looking for. ‘Dicible’ isn’t in there. But let’s think: we all have at the back of our minds some knowledge which can help us. For example ‘DICible’ [expressible] is related to ‘DICtée’ [dictation], DICtion [diction] and even bénéDICité [beneDICtion, blessing]. What is the meaning that all these words have in common? WHO WILL ANSWER? [...] 

The message is a good example of a cognitive issue being tackled: how to use existing knowledge to make sense of new vocabulary. The teacher attempted to deal with the (commonly experienced) learner frustration at not finding words in dictionaries, by raising the learners’ awareness of the structural and combinatory properties of the lexical items under scrutiny. Also, she chose, as triggers for students’ reflection, French examples which had English cognates and as such were unlikely to give the students a further processing difficulty. The message also shows the beginnings of a ‘modelling’ approach in which the tutor demonstrates the kind of thinking and discussion that is wanted. In this case it is confined to the topic of the discussion (the root ‘DIC’). However, the tutor could have gone further by inviting the other students to submit their own ‘not-found’ items, and asking them to work out a coping strategy collectively.

The cognitive tutor: quality of the interaction

Nevertheless, the thread did yield an interesting result. In Figure 12 we look ‘inside’ the second of the two threads shown earlier, and see what quality of learner-tutor-learner interchange occurred. Messages are shown in chronological order of posting.
Figure 12: a sequence with a reflective outcome

<table>
<thead>
<tr>
<th>Message 24: a learner sets off the enquiry and makes an erroneous hypothesis</th>
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<tbody>
<tr>
<td><strong>(French original)</strong></td>
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<tr>
<td>[...] je n’ai aucune d'idée ce qui veut dire 'dicible'. Peut-être la phrase 'au-delà du dicible' veut dire 'the back of beyond'?</td>
</tr>
<tr>
<td><strong>Amitiés</strong></td>
</tr>
<tr>
<td><strong>(English translation)</strong></td>
</tr>
<tr>
<td>[...] I have no idea what ‘dicible’ means. Maybe the phrase ‘au-delà du dicible’ means ‘the back of beyond’?</td>
</tr>
<tr>
<td>Greetings</td>
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<tr>
<th>Message 29: solidarity but no help from a second learner</th>
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</thead>
<tbody>
<tr>
<td><strong>(French original)</strong></td>
</tr>
<tr>
<td>Il y a toute une gamme des choses d'intérêt pour moi parmi votre coup d'essai. [...] Je n'ai trouvé pas &quot;dicible&quot;, mais j'aime la traduction &quot;the back of beyond&quot;</td>
</tr>
<tr>
<td><strong>A bientôt</strong></td>
</tr>
<tr>
<td><strong>(English translation)</strong></td>
</tr>
<tr>
<td>There is a range of interesting things as far as I'm concerned in your 'first attempt' . [...] I couldn't find 'dicible', but I like the translation &quot;the back of beyond&quot;.</td>
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<tr>
<td>See you soon</td>
</tr>
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<tr>
<th>Message 30: tutor's response sent on 10/5 (see Figure 11)</th>
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<tbody>
<tr>
<td><strong>(French original)</strong></td>
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<tr>
<td>Bien entendu! 'DIC' veut dire 'speak' (du latin, si je m'en souviens), mais 'speakable'??!! Donc, je pense que peut-être la phrase 'elle aimait la solitude au-delà du dicible' veut dire 'she loved solitude more than words can say'. Est-ce que j'ai raison?</td>
</tr>
<tr>
<td><strong>(English translation)</strong></td>
</tr>
<tr>
<td>Of course! 'DIC' means 'speak' (from Latin if I remember right), but ‘speakable’??!! So I think that maybe the phrase ‘elle aimait la solitude au-delà du dicible’ means 'she loved solitude more than words can say'.</td>
</tr>
<tr>
<td>Am I right?</td>
</tr>
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<tr>
<th>Message 37: a further contribution from the second learner, sent on 12/5</th>
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<tbody>
<tr>
<td><strong>(French original)</strong></td>
</tr>
<tr>
<td>Moi aussi C-m! Je suis d'accord. Enfin, un éclair de génie ('flash of inspiration', je l'ai trouvé dans le CD).J'ai cherché les exemples de la famille DIC, et en commun est le sens de &quot;parler&quot; ou &quot;parler à quelqu'un&quot;. Bien, &quot;au delà du dicible&quot; devient &quot;beyond saying, or</td>
</tr>
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</table>
more than could be said", afin de dire que Barbara vécût la campagne parce qu'elle aimait la solitude plus qu'on va dire.

