Supporting oral production for professional purposes in synchronous communication with heterogeneous learners

Anna Vetter, Thierry Chanier

To cite this version:

Anna Vetter, Thierry Chanier. Supporting oral production for professional purposes in synchronous communication with heterogeneous learners. ReCALL, Cambridge University Press (CUP), 2006, 18 (1), pp.5-23. edutice-00080316

HAL Id: edutice-00080316
https://edutice.archives-ouvertes.fr/edutice-00080316
Submitted on 15 Jun 2006

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
Supporting oral production for professional purposes in synchronous communication with heterogeneous learners


Anna Vetter, Thierry Chanier

LASELDI, Université de Franche-Comté
30 rue Mégevand
25030 Besançon Cedex, France
{anna.vetter, thierry.chanier}@univ-fcomte.fr

Abstract: during the last decade, most research studies analysed online synchronous interactions in written mode (textchat), highlighting the benefits of chatting for the development of learners' oral proficiency. The environment used in our experiment is multimodal and based on a synchronous audio conference. Analyzing interactions in such an environment is rather new in CALL. This study is related to false-beginners in an ESP course, presenting a high degree of heterogeneity in their proficiency levels. We use two approaches. One is quantitative and involve learners' participation in audio and textchat. The other is qualitative and relates to the complexity of professional discourse. First, we provide a method that accurately measures oral participation in the two modes. In this framework, we report that heterogeneous linguistic levels do not constrain learners' oral participation, outlining the equalizing role played in this instance by the textchat. Moreover, this type of environment supports oral production by false-beginners who have over a period of years become unaccustomed to learning and speaking in a foreign language, and leads them to regain self-confidence. The qualitative part of our study shows that false-beginners can cope with professional conversations at different levels of complexity.

Key words: audio-graphic conferencing, participation, quality of professional discourse, multimodality, ESP, heterogeneity.
1. Introduction

Research into synchronous interactions in language learning has demonstrated that learners' oral participation benefits from being involved in written synchronous conversations. Indeed, it is now accepted that chatting may improve learners' oral proficiency (Payne & Whitney 2002). During the last decade, a large number of studies have compared online and face-to-face participation. Ortega (Ortega 1997) reminds us that they have produced two important conclusions:

- learners in textchat (chat, for short) participate more than in face-to-face (Kern 1995);
- participation is best shared between learners (equalization, Warschauer 1996)

Others studies have also claimed that learners produce more complex structures in such conversations (Kitade 2000). However, Thorne and Payne observe that these outcomes are only related to chat mode (Thorne & Payne 2005). The experiment presented within the framework of the CoPéAS project which we report here shows original features in that the multimodal environment we used combines both audio and chat. Our study took place within a course in English For Specific Purposes (ESP) for professional Masters' students¹ who present a strong heterogeneity of L2 proficiency levels. This paper analyses two fields: one quantitative learners' participation in audio and chat, and one qualitative, the complexity of professional discourse.

Heterogeneity among groups of learners in Language For Specific Purposes (LSP) is well-known (Lehmann 1993). Furthermore, learners on vocational Masters are traditionally heterogeneous because this diploma brings together students in Initial Training and others from Continuous Professional Development. This heterogeneity may be recognized as a pedagogic asset, but more often, it is problematical, particularly when splitting the group into proficiency-related subgroups. This is a common constraint in LSP courses and some studies report cases in which mixed level groups had good rates of participation when they combined intermediate with advanced learners (Gatehouse 2001). But a minimum level of proficiency is required from learners in order to participate and this is the reason why mixed groups including beginners are not recommended (Yogman & Kaylani 1996). Can near-beginners, who over the years have lost the facility of learning and speaking in a foreign language, regain self-confidence by communicating in a multimodal environment? Comparing face-to-face and chat discussions, Warschauer defines the equalizing effect as a more balanced participation between speakers. While he claims that the equalizing effect on participation in chat is caused by the absence of oral interactions, this study aims to verify whether the benefit claimed for chat is still available in an environment that combines audio and chat, knowing that with audio, learners encounter the same risks with speech as in face-to-face. We will present the outcomes of learners' oral participation, focusing primarily on the false beginner's group in order to check whether a low linguistic level is a disadvantage in this type of environment. As this question deals with quantifying learners' participation and production, we also considered how to assess audio speeches. In fact, previous research (e.g. Kitade and Thorne et al op. cit.) only focused on written chat interactions, so we considered whether both audio and chat contribute to make learners participate equally and whether the combination of audio and chat sustains their oral productivity.

