Who was teaching whom? : flipping higher education
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Abstract—The focus on increasingly student-centered methodological approaches is a current concern of all of those involved in educational contexts as they face the challenges of the 21st century. The present study, supported by the “Made by them to them: the students in the learning process” approach [1] and integrated within the scope of the IFITIC project (Innovate in Initial Training with ICT), focuses particularly on Higher Education and presents a reflection on the use of active methodologies in the didactic framing of languages and cultures at the undergraduate level.

Starting from the concept of “Made by them to them” in higher education (idem), we turned our attention to the curricular area of foreign languages and cultures having conducted a case study for this purpose. The students implemented strategies consistent with the concept, and data collection focused on reflections and field notes written by the Curricular Unit Teacher who accompanied the entire training process. Also, the analysis of contents and results was based on the categories of that same approach. It was concluded that in this specific context, “Made by them to them” promotes a way of learning to learn that drives the students to discover themselves and the world: not only individually in an informal context, but also collaboratively in a formal context where they integrate and share knowledge and skills in a more natural manner, meeting an innovative, enriching and meaningful teaching and learning experience. In this framework of active methodologies, teaching practice is enriched and students are prepared for the real work context, for their journey as individuals and citizens of the 21st century.

Keywords—Pedagogical innovation; 21st Century skills, active methodologies, flipped classroom.

I. THEORETICAL FRAMEWORK
The information era has thrown humanity into a new paradigm whose digitization, dematerialization, and connection have expanded storage and communication capabilities, overcoming spatial and temporal boundaries, favoring global integration and, consequently, the transformation of personal, professional and social aspects of our lives.

This framework implies changes in society in general and in education in particular, as stated by: changes in qualification, training, skills and knowledge, ethical attitudes and behaviors, relationships, organization and evaluation, in the curriculum, in all aspects of the educational phenomenon [2]. Therefore, there is a need to recreate the teaching-learning process by finding new active approaches that respond to students' interests and the challenges of a society increasingly organized around complex digital networks, as the misalignment of these vectors is a generating factor of demotivation among students [3, 4, 5, 6, 7].

Active methods underlie the notion that all activity exercised in this context fosters the construction of knowledge as a process, not linking it exclusively to the moment of discovery, of the final product. Thus, the student actively participates in the preparation of tasks and in the elaboration of knowledge, placing the emphasis, simultaneously, on their reflective and acting capacity.

Seeking to make this idea come to life in this study, we met the guiding principles of active methods as identified by Douglas Barnes [8], by creating relevant tasks for students, promoting opportunities for reflection and negotiation throughout the process, so that they could carry out tasks critically with relevance and connection to their day to day, to their professional future, responding to specific needs and questions of foreign languages and cultures, in an atmosphere of motivation, autonomy and commitment to individual learning and peer learning.

Studies such as "It's Not About Seat Time: Blending, Flipping, and Efficiency in Active Learning Classrooms" by Baepler, Walker, and Driessen [9], show us that active methodologies reduce the focus on the teacher within the classroom, increasing student autonomy and providing results as good or even better than those achieved in “traditional classes”. These authors also report that the
data show that these methodologies allow for better management of school spaces, time for all involved, giving learners a more positive overall perception of their own learning experience.

In addition to the focus on active methodologies, we cannot help but reflect on the theme of collaborative work, as we consider that it is precisely in line with our approach to active methodologies, namely because collaboration involves issues such as

- listening to others, asking questions, expressing an opinion, settling disputes, and even being willing to change their minds, to the point of being able to evaluate different perspectives and detect stereotypes, prejudices, negotiate, make effective arguments based on evidence gathered, evidence, and accept differences of opinion (...). [10, p. 223]

We believe that the model followed in this study attempts to frame the four essential elements for effective learning, as pointed out by Osler and Starkey [11, p. 51], namely the acquisition of knowledge, the opportunities for reflection around cultures and identities, the experience of living in a democratic community and the development of the skills necessary for participation. It then became necessary to ensure that, in the design and implementation of the project, we were encompassing the requirements also listed in the work mentioned above, in view of the participatory aspect of the work.

