The Learning Process in Higher Education: Flipping the Classroom.

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Abstract

The pandemics and the fast paced changes in today's society had a irrefutable impact on Higher Education and the learning process that binds teachers and students together.

Based on the "Made by them to them: the students in the learning process" approach (Quadros-Flores, Flores, Ramos & Peres, 2019) [1] this paper invites us to place Higher Education under a different light and to think about the use of active methodologies in the area of foreign languages and cultures teaching. The active methodology approach was underlying the strategies implemented with and by the students and the data collection focused on reflections and field notes written by the teacher who collaborated with this research. The "Made by them to them" approach also provided the categories under which both contents and results analysis fell. This approach aims at the implementation of guidelines for students as they follow a path of self-discovery and discovery of the world, catering not only for their learning to learn needs, but also for their collaborative skills in a formal context, where they integrate and share knowledge, while benefitting from a significant teaching and learning experience. Active methodologies provide the teaching practice framework and help with the preparation of students for the work context, fostering their development as individuals and citizens.

Keywords: *Pedagogical innovation; 21st Century skills, active methodologies, flipped classroom*

1.Introduction

Within the scope of language learning for intercultural communication as a key to global citizenship, we highlight a humanist paradigm that sustains personal, emotional and relational values. In addition to the knowledge acquired and constructed, opportunities for reflection around cultures and identities are valued, besides the experience of living in a democratic community and the development of necessary skills. Taking into account the guiding principles of active methods, we are responding to specific needs and questions of foreign languages and cultures, creating an environment of motivation, autonomy and commitment towards individual and peer learning. Life experiences are seen as fundamental elements for the development of language skills and critical cultural awareness, so we see, especially now in the context of pandemics, that the acquisition of knowledge can occur ubiquitously. This scenario strongly points to the possibility of learning focused on the students and the learning process, fostering the opportunity to help them reach their maximum potential, raise their self-esteem and better understand the world around them. In addition, the chance of doing so collaboratively enriches relationships, worldview and learning skills.

In this sense, it was our purpose to apply the approach "Made by them for them: Students in the Learning Process" (Quadros-Flores et al, 2019) [1] in order to understand how an active methodology approach based on the concept of "flipped classroom" could contribute to the pedagogical renewal in a Higher Education context. This approach is part of the IFITIC Project developed by Centre for Research and Innovation in Education (inED).

2.Theoretical Framework

Knowing that human beings live in relationship with others, training them in teamwork in an inter and transdisciplinary environment that emphasizes learning based on problem solving, means valuing emotional and affective development, empathy, social skills and education with an emphasis on teaching how to think by reflecting and creating holistically, which is so important in today's society, as said by Moran (2018) [2]. This author shows the importance of the global perspective that includes the relationship between the parts, going against the disciplinary system of isolation and revealing an education that involves a look at life in the sense of understanding the complexity of reality. Bloom (1964) [3] indicates that in a problematic situation there is a mobilization of intellectual and other social and emotional capacities in the organization of the problem, in the selection of resources that support

the solution. When the students are given the opportunity to practice applying and building their knowledge, explaining and arguing what they did, how they did it, why they did it in an open dialogue with others, or in a collaborative process, they can reach higher levels of knowledge. In this process, the student learns, builds knowledge on a basis of freedom and dialogue with himself and with others. The "Made by them to them: the students in the learning process" approach (Quadros-Flores et al, 2019) [1] is based on the assumption that the class must be previously prepared by the students, that they must gather the resources that will serve their learning in later moments. This gives them the opportunity to build cognitive processes according to the levels of complexity and goals of cognitive development. This approach finds a touchstone in the concept of "inverted classroom", a student-centred model, thus creating a more meaningful teaching and learning process, allowing a greater variety of strategies when it comes to dealing with content, both inside and outside the classroom. This grants the teacher the opportunity to build a stronger bond with the students because they are better prepared and more confident for the class. This spiral where products become learning processes again designs a cycle that optimizes a sustainable learning process and prolongs its retention time. The valid integration of technology was also very important, as we believe that its usage as a tool can set Higher Education on the right path, through the redesigning of contents and tasks, ways of interacting and evaluating. We consider that its use alone is not a guarantee of educational success, so we corroborate the notion that education professionals are needed in order to promote new pedagogical approaches (Quadros-Flores et al, 2019) [1]. Curiosity, emotion and empathy have been proven to be powerful allies for learning, so we, as educators, can "press these buttons", promoting lasting learning, as our students will be ready to ask new questions and find new ways of answering them.