The other part of our study focuses on the professional dimension of oral communication between learners. Today, in LSP, we seek to assess linguistic abilities in finalized speech acts (Springer 1999). As far as false-beginners are concerned, we consider whether these learners manage to produce professional interactions and how they use multimodal tools to make these

¹ A taught 2-year postgraduate degree.
interactions effective. We will suggest the concept of 'notional conversation', based on Bloom's taxonomy (Bloom 1956) in order to identify finalized speech acts and also to appreciate the quality of the professional utterances produced (basic and high level of complexity). Moreover, we will pay attention to the role played by learners during the interaction. In this respect too, the question will be whether a particular level of L2 proficiency is a fundamental prerequisite for the production of high level professional conversations.

For both of these fields (participation and quality of professional discourse), we will highlight the effects of multimodality on the results that we have obtained, in particular discussing the use of text (chat and word-processing) in the development of spoken interactions.

2. Presentation of the research experiment

The CoPéAS project has been described in detail in (Chanier & al. 2006). We only present here those elements which are relevant to our subject: the context and the aims of this ESP course, the multimodal environment and the main heterogeneous characteristics noticed among the learners.

2.1 Context

During their training, French Masters degree students must follow a 20 hours course in a foreign language. Generally, this course is based on face-to-face activities, but for the year 2004-2005, it was provided at distance during ten weeks. This ESP course was designed as part of a research project (CoPéAS) involving both the Université de Franche-Comté (France) and The Open University (UK), for 14 students in the field of Science of Education in Distance Learning.

2.2 Aims of the ESP course

The course aimed not so much at actual linguistic improvement during these 20 hours, as at exposing learners to the target language with native tutors in order to allow each of them to find his/her own place in oral communication in English. For the less proficient learners, this also meant finding their way back into learning a foreign language, as some of them had not done so for a long time. The syllabus has two broad aims: one linguistic and one professional. The first is to give learners an opportunity to speak in English about different notions they already know in French. The professional objective is to enable learners to develop the oral skills necessary for working with foreign partners. Moreover, students practiced using a synchronous environment which is characteristic of their professional area.

Before starting the course, learners self evaluated their English skills, using the Common European Framework of Reference for languages (CEF). The outcomes showed a high degree of heterogeneity in their levels, which led us to split the students into two groups, false-beginners (group T) and intermediate-advanced (group R). This lessened but did not remove heterogeneity within the groups. Each group was taught by a tutor proficient in designing pedagogic materials for online distance learning. Tutors and learners met in the audio synchronous environment for eight sessions (1h to 1h30 each session). Learners joined the course from home and used their own computer and connection. In addition, learners used an asynchronous learning management system in order to consult instructions and publish individual pieces of written work.

2.3 Lyceum environment

Lyceum is a synchronous audio conferencing system developed at The Open University that is currently used for language learning (Lamy 2004). Its structure uses an architectural metaphor representing a building with four floors. Each floor contains rooms (fig.1, 1) in which tutors can organize simultaneous small-group sessions (Vetter 2004). In addition to its main audio...
conferencing function, this environment includes communication tools and shared editing tools that sustain, regulate and diversify interactions in audio:

- communication tools: audio, chat, and vote tool (semiotic system) (fig.1, 2);
- shared editing tools: word processor, whiteboard and concept map (fig.1, 3).

Lyceum can be termed a multimodal environment in that sense that it allows different modes of communication (text, speech, graphics…). To each mode correspond different modalities. For example in this paper, we will pay special attention to audio modality (speech mode), chat and word processor modalities (text mode).

2.4 Learners' heterogeneity

Learners' heterogeneity appears at various levels: age (from 23 to 52) and length of professional experience. Moreover, the linguistic biography of learners shows numerous differences in the practice of the target language. Indeed, some learners had given up English since secondary school, while others had continued learning it at university. Consequently, a wide range of situations may be observed: from students who have not practiced the target language for years (15 to 30 years) to those who are foreign language teachers, fluent in two or three languages. But the heterogeneity in their language levels is still the most striking feature.

Learners completed a self assessment questionnaire about their English skills before and after the course. This self evaluation, based on the CEF for languages distinguishes between three levels of skill: A (elementary), B (independent) and C (expert). This evaluation covers such linguistic and communicative skills as listening, spoken interactions and spoken production. The
assessment was comprised of 10 questions per level for which the students were asked to choose between 3 possibilities: a) I can do it easily, b) I can do it but not easily, c) I can't do it. The students didn't know the outcomes of the first test until after they took the second one. We should also say that no external measures of their competencies were available to confirm or refute these self-reports. So both of these evaluations may be considered as estimations of the learners' level.

