Blended Learning in the "*Langue et Erminologie*" Module: What Scenario for the Disciplinary Modules at the Moroccan University?

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Abstract. In order to ensure a better integration of Moroccan students at the university, the incorporation of a language module in higher education institutions (HEIs) has been a necessity (CSEFRS, 2018: 44). Since 2004, several modifications have been made to the "Langue et Terminologie" (LT) module which has become an accredited and compulsory course. However, after years of experimentation, the intended objectives were not fully achieved and the actual needs of students in the field were not wholly met (Ibid.). Thus, several attempts were conducted by researchers and experts to implement more effective approaches such as French Language with Specific Objectives (FOS) and French Language with University Objectives (FOU) coupled with the potential of digital practices. This work is about a reflective practice (Dörnyei 2007), in the techno-pedagogical field, aimed at improving teaching practices in higher education. We tried to improve the performance of the LT module through the implementation of a blended course combining micro-tasks and macro-tasks related to the disciplinary field of learners. We relied on a FOS/FOU approach targeting both the discursive and linguistic skills in two Moroccan universities. Using a mixed approach, we conducted an analysis of learners' oral and written achievements in the face-to-face and digital environment. We conclude with a few perspectives paving the way for the generalization of the system to other contexts in order to promote the development of the linguistic and discursive skills meeting the recommendations of the Ministry of higher education.

Research Contribution: This work is about a reflective practice in the techno-pedagogical field, aimed at improving the teaching practices of the LT module in Moroccan higher education. The main objective is to help university students improve their level of French language for a better academic and professional integration.

Keywords: Blended Learning · discursive and linguistic skills · digital practices · "Langue et Terminologie" module · Moroccan university

1 Introduction

During the last decades, the scientific students in the Moroccan university context have faced a serious linguistic problem (Nissabouri, 2005) related to the difficulty of mastering the language of instruction (French language). Indeed, having received, for the scientific subjects, an Arabic teaching, students have difficulties to follow the higher studies taught in formal/academic French language such as the oral pedagogical discourse and written lectures, tutorials and practical works. (Messaoudi, 2013).

Thus, in order to solve the problem related to the language of teaching scientific subjects at the higher level, the Faculty of Educational Sciences (FSE) began to train teachers who officially took office in 1997. The latters' mission was to teach the Techniques of Expression and Communication (TEC) based on three major aspects: French language (reading and explanation of text, lexicon), cultural animation and techniques of expression and communication which cover speaking exercises, courses on job interviews and report writing.

Since 2012, the approach adopted for the development of the TEC module, also called "Langue et communication "/"Langue et Méthodologie", has been oriented towards the methodological tools of French Language with Specific Objectives (FOS), and the Common European Framework of Reference for Languages (CECRL). Consequently, the identification of students' level is done through the scales of the CECRL (A1, A2, B1, B2, C1, C2) and the contents of the courses are much more adapted to the needs of the students and the scientific field in which they evolve. In this way, the titles "*Langue et Communication" /"Langue et Méthodologie"* have been replaced by "*Langue et Terminologie*" (language and terminology) (LT). The term "terminology" refers to a reinforcement that must target the gaps in scientific terminology of which Moroccan university students suffer the most, and which is compulsory to facilitate and accelerate their linguistic immersion.

As Information and Communication Technologies for Education (ICT) had already begun to prove themselves in Europe, the LT module had a modern didactic capital derived from the COMPETICE typology (2001) and had to cope with technological advances observed in the blended learning practices and in the field of e-learning in general (Deschryver and Charlier, 2012). As a result, the task of the researcher/ teacher is becoming increasingly difficult. Indeed, how could the LT module simultaneously meet the needs of a heterogeneous group of students, the needs of scientific disciplines/fields and the needs of recruiters? To what extent could the LT module be cost-effective and efficient in a sustainable way?

2 Theoretical Framework

2.1 French Language with Specific Objectives (FOS)

The FOS, known in the English studies as "English for specific purposes" is a component of French as a Foreign Language (FLE). It offers French language instructions for foreigners, non-natives, for individuals who do not master the French language and who aim to learn it and have access to information communicated in French in an academic, professional or university context.

The interest of the FOS is purely functional. Its teaching aims at the acquisition of language skills in specific fields/sectors. "The FOS emerged of a desire to adapt the teaching of FLE to adult audiences wishing to acquire or improve skills in French for a professional activity or higher education" (CUQ, 2003: 109). In fact, as explained above, Moroccan university students, who during the long years of their education, had a "weak" French language education, are currently confronted with courses of specialization taught in formal/academic French language.

The FOS follows four key stages that govern the implementation of the courses and their adaptation to the specific needs and expectations of the learners. Each of its stages meets specific restrictions and conditions depending on the context and environment in which they are to be established as well as the target audience.

