Flipped Classrooms:

A New Perspective to Enhance Students' Questioning Skills

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Abstract

This action research project explores the use of a flipped classroom model for pre-service teachers in Venezuela. After struggling with an insufficient allocation of class time for teacher training courses and a lack of critical engagement in the classroom, the researcher chose to implement a flipped classroom approach. In particular, research looked at the impact of a flipped classroom model on the development of student questioning skills. Data collected through surveys, journals, and analysis of classwork suggest that students in this context responded positively to the implementation of a flipped classroom. In-class student questioning increased, and level of critical inquiry in the classroom overall was impacted positively. This research suggests that the flipped classroom model may be one way to strengthen student engagement and critical questioning skills in an in-service teacher training context.

Introduction

In the last nine years, I have encountered different types of pre-service teachers in EFL contexts, and in all groups, I repeatedly saw evidence of the absence of questioning in class and during academic work in general. Also, the levels of cognition in my students' comments and answers were always centered towards the bottom of Bloom's Taxonomy (1956) – understanding information and remembering it. It seemed that the problem was in the methodology that I was using over the past years because I, certainly, was focusing the class more on my work and my participation than my students'. However, I recently changed the path of the development of my teaching and centered activities more on the students' participation. Nonetheless, I noticed that even though they were clearly more involved and active in the class, they did not improve their thinking abilities.

Over the past two years, I have reflected on the possibility that the problem might be that the class time is not enough to cover all the information related to the course and that for this reason students never have enough time to reach HOTS (higher orders thinking skills) or cognition levels. According to Lindahl (2016), many teachers worldwide struggle to promote HOTS in the classroom, so, as guidance, they apply Bloom's Taxonomy in order to identify the levels of cognition in students. This taxonomy classifies low levels of cognition or thinking skills such as remembering, understanding and applying; and high levels of cognition or thinking skills such as analyzing, evaluating and creating.

For the purpose of this research, I worked with students studying to become language teachers in a course called Grammar I. This course aims to study the different language schools of thought and the development of language. Thus, sometimes the class stays in the lower levels of thinking (understanding, remembering and applying). That is to say, students tend to limit

themselves to manage information to pass the test, and many are unable to transfer this knowledge into real-life situations. Therefore, I wanted to enable my students to enhance their critical thinking and questioning abilities through the use of flipped classrooms, which in the words of Aidinopoulou & Sampson (2017) is a "technology-supported pedagogical innovation" (p. 1) whereby students first are exposed to new materials and resources prior to instruction, and then are asked to practice and assimilate knowledge inside of class. According to Brame (2013) the flipped classroom instructional model benefits students' learning process because "students gain first-exposure learning prior to class and focus on the processing part of learning (synthesizing, analyzing, problem-solving, etc.) in class" (np). This allows students to actively participate in the learning process, activating their cognitive processes before the class due to the fact that the teacher reverses the typical class setting. The classroom is transformed from a place to repeat and reproduce to a place to analyze and create. The student is empowered for the class before entering the classroom. Thus, in the same way, this instructional model allowed me to design activities that students could work on at home in order to activate their cognition prior to the class.

Research Question

All this led me to design a research project to explore the following research question: ***What impact will the introduction/implementation of a flipped classroom instructional model have on students' questioning?*** Moreover, through this research, I aim to know if this model could help us to have deeper discussions in the classroom, and if we could move to a higher order of thinking (analyzing, evaluating, and creating) through questioning.

Literature Review

Critical Thinking

Critical thinking involves the active participation of both students and teachers in building knowledge. However, in ELT settings, we can observe that teachers tend to teach by repeating theories without questioning much about our context and reality. According to Schafersman (1991), critical thinking is not an innate skill. It means that we have the capacity to think, but we need to train ourselves to think critically. Thus, teachers should know that they have to foster the enhancement of critical thinking in the classroom. This author explained that teachers need to be critical thinkers in order to promote critical thinking because "trained and knowledgeable instructors are necessary to impart the proper information and skills" (p. 1). That is, teachers must develop their critical thinking skills to guide students to high orders of critical thinking. I believe that thinking critically is difficult for many people because everything seems to be ready for them. Everything is so automatic that they do not have to stop to think about what they are doing or if there is a better way to do things. According to Ramsey, Gabbard, Clawson, Lee and Henson (1990) "most of the questions asked in a typical classroom require only recitation of memorized material and are on the lowest cognitive level" (p. 2). Schafersman (1991) also explained that people tend to stay in a low order of thinking, which he defined as "sufficient for personal survival" (p. 1). Nevertheless, as teachers, we have to think about the need for higher cooperation in our society. Therefore, we cannot conform to having individuals that are able to solve one problem if you give them the solution in advance.

