

# Flipped Classroom in Subject of Entrepreneurship and Management as Active Learning

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**Abstract---***The Flipped classroom is a model developed within the framework of educational innovation and the use of technological resources that consists of investing the way in which educational knowledge is explained in order to obtain a greater amount of time in the classroom. To favor the practical application of the contents, it favors that the student prior to the development of a class can access the theoretical approaches so that later these are practiced in the classroom so that the detected difficulties are overcome. In the subject of Entrepreneurship and Management, this active learning methodology allows students to have a direct approach with the synthesized contents so that later in the development of activities in the classroom, the student actively participates in their learning, favoring the use of time and assimilation of the contents, therefore, through research, the aim is to analyze the Flipped Classroom methodology applied in the discipline of Entrepreneurship and Management to promote active learning. As a methodology, the exploratory systematic review with a qualitative approach is adopted, with which it is oriented to carry out the synthesized bibliographic review, on the Flipped Classroom and active learning. The technique used was Desk Research to obtain information through existing data. The analysis and discussion of specialized information allowed establishing the advantages of the methodology and its benefits for the active learning of students in the subject of Entrepreneurship and Management.*

**Keywords---***learning, educational innovation, technological resources.*

## I. INTRODUCTION

Throughout the 21st century, various pedagogical models have been developed that provide valuable ideas for the improvement of education (Pallares, 2018), these models built by the science of pedagogy, as part of the knowledge of teaching-learning processes (Vives, 2016), respond to an adaptation to social, cultural and technological advances. In this context, educational innovations emerge, bringing significant changes in learning (Ortíz, 2019), constituted in the field of education as one of the greatest challenges posed by its application in schools at all levels.

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Innovation enables a new approach based on learning, aimed at improving educational quality (Jimenez, 2017). Globally, there are authentic axes on which educational innovation is led by countries such as Singapore known as “the society that believes in teachers”, Germany, China and the United States (García L., 2016), these educational giants They made efforts to reach certain standards in educational innovation, a situation that led them to reconfigure schools, adapt their infrastructures, train teaching staff, and include technological tools and methodologies that facilitate learning processes.

In Ecuador, through educational policies, a culture of innovation and continuous improvement has been fostered (Páez & Martínez, 2019), this cycle of changes is oriented towards an increasingly significant learning process, the deepening of knowledge, the development of abilities and skills, as well as the empowerment of values (Ministry of Education of Ecuador, 2017). In the framework of incorporating innovative methodologies into the educational process, the Flipped Classroom, or inverted classroom, emerged, a term coined in 1998 by Walvoord and Johnson Anderson (Luque & Parrado, 2019), a model in which they proposed to their students prior to the development of Classes carry out activities and a brief review of content (Cajías, García, & Valero, 2017). In 2007 Jonathan Bergmann and Aaron Sams teachers from the Woodland Park Institute in the United States published PowerPoint presentations on the Internet for students who had not been able to attend class, which were expanded and spread rapidly (Roig, 2019), since then The Flipped Classroom became an innovative methodology with great appeal and acceptance.

The Flipped classroom according to Mero, Pazmiño & San Andrés (2020), is an active methodology that is contextualized with the interests of students in the knowledge society, since they can interrelate learning with existing technological means, being attractive for the generation of an apprenticeship. This methodology is linked to technological advancement and has served to overcome traditional learning methods (Fernández, Ortega, & Pecharrormán, 2018); transferring the work of certain learning processes outside the classroom, allowing the student to prepare the lessons from home supported by technology (Torrecilla, 2018).

Among the advantages of the Flipped Classroom, improvements in class time are identified together with the teacher's experience by facilitating and enhancing the processes of acquiring and practicing knowledge within the classroom, a greater time dedicated to the attention of diversity, (Aguilera, Manzano, Martínez, Lozano, & Casiano, 2017) to the preparation of materials and continuous supervision of feedback, the reinforcement of learning is favored by providing students with the possibility of re-accessing the best content generated or provided by their teachers , in addition to creating a collaborative learning environment in the classroom (Torrecilla, 2018).