3. Methods

The project was born out of our belief in pedagogical renewal, active methodologies and willingness to work with emotions, multiple intelligences, and mixed abilities that our 21st century students bring to the classroom. This case study aims to understand and describe pedagogical events and contexts (Yin, 2009) [4], carried out from a real context, therefore seen as a true pedagogical resource, since there was room for reflective practice in a field research that allowed the teacher to observe the natural environment of the classroom, collect data through field notes that were later analysed and interpreted in the light of content analysis and extract knowledge that will certainly serve as reference for new pedagogical experiences in Higher Education. As we intended to find new applications for the use of the aforementioned methodologies at the level of Higher Education in the field of Foreign Languages and Cultures, we believe that this is an exploratory field investigation. The educational practices that took place included thirty students, aged between 20 and 23 years old, who participated in this study for a semester, along 60 hours of teaching and learning experience. Given the specificity of the Curricular Unit of French Language and Culture and the target audience (adults), the fieldwork was organized as a Didactic Unit around a theme, in several face-to-face meetings.

4. Findings

At the initial stage, students were given access to online information about the course objectives and negotiated with the teacher the topics to be discussed under the theme "Geography of France / tourist sites", establishing individual connection points and ideas to develop their skills and knowledge while working outside the context of classroom. The involvement and accountability of each student were fundamental to this process, as well as the group's self-regulation of its own functioning. Each individual assumed the role of producer and receiver-interpreter in a process in which the word is the resource that generates discovery and enjoyment of oneself, others and the world, and it is also a condition for intervention in real life and in professional contexts. We would like to mention that, during the whole semester, the teacher created diverse pedagogical resources, contributing to a more inclusive classroom.

The second stage took place after the students gathered the information and resources. The groups discussed and analysed the data in order to create a final product. The diversity of resources adopted and solutions presented by them became evident and this process showed that there are no limits to the use of adequate tools for language development, as suggested in "Made by them to them".

The teacher observed that, in a collaborative and dynamic way, the groups adopted different strategies during this stage, namely: design of the pedagogical device project as a way of presenting

the information collected for reflection ; synthesis of the theme and subsequent presentation of the final product; Division of tasks within the working group according to the information and knowledge already acquired; search for more detailed information about the content and the document or activity to be presented; reformulations and readjustments related to the elaboration of the pedagogical project to be developed.

The third moment consisted of the presentation of the students' final products, the discussion about the process and the evaluation of the results. This reaffirms the fact that this approach effectively integrated the categories of the cognitive domain proposed by Bloom's Taxonomy (knowledge, comprehension, application, analysis, synthesis and evaluation). Thus, considering the categories of the "Made by them to them" approach and the reflections of the teacher and students, it can be said it:

a) activates previous knowledge: "Helps students to become more able to acquire proactive knowledge and know-how" "Involves students in their learning, perceived as project work done productively and meaningfully without 'boring' classes and the stress of testing."

b) promotes personal and group efforts to achieve better results. "This way of doing things has taken us much further in the acquisition of knowledge and skills" - We did a good job, very useful in future professional contexts"

c) creates an emotional bond by engaging students, leading them to gain more knowledge of themselves and of others. I felt truly committed and responsible for learning"

5.Conclusion

Language education in an interactive school/world environment enriches critical reflection, allows for interaction with "reality", emptying the idea of a classroom that merely reproduces the world. In this process, it promotes the teaching of foreign languages through the expansion of perspectives (Duboc, 2012) [5], integrating not only linguistic-cultural contents foreseen in the Curricular Unit, but also other contextual and situated ones. Furthermore, the active participation of students and their emotional involvement in the learning process fostered the collaborative construction of knowledge and experiences. The affective component has a great impact on the learning process, since emotions activate the self and help to clarify the threats and opportunities of the individual in the context (Damásio, 1999) [6]   and this approach generates positive feelings, thoughts and behaviors. The application of the approach "Made by them to them: the students in the learning process" in higher education draws a profile of a teacher that is more mediating and facilitator of the learning environment, a profile of a student that becomes a builder of learning in different environments and in a relational process, and a more inclusive and open school profile, whether in terms of spaces, content and training objectives, or in terms of opportunities for development for all

References

[1] Quadros-Flores, P., Flores, A., Ramos, A., & Peres, A. (2019). Made by them to them: The Students in the Learning Process. In *Conference Proceedings International Conference New Perspectives in Science Education (* (pp. 417-423).

[2[Moran, J. (2018). Metodologias ativas para uma aprendizagem mais profunda. *Metodologias ativas para uma educação inovadora: uma abordagem teórico-prática. Porto Alegre: Penso*, 02-25.

[3]Bloom, B. S., & Committee of College and University Examiners. (1964). *Taxonomy of educational objectives* (Vol. 2). New York: Longmans, Green.

[4]Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). sage.

[5]Duboc, A. P. M. (2012). *Atitude curricular: letramentos críticos nas brechas da formação de professores de inglês* (Doctoral dissertation, Universidade de São Paulo).

[6]Damasio, A. R. (1999). How the brain creates the mind. Scientific American, 281(6), 112-117.