In the same perspective, the French Language with University Objectives (FOU) targets students enrolled generally in the scientific majors in order to help them understand university formal/academic discourse (especially the lectures) and to acquire skills and knowledge to better understand the information and re-use appropriately.

2.2 Techno-Pedagogical Approach (The ASPI Model)

Peraya and Jaccaz's (2004) ASPI (Analyze, Support and Drive Innovation) model sees the digital environment (*dispostif* in french) as "an instance, a social place of interaction and cooperation possessing its intentions, its material and symbolic functioning, and its own means of interaction. The economy of a digital environment - its functioning - determined by intentions, is based on the structured organization of material, technological, symbolic and relational means that model, from their own characteristics, social (affective and relational), cognitive and communicative behaviors and behaviors of subjects" (Peraya, 1999:153).

According to Viens (2003), the structural variables that govern an innovative digital environment must be presented in a hierarchical way articulated in an increasing logic. It distinguishes between the micro level which concerns the training system, the meso, the institution in which the system is situated, and the macro level which concerns the societal level.

2.3 Macro-Task, Micro-Task and Digital

In this article, we have adopted the declination in macro-tasks and micro-tasks from the work of Jean-Paul Narcy-Combes (2005) inspired by the distinction made by Ellis (2003). Macro-tasks, according to the authors, are part of a socio-constructivist paradigm, and are more realistic with social validity.

As for micro-tasks, they are part of a cognitive paradigm, they are specific and individual and they are used for training or for explaining. As a result, "the macro-tasks, given their complexity and realism, are the point of support in the pedagogical sequence because they are considered as a set of actions constituting a form of «direction» of reality, or of a type of fiction which learners will be able to follow. They lead to a language production not limited to the school world context." (Demaizière and Narcy-Combes, 2005: 50).

Thus, several studies in the field of techno-pedagogy explains that the digital tool plays a crucial role in the implementation of both macro/micro tasks. In fact, micro-tasks are essential to ensure an individual experience or a training in a small group by taking into account the needs and pace of each learner, according to the problems encountered without being under the pressure of social factors Demaizière (1986).

In addition, the different functions provided by the platform (the support, instant and automated feedback, individual tracking…) remain relevant for the implementation of micro-tasks. In the same perspective, Pothier adds that the use of technological tools based on cognitive and constructivist theories is relevant when it comes to designing micro-tasks: "It is important to consider the individualization and empowerment, coupled with the motivation for authentic material (or something close to authentic) and the immersion it offers, as well as the variety it can bring" (2003:52).

To sum up, we emphasize that the use of micro-tasks has certain advantages since it encourages the learner to manipulate the "meaning" in a specific context and to avoid any mechanical learning. Moreover, micro-tasks are designed according to real needs which are related to the accomplishment of a social task.

3 Two Case Studies

The program of the first year of the bachelor cycle "*Licence*", as in all (Moroccan colleges) faculties in Morocco, must include the "LT" module. It is a weekly course scheduled 2/3 h per week of 45–50 h/per semester (semester 1 and semester 2). In this article, we present two experiments conducted in two institutions of two different universities.

3.1 The Experience of the Faculty of Sciences in Rabat (FSR)

– *MOOC FOFLE*

Willing to help students to improve their level of French language in order to better succeed their academic integration, the Faculty of Sciences of the Mohammed Fifth University of Rabat and the French Institute of Morocco have set up the FOFLE MOOC, proposed by the Claroline Consortium, to serve digital resources/practices on the FLE-SUP platform of the Claroline Connect environment. The MOOC is made up of six courses focusing on subjects to confront the learner with situations that he will encounter during his first year at university. The FOFLE MOOC started on March 12, 2016 for a period of 12 weeks with the participation of 73 students.

It was therefore a Mini-MOOC that borrowed a number of aspects from the SPOC (Small Private Online Course), given the complexity of the phenomenon of massification (massive number of students) observed in the license cycle. "This is the reason why, beyond the expected progress, the main concern was to invalidate or confirm the compatibility of a "virtually non-existent face-to-face" with authentic working conditions that are globally binding from a structural and logistical point of view as well as from a technical-pedagogical and managerial point of view» (Jirari and Tailassane, 2018: 265).

The results of this experiment revealed that the students expressed a certain enthusiasm for this new experiment with participation rates exceeding 60%. In short, our feedback on this first experience was very positive. Indeed, the platform offered an enriching and interactive learning and exchange environment, increasing students' motivation and involvement.