The false-beginners' group presents more heterogeneity in linguistic level than the other group. The data confirm that this group is most in danger according to Yogman & Kaylani; and we could expect a very low participation from false-beginners.

3. Heterogeneity and oral participation

Until now, research in CALL did not have exact data to assess audio participation in a multimodal environment. The methodology of data processing adopted here enables us to present accurate data throughout the course. First we will present global participation data for the two groups, aiming at establishing a few hypotheses about audio and chat relationships. We will consider if an increase in oral participation can be observed over the sessions. Next we will compare participation rates for sessions that include collaborative activities. Finally, we will analyze individual data comparing audio and chat production in order to see to what extent the combination of these modalities helps equalize participation.

3.1 Measuring oral participation

Throughout the 8 sessions, we recorded audio and captured screen video, and we transcribed the entire contents of the audio recordings and the saved chat files. The conventions of transcription we have applied (table 1) highlight:

- audio turns numbered (tpa);
- start time of each turn (hours);
- actors' name coded (learner, tutor or silence noted 'sil');
- audio transcript (code switching from English to French are in brackets; rising intonation is indicated by the sign |) and time of pauses in seconds (+);
- comments about what is seen on the screen and in shared tools².

² It would be useful for the reader to keep fig.1 in mind to visualize the setting of the different actions transcribed in this chapter.
Table 1: example of transcription (session 6, false beginners)

<table>
<thead>
<tr>
<th>Id</th>
<th>Hours</th>
<th>Actor</th>
<th>Audio</th>
<th>Chat</th>
</tr>
</thead>
<tbody>
<tr>
<td>tpa49</td>
<td>0:13:17</td>
<td>sil</td>
<td>71</td>
<td>you have something on <a href="http://iteslj.org/">http://iteslj.org/</a></td>
</tr>
<tr>
<td>tpc11</td>
<td>0:13:39</td>
<td>AT2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tpa50</td>
<td>0:14:28</td>
<td>AT2</td>
<td></td>
<td>euh I think on euh the ++ the links that I put on the chat you have euh you can find courses and exercises and that's not some euh links to other website</td>
</tr>
<tr>
<td>tpc12</td>
<td>0:14:36</td>
<td>AT6</td>
<td>ok</td>
<td></td>
</tr>
<tr>
<td>tpa51</td>
<td>0:14:48</td>
<td>sil</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>tpa52</td>
<td>0:14:58</td>
<td>TutT</td>
<td></td>
<td>I don’t understand ++ can you explain that a bit</td>
</tr>
</tbody>
</table>

For audio, we quantified turn-taking time (tpa) for each subject as well as the number of turns taken (turn, for short). Silences between turns were accounted for as well. If they were of up to 3 seconds, they were considered as pauses (+) to be part of the audio turn. If they were longer, they were accounted for separately (noted ‘sil’ in Table 1). Owing to this method, we are certain that when a learner is attributed the figure 3.45 (for example), this means 3 minutes 45 of actual speech. Our data processing method also enables us to give the exact time for individual audio participation during the course as we will see in 3.3.1, as well as individual audio participation per session.

In audio, French was seldom used by the learners. The same is true for the chat: less than 2% of the total number of words in the false-beginners group were in French and around 7% for the others. To measure participation in chat, we counted the number of turns (tpc) as well as the number of words in each turn.

3.2 Global participation outcomes

3.2.1 Participation rates in audio and chat

As displayed in tables 1 and 2, for all subjects (learners and tutors), global working time over the 8 sessions amounts to 12h33 in the group T, including 5h35 of silences and 6h58 of audio conversation. Audio conversation time is 8h02 for the group R. For both audio and chat, we distinguish between learners’ data and tutors’ data.

<table>
<thead>
<tr>
<th>AUDIO</th>
<th>Learners</th>
<th>Tutors</th>
<th>Silences</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Audio (in hours)</td>
<td>Turns</td>
<td>Average (in sec. per turn)</td>
<td>Audio</td>
</tr>
<tr>
<td>False-beginners (group T)</td>
<td>3h36</td>
<td>1582</td>
<td>8.2s</td>
<td>3h22</td>
</tr>
<tr>
<td>Intermediate-advanced (group R)</td>
<td>5h23</td>
<td>2246</td>
<td>11.3s</td>
<td>2h39</td>
</tr>
</tbody>
</table>

Table 2: global participation rates in audio

---

3 t(our de) p(arole) a(udio).
4 t(our de) p(arole) c(hat).
### Table 3: global participation rates in the chat