CT and Questioning

There is a close relationship between critical thinking and questioning. Elder and Paul (2003) explained that thinking is not directed by the answers but by the questions that we ask. This means that students should be motivated to ask questions and not only to repeat set forth answers. In this regard, Yang, Newby, and Bill (2005) stated that "the level of thinking that occurs is influenced by the level of questions asked" (p. 164). For that reason, it is important to analyze the relevancy of questioning and the impact it generates in the learning process. According to Paul and Elder (1996) "questions are the force that powers our thinking" (p. 1), and the teacher must understand and internalize how both work. The teacher has to know what the elements of thought are, and also how to ask effective questions.

According to Cashin (1995), the issue dwells in the fact that teachers normally tend to focus on closed-ended questions in the class. These questions only lead to verifying the comprehension of a certain topic or content, but they do not promote higher orders of thinking skills. Therefore, teachers should foster open-ended and divergent questions. These types of questions activate the cognitive process in our students because they invite students to actively think about the question to reach a "viewpoint." Furthermore, for making good questions, teachers should consider other aspects such as "time" and "class atmosphere" (Ramsey et. al, 1990). Students need time to absorb the question and discuss it with their classmates in private in order to provide an answer. Thus, the teacher can scaffold questions by providing time for the students to participate without directly asking anyone at once, but giving time for students to work on it. Furthermore, students need to feel comfortable when answering the questions. Ramsey et. al (1990) further stated, "In a secure atmosphere, questions can become powerful catalysts for learning and provide excellent models for other students" (p. 4). Therefore, teachers

must create a welcoming atmosphere in which students feel the freedom to provide answers and also to ask questions.

Flipped Classrooms to Trigger the Metacognitive Process

Throughout my research, I found a lot of information about the benefits of flipped classrooms to improve critical thinking in students. Also, I found some articles about the importance of questioning to improve critical thinking, but I did not find the combination of flipped classrooms and questioning. Therefore, through this research, I would like to explore how the combination of both of them contributes to enhancing students' thinking skills; and, in order to do so, the analysis was built on triangulating between theoretical knowledge, students' experiences, and my own perspective as the teacher.

Flipped classrooms are based on a constructivist theory of learning that is triggered in collaborative environments according to Strayer (2012). This means that the approach is student-centered, and students take action in their learning. Bishop and Verleger (2013) explained that the flipped classroom "represented a unique combination of learning theories once thought to be incompatible—active problem-based learning activities founded upon a constructivist ideology" (p. 1).

In the same sense, Bergmann & Sams (2012) emphasized that flipped classrooms allowed the use of interactive technologies to help students take an active role in the class. That is to say, through this model, students are empowered to take action in their learning process and more importantly in knowledge construction. This is paramount for the learning process because they are engaged in learning activities outside the classroom that allow them to trigger their metacognitive process before entering the class. Once students are more active in learning, the teacher can plan the class for a more question-driven environment, in which students are led to

ask more and more divergent questions. All in all, the connection between questioning skills and flipped classrooms dwells in the opportunity that students receive to start their cognitive process in a more student-centered environment in which they will truly be protagonists of the learning process.

Methodology

In this study, students' questions were used to classify their levels of critical thinking skills. This is relevant because teachers' and students' questions impact the way students think. Through this research, I could visualize how questioning influences students' thinking processes, due to the fact that questioning shapes thinking; through the use of flipped classrooms, students were given the opportunity to start their metacognitive process before arriving at the classroom. The intention was for students to be able to question in higher orders of thinking since they had the time to check the material several times in advance.