– *SPOC ITS*

Drawing on our experience as tutors in the FOFLE MOOC, we decided with the support of the Dean of the Faculty of Science (FSR) and the contribution of the Rabat E-learning Center (Mohammed V University), to design a SPOC, entitled "*Initiation à la Terminologie Scientifique*" (ITS), a course dedicated, designed and developed to meet the specific needs of students enrolled in the "Science Mathématique Physique/Chimie "(SMPC). The SPOC, which is a terminology immersion course developed according to a FOS/FOU approach, was scheduled at the beginning of the year, offering students an upgrade to help them overcome the terminology difficulties that could negatively impact their motivation to learn.

It should be noted that the choice to go for a distance course, as opposed to a face-to-face course, was obviously necessary in a context marked by the mass enrollment of students and the lack of material and human resources (Report of the Higher Council of Education, 2018).

The SPOC ITS was programmed for three sessions (2017/2018/2019), each session took four weeks and ended with a final activity. The main results of this SPOC disclose that students demonstrated active involvement during the five weeks of the course suggesting that they were motivated and engaged. Moreover, the contribution of the SPOC ITS is reflected in their class productions. We noted in the face-to-face course that students were more confident and actively participated in the activities. (more outcomes will be discussed in the results section).

3.2 Experience of the Faculty of Sciences Semlalia of Marrakech (FSSM)

At the FSSM, the structure of the LT module is based on a blended course that offers, according to their designers, contextualized content in the students' disciplinary fields. To give them every chance of success, the design of the LT module took into account a set of contextual factors including the language of teaching of scientific disciplines, university massification and the linguistic level of students.

The organization of the course is based on a hierarchical blended/hybrid system based on a three-step interdependent process: the validation of a placement/level test, the distribution of students by level/group and the organization of content by level in a hybrid mode. The courses in the LT module focus on developing students' language skills in order to facilitate their integration into university, help them overcome linguistic obstacles which may lead to dropout and failure. On the pedagogical level, the choice was made to propose authentic documents in order to achieve the communicative, academic and linguistic objectives.

The results of the end-of-course tests have shown a clear progression in the students' disciplinary terminology. Similarly, the results of the face-to-face sessions showed a satisfactory evolution of language skills, particularly the assimilation of the formal rules of French language. However, during our practice in class we noted some inconsistencies between the intended objectives and the pedagogical practices in the LT module. First of all, the content provided on the platform was limited to structural exercises around the disciplinary vocabulary and did not take into account academic and socio-cultural objectives. Second, the majority of face-to-face sessions were devoted to activities/ exercises of linguistic systematization which did not promote the development of communicative/speaking skills of learners. Finally, assessment activities were limited to written tasks and did not allow students to assess their speaking skills.

4 Methods

Since our research focuses on complex issues related to the teaching of the LT module, a multi-level analysis is useful in order to achieve a detailed understanding of the problem. The combination of viewpoints, methods of data collection and analysis is relevant to understand our research in its various aspects because "Words can be used to give meaning to numbers and numbers can give precision to words" (Dörnyei 2007:45).

Thus, to identify the motivation and commitment of learners we opted for a quantitative approach with the participants (FOFLE MOOC n: 73 / SPOC ITS n:107). At the end of the course, we administered a questionnaire comprising two scales:

(i) The Adult Education Motivation Scale (EMFA) developed by Fenouillet, Heutte and Vallerand (2015) and based on the self-determination theory of Deci and Ryan (TAD). This scale allows the measurement ofa participant's motivation in the context of an online training system, which is perfectly in line with our study.

(ii) The MOOC entry pattern scale for training purposes developed by (Poellhuber, Roy, Caron, Roland, Heutte & Peraya, 2018) is an adapted version of Carré (2002) used to understand the commitment pattern. The use of this scale makes it possible to locate the axis of commitment and motivation of students within the framework of the digital environment.

As for our qualitative study, given the complexity of our intervention context and the plurality of data to be submitted for analysis, we were limited to qualitative analysis of students' productions during the face-to-face evaluation session. Thus, to evaluate the skills developed during the face-to-face training course, we proposed tasks that require both speaking and writing skills which are necessary to cope with the communicative requirements within the academic context in general and the communication skills required by the disciplinary field in particular. The achievements of the students were evaluated according to a grid designed to target the following criteria (the findings of this qualitative study will be discussed in the results section):

- Respect of the specificities of academic discourse;
- Textual coherence and cohesion;

- Mastery of disciplinary terminology;
- Respect for language rules.

It would have been very interesting to have access to the students' digital traces in order to proceed to the learning analytics methods which could have enriched our research, but unfortunately, unlike Moodle, neither the Edx platform nor the "Claroline connect" can give information about the students' traces.