<table>
<thead>
<tr>
<th></th>
<th>Chat (number of words)</th>
<th>Turns</th>
<th>Average (in words per turn)</th>
<th>Chat (number of words)</th>
<th>Turns</th>
<th>Average (in words per turn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>False-beginners (group T)</td>
<td>2344</td>
<td>659</td>
<td>3.6</td>
<td>1193</td>
<td>222</td>
<td>5.4</td>
</tr>
<tr>
<td>Intermediate-advanced (group R)</td>
<td>1295</td>
<td>448</td>
<td>2.8</td>
<td>490</td>
<td>200</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Learners from group T have a total audio of 3h36mn over the eight sessions, which represents one third less than group R. This gap is confirmed by the comparison of the number of turns in the two groups. According to the number of turns, the average for false-beginners is 8.2 seconds of audio production per turn against 11.3 seconds for the others. Nevertheless, group T uses the chat nearly twice as much as group R. In addition, group T produces a higher average number of words per chat turn. This suggests that the chat provides a significant support for conversation for false-beginners and perhaps even an alternative to spoken interaction in the audio-conference.

Length of time spent speaking can be gauged by looking at these figures for AT3, a false beginner who had not practiced speaking English for 30 years. AT3 produced 44 minutes of continuous speech (that is without silences), for a total of 292 audio turns, that is between 20 and 70 turns per session.

### 3.2.2 Development of learners' oral participation (audio and chat)

We compared participation rates in the two groups between the first and last session, to ascertain whether learners' oral participation rates increased or not.

The following figures show the development of audio participation rates for each group. Circles indicate that three learners were absent from these sessions. It is also relevant to point out that these sessions did not go on for as long as the others: this may explain the fall of the cumulative participation observed.

**Figure 3: evolution of cumulative audio time per session (h:mn)**

Learners' audio participation increases significantly, albeit irregularly, in both groups. In group T, it increases three-fold between the first and the last sessions, ultimately reaching a time close to that of group R at the outset of the course: that is around 40 minutes.
The curves of participation in the chat reveal a very different behaviour in the two groups. Group T seems to find its rhythm starting from the third session and this confirms the assumption that chat may support the audio speech. Indeed, between the third and the last session, the participation rate in chat follows the rate of audio participation, in terms of both increases and falls. In group R, the weak index of participation in the chat reveals that this tool is not directly linked to the audio.

As the course relied on collaborative activities being achieved in sub-groups, we examined whether the sessions including such activities, coincided with a high rate of participation. Actually, for group T, these sessions (5, 7 and 8) coincided with the highest rates of participation in audio: 37mn, 28mn and 43mn. Sessions 5 and 7 also coincided with the highest rates of participation in the chat (106 and 97 contributions). At the same time, it is interesting to see that these sessions matched the lowest rates of speech from the tutor (22mn, 18mn and 17mn). For group R, these sessions (1, 5, 6 and 8) matched the two peaks of audio participation (1h04 and 57mn) whereas the two others are situated in the area of average of audio participation for this group (38mn and 31mn).

### 3.3 Distribution of participation between audio and chat per learner

In this chapter we present the data related to individual participation in audio and in the chat for each group. We will discuss these data first comparing them to the learners’ position by level and secondly considering the highest rates of participation of learners in audio and chat. In addition, we must point out that synchronous sessions proceeded in good technical conditions, so the chat has not been used as a substitute for audio after a breakdown.

#### 3.3.1 Learners’ ranking: audio and chat (false-beginners)

When we related proficiency levels rankings (fig.2) to individual participation rates, we obtained some surprising results.
Admittedly, it seems logical that the learner AT1 who was in first position on the elementary level (CEF, fig.2) is the one who speaks for the longest time: 24% of total amount of time (fig. 5a). But we also observe that learners who had a low proficiency level (AT3 and AT5) are among those who spoke most often in audio (8%). On the other hand, learner AT4, who was in third position on the elementary level, is the one who speaks the least in audio. So there is no apparent correlation between perceived linguistic level and degree of audio participation.

Comparing audio participation to that in chat (fig. 5b), we observe a clear inversion in the distribution of oral production per learner. In audio, three students speak more than 20%. But the rate observed in the chat makes up for this disparity. Indeed, learners AT1, AT3 and AT5 who spoke more in audio are those who used the chat less. Conversely, learners AT2 and AT6 chatted half as much as the three most voluble speakers, but together AT2 and AT6 account for over 60% of the volume of chat interactions. These values show that the chat was used as a support or as a substitute for learners who were less ready to speak in audio. So, the chat takes up a function of regulation (equalization) by rebalancing the gaps observed in the distribution of speech in audio.

