Chapter 45
Technology-Mediated Tasks in English for Specific Purposes (ESP): Design, Implementation and Learner Perception

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ABSTRACT
Although many researchers have focused their attention on task-based language teaching (TBLT) in recent years, there is little published research on TBLT in technology-mediated contexts, and on how to design and implement tasks in online settings. In addition, very little can be found in the literature about learner perception of technology-mediated tasks in these new virtual learning environments. The objective of this paper is to bridge these gaps by reporting on the design, implementation and learner perception of English For Biologists (EFB), an online module based on tasks and aimed at French biology students enrolled on a first year Master’s degree programme. The principles underlying the design of EFB (a combination of three action-based approaches) as well as its implementation (tutor mediation in particular) are presented in this paper. This article also offers insight in the learners’ perception of task-based language learning through the analysis of the answers they gave to a post-course online questionnaire. Overall, technology-mediated task reception was positive but learner feedback enabled to uncover specific problems, notably regarding the type of support provided.

INTRODUCTION
Despite the amount of published research on Task-Based Language Teaching (TBLT) in recent years, very little attention has been paid to TBLT in technology-mediated contexts in the English literature (Ellis, 2010, p. xvi), especially when it comes to TBLT in online settings (Hampel, 2010, p. 132), and to how such tasks should be designed and implemented in these new – often complex – virtual learning environments. The situation is, however, slightly different when examining the
French literature which often remains confidential and still needs to be more widely disseminated, which is a secondary objective of this paper. In addition, little research has been carried out to assess learner perception of task-based language learning in online settings as opposed to more traditional face-to-face approaches to language learning and teaching. This article aims at bridging these gaps as it reports on the design and implementation of *English For Biologists* (EFB), an online module for French biology students at Master’s level whose main objective was to give learners opportunities to interact with each other in English about subject-specific topics outside the English classroom in an attempt to help them develop their interactional competence (Kramsch, 1986; Young, 2010) in L2 through computer-mediated collaborative work.

EFB is the centerpiece of a wider action-research project but only part of it will be reported on in this article. Indeed, the central questions underpinning the discussion are the following ones:

1. How should an online module of ESP be designed with a view to helping learners develop their interactional competence?
2. Once designed, what principles should guide its implementation?
3. What is the learners’ perception of the module?

The general approach adopted in this paper is Hampel’s (2006) three-level model of task development, based on Richards & Rogers (1986) and consisting of approach, design and procedure, where approach refers to the theoretical framework (language learning and affordances of the technological tools), design deals with the syllabus, tasks and learners’ and teacher’s roles, and procedure refers to task implementation and learners’ use of tasks (Hampel, 2010, p. 135). It seemed, however, that the model could greatly benefit from the addition of an extra level, as task development is an iterative process that does not stop with the implementation of the task. Indeed, as is the case in the methodology of research and development (Guichon, 2006) for the design of complex language learning systems, the task should be tested *in situ* in order to check whether the objectives have been reached as well as to get feedback from the learners in an attempt to improve the task itself. I have therefore added a fourth level to Hampel’s model, namely that of evaluation.

Following this basic model for task development, I first present the theoretical approach to language learning that served as a guideline for the development of EFB, before focusing on the design process of the different tasks included in EFB; I then examine EFB’s implementation process, with an emphasis on the choices made in terms of tutor mediation; Finally, I offer insight in learner perception of TBLT through the analysis of the answers they gave to a post-course questionnaire.

**APPROACH**

The starting point of EFB, as is always the case in action-research (McKay, 2006, p.16), was a problem identified in the field: although our French first year Master’s degree students in life sciences could often deliver good quality oral presentations in English, answering questions (in the questions and answers session that followed the presentation) and, more generally, interacting in English were not part of their fortes. This conclusion, which was originally more a perception of their teacher of English, was to be confirmed by the students’ own perception through some of the answers given to a needs analysis questionnaire (Figure 1).

Drastic work thus needed to be done on interaction which, from then on, was considered as both a skill to develop (interactional competence) and a context that is conducive to Second Language Acquisition (SLA) thanks to negotiation work.