5   Results

In the light of the experiences conducted within the FSR and FSSM, we can confirm that the integration of digital education in a hybrid approach oriented FOS/FOU and conveyed in a micro and macro tasks approach, allows us to confirm the efficiency of the LT module. Indeed, the results obtained reveal that the hybrid approach has engaged students in a double immersion (linguistic and terminological) on the topics addressed in the courses delivered face-to-face in a digital environment. Indeed, asynchronous textual communication mediated by the forum is naturally required in collaborative online learning, especially when it comes to developing ideas, testing their relationships and structuring them (Harasim 1990). In addition, we noticed that students were able to overcome some of their linguistic difficulties and began to make considerable efforts by daring to initiate and maintain discussions in French.

Moreover, going through the forum, where comments are meant to be read by peers, learners take the time to write a well-structured response based on a thoughtful and contextual expression unlike the improvised answers in class. The forum, being a space for exchange and sharing, is a central resource in online platforms. For this reason, collaborative online learning is an important pedagogical contribution of distance learning (Salomon, 2000). Thus, the context of online courses opens the way to the development of a cognitive potential that can be activated and release some skills almost hidden in the classroom. Moreover, we noted that the interactions and exchanges between students and teachers were richer on the platform than in face-to-face classes. They were much more active and "free" behind their screens than in the classroom. This helped break down the teacher/learner barrier and paved the way for more fluid and spontaneous oral communication in the classroom.

It should also be mentioned that the "Learning by doing" technique seemed to be effective in our context. The students were more comfortable in the navigation process and easily found themselves in the different sections of the platform. In fact, our objective was to align our young students with the challenges of digital technology, where social, relational, technical and academic skills are embedded in digital skills that influence all societies and significantly affect all aspects of human life.

In addition, the use of micro-tasks and macro-tasks during face-to-face sessions simplified the complexity of the university context through the establishment of authentic or semi-authentic learning situations. However, our qualitative study revealed some difficulties expressed by students after they have completed their studies. Firstly, we observed the partial mastery of the disciplinary terminology. Actually, even if terminology tests show very satisfactory results, the use of this vocabulary in other more

complex situations remains limited. Secondly, the criteria related to the specificities of university discourse were not fully achieved. Indeed, students' productions, whether oral or written, indicate the predisposition of students to use a generalist discourse that does not conform to academic standards. Finally, the obtained results also revealed linguistic difficulties in terms of variation of structures to express an idea/reaction or to describe a fact in an appropriate use of grammatical rules.

6   Conclusion

By optimizing an experience of more than ten years in the teaching of the Language and Terminology (LT) module, we accomplish a curriculum positioning resulting from the dynamics of the reforms implemented since the deployment of the LMD (Licence, Master, Doctorat) system in Moroccan universities in 2003. This positioning coincides with the exploration of experimental theoretical models and exploratory studies on pedagogical environment/ practices, based on pedagogical paradigms, chose major contribution lies in the redefinition of the respective roles assumed by the teacher/trainer/tutor and learner/follower/leader.

In fact, our experience in both face-to-face and distance-teaching, has revealed how difficult it is to achieve the learning objectives in a constantly fluctuating educational context, to what extent the need for support revealed the limits of the means and the standards concerning adjustments and innovation.

As a consequence, this complexity has enabled us (professors/tutors) to update what the Council of Europe's most elaborate reference framework, the Common European Framework of Reference for Languages (CEFRL), would ignore, namely empathy, that is to say, the ability to put oneself in the place of the expected learner in order to live and identify a new experience whose dual mediation (digital tools/ tutor) would determine its effects. In this regard, "it [empathy] can pave the way for more effective cultural mediation and serve as a guide for assessing mediation skills in intercultural communication".

Thus, applying the FOS/FOU approach in a national large scale is a challenge to be met both for the student towards disciplinary studies in modern languages, French in this case, and for the teacher to be the main and only actor of an ambitious and complex reform policy. The LT module, as described and imagined in this article, was in the image of the particularities of a FOS approach, based on enhancing the French language knowledge and improving the scientific terminology destined to be used in personal and professional purposes.

Therefore, it is important to take into consideration the recommendations of the Moroccan Ministry of Higher Education, Scientific Research and Innovation that appeal for a "modern" university where teaching must take place towards a new paradigm in a spatial and temporal re-organization of teaching sequences; place to hybrid pedagogy. Finally, we can say that such a synergy of efforts would in fact benefit from several strategic orientations, namely:

- Update the accredited curricular descriptions on the basis of the empirically used didactic ways (notably that of the FOS) and the conceptual models governing the use of ICT in education and training;

- Standardization of hybrid pedagogical practices according to international standards and the quality systems in force in performing universities;
- Standardization of level tests (positioning tests) specific to the accredited university certifications, concerted within the framework of an inclusive national commission;
- Realization/structure of online and face-to-face training content according to a task-based approach taking into account the discursive specificities of disciplinary discourse genres;
- Setting up authentic evaluative tasks (realistic and valid social tasks) according to the requirements of the Moroccan academic context.

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