Blumenfeld, Marx, Soloway and Krajcik[12] tell us that “Policymakers and researchers see small group work as a way to improve attitudes towards school, foster achievement, develop thinking skills, and promote interpersonal and intergroup relations”. (p.37) However, they also warn us of the dangers of misuse of this strategy, as this may lead to stigmatization of students with greater difficulties or even special needs, opening a gap and creating a large separation between learners of a given class. Therefore, we seek to follow the idea that “the ways to overcome these problems must be adapted to the unique circumstances of the students, curriculum and context.” [12, p.37], by looking at the specificity of higher education and the area of foreign language and culture teaching in a very particular way and implementing strategies consistent with that specificity, as we will further explain in the treatment of the methodology followed in this case study.

We would also like to mention the growth of formal, non-formal and informal paradigms of education as guarantee of inclusion in education and of equal opportunities in social participation. Knowing that the acquisition of digital competences, their critical and responsible use, as well as mastery of other transversal skills, favor inclusion and progress in the light of empowerment, identity development and citizenship, we also intend to give prominence to that very same theme in this text. As the Council of Europe tells us,

In short, equipping learners with the competences specified (...) is an essential step which needs to be taken to empower them to choose and pursue their own goals within a context of respect for human rights and democratic processes. Equipping them with these competences through the educational system, alongside taking action to tackle structural disadvantages and inequalities, is crucial to ensure the future health of our culturally diverse democratic societies and the empowerment and nourishing of all young people who live within them [13, p. 66].

Having said that, and considering that the mere use of technology alone does not guarantee school success, we affirm that education professionals are needed to promote new pedagogical approaches as tools to improve education and make it increasingly inclusive [14].

Knowing that workers nowadays are valued for their creativity and emotional intelligence [15], for their value-creation skills, for how they are able to meet challenges with commitment and by “thinking outside the box”, it is up to society to become increasingly concerned about the inclusion of all individuals, and aware of their rights and duties as citizens. This scenario imposes critical thinking, problem solving, collaboration, agility and adaptability, initiative and entrepreneurship skills, good oral and written communication, ability to access information and analyze it, curiosity and imagination, areas to be put to practice and stimulated from the earliest moments of school life [10], and throughout life as well.

This same inclusion theme deserves a prominent position in the theoretical and practical works in the field of education, and this framework strengthens the management of the curriculum in a flexible and contextualized manner [7], stresses the pillars of education [16] and creates a framework of reference for learners based on a humanist-based curriculum that advocates a people-centered society and human dignity as core values. Thus, it considers learning as the center of the educational process, inclusion as a requirement, and social contribution as a challenge that imposes an atmosphere that values freedom, knowledge, responsibility, and awareness of oneself and others [17].
For this reason, we consider it appropriate to address this issue also in the light of the present investigation. According to UNESCO [18], inclusive education is a process that involves the transformation of schools and other centres of learning to cater for all children – including boys and girls, students from ethnic and linguistic minorities, rural populations, those affected by HIV and AIDS, and those with disabilities and difficulties in learning and to provide learning opportunities for all youth and adults as well. Its aim is to eliminate exclusion that is a consequence of negative attitudes and a lack of response to diversity in race, economic status, social class, ethnicity, language, religion, gender, sexual orientation and ability (p.4).

In 2018, the European Agency for Special Needs and Inclusive Education published a paper entitled “Evidence of the Link Between Inclusive Education and Social Inclusion: A Review of the Literature”, which helps us to develop this study given that the conclusions presented demonstrate that there is a close relationship between inclusive education and social inclusion in the areas of education, employment and community life, relevant contexts for this case study as it includes undergraduate students who are about to undertake internships in real and diverse work contexts within their learning pathway. Special needs contexts are usually correlated with low academic and professional qualifications, employment in occupational activity centers, financial dependence, fewer opportunities to live independently, and insufficient social core after school completion. We believe that the use of active methodologies can help fight these inequalities and mitigate the negative effects normally associated with these same special contexts.

In this light, policy makers and teaching professionals can come up with ways of reformulating existing specific resources and supporting learning in inclusive education contexts [19, p. 6].