3.3.2 Learners' ranking: audio and chat (intermediate-advanced)

In this group, apart from learners AR3 and AR2 who were present all the time, each of the others was absent once over the eight sessions. Compared with group T, group R has a more homogeneous distribution of oral participation. However, we find the same important participation from learners who were positioned on lowest linguistic scores. This phenomenon is however less spectacular than in the false-beginners' group, where the disparity of linguistic levels is more significant.

The inversion between audio and chat is effective only for AR4 who spoke less in the audio and more in the chat. Thus, the link between audio and chat is less relevant in this group according to the phenomenon of equalization. This can be explained by the linguistic level of learners which enables them to speak more easily in audio.

3.4 Discussion and explanations

Quantitative aspects of our study enable us to claim that neither the heterogeneity of linguistic levels nor learners' linguistic experience (linguistic biography) affects their oral participation in the context of a distance course in a multimodal environment. For the intermediate-advanced group, this assertion is not new but confirms what other studies already concluded about heterogeneous groups at level B. On the contrary, the data we extracted for the false-beginners group are surprising. It was indeed noticed that false beginner participation rates were evenly spread across both the audio and the chat. Consequently, we observe an equalizing effect of participation in an environment which combines the two modalities, as far as one
modality compensate for the other. The length of time in non-practice of target language was another key fact that strongly characterized the heterogeneity of this group. A consequence of the equalization above was the flattening out of any observable differences between those who had not had contact with English for two decades or more, and those with recent contact.

Moreover, we noticed that the choice of audio or chat is not systematically related to linguistic level. In fact, linguistic level is not the only explanation for the participation displayed by the two students who most used the chat. This mode may indeed have provided an alternative to spoken production and an audio support for AT6, the lowest ranked member of group T. But this does not explain its use by AT2, who ranked best. Here, personal preference for a mode of expression seems to be the determining factor. Indeed, during their interview, some learners have claimed that they did not like using the chat. As a result, these were the ones who used more audio modality. On the contrary, others (like AT2) who spoke less in audio have said that they preferred the chat.

In conclusion, this suggests that the fact of using one modality or the other led these learners to regain self-confidence in language learning, as anticipated in the aims of the course. Without such a choice, a number of these learners may well have been unable to sustain conversations.

4. Building a notional conversation

Researchers have already analysed synchronous interactions within a qualitative framework, examining syntactic acquisition (Sotillo 2000), types of discourse (Warschauer 1996), acquisition of grammar (Pellettieri 2000) and lexical acquisition (Smith 2003). Our approach is slightly different as we will analyse interactions according to the professional context of the tasks learners were exposed to. Indeed, we will be asking whether false-beginners are able to sustain discourses that are part of their professional environment.

During the course, learners were encouraged to speak in their target language about professional concepts with which they were already familiar in L1. In fact, these notions were taught in the Master's course and students had practiced them within the framework of vocational training activities. For instance: analyzing pedagogical websites to be integrated in a course or getting practice in several environments (synchronous and asynchronous) to experiment with carrying out tutor's functions and roles. Thus, the students manipulated ideas in problems solving activities related to their professional area. Moreover, if the ESP course constituted an opportunity for them to assess their English skills, it also allowed them to transfer into English the professional abilities they had developed in the Master's course.

We reported above that the false-beginners had a satisfactory rate of participation. But on one hand, we remain curious whether their linguistic level is a decisive factor concerning their ability to sustain professional conversations. To verify that point, we shall analyse sequences in which they use notions from their specific area, establishing a hierarchy among these conversations. And on the other hand, we shall examine to what extent a multimodal environment can play a specific role in helping false-beginners to construct professional conversations and to find their place in an interaction.

4.1 Research questions

Some frameworks still often approach LSP as a specialized vocabulary, in a frozen communication where syntax does not reflect any professional reality. For us, on the contrary, the ability to participate in a discussion, using concepts is appropriate to a professional context in which the common background knowledge is based on notions. The model of 'notional
conversation' we propose, provides a framework for identifying and assessing the quality of professional speech in online LSP courses.

4.1.1 Justification of the recourse to notional dimension

In a course aimed at enhancing language practice in a professional context, notions and concepts are important insofar as they build the representations which speakers have of their domain. Today, the notional domain in sciences of education in distance learning is not yet established in a common framework of reference for training purposes. Nevertheless, the Master's curriculum specifically refers to the concepts that compose such a professional environment. The LSP course offered to the students provided opportunity to "rediscover" them, by practicing professional conversations in L2. So, the interactions selected for analysis comprise conversations focusing on these concepts.