Important experiences of its use have been obtained at different levels, in the field of university education (Alegre, Demuth, & Navarro, 2019; Roig, 2019; Rivero, 2018, Hinojo, Aznar, Romero, & Marín, 2019; Sola, Aznar, Romero, & Rodriguez, 2019) in middle education (Espinosa, Solano, & Eliane, 2018) as an applicable methodology in the area of Physics (Oliveira, Araujo, & Veit, 2016) in basic education (Gonzalez, Gallego, & Jeong, 2017), oriented towards its benefits in teacher training (Hernández & Tecpan, 2017). In Ecuador, the Flipped Classroom methodology has been used as a pedagogical research model (Cobena & Rodríguez, 2019) and as an innovative proposal for teaching learning (Mero, Pazmino, & Rodriguez, 2019). The research focuses on explaining the Flipped Classroom model and its application methodological, as well as its advantages and

disadvantages. The subject of Entrepreneurship and Management is selected for the study of the methodology due to the unattractiveness that this subject generates, considered a filler that it is not given the importance that its learning demands.

The lack of interest and little attention as well as the deficit in participation and cooperation are recurring problems faced by teachers of the subject of Entrepreneurship and Management, which is why it is a priority to apply innovative methodologies aimed at motivating students that help them achieve the appropriate skills related to entrepreneurship and management, knowledge that is essential in the process of comprehensive training of students due to its importance closely linked to the economic and social development of the country (Zamora, 2015), consequently it is proposed The research objective is to analyze the methodology of the Flipped Classroom, applied in the subject of entrepreneurship and management to promote active learning.

## **II. MATERIALS AND METHODS**

The methodology of this study is an exploratory systematic review that according to Manchado et al. (2009), "are works that systematically summarize the scientific evidence to study an existing relationship by answering a specific question" (p.14). In its development a process of selection, analysis and interpretation of specialized information on the Flipped Classroom methodology and active learning in the subject of Entrepreneurship and Management was followed, presented in the main databases at national and international level such as: Web of Science, Scopus, Scielo, Dialnet, Doaj, among others. In addition, the analytical method was used to explain, establish analogies and relationships (Corona, 2016) between the Flipped Classroom methodology and the Entrepreneurship and Management Subject. Using the Desh Research technique, specialized documentary sources (Borrego, 2018) were tracked and analyzed, summarized, and contributed to the support of this research.

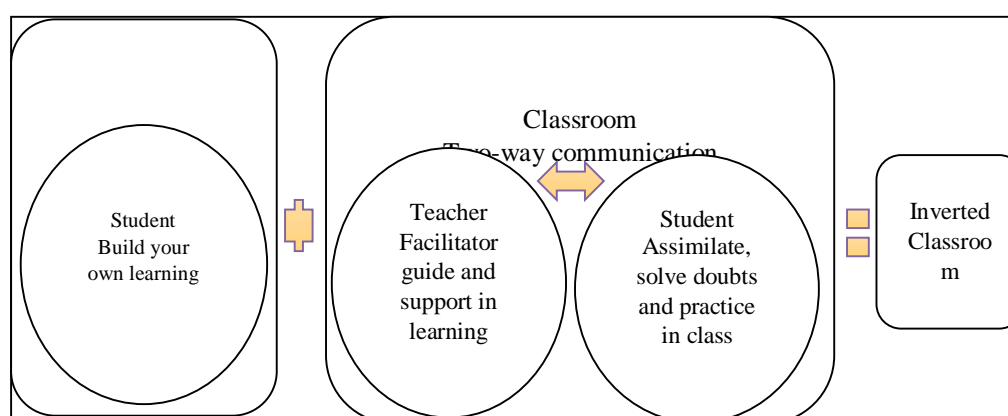
## **III. ANALYSIS AND DISCUSSION**

In the observation frameworks of various investigations, positive results are reported related to the use of Information and Communication Technologies (ICT) in education (Calderón, et al., 2016), the development of methodologies and strategies for Innovative teaching and learning (Monroy & Monroy, 2019), demonstrate the students' preference for virtual resources, and their benefits in autonomy, motivation, cooperative work (Flores, 2017) and especially in academic performance (Mendaña, Poy, González, Arana, & López, 2017).