It is precisely in this context that we highlight the “Made by them to them: the students in the learning process” approach [1] for its perspective on the student as the main engine of their motivation and learning process, turning him into a producer as well as a direct consumer of his production. This process seeks to inspire students to reach their individual maximum potential, regardless of their characteristics or needs, their so-called functionality profiles, in an “inverted classroom” context, and at group level in the collaborative process, in an imminently inclusive spirit.

The “Made by them: the students in the learning process” approach [1] is based on the idea (Fig. 1) that the class should be prepared in advance with the participation of students, taking into account their characteristics, needs, motivations, so it takes support in the project methodology and learning by experience as means of achieving educational and professional integration.

![Fig. 1 – Made by them to them [1]](image_url)

Although the framework presented mentions a working scenario with Primary School children, we consider that the design of the process, as well as the work stages, should be similar at other levels of education, even if it implies adapting resources, tasks, and adjusting the challenge levels placed on students involved. We believe that the objectives of the “flipped classroom” should be clearly set and through a brainstorming process (what I
know, what I want to know, what is it for me to learn, how to learn, what to do and how I will use what I have learned), the steps should be defined according to the interests, abilities, motivations and needs of the students. The experience presented by the authors in “Made by them to them: the students in the learning process” [1] was carried out in the context of mother tongue learning, under the premises of the “Flipped Classroom”, in which the students, outside school, individually, performed tasks to collect information with the purpose of using it to create fundamental didactic resources, to construct knowledge, according to the objectives of the class.

According to the authors, (Idem) the use of the resource produced by the students, or with their personal elements, such as their voice, (i) makes learning meaningful by captivating attention because it involves the student in a meaningful process, (ii) facilitates understanding as it includes prior and articulated knowledge in familiar contexts, (iii) stimulates effort by improving outcomes as everyone wants a good performance and (iv) promotes an inclusive and emotive school because everyone is eager to participate and does so with pleasure and satisfaction. Thus, it is concluded that the “Made by them to them” approach activates crucial knowledge in the construction of new knowledge and articulates it in a natural way; involves the student in the learning process, from class preparation, promoting contact with curriculum materials and contents outside the classroom; helps the learning process to become more inclusive and challenging; promotes personal and group efforts to achieve better results; creates excitement and responsibility in the learning process.

Given these data, we wanted to broaden the scope of this approach and verify its application in Higher Education in the process of learning Foreign Languages and Cultures, namely French.

II. METHODOLOGY

From a methodological point of view, we are dealing with a case study that aims to understand and describe events and pedagogical contexts [20] where the approach “Made by them to them: the students in the learning process” [1]. Having been undertaken in a real context, we see it as a true pedagogical resource [21], as the teacher reflected on a field research: observing in the natural environment, collecting data through field notes that were later analyzed and interpreted in the light of content analysis [22] to extract knowledge that will serve as a reference for new pedagogical experiences in an educational context. This is an exploratory field research as it seeks to find new applications for using the above mentioned approach at the Higher Education level in the field of Foreign Languages and Cultures. As Sharan Merriam tells us, “Research is, after all, producing knowledge about the world — in our case, the world of educational practice” [23].

III. FINDINGS

Regarding our study, the pedagogical experience focused on the teaching and learning process in the area of French Language and Culture in Higher Education, and the traditional learning process was “flipped”, as well as the educational practices in the field of languages and cultures, which are usually inspired by cognitive behavioral orientation and centered on the teacher’s pedagogical activity.

Thirty students, aged between 20 and 23, participated in this study during a semester, more specifically, in a period of 60 hours of classroom teaching / learning experience. Moving away from a traditional stance, we intend to create a paradigm that would give rise to a new way of looking at the teaching and learning process and that, without neglecting basic skills, would aim above all to educate the individual as a citizen, as language and culture constitutes a modeling semiotic system of the world, where each individual gives meaning to his perceptions within a cultural framework, and transmits them through his discourse, while revealing a way of life of a certain community, which he actively integrates and in which he actively intervenes [24]. It should be noted that life experiences have now become the central focus for the development of language skills and critical cultural awareness. Also, the acquisition of knowledge can now occur anywhere and anytime, inside or outside the classroom, so this scenario is extremely favorable to the possibility of each student making a change, improving their potential, their self-esteem and their self-concept. In this context, “each student is unique and learning is seen as a cyclical process made up of meaningful and lasting experiences” [25].