4.1.2 Two levels of complexity in notional conversations

We define a notional conversation in its linguistic and modal dimension. A notional conversation:

- consists of two turns at least (turn may be audio, written in the chat or mixed);
- refers explicitly to one relevant notion from the professional area at least;
- can be realized via one or more shared editing tools.

Bloom's revised Taxonomy of Educational Objectives (Anderson & al., 2001) brings out six levels of educational objectives (regardless of the subject) corresponding to intellectual operations from the simplest level (remembering) to the more complex (creating). It is common practice for ESP literature to refer to Bloom's taxonomy in order to clarify learning objectives (Wiwczaroski 2002) and also to highlight the usefulness of learning thinking skills (Almabekova 2002). Our purpose is not dealing with cognition nor design activities so the way we use the taxonomy is different. We transfer the categories into two levels of discourse regarding the use of notions from the domain:

- the basic level refers to a descriptive discourse that mentions a concept in order to identify it, to define it, to describe it or to give some examples. These operations are linked to the two first objectives of the taxonomy: remembering and understanding.

- the second level corresponds to a more complex discourse in which the concept is used in the context of application, analysis, synthesis or evaluation activities, relating to the four other objectives of Bloom: applying, analysing, evaluating and creating.

Thus, the basic level is centred on the concept itself (recognising, describing, naming). This presupposes that the learner is capable to structure his/her factual knowledge in the professional area with the lexicon in L2. This level is a prerequisite for completing ESP course activities. The second level aims at developing a series of actions, deriving from the concept, and involving a higher level of activity in which the concept is used to reach professional behaviour (arguing, deciding, constructing etc.).

So this distinction corresponds to a qualitative measure of utterance observed in learners' production. In this framework, the research question that interests us is: can learners with a basic linguistic level sustain a professional conversation?

4.2 Examples with interactivity notion

Two examples, taken from the same sub-group of false-beginners, illustrate the levels of complexity notional conversations can reach and the way learners deal with multimodal functions
to achieve them. We will describe the context of these examples (session, type of task, and the tutor's presence). Then, we will illustrate each example with an extract from our transcription, and finally we will discuss the role played by the multimodal functions in the task, referring to the way the learners use them according to the role taken by each actor during the interaction.

4.2.1 Context

The examples we have chosen occur half-way through of the course (session 5). They are related to the same task, that aimed to discuss the interactivity of a pedagogical website learners had already seen. At the beginning of this session, the tutor gave instructions in plenary and invited each group to break away in different rooms in Lyceum. He gave each sub-group a questionnaire, using the word processing tool, to encourage them to start the task with questions that involve answers in both low and high level of complexity. For example: what are the interactive elements of the website? (low level), what is the worst interactive element of the website? (high level that involves analysis and value judgment). The 3 students (AT1, AT3, AT6) had 15 minutes to complete the work in their sub-group in order to present a synthesis in plenary session. In both of these extracts, the tutor only makes a short appearance, because the interactions were numerous and balanced.

4.2.2 Notional conversation: basic level

<table>
<thead>
<tr>
<th>Id</th>
<th>Hours</th>
<th>Actor</th>
<th>Audio</th>
<th>Actions in the word-processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>tpa19</td>
<td>0:21:15</td>
<td>AT6</td>
<td>first question</td>
<td>euh interactive elements of English Club site include</td>
</tr>
<tr>
<td>tpa20</td>
<td>0:21:22</td>
<td>sil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tpa21</td>
<td>0:21:26</td>
<td>AT1</td>
<td>euh + yes euh ++ to euh to start euh + the first question yes</td>
<td></td>
</tr>
<tr>
<td>tpa22</td>
<td>0:21:35</td>
<td>sil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tpa23</td>
<td>0:21:38</td>
<td>AT3</td>
<td>we must euh write + the answer on the document + + I think ++ euh ++ do you want I write in the document</td>
<td></td>
</tr>
<tr>
<td>tpa24</td>
<td>0:21:51</td>
<td>sil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tpa25</td>
<td>0:21:55</td>
<td>AT1</td>
<td>yes ok XXX right ++ ok I (euh ++)</td>
<td></td>
</tr>
<tr>
<td>tpa26</td>
<td>0:22:01</td>
<td>AT3</td>
<td>(when I see the) + when I see the English Club euh point com ++ I see euh help + games + quizzes + forums and chatroom ++ do you want I write this</td>
<td></td>
</tr>
<tr>
<td>tpa27</td>
<td>0:22:18</td>
<td>AT6</td>
<td>yes</td>
<td></td>
</tr>
<tr>
<td>tpa28</td>
<td>0:22:20</td>
<td>AT1</td>
<td>yes hum ESL help + ESL games + euh ++ because it's english as second language ++ I euh I think euh we had euh to say euh ESL help ESL games</td>
<td></td>
</tr>
<tr>
<td>tpa29</td>
<td>0:22:43</td>
<td>sil</td>
<td></td>
<td>AT3 writes: Help, Games, Quizzes, Forums, chat room</td>
</tr>
<tr>
<td>tpa30</td>
<td>0:23:05</td>
<td>AT3</td>
<td>do you see what I write</td>
<td>+++</td>
</tr>
<tr>
<td>tpa31</td>
<td>0:23:11</td>
<td>AT1</td>
<td>yes it's ok +++</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: notional conversation at basic level (session 5)