Preference that is evident in the technological habits of the students, accustomed to using ICTs and interacting through social networks, for whom the master classes and traditional methodologies, with few possibilities of interaction and high degree of passivity are highly demotivating (Oliveira, Araujo, & Veit, 2016) reasons that lead to focus teaching attention towards methodologies, resources and conditions that help to include innovative trends in the educational process. The Flipped Classroom model, also known as Flip Teaching, inverted classroom or reverse classroom is an emerging methodology with great projection (Hinojo, Aznar, Romero, & Marín, 2019), an alternative to the traditional class (Aguilera, Manzano, Martínez, Lozano, & Casiano, 2017) devised from new

forms of didactic strategies developed through experiences related to the demands of the knowledge society (Alegre, Demuth, & Navarro, 2019).

The Flipped Classroom as part of the constructivist teaching model places the student at the center of the educational process (Roig, 2019), the growing interest in this active methodology is observed from different areas of knowledge, with predominance in circles dedicated to education (Hinojo, Aznar, Romero, & Marín, 2019) where specialists provide remarkable attention (Reyes, Dzul, & Melkel, 2019). The Flipped Classroom is an active and innovative methodology (Fidalgo, García, & Sein, 2019), a trend in educational innovation (Figalco, Sein, & García, 2020) that improves the classroom experience by giving direct instruction outside of class (Gonzalez, Gallego, & Jeong, 2017) identified by the exchange of the two most characteristic tasks of the teaching-learning process: taking lessons and preparing homework (Fidalgo, Sein, & García, 2018), this combination of work within and Outside the classroom, it allows to put into play different processes and learning experiences essential in the development of teaching practice (Castro & Mallón, 2019).

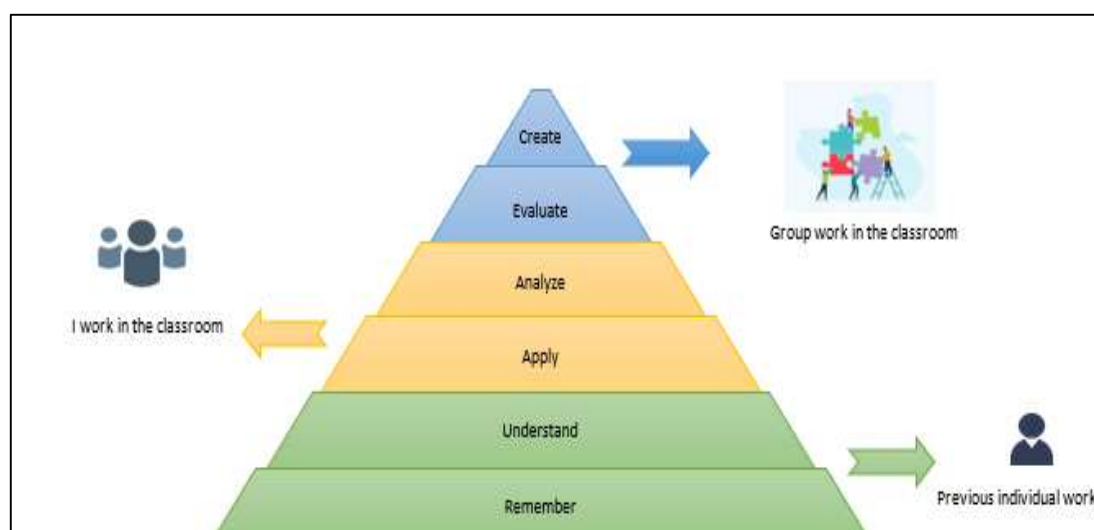


**Figure 1.** Inverted Classroom Pedagogical Model

Source: Own elaboration based on information from (Monroy & Monroy, 2019)

The methodology requires the teacher to design intentional learning experiences and the student to explore the materials provided synchronously to obtain basic knowledge prior to class development (Mingorance, Trujillo, Cáceres, & Torres, 2017), which produces a change in the teaching method by providing greater emphasis on practice (Vidal, et al., 2016) and alters the traditional perspective of time working in the classroom.