(English translation)
Me too, C-m! I agree.

At last, a flash of inspiration (I found that phrase in the CD). I looked for examples of the DIC word family, and in common they have the meaning of “speak” or “talk to someone”. OK, so then "au-delà du dicible” becomes “beyond saying, or more than could be said”, to mean that Barbara lived in the countryside because she loved being alone more than we will be able to say.

We see from this reflective conversation that after the tutor intervened, both learners are able to carry out (and publish) strategies for resolving their original problem. One has tapped into her previous knowledge and uses deduction to make the connection between old and new knowledge. The second learner has improved his technique for using the tool (in all likelihood the electronic dictionary). As a result, both have reached a much better understanding of the French phrase than they had at first. The cognitive tutor’s approach has, we believe, been instrumental in bringing this learning about. What we have here are two parallel itineraries within a supportive peer relationship (at least on the part of the second learner).

5. Conclusion

We have shown that three CMC-based language learning groups working to the same brief fared differently depending on the approach taken by their teachers to online support. In particular, having identified two specific tutorial approaches, one which places greater emphasis on the socio-affective needs of the students (social tutor) and the other giving a higher priority to students’ reflection on syllabus content (cognitive tutor), we have found that the social tutor’s approach is associated with one of the outcomes which we have been seeking to promote, i.e. learner-learner interaction, and that the cognitive tutor’s style fosters the other desired outcome, i.e. the raising of subject knowledge. However, full integration of the two types of outcomes was not successfully achieved: the more socially-cohesive group produced less by way of form-focused language discussion, and the members of the more controlled group were less able to take over the interaction and create autonomous peer exchanges.

Modelling may be one answer to the problem of marrying the styles of the cognitive and the social tutor, in order to find the right balance between strategies producing different but equally desirable outcomes. By this we mean modelling tutoring strategies for the benefit of teachers, as well as encouraging the teachers to model styles of participation for the benefit of students. In the project described here we have addressed the latter. We have tried two modelling strategies: one involving direct instruction (e.g.: a guided rehearsal) for ensuring a better understanding of the linguistic task to be carried out, and another using demonstration (e.g.: a case study) for showing learners the type of interaction we were after. We know, through a comparison with an earlier project (which did not have the benefit of guided task rehearsal) that the guided rehearsal strategy was effective. We believe that the case study was helpful but in our future work we need to monitor student response to it more closely.
The centrality of interactive reflection for our pedagogical design is prompting us to look further into the nature of learner reflection itself (Goodfellow, Manning & Lamy, forthcoming). Questions for further research include: in what ways (direct instruction, demonstration, other techniques) can we model reflective interaction, how can we measure the respective benefits of different modelling strategies, and how can we train online tutors to adapt their support styles in order to accommodate them?

References:


Goodfellow, R., Manning, P. and Lamy, M-N. (forthcoming) “Building an Online Open and Distance Language Learning Environment”. In R. Debski and M. Levy (Eds.) *WorldCALL: Themes for the New Millenium*, Swets and Zeitlinger


McLoughlin, C. and Oliver, R. (1998) "Planning a telelearning environment to foster higher-order thinking". Distance Education, Volume 19, Number 2, p 258.