We believe that the “flipped school” a provides more efficient use of classroom time, as students can delve deeper into the subjects of Language and Culture, learning for themselves, and showing greater motivation and involvement in learning.

In this context, students were previously, at an initial stage of this case study, given access to online information about the objectives of the course:

- Critically reflect on issues related to French culture through research and analysis of various documents, mutual exchange of knowledge and life experiences.
• Analyze the dynamics between linguistic, cultural and social relations from an intercultural point of view.
• Evaluate the French contribution to the creation of a European and global cultural heritage.
• Plan and create projects that require the appliance of knowledge and skills related to the subject in question.
• Reveal practices of critical thinking and cultural acceptance of others in order to promote personal and professional growth.

Given the specificity of the Curricular Unit and the target audience (adults), the model ceased to include only isolated classes, but was instead organized as a Teaching Unit around a theme, presupposing several face-to-face meetings.

At the first meeting, the students negotiated with the teacher the topics to be discussed under the theme “Geography of France / tourist sites”, having established individual points of connection and brainstormed ideas so that, outside school, each could develop his skills and knowledge. This moment was important because the students became aware of the way the learning process was organized and communicated in the target language about their researches, taking into account the rules of production and reception. This process acted as a stimulus for the promotion of autonomy and self-awareness.

At this stage, students were also organized according to the region / tourist destination of their choice. This pragmatic process that was developed promoted French-speaking discourse in communicative exchanges and favored the cohesion of the work groups. We believe this is very meaningful as speeches transfer the view of the world marked by the subjectivity of the speaker [24], but also his ability to argue and to influence the other for his decision, fundamental capabilities today.

Additionally, by email, students were made aware of other resource typologies (Tourist Sites, magazines, books, brochures, travel blogs, and others) and tasks they could access outside the classroom such as:

• Collection of different resources regarding the subject and typology of the itinerary chosen by the group
• Research: Collecting information by individual students, taking into account their interests, needs and experiences

• Online consultation of books on the subject, magazines and tourist brochures, travel blogs and other resources

Thus, outside the classroom, each student became increasingly committed to the group and gathered information and other relevant resources to address the topic. This process called for the involvement and accountability of each student, the self-regulation of the group about their own functioning as indispensable ingredients for the success of the group.

In the classroom context, it became evident that the mobilization of discursive language knowledge was fundamental in the transmission of collected information. Each group decided on the type of learning product / resource they would design to support the construction of more complex thinking, based on important reflections and syntheses on the cultural theme. In parallel, we followed a “Pedagogy of discourses” [24] which, according to the author cited, suggests that each individual takes on the role of producer and receptor-interpreter in a process in which the word is the resource that generates discovery and enjoyment of oneself, others and the world, and is also a condition for intervention in real life and in professional contexts.

It is important to point out that, throughout this process, the decisions were communicated to the teacher who ensured the diversity of pedagogical devices to be explored later on in the classroom. Given these circumstances, the teacher analyzed each project providing more precise indications for student guidance and to enhance their individual and collective performance.

In a second moment, imminently marked by the collaborative process, the students gathered the information and resources, discussed and analyzed them in order to create a tool that translated the knowledge built in accordance with the intended objectives. In this context, it was found that there are no limitations to the use of privileged tools for language development, as suggested in “Made by them to them”, bringing to the spotlight a diversification of resources clearly evident in the tasks developed by the students. :

• Photo gallery with descriptions and comments;
• Tourist brochures;
• Virtual tours with tour guides;
• Vacation schedule in a given region with different budgets;
• Design of detailed school exchange programs
• Visits and activities for different types of travelers;
Role play in travel agencies;
Video documentary for a contest to choose the best holiday destination in France.