According to the Flipped Classroom sequence, the student acquires conceptual knowledge to later practice or apply it in the development of their tasks (Fidalgo, Sein, & García, 2018). The instructional part is received at home through multimedia and interactive resources, the contents are consulted by the student based on autonomous work (Gonzalez, Gallego, & Jeong, 2017), which frees up time in the classroom to carry out activities most significant learning opportunities and foster collaboration between students (Rivera & García, 2017). The hours of classes are used to solve doubts about the tasks carried out, reinforce learning and work in discussions, exercises, problems and projects (Reyes, Dzul, & Melkel, 2019), in this way the classroom is configured in a space for resolution of doubts and teamwork (Gonzalez, Gallego, & Jeong, 2017).



**Figure 2.** Sequence of the methodological process of the Inverted Classroom

Source: Own elaboration based on information from (Fidalgo, Martínez, Borrás, & Sánchez, 2017)

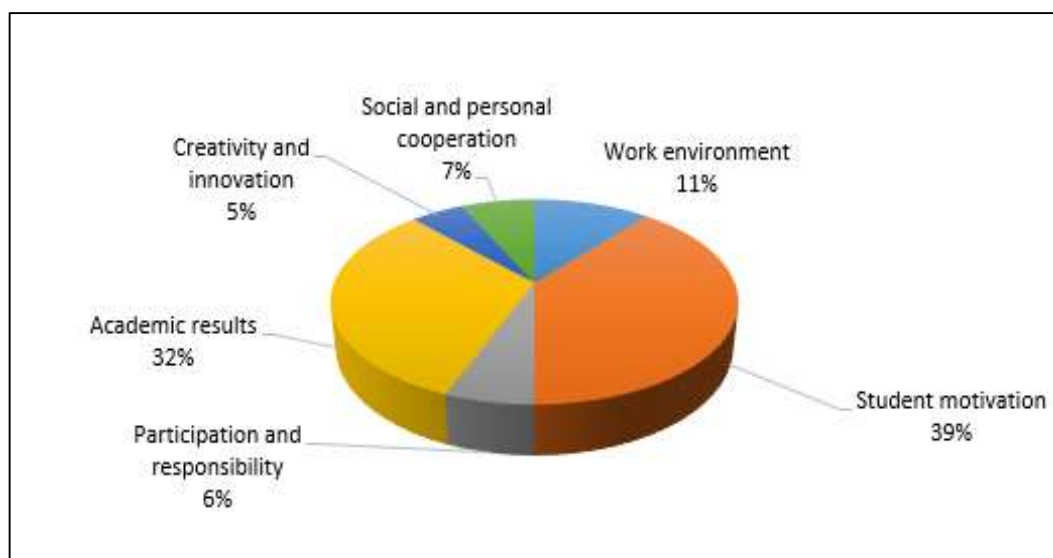
The characteristics of the Flipped Classroom correspond to an increase in the hours dedicated to learning, the use of technology, a greater student role, the reversal of roles and the commitment of teachers and students to carry out the learning process (Sola, Aznar, Romero, & Rodríguez, 2019). The inversion of the roles allows the teacher to acquire a secondary role as a learning guide and the student to learn the contents outside the classroom (Basso, Bravo, Castro, & Moragá, 2018).

But it should be pointed out that investing the classroom does not make exclusive reference to the possibility that the student may consult the previous information, but rather it is a comprehensive approach to learning, since although the teacher provides information through additional material for study, the Student must be fully involved in their learning process (Goncalves & Quaresma, 2018).

The Flipped Classroom methodology is contextualized with the interests of students in the knowledge society, since they can interrelate learning with existing technological means, which is of greater attraction for the generation of learning in relevance to the social needs of the student. current world (Mero, Pazmiño, & San Andrés, 2020). The potential of the methodology lies in the fact that the time invested that the teacher generally uses to explain a subject is relegated to the work carried out by the student from home, supported by the material provided By the teacher, the student has the advantage of accessing the content in a ubiquitous way, at any time, place and as many times as they consider necessary to review them (Reyes, Dzul, & Melkel, 2019).

In relation to the benefits that the methodology provides, these are diverse , research has reported an increase in student motivation by allowing learning in a simple and enjoyable way ble (Sánchez, Ruíz, & Sánchez, 2017; Roig, 2019), in the effort (García A., 2016), improvements in self-regulation of learning (Hernández & Tecpan, 2017; Rivero, 2018), strengthening conceptual learning, promoting critical and complex thinking, developing competencies with procedural, attitudinal and motivational character (Roig, 2019), and teamwork skills (Abío, et

al., 2017) in addition to better academic results (Merla & Yáñez, 2016, Metatute, Villarreal, Vargas, Saker, & Bustamante, 2018).