Research Context

This research took place in Maturín, Venezuela. The educational system in Venezuela is divided into seven subsystems from primary education to higher education. It is important to say that the education system is free throughout all subsystems and only mandatory until general middle education. In this research, I worked with a university responsible for the formation of future teachers in the country, UPEL (Universidad Pedagógica Experimental Libertador), specifically Instituto Pedagógico de Maturin. In this institute, we can find the English Language Teaching Program. In this program, students take different classes that aim at the study of language, culture, literature, pedagogy, methodology, and evaluation, among others. Grammar I is one of the subjects students take during their sixth semester in the university. When they take

this class, they are challenged to read intensively and extensively, discuss, make oral presentations, and write texts about language theories in English. This study took place at the beginning of the academic period 2017-II, from October 2017 to February 2018.

Participants

The students participating in the research were pre-service teachers from UPEL Maturín. These students have already studied English for three years in their career, so they are able to communicate orally and in written form in the target language. For that reason, all of the data collection process was fully in English. I had a total of ten students who showed their interest in the research. Out of the ten participants, six were female and four male. Their age range was 20 to 25. Also, they all had digital skills to manage the flipped classroom instructional model, and they had access to the Internet and to a computer.

Now, I would like to share with you a little bit about myself. I have worked as an English teacher for nine years at UPEL Maturín. I hold a degree in English Language Teaching and a Master's Degree in Higher Education. I am currently enrolled in a Doctorate in Education, and I am in the process of writing my thesis. My research fields are Teacher Education, ELT, EFL, Linguistics, Grammar, English for Specific Purposes, Flipped Classrooms, Critical Thinking, Questioning, and Young Learners. I have a passion for education because I believe that teacher education is key to building a better future for my country.

The Intervention

In the first week, students were invited to participate in the research. After a week, during a special class, students were handed a text about language schools of thought in English. They had 20 minutes to read the text, and then 20 minutes to think about two questions about the reading in English. The students were asked to write their names to be able to follow up on any

changes during the second part of the test. The week after, students were asked to join a virtual classroom on Canvas where they had access to different pieces of information about the topic of the second part of the test. In the fourth week, in the same fashion, they were asked to read a text about morphemes for 20 minutes, and after that, they had 20 minutes to write two questions about the reading.

I created a Google Forms document and sent it to students to find out what their attitudes towards flipped classrooms and questioning were. This allowed me to have a starting point or reference for the study. Finally, I kept a journal to have a written record of my actions and their progress, and this information was used for the analysis and reflection of the research process.

Data Collection Procedures

So far, I have briefly explained how I worked to find out more about the impact that flipped classrooms have on questioning. The collection of the whole data took five weeks. In order to obtain the necessary information for the research, I used three data collection tools: a class document analysis (Revised Ennis-Weir Critical Thinking Essay test), a survey, and a journal.

Revised Enis-Weir CT test.

In order to design a research tool that suited my participants, my study used a tailored version of the Ennis-Weir Critical Thinking Essay test presented by Hasan and Sevki (2008), in which they analyzed the importance of questioning behavior to enhance critical thinking skills using Bloom's Taxonomy as a reference for classification. This test consisted of presenting students a text and requesting that they write questions about the text. So, first, I presented students with a reading about language schools of thought; after reading, they wrote two questions about the reading. I classified their questions using Bloom's Taxonomy as a reference

to establish their questioning level. Then I applied the test again using a different text and with the implementation of flipped classrooms.

Survey.

Using Google Forms, I designed and applied a survey in English to the ten students who participated in the study (see Appendix A). Through the survey, I provided students with six open-ended questions to find out about their perspective towards questioning, and their attitudes towards the implementation of flipped classrooms. The survey was sent after the implementation of the two tests mentioned above in order to give students the opportunity to express their opinions and thoughts about their experience, and also about the relationship between questioning and thinking and the benefits of the implementation of a flipped classroom instructional model in this learning process.

Keeping a journal.

I designed a journal sheet to keep a written record of all the steps of the research with my actions and reactions of the students; also, I wrote down my observations of the activities, and the changes and progress produced in the whole process.

