Original Paper

Digital Technology in University Language Courses:

Project Letras 2.0 at UFRJ

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Abstract

Project Letras 2.0, which promotes research and teacher education by using digital technologies at the Faculty of Languages and Literatures (FLL) of the Federal University of Rio de Janeiro (UFRJ), completed ten years in 2021. This paper intends to describe the goals of Project Letras 2.0 - UFRJ and discuss, through the lens of Activity Theory, some of the main conflicts and contradictions that have been or can still be perceived as opportunities for change and development. Therefore, this article may help shed light on debates on theoretical and practical debates about the use of digital technologies in language courses for undergraduate students who are being trained to be 21st-century language teachers. In addition, this paper also aims at encouraging discussions and further research on the use of digital technologies and the strategic adoption of hybrid classes in language courses in higher education.

Keywords

digital technology, language learning and teaching, higher education, activity theory, UFRJ

1. Introduction: The Challenges of Using Digital Technologies in Higher Education

The use of technology in language learning and teaching has become increasingly popular worldwide and its implementation has been a concern for both administrators and professors in higher education. In many Brazilian public universities, technical constraints and institutional misconceptions about distance education, among other factors, have discouraged language professors from adhering to, or even merely trying out, technology-mediated language courses.

Ropoli and Amorim (2008) highlight the following obstacles to the use of virtual learning environments in higher education: (i) the amount of time required to develop instructional material and to interact with students; (ii) the lack of technical skills in the use of technologies and the limitations imposed by

such technologies; (iii) the need to learn a new teaching attitude; and (iv) the lack of effective support from the institution to its professors.

In a literature review of web 2.0 technologies in higher education in several countries, Conole and Alevizou (2010) detected a few of the factors that hinder their incorporation, among which some that are widely cited: restrictions and rules in education in different countries, access, technical resources, digital literacy, teaching capacity and teaching cultures. According to the authors, a key issue concerns cultural aspects: the belief systems of professors the teaching staff and their daily activities in the classroom, which are still built predominantly around the idea that the one who teaches is the giver and the learner is the receiver.

The difficulties of adopting digital technologies in higher education might lead undergraduate students of BA in Languages to have scarce or no experience with the systematic, guided use of digital technologies. The lack of this type of experience can limit the initial training of language teachers, considering that studies on teacher education (such as Riding & Daw, 2002) have indicated that having the experience of being an online student is a crucial factor for online teacher education. Given the relevance of providing undergraduate students of the FLL with opportunities to use digital technologies in the courses, Project Letras 2.0 was created.

2. Project Letras 2.0 - UFRJ: An Overview

Early in 2011, the LingNet research group, which conducts research on Language, Education and Technology at the Federal University of Rio de Janeiro, created a project called Letras 2.0 - UFRJ (http://lingnet.pro.br/moodle3/). In addition to promoting research and teacher education, Letras 2.0-UFRJ aims at providing professors and students of the FLL with the necessary technical and pedagogical conditions to take part in online or blended/hybrid courses. The project's name – Letras 2.0 – refers not only to the use of web 2.0 resources (O'Reilly, 2005; O'Reilley & Battelle, 2009) but also to the development of a web 2.0 pedagogy, or simply pedagogy 2.0 (Mcloughlin and Lee, 2008), which can be characterized, in general terms, as a learner-based, media-rich and flexible approach (Weimer, 2002) that aims at collaborative knowledge construction.

Project Letras 2.0 - UFRJ allows professors to create online learning environments for their undergraduate, graduate and extension courses by using Moodle, which stands for Modular Object-Oriented Dynamic Learning Environment, a free source e-learning software platform, also known as a course management system (CMS) or learning management system (LMS).

Since 2011, to support professors in designing and developing online learning environments, Project Letras 2.0 - UFRJ has regularly hosted several lectures, courses and workshops on the use of digital technologies in education and, more specifically, on technical and pedagogical aspects of Moodle. Additionally, Project Letras 2.0 - UFRJ has organized a support team consisting of a group of around 8 graduate and undergraduate students who are doing research on Language, Education and Technology during a specific academic year. Each professor interested in joining the Project can be assisted by a

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graduate student (called an "assistant") who is assigned to work collaboratively with the professor, sharing technical-pedagogical expertise.