**Figure 3.** Effects of the Inverted Classroom in the subject of Entrepreneurship and Management

Source: Own elaboration based on information from (Bustamante & Holguin, 2019)

But there are also disadvantages related to reluctance on the part of students as a result of work overload (Roig, 2019), increased hours dedicated to learning and greater pressure due to the degree of responsibility that this requires, in addition to the effort that the student must make to achieve individualized learning (Aguilera, Manzano, Martínez, Lozano, & Casiano, 2017). Among the improvement indicators obtained with the application of the methodology are: the development of peer learning, greater interaction between students (Fidalgo, Sein, & García, 2020), creation of knowledge resources, shared use of resources created by the students themselves, generation of lessons from their own learning experiences, greater cooperation (Fidalgo, Martínez, Borrás, & Sánchez, 2017) demand for feedback from the students (Fidalgo, García, & Sein, 2019) and strengthening of the sense of individual responsibility.

The Flipped Classroom (Fidalgo, Martínez, Borrás, & Sánchez, 2017) is classified as a global method, since it has objectives and activities similar to active methodologies, it can be considered an active methodology, therefore, as active methodologies are applicable to any subject and educational field (Sein-Echaluze, Fidalgo, & García, 2019; Reyes, Dzul, & Melkel, 2019) its application in the subject of Management and Entrepreneurship is justified, taking into account the benefits reported in motivation and academic performance by Research carried out around different courses and varied subjects (Mendaña, et al., 2017). Given that students value the methodology associated with the method more than the contents used (Fidalgo, Martínez, Borrás, & Sánchez, 2017) the Flipped Classroom in the Management and Entrepreneurship course generates a significant contribution to learning processes by adapting teaching to the requirements and expectations of students.

Its methodological application in the classroom must respond to a planning process (Aguilera, Manzano, Martínez, Lozano, & Casiano, 2017) based on: The programming of learning objectives and the skills to be developed in students, preparation of materials that will help students to familiarize themselves with the topics to be covered, the visualization and reading of the materials at home, the design of the class sessions where the materials are prepared based on the doubts of the students and the individual activities are selected and group activities that will allow the student to achieve active learning, resolution of doubts to promote understanding of concepts and encourage participation, consolidation activities of the concepts acquired through various activities depending on the needs of each student, including collaborative work, work outside the classroom to encourage students to work in Collaborative methods, review and review of the work and contents addressed, the evaluation of the cognitive and competency objectives defined at the beginning of the planning process.

Finally, it is necessary that the teachers of the subject of Management and Entrepreneurship know different ways in which their practices can be diversified. and they feel motivated to do so, since there is no single way to invest the classroom, the teacher must choose the teaching method that he considers most appropriate and critically modify it according to the learning needs of his students (Espinosa, Solano , & Eliane, 2018) considering that although the investment of the classroom can be carried out in any area of knowledge, the particular challenges that this subject may present must be taken into account.

#### **IV. CONCLUSIONS**

According to the results obtained, the evaluation of the Flipped Classroom shows positive aspects in its application, among which the benefits reported in motivation, autonomous learning, collaborative learning and the academic performance of the student stand out, as evidenced by the various studies addressed. The advantages of the Flipped Classroom as part of pedagogical innovation and active methodologies are demonstrated by the great appeal it offers to the educational process. Supported by technology, the factor of change with the greatest influence on education, teachers find in ICTs the ideal tools and resources for the creative preparation of classes, which facilitate the investment processes of the classroom, making it easier and with significant results in learning and performance. The adaptability of the Flipped Classroom was verified as it is an effective and practical methodological approach applicable to the different areas of learning, as well as at the different educational levels, consequently, its application in the subject of Management and Entrepreneurship is appropriate to motivate the interest of the students, guide and strengthen specific competencies and skills, help them improve their performance and get involved in their own process of acquiring knowledge, which in turn will allow them to achieve the curricular objectives of the area.

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