Data Analysis

All the data collection tools described before were used to perform a discrete data analysis with the purpose of ensuring the triangulation of the information and the generation of a validated analysis to help me understand the impact of flipped classrooms on questioning and especially on thinking.

Revised Enis-Weir CT test.

I used students' questions to analyze what levels of critical thinking skills students had, using a rubric based on Bloom's Taxonomy; all this was done with the purpose of analyzing and

categorizing the questions written by students. This helped me diagnose the questioning skills of the students in order to understand the way students thought, and after the second part of the test, I was able to see the improvement in their questioning skills due to the implementation of the flipped classroom instructional model. For example, if a student's question aimed to verify information that was given in the text, such as "What is langue and parole?" or "Is the study of language prescriptive?" I classified it at the bottom of Bloom's Taxonomy as "remembering" because the student was only attempting to memorize information.

Survey.

The information given by the students provided useful information that helped me understand students' perspectives toward questioning and flipped classrooms. I analyzed students' answers to the six questions, and after I got the results I used a framework of categories to systematically organize students' answers by categories according to their responses (see Appendix B). Once I categorized students' responses, I created new categories that emerged from the analysis.

Keeping a journal.

The information was recorded weekly for five weeks. It was used to analyze and reflect meaningful on my teaching practice, and my students' improvement throughout the research. In the end, I used this journal as guidance to write my final comments and results about the research. This helped me to reflect on students' progress during the whole process.

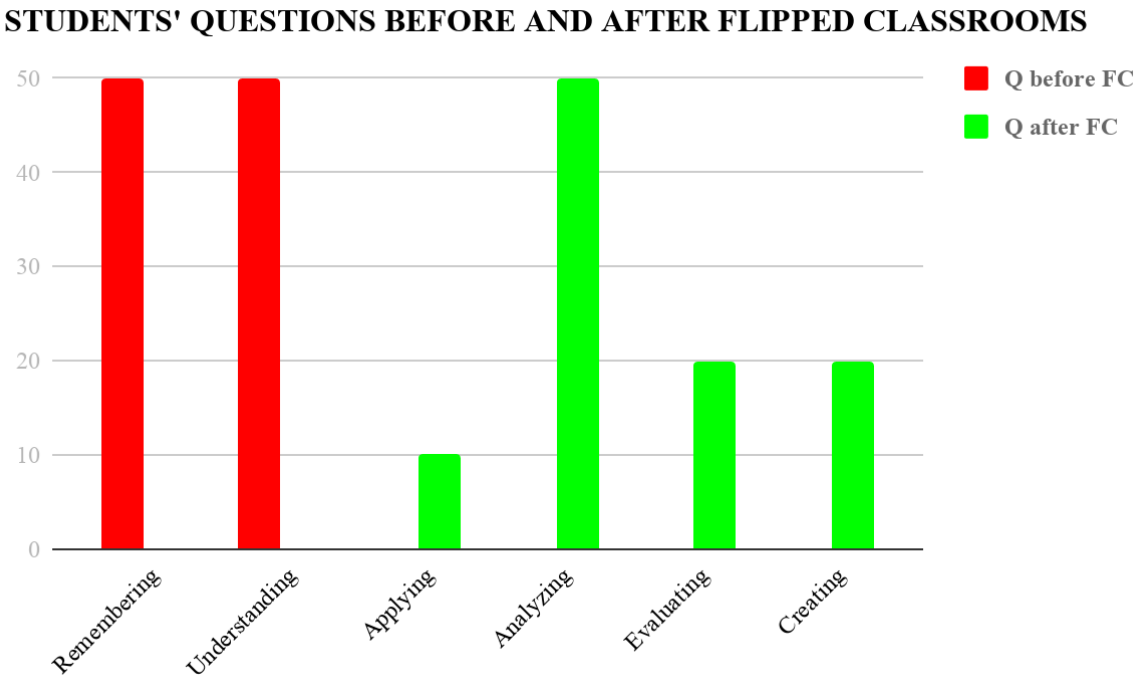
Results

Findings

Revised Enis-Weir CT test.