In addition to this one-to-one assistance, two graduate students, who are more experienced in educational technology (known as "comprehensive assistants") and two undergraduate students (known as "tutors") provide further technical and pedagogical support to all the participants (professors, students and other assistants) in the project. The Project Letras 2.0 - UFRJ team includes two full-time professors from the Department of English and a system manager, who is a doctoral student in the Applied Linguistics program offered by UFRJ.

In order to help the professors involved in the project create and develop online learning environments, the assistants have regular face-to-face meetings with the professors and, when needed, with the undergraduate students who act as course tutors. They also interact by email or by phone. Besides, when requested by a professor, assistants can also make a hands-on presentation of the main features of Moodle to a specific group of students or to a whole class at the FLL multimedia center and, thus, help students become acquainted with the online learning environment more easily.

Now, after ten years of activity (Table 1), Project Letras 2.0 - UFRJ has approximately 10,000 participants registered in the Moodle platform where more than 450 online learning environments have been created for undergraduate, graduate and extension courses of the FLL (English, French, Portuguese, Portuguese as a Foreign Language, Latin, Italian, Spanish, German and Brazilian Sign Language). Specifically concerning the teaching of English, about 300 virtual learning environments have been used as online components of undergraduate subjects taught. The syllabi of English courses (such as English Grammar, Second Language Acquisition, English for Specific Purposes) have integrated online activities and tasks to focus on and develop different language skills – such as reading, reading for academic purposes, written practice, oral practice.

Table 1. Numbers of Project Letras 2.0 – UFRJ

	2011	2011-2021
Total number of participants	1,115	10,069
Total number of online learning environments	52	456
Total number of online learning environments for the teaching of English	31	303

3. English Subjects Taught in Project Letras 2.0 - UFRJ: Most Frequent Activities

Among the several activities and resources available in Moodle, the ones most used by English professors in Project Letras 2.0 - UFRJ have been the forum, the glossary, the assignment, the wiki as well as links to texts, audio files, videos and exercises with automatic feedback uploaded to the course online environment or available on external sites. Forums (Figure 1) are, however, the most popular activity in the Letras 2.0 - UFRJ online learning environments, and are used for discussing texts and/or

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videos; sharing tips, personal learning experiences and ideas on a topic; sharing and discussing students' responses to a given task.

Figure 1. Discussion Forums Used in an English Undergraduate Course

Glossaries are another resource that has been successfully used in some of the subjects taught. These have been created collaboratively by students in two main different ways. In some subjects, students are requested to create a kind of specialized glossary that gathers definitions of concepts in a specific area (for example, English Teaching Methods, Figure 2). In other subjects, students are supposed to create a monolingual dictionary-like glossary with entries of a specific type of word or expression (phrasal verbs, for example) or select words from the texts they read and with which they are not quite familiar.

Figure 2. Entry in a Glossary about English Teaching Methods

The assignment module is another Moodle feature commonly used by English professors, especially in written practice courses, as it allows professors to collect work from students, review it and provide feedback, including grades. It should be noted that only the professor has access to all of the students' tasks in the assignment module. However, in order to allow for peer-to-peer feedback, as proposed by Morrison (2012), the students in a subject on written practice were enrolled with a non-editing teacher status so that they were able to view their colleagues' texts and provide them with their feedback.

The wiki module is used less often than other features. Wikis get their name from the Hawaiian word "wiki wiki", which means "very fast", and a wiki is indeed a quick method for creating content as a group. Basically, a wiki page is a web page everyone in a class can create together, right in the browser, without needing to know how to program with HTML (Moodle, 2011). Wikis, therefore, can be a powerful tool for collaborative work (Malamed, 2011). Documents can be edited by the entire class, in small groups or pairs of students. Alternatively, each student can have their own wiki and work on it with the collaboration of the professor and classmates. For instance, wikis were used in an Academic Reading course in English, so that, in small groups, students could write short reviews on different academic genres.

In addition to those activities, English professors usually add links to texts, audio files, videos and exercises with automatic feedback, which are either uploaded to the course sites or available on external sites.

4. Conflicts and Contradictions: Opportunities for Change and Development

After describing Project Letras 2.0 - UFRJ and how English professors at the Federal University of Rio de Janeiro have been using the Moodle platform to create online learning environments for their undergraduate courses, this paper highlights some conflicts and contradictions that have emerged during the course of the Project and that should be seen as opportunities for change and development rather than samples of undesirable or discouraging outcomes.