This extract shows the learners starting the task and answering the first question as a sub-group which refers to the most elementary level of the taxonomy: identifying and listing.
The learners understand the question because they have no problem answering and listing the functions provided by this website, as either interactive or not interactive. At the same time, they discuss the form of the answer they should write in the word processor (tpa23, 25, 27). This action takes place during the silence in tpa29 when AT3 is using the word processor (his words are in italic). All the learners participate in the conversation and each of them negotiates his own role in the task: AT6 as animator (tpa19), AT3 as a facilitator (tpa23, 26). AT1 takes the role of the learner, showing first that he understands the injunction of AT6 (tpa21), and then, adding to and refining what AT3 wrote in the word processor (tpa28). The word processor is used to shape the response of the group (action of AT3 in tpa29). This action is also taken into consideration in audio and validated by AT3 and AT1 (tpa30-31). So, two kinds of discourse are mixed: one which is focused on the task and aimed at answering the question; and meta-discourse regarding the sharing of the work and the distribution of roles (writer, animator).

### 4.2.3 Notional conversation: high level

Question 3 invites learners to select the worst interactive element of the website. This kind of discourse refers to the category 'Analysing'. It includes operations such as: arguing, comparing, criticising. See for example Fig. 1.3 which depicts the state of the word processor shown here in Table 5 where tpa79 is t=31:59.

<table>
<thead>
<tr>
<th>Id</th>
<th>Hours</th>
<th>Actor</th>
<th>Audio</th>
<th>Actions in the word-processor</th>
</tr>
</thead>
<tbody>
<tr>
<td>tpa64</td>
<td>0:29:41</td>
<td>AT3</td>
<td>do you want to answer at the third ++ euh question</td>
<td></td>
</tr>
<tr>
<td>tpa65</td>
<td>0:29:45</td>
<td>sil</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>tpa66</td>
<td>0:29:51</td>
<td>AT1</td>
<td>euh + yes</td>
<td></td>
</tr>
<tr>
<td>tpa67</td>
<td>0:29:53</td>
<td>sil</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>tpa68</td>
<td>0:30:22</td>
<td>AT1</td>
<td>I euh + for me it's euh games ++ maybe + I don't know &lt;laugh&gt;</td>
<td></td>
</tr>
<tr>
<td>tpa69</td>
<td>0:30:29</td>
<td>sil</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>tpa70</td>
<td>0:30:50</td>
<td>AT1</td>
<td>euh worst euh + of them is euh ++ the more bad +++</td>
<td></td>
</tr>
<tr>
<td>tpa71</td>
<td>0:30:59</td>
<td>AT3</td>
<td>yes + it's euh the more bad + but you must say the worst +</td>
<td></td>
</tr>
<tr>
<td>tpa72</td>
<td>0:31:06</td>
<td>AT1</td>
<td>yes &lt;laugh&gt;</td>
<td></td>
</tr>
<tr>
<td>tpa73</td>
<td>0:31:08</td>
<td>AT6</td>
<td>and and ++ and help</td>
<td>is no + no good</td>
</tr>
<tr>
<td>tpa74</td>
<td>0:31:13</td>
<td>sil</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>tpa75</td>
<td>0:31:28</td>
<td>AT3</td>
<td>it's ok like that</td>
<td>++</td>
</tr>
<tr>
<td>tpa76</td>
<td>0:31:31</td>
<td>AT1</td>
<td>maybe euh + we have to choose one of them ++ &lt;laugh&gt;</td>
<td></td>
</tr>
<tr>
<td>tpa77</td>
<td>0:31:37</td>
<td>sil</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>tpa78</td>
<td>0:31:48</td>
<td>AT1</td>
<td>for euh for this website it's maybe euh is help + and and no + games ++ I don't know +++</td>
<td></td>
</tr>
<tr>
<td>tpa79</td>
<td>0:31:59</td>
<td>AT6</td>
<td>euh in help euh interactivity is euh ++ FAQ +++</td>
<td>AT3 erases and writes: help only</td>
</tr>
<tr>
<td>tpa80</td>
<td>0:32:08</td>
<td>AT1</td>
<td>(ouais) yes ++ just + choose help ++ ok</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: notional conversation at high level (session 5).