Figure 1 shows students' questioning progress as measured in percentages. At the beginning of the study, the majority of questions were either on the level of remembering or understanding. These two levels are considered to be linked to low orders of thinking. On the other hand, after the implementation of flipped classrooms, students' questions moved to higher orders of thinking. The majority of questions were in the level of first, analyzing; second, evaluating and creating; and in third position, applying. This figure shows the progress of students' questioning skills after the implementation of flipped classrooms.

Figure 1:
Students' questioning progress after the implementation of flipped classrooms



In order to show the questions and also the improvement, Table 1 gives one example of a question in each session, and also the way they were classified.

Table 1:
The classification of students' questions using Bloom's Taxonomy.

ORDERS OF THINKING	**SESSION 1** **Questions before flipped classrooms**	**SESSION 2** **Questions after flipped classrooms**
LEVEL I REMEMBERING	-What are langue and parole?	
LEVEL II UNDERSTANDING	-Did North American Structuralism pay attention to the semantic aspect of language?	
LEVEL III APPLYING		-Explain how allomorphs operate in spoken language.
LEVEL IV ANALYZING		-How do you think morphemes, allomorphs and words are connected?
LEVEL V EVALUATING		-How does knowing the notions of morphemes, allomorphs and words impact your awareness of error correction?
LEVEL VI CREATING		-What techniques or strategies would you use to teach words, morphemes and allomorphs?

Survey.

The purpose of the survey was to give students the opportunity to express their ideas about flipped classrooms and more importantly to have time to reflect on their own learning process. As a result, six new categories emerged from students' answers: 1) Active Participation,

2) Knowledge Construction, 3) The Path to Thinking, 4) Creation, 5) The Need and 6) Commitment.

Students' experience with flipped classrooms was represented as active participation in the learning process. All the students agreed that flipped classrooms allow students to take action in the learning process. Students expressed that through flipped classrooms, they could construct knowledge, and that they were not only receivers of information. They expressed that they felt a new responsibility within the process. Two students were very emphatic about it. One student stated, "It make[s] students try to construct their own knowledge and produce ideas by themselves." Another explained, "there is a feeling of more responsibility towards learning."

In terms of the importance of questioning, students agreed that questioning was the path to thinking because it is the way to build their own knowledge and to produce new ideas. Students expressed that in the learning process, questioning is key to pass from receiver to producer. Regarding the relationship between thinking and questioning, all the students agreed that they were both linked and that one cannot have one without the other. Therefore, the category "Creation" describes the perception of the students since they expressed that through questioning you are able to create new ideas, thoughts, and knowledge. One participant noted that, "When you ask [it] is because you are really learning and you have the necessity to understand things better."

Students' attitudes towards questions in class varied and were somewhat opposed. On the one hand, half of the population expressed that they did ask questions in class because it allowed them to learn and that questioning was very important in the learning process. On the other hand, the rest felt that they did not like to ask questions in class because they preferred to ask their

classmates, wait for someone else to ask, or research on the Internet. Also, some students confessed that they did not ask questions because they were shy.

Answers to survey questions regarding the impact of flipped classrooms in students' questioning gave rise to a new category of "Commitment." The majority of students declared that through flipped classrooms students were more committed to their own learning process and to questioning. Most of the students agreed that the flipped classroom enhanced their questioning and that it not only motivated students but also empowered them to take active participation in the learning process. For example, a student stated, "In a flipped classroom we are not only receivers of information because the professor acts as a guide, who provides help. She expects we can talk and ask questions, so, even if we are shy we need to do it."

Journal.

The aim of keeping the journal was centered on the need for reflection during the research process. Through this tool, some key aspects of students' reactions were noted and recorded.

1. At the beginning of the project, half of the students declined to participate. Many did not understand the value of questioning in the learning process. Only ten students showed interest in the research and committed to participate during the five weeks.
2. During the first session and first test, prior to the application of flipped classrooms, students had a hard time articulating their questions because they felt they were being evaluated. Many students expressed that they did not usually write questions because normally the teacher provided the questions.
3. Students were invited to join the virtual classroom on Canvas, in which they found different types of information about morphemes (video, text, mind map, mental map,

etc.). They got excited about the idea of having a virtual space with the information for the class at all times. They expressed that they felt more confident since they could check the information at any hour during the day and also as many times as needed.