Based on the principles of Activity Theory (Engeström, 1987, 1999; Russell, 2002; Daniels, 2003; Tavares, 2004; Sannino, Daniels, & Gutiérrez, 2009), conflicts and contradictions are seen in this context as the driving force for change and development in activity systems. For Engeström (1987, 1999), the study of contradictions manifested through problems and overcome through innovations provides more significant insights about the activity system than the study of stable interactions. Conflict, questioning and dissatisfaction are fundamental to the notion of development proposed by Engeström, who argues that the transformation of practice arises from them.

Since Project Letras 2.0 aims not only at integrating digital technologies into the course syllabi of the FLL of the Federal University of Rio de Janeiro, but also at promoting research on issues related to this process, all participants are constantly encouraged to do research on the contexts provided by Letras 2.0 - UFRJ. In order to do so, they are urged to use a wide range of research instruments, to investigate different points of view, to share the collected data with the research group and to discuss research

results with the entire academic community. Thus, delving into data generated by several participants for multiple research purposes and with the use of various research instruments, such as field notes, research diaries written by the Letras 2.0 - UFRJ support team, semi-structured and informal interviews with students and professors, questionnaires, course documents and registers, students' portfolios, students' videos and written narratives or reports, made it possible to find several pieces of evidence that mention the conflicts and contradictions discussed in this paper. Due to the scope of this article, the discussion of the data is limited to some reports shared by students, monitors and a professor of English. We consider these to be representative of such conflicts and contradictions. These reports present both a general assessment of the participants about Project Letras 2.0 - UFRJ, as well as comments on specific aspects that they highlight. Even though the participants authorized the use of their reports for research purposes, all names have been changed to protect the identity of individuals.

Among the conflicts and contradictions identified in the data, a very relevant contradiction concerns the participants' general perceptions of the main benefits of having an online learning environment alongside with the face-to-face classroom. Although most professors and students agreed that the online component provided opportunities of syllabus enrichment, they also viewed it as a source of work overload. In an evaluation report, a senior student summarized this conflict.

> *Last year I got in touch with Project Letras 2.0 - UFRJ. I must confess I didn't like it very much at first, because it meant more tasks for everybody. However, today I have a different opinion, because with Moodle the professor can give students more resources in a more effective way, for example uploading texts, videos, seminars presented by the students themselves, prior tests etc. (Nara, undergraduate student of English)*

Since most professors in Project Letras 2.0 - UFRJ used the online learning environment as a supplementary or accessory part of the course, the time students spent on it was not taken into consideration as official course hours. Therefore, online activities were often seen as a burden by the students, especially when they realized that apparently simple tasks (such as discussing in an online forum) could be very demanding and time-consuming if it was to be fully accomplished.

In an evaluation report written by an undergraduate student of English who also acted as a tutor, she strongly suggests the adoption of hybrid classes in which face-to-face and online activities have similar status and are both considered as official parts of the course workload.

> *After having experienced Moodle in three different courses, in which the platform was used differently by three different professors, I can tell for sure that, to me, the most productive way to deal with the platform is in a blended course. This is the best manner to use Moodle so that it does not seem too demanding to the students. When it happens, students develop a feeling of aversion or antagonism toward the use of the online learning environment, which is hardly overcome. (Dora, undergraduate student of English and tutor)*

In fact, when students think there is too much work to be done and they have to choose where to spend more energy, they often choose traditional face-to-face lessons, even if the online activities are part of

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the course grading system. In the following report, Natália, an undergraduate student of English and tutor of Project Letras 2.0 - UFRJ, reinforces this idea.

> *Well, I believe that students have too many tasks in this [English Teaching Methods] course. They have to write a report about their classmates' presentations every week. In addition, they have to prepare their own presentation about a method and ... it is a very different thing because some methods are ... very exotic, so to speak. So, it requires a lot of dedication... if you demand extra participation, like, engaging in discussions that take place beyond the classroom, it might scare the students a little bit. [...] Then I think that they believe that Moodle is just a small percentage of the final grade. So, if they do not engage in the online activities proposed, that's ok, because they still have a great chance of doing fine. I don't know if it would be the case, but what if Moodle starts to gain more space in the course? Anyways... I don't know." (Natália, undergraduate student of English and tutor of Project Letras 2.0 - UFRJ)*

Natália's report also points to another very central conflict – one that concerns the reasons why a student decides whether to engage in online activities. Some seem to participate just because they feel obliged to and/or because they want to get a good grade. These motives, however, do not seem to be strong enough to ensure a long-lasting, continuing student engagement unless students realize that their participation in the online learning environment could help them fulfill really relevant personal needs. Therefore, thinking of ways to fully engage students in online learning activities has become much more relevant to course planning. One possibility is to provide an open, safe environment for students to talk about their personal needs, expectations, feelings and learning styles. If professors are able to provide such an environment, more meaningful online learning activities might be collaboratively created and students may be willing to engage in them.