It should also be noted that, in a collaborative way, the groups were dynamic and created different strategies during this second implementation stage, among them:

- Project design work of pedagogical devices as a way of presenting the information collected for reflection, synthesis of the topic and subsequent presentation of the final product.
- Division of tasks within the work group according to the information and knowledge already acquired (travel report collection, testimonials and real photos, collection of tourist brochures, audio and video documents, location of information relevant to the destination area on France...)
- Search for deeper and 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 collaborative construction of knowledge and experience in the teaching and learning of French language and culture was based on the active participation of students and their emotional involvement in the learning process. It is known that the affective component has a great impact on the learning process, since emotions activate the self and help clarify the threats and opportunities of the individual in the context [26], which generate feelings, thoughts and behaviors, important elements in transformations, depending on abstract emotions: love, joy, sadness, anger, surprise, and fear [27].

We know that these emotions generate enthusiasm and involvement, but also despair, discouragement or disappointment. Thus, it is important to promote moments that foster collective proactivity, self-confidence, awareness of one's own formative process. We also aligned our research with Vygotsky's [28] inspirational theory, which focuses on learning from others in a social, cultural environment, since the interaction that each person establishes with a given environment, the so-called personal experience, is significant in a process of learning and learning to learn. Knowledge sharing increases the level of knowledge (through the scaffolding process) and develops the person and the group, stimulates the student to reach a level of understanding and skills not yet fully mastered, enabling the acquisition of a new knowledge at a more demanding level of learning. Bloom's taxonomy is also strengthened [29] as group organization takes into account the specific domains of learners' cognitive and affective development, according to a gradual process that, according to the levels of its revised theory, consists of six levels: knowledge, comprehension, application, analysis, synthesis, and evaluation. Bloom's taxonomy provides a systematic way of describing how a learner's performance grows in complexity when mastering academic tasks. This context reveals the importance of pedagogical differentiation as learning differs from person to person, particularly when it regards the level of depth and abstraction of knowledge.

The “Made by them to them” approach [1] encompasses students' prior knowledge and skills, and respects previous organizers who make the necessary connections so that a given content can be understood and applied. In this sense, it gives the opportunity to build cognitive processes according to the complexity levels and objectives of cognitive development.

In the third moment of this study, based on the didactic resources built, the final products were presented and the process was debated and the results were evaluated at a more complex level, and a synthesis of the same was obtained. This approach effectively integrated the categories of the cognitive domain proposed by Bloom's Taxonomy (knowledge, comprehension, application, analysis, synthesis and evaluation).

In this context, in the classroom, students:

- Introduced the product built to the class, promoting discussion moments
- Subsequently recorded syntheses relevant to the understanding and assimilation of the topic;
- Ways of dissemination of products were considered

This step was effectively completed by evaluating the work of the various groups.

Thus, considering the categories of the "Made by them to them" approach and the reflections of the teacher and students, it can be said that

a) "Made by them to them" activates previous knowledge:
"Promotes increased research capabilities"
"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."
"Raises interest in experiential intercultural learning, involving real tasks"

b) "Made by them to them" 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) “Made by them to them” creates an emotional bond in the learning process by engaging students, leading them to gain more knowledge of themselves and of others.
“I felt truly committed and responsible for learning”

We would like to point out that, regarding the results, the teacher mentions that

“By applying this new “flipped learning” methodology, I realized that students, critically and with great involvement and autonomy, were able to learn better on their own, improving knowledge and critical understanding of another culture. Each task was presented as a challenge to generate interest. Task effectiveness showed a significant improvement in autonomous learning and cooperation skills and objectives were achieved by taking into account different learning styles and profiles. The different types of tasks proposed were intended to contemplate different types of intelligence, as defined by Howard Gardner [30] in his theory of multiple intelligences. ”

Referring to the moment of self and hetero-evaluation performed orally in the classroom, the teacher concluded that

“They were interested in the experience of intercultural learning, involving practical tasks in real contexts, were proud to share the final products with their colleagues and carefully prepared the evaluation questionnaires about their presentation. Obviously, they were proud of the success of all groups in multitasking; They were aware that, in addition to the increased knowledge of the contents of French language and culture, they developed skills such as autonomy, creativity and decision-making as well as many social skills; They were also aware of the benefits of the “flipped class” model and felt as if they were “walking in the teacher's shoes”.