The conversation remains primarily oral. However, the action of AT3 who carries on with his task of making notes in the shared word-processed document leads the group to adopt a reflective attitude toward their own production. Actually, AT3 gathers the others' opinion (tpa68, 73). AT3


respects the thoughts of his peers in his written work: on one hand, he expresses the hesitancy of tpa68 by writing 'perhaps games'; then, he correctly translates the final position of AT6 in the tpa73 by writing 'and also help'. This practice is important because it shows that the group uses the text processor to reflect the collective construction of the thought, which allows a nonfinal state. Indeed, AT3 brings the group to re-consider this temporary answer (tpa75-80). The suggestion of AT1 (tpa76) shows a second reading of the written response according to the instruction. Actually, the result was to obtain only one bad interactive element. During tpa77, the group takes a while to select between the two elements that AT3 wrote into the word processor. It is significant that the final answer accepted by the group rests on the evaluation of the quality of the arguments suggested. AT1, for his part, withdraws from his first position (tpa78), whereas AT6 reinforces his, considering that the principle of FAQ is not interactive enough (tpa79). The argument suggested by AT6 wins his peers over. This suggestion is agreed in two modes simultaneously: first by AT3 in the word processor, and orally by AT1 (tpa80).

4.3 Discussion

We have seen that learners can engage in notional conversation at a basic or more complex level, using the skills at their disposal. Indeed, professional conversations are sustained from a linguistic and methodological point of view by the framework provided by the tutor (the questionnaire). But they are also sustained by the learners' ability to negotiate their role during the conversation. The degree of learners' involvement in the task is related to the way in which the roles are distributed throughout the interaction. Functions such as animation or facilitation are transferred flexibly between these learners. Thus, the negotiation of such roles serves to enhance the group dynamics in a structured and efficient way: each one's participation is recognized whichever modality is used.

But the roles the learners assume are not enough to explain their linguistic performance. In both of these extracts, the audio interactions were supported by what was written in the shared document. The learners used the word processor more often in conversation which showed a high level of complexity. In fact, by materializing the successive states of a complex conversation, the use of the word processor enabled the group to keep the thread of the conversation. Moreover, the action of the writer ensured the continuation of the conversation with the same efficiency as if it was an oral contribution. So the use of this tool constitutes a facilitating factor. Therefore, we can identify this tool as playing an important role in the synchronous communication. What is typed in the word processor takes its place in the interaction as a speech act according to Austin's definition.

5. Conclusion

In this paper, we report that in an audio-synchronous and multimodal environment, learners, including those who have not spoken in foreign languages for some time, can reach satisfactory rates of oral participation in a relative short period of time. In this respect, the equalizing effect that can be observed to take place between the two modalities (audio and chat) is particularly relevant for false-beginners. Beside multimodality, collaborative tasks may account for the participation of false-beginners. Undoubtedly, these outcomes should be verified by other studies that focus on small size groups. From this perspective, the methodology we proposed for the extraction of accurate data can be re-used to assess oral participation in such an environment.

We also observed that false-beginners are able to have professional conversations in L2 at various levels of complexity. Here, a third modality (word processor) is particularly useful and supports the way the learners construct their interactions in audio. Today, in LSP, we seek to assess linguistic abilities in finalized speech acts (Springer, 1999), that is to say, in
communicative acts performed in a professional context. Therefore, such a combination is particularly suitable to promote the production of speech acts in a professional context. So, we suggest that integrating the use of modalities such as word-processing, whiteboard, concept mapping, etc. in the design of activities may help learners to hold professional conversations. This is in fact what we see happening in the analysis of false-beginners discussed in the present study. Based on Bloom's revised taxonomy, the framework we outline for assessing the quality of professional discourse may provide a method for analysing other types of interaction.

Acknowledgements

We wish to acknowledge and thank the team of the CoPéas Project: Marie-Laure Betbeder, Christophe Reffay, Laurence Jeannot, Marie-Noëlle Lamy, Tim Lewis and Robin Goodfellow. CoPéas is part of the ODIL project, supported by the Ministère de la Recherche.

References