In the following report, an undergraduate student of English reflects about the genuine reasons for student participation and engagement.

> *I think there was no engagement. So, there was no point in saying that we would get a grade for it, that it would be worth it, you know, because I think that nobody really understood what the point was. Even when the professor wanted to know our opinion on Moodle, even at that time I wondered if people were active online just for the grade and ended up posting anything on the discussion forums. There were times I caught myself pressing Control C, Control V... I think the problem is how to use it in a way that people understand what you are using this online tool for. And what I think is good about having this tool is that you can get that knowledge out of the classroom. And if you're going to post something, you're going to think about it. I think that is actually the intention behind it. I think you can give whatever grade you want, you can design the coolest learning activity, but if the person is not aware that it is there for them to think about it, they won't think about it and it won't work, you know. (Flávia, undergraduate student of English)*

Mauro, an undergraduate student of English, sounds a bit more optimistic in relation to the students' attitudes towards the online platform and believes motivation and a sense of belonging may make the

difference in terms of student engagement.

> *At first, the Moodle platform was a source of difficulty and discouragement to study. [...] Today I realize I felt like that because I didn't really believe in distance education. [...] Now I see that working in the online platform can be very useful and interesting if the participants feel motivated and part of the process of discussing and reaching (or not) a conclusion and/or a solution to the collective work and learning. (Mauro, undergraduate student of English)*

Conflicting views about the level of comfort and the amount of personal exposure in terms of student participation in online discussion forums have emerged from the data and refer to another conflict or contradiction. On the one hand, it is believed that students would feel more comfortable in participating in online asynchronous discussions because they would have more time for reflection and editing – and, thus, probably to reduce mistakes or slipups which might leave them more vulnerable to judgements by their peers. On the other hand, students may feel less confident because all their posts are kept on record and, therefore, more easily subjected to criticism. This underlying conflict is made evident in the following statements.

> *It is interesting because some students who did not feel comfortable talking in class felt more comfortable on the platform, because you lose your face less, because you risk less, you can think more before writing than when you speak in front of everyone, which is something more spontaneous. So, that was very good. (Natália, undergraduate student of English and tutor of Project Letras 2.0 - UFRJ)*

> *When we talk about the online platform, we tend to say that it eliminates barriers, saying that the students will feel more comfortable to express themselves and to participate, and that this is even more interesting than a face-to-face lesson. But I keep wondering how real this is, so to speak. I can tell it from my own experience, from reports of students who used the online platform in the course. Because once you write it, it is there. So, you take risks, too. You express yourself more freely. Then not every student feels comfortable doing this because they know that their use of the English language and their own ideas will be judged somehow. (Beatriz, undergraduate student of English and tutor of Project Letras 2.0 - UFRJ)*

Bringing these confronting perspectives into discussion among the students right in the beginning of a hybrid course may help them deal with the risk of losing face exposure in a more confident way.

In relation to the different approaches adopted by professors to create online learning environments for their courses and the consequent selection of digital resources and learning activities, using the Moodle platform mainly or exclusively as a repository of texts has been controversial. Some participants view it as a useful pedagogic strategy, since they like to be able to have access to all course texts gathered in a single site, from anywhere, at any time. Others, though, criticize the undesirable underuse of the platform which, in their view, should be better exploited. These conflicting perspectives can be noticed in the following statements.

> *It's been a very good experience, because it is like an extension of our classroom. We just have to upload the handouts and materials that we use in class. And also the students who were absent can catch up for the next class. (Patrícia, undergraduate student of English)*
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> *Well, I think that the use of Moodle helps you find your way sometimes, mainly in the English course because people can search for the texts, the course syllabus, you know, which is usually there, too. But I think it can be used in other ways. Maybe for the professor to communicate more regularly with the students, not only leave the materials there... I actually think I used very few tools on Moodle... I know I used the forums and the files that are there. I thought they were useful, but more resources could be made available for us. (Sheila, undergraduate student of English)*

Notice that Sheila says that she used just a few tools on the Moodle platform. She realizes there are a lot of other possible digital resources and asks for variety. This may lead us to think of a previously mentioned contradiction: despite the work overload the online learning environment may represent, it is also recognized as a possible source of syllabus enrichment.