We would like to conclude this part of our study by presenting the reflection and quoting the sentence said by the teacher which effectively pinpoints our work in extremely a concise and meaningful manner: “Who was actually teaching who? The students were happy and the teacher came to the conclusion that teaching less and learning more is the key to innovation and success. ”

IV. CONCLUSIONS
The world is constantly evolving and School must find new answers to the new challenges of society. Technology has changed the world by promoting new ways of living, thinking and acting, by expanding horizons through globalization. The best part of the challenge of changing school systems is that it is impossible to perpetuate the same methodologies often used and enclosed in textbooks. There is no turning back, we are building the future today. We need to rethink our role as teachers, while adapting methodologies that meet the needs of our students, citizens of the world. Not only new forms of literacy and new educational policies are emerging, following new key competences for lifelong learning, but also new directions of research with pedagogical applications.

In this specific case study, we have reflected on how students can successfully learn foreign languages and cultures in school in order to live full and responsible citizenship locally and globally. “Made by them to them” is not a method or technique, but rather a pedagogical approach that aims to encourage proactive learning of all subjects. This way, it is possible to design different types of “flipped classrooms” for language and intercultural learning, with activities and strategies adapted to the students’ age and linguistic level. There is no normative application or restricted model for this pedagogical option based on experiential and sensory approaches which are usually related to project pedagogy and task-based learning, always supported by the use of technology. Focused on student activity and responsibility for learning itself, this approach proved to be very effective for adults. Even though children have a natural appetite and are at ease while learning foreign languages and cultures, adult students have other advantages related to maturity, experience and autonomy in learning contexts. In a “flipped classroom”, the role of the teacher should not be that of a mere content presenter, but rather one of a learning facilitator, assuming the role of knowledge mediator, organizer of learning processes, source of feedback and evaluation. By reversing the pedagogical process, different learning styles are taken into account and each student is able to control it to match his own interests and personal abilities.

It should be noted that the field of language teaching encompasses cross-cutting skills that are extremely
relevant for academic and professional purposes. Through language and culture learning, students can reach 21st century goals in areas such as critical thinking, problem solving, communication, and collaboration. The development of social skills has become a relevant formative dimension throughout the curriculum and much appreciated in professional contexts. It should also be noted that technological literacy is now an essential component for experiential communicative activities and students should be able to apply their knowledge in a practical way, whether in real or virtual contexts, using blogs, web quests and social networks, elements that are also part of their daily activities in their “real life”. School is not disconnected from the “real world” and cannot ignore the daily interests and activities of current students, the digital natives. The abolition of barriers of time and space through technology has changed the way we live, but also the way we teach and learn. The goal now is to empower students to take greater responsibility for managing their own learning by working collaboratively with teachers, other students, and people at local and global levels.

In an era of transition, renewal is important, in the sense of making things new, improving them. In Higher Education, students are not expected to acquire or memorize knowledge, but rather to learn to research, to think reflectively and critically in order to understand and intervene in the world in an intentional, responsible and creative way. The results show that the “Their for them” approach can be applied in a context of learning foreign languages and cultures. However, it is stressed that the product realized by students must be diversified. We therefore conclude that this approach: (1) initially activates prior knowledge, fosters the personalization of teaching by individual student discovery in an informal context, and the development of personal and social skills (of others outside school); (2) at a later stage, fosters the development of personal and social skills with peers, and encourages student participation and pride in their performance; (3) finally, it promotes the mobilization of knowledge and the development of competences, as well as the awareness of the whole formative process and its benefits in the future. The “flipped class” in educational practice enriched the learning process as it promotes representations of reality that are fundamental for the construction of knowledge schemes and to make learning meaningful. In addition, it allows students to carry their knowledge to class and share it with their classmates while building products that serve as didactic resources for learning with a higher degree of complexity.

Who was teaching whom? This process of learning to learn, with active methodology, guides the student in discovering himself and the world around him and promotes a positive attitude towards the curiosity of knowledge and the relationship with others and things.

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