In fact, blending face-to-face and online teaching modalities into one single course is not an easy task. It is worth noticing how differently students and professors perceive it the integration of face-to-face and online activities. One possible conflict is that while students focus on content integration – that is, if the same topics are dealt with in both face-to-face and online environments –, professors seem to be aware of a more epistemological kind of integration, which has to do with the theoretical-methodological principles underlying the activities proposed. Pedro, a student, and Sonia, a professor, have given their opinion:

> *The face-to-face classes and the online activities were well integrated. In the online environment, we did extra comprehension exercises and had further discussions on the topics discussed in the classroom. (Pedro, English for Academic Purposes student)*
>
> *Although relations between the face-to-face and the online components of the course were established, interrelations between the knowledge construction processes in one component and the other could be more effective. The ready-made online activities we used did not coincide with the socio-historical view of gender underlying the face-to-face activities. (Sonia, English for Academic Purposes professor)*

These quotes show that while the student seems to be pleased with a content integration approach, the professor wants to go beyond that. She has uploaded ready-made online activities to her English for Academic Purposes course and, after the course has been taught, she considers that a full integration between face-to-face and online components was hindered by the fact that some of the theoretical-methodological concepts underlying these activities did not coincide with the theoretical-methodological views that guided the face-to-face activities.

Lastly, it is paramount to mention another possible contradiction concerning the very nature of English language teaching in online learning environments. Although students are often asked to participate in online discussions, they are not formally taught about the kind of language one should use in this

digital genre (Crystal, 2001; Marcuschi & Xavier, 2004). The technical aspects of using an online discussion forum are presented, but it seems that students are not invited to reflect on the discursive characteristics of the genre. It was only in a research interview, when asked about what she had learned concerning the use of English that a student started to think about the way language is used in academic online forums.

> *I haven't thought about it yet but maybe what was learned from the forum discussions was to communicate in an informal, but not totally informal way, halfway in a continuum of formality and informality. [...] I guess the lesson learned about the use of English was this ability to communicate in a different context in which a more formal register could be welcome, but it is not fully appropriate. (Flora, undergraduate student of English)*

The teaching of digital genres, especially in a context in which students are actually using them, should not be overlooked. We should not think of our students as "digital natives", a term coined by Prensky in 2001, and merely take for granted that they already know how to produce digital genres. In a later work, Prensky (2010, p. 64) also claims that "by virtue of being born in the digital age, our students are digital natives by definition, but that doesn't mean that they were ever taught everything (or anything, in some cases) about computers or other technologies, or that all of them learned on their own".

5. Concluding Remarks: In Search of Change and Development

This paper aims at describing the goals of Project Letras 2.0 - UFRJ and discussing some conflicts and contradictions concerning the use of hybrid English courses at the FLL of the Federal University of Rio de Janeiro. The following items summarize such conflicts and contradictions:

(1) conflicting perceptions of the use of a virtual learning environment in undergraduate courses, which are seen either as a syllabus enrichment or as a source of work overload;

(2) conflicts related to the reasons for student engagement and participation;

(3) conflicting views on participating in online forums, which can make students feel more comfortable by granting them further time for reflection and editing, but can also generate fear of losing face through the written record of messages;

(4) use of Moodle as a repository of texts, being evaluated in opposite ways – sometimes as a useful strategy, sometimes as an undesirable underutilization;

(5) different views on the integration of the online and face-to-face components – students focus on course content, while professors focus on epistemological aspects;

(6) contradiction in asking students to produce digital genres without previously exploring their discursive characteristics.

It is hoped that, based on these findings and on the discussion of these conflicts and contradictions by participants, other perspectives can be incorporated and other issues be brought to light, in order to effectively contribute to changes that lead to the improvement of the project.

Although Conole and Alevizou (2010) believe that research on the use of digital technologies in higher

education is not adequately feeding policies on the use of technology, nor in fact impacting pedagogical practices, it is expected that the collaborative nature of the Project Letras 2.0 - UFRJ and the incentive given to all participants (including students, tutors, professors, and advisors) to conduct research can have positive implications for teaching and learning. In addition, this paper intends to encourage discussions and further research on the use of digital technologies and the adoption of hybrid classes in language courses in higher education.

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