4. During the second session and second part of the test, after the implementation of flipped classrooms, students asked questions beyond the low orders of thinking. They expressed that their curiosity was not centered in understanding the topic, but in finding out what other possibilities this topic could bring in relation to their context and learning process.
5. Students received a survey with questions about the experience they had with flipped classrooms and questioning. Many students expressed that they felt empowered using the flipped classroom instructional model and that it did influence their questioning and thinking.

Discussion

This study had the purpose of evaluating the impact of the implementation of the flipped classroom instructional model on students' questioning skills. In this research, students' experiences, ideas, perspectives, attitudes, and thoughts were considered in order to nurture the analysis and provide validated information about the learning process.

As stated earlier, at the beginning of the study, some students declined to participate because many did not understand the influence of questioning as a reflection of their thinking process. The research results suggested that this had to do with the traditional setting because usually students are not challenged to reflect on the learning process, but to only memorize or "learn" what they need to pass a course or a subject.

The results indicate that participants really benefited from the implementation of flipped classrooms in terms of reflection, ownership, critical thinking, creativity, and commitment to the

learning process. Also, there is evidence of flipped classrooms being a constructivist learning approach and a tool for students, which is consistent with the ideas of Strayer (2012). The majority of students agreed that they felt more empowered to form questions after the implementation of flipped classrooms, due to the fact that they were given the chance to take active participation in the learning process. The impact of flipped classrooms was evident in students' confidence and questioning.

The students that participated also demonstrated more comfort with the whole process. They said that they could understand the topic much better and they got to think about the relationship the topic had with their learning process. The fact that students were able to make connections between the topics and their learning process showed evidence of higher orders of thinking because they were able to go beyond the low orders of thinking and move into higher orders through the reflection that originated from questioning, which is what Yang, Newby, and Bill (2005) referred to in their study of the connection between questioning and thinking.

Another positive aspect of the research was that students learned the link that exists between questioning and thinking. Many agreed that questioning was the path to thinking. These results are consistent with Elder and Paul (2003) when they expressed that questions are the engine of thinking; hence one could not have real learning without the two.

Furthermore, this study showed that through the implementation of flipped classrooms students were not only motivated but able to be more creative and confident about their ideas. In this sense, the research provided valuable information that supported the claim that we have to prepare students to be active thinkers not only in the classroom but outside the classroom as stated by Seker and Komur (2008). All of this is especially important in the context of this research because the participants are pre-service teachers. That is, these students will be teachers

soon, and their growth will definitely impact their classes and future students. Hopefully they will switch the way they view the goal of education, from preparing to pass a test to preparing for life itself. Overall, research data showed sufficient evidence that through the implementation of flipped classrooms students felt empowered to be more active in their role as students and as future teachers as well.

Conclusion

As shown in the research, questioning is linked to thinking and to understanding the world. Therefore, any educational setting should aim toward the development of citizens that can interact with others in a more understanding and comprehensive manner. Thus, education should help students unveil their minds and understand their thinking in order to visualize that all humans have different ways of thinking and that it is due to their own questioning level. Once we are able to do this, we can give new and fresh steps into a new and better way of thinking in and outside the classroom. As stated by Rojas (2001), "The first step is the breaking away from the shadows of our conventional knowledge and believing that the questioning process is the beginning of knowing what we have learned" (p. 330). We need to allow ourselves to be engaged in the metacognitive process. The ELT class has to stop being the place where the teacher only asks about the things he already knows and students are quiet. So, the invitation is to create more spaces where questions are welcome and students can feel ownership of knowledge in the learning process and be active participants through class experience and more importantly in their lives.

Limitations

The primary limitation of this study was the access to a computer and to Internet not only for students, but for teachers as well. Unfortunately, in Venezuela, not all the students and teachers have this privilege. Therefore, this study had to be carried out with students that qualified in this aspect. All over the country, students complain about having to spend a lot of money on Internet access with really slow bandwidth to be able to watch a video or even download documents. Thus, this is the biggest limitation of the research. I suggest that other researchers create a digital folder with the information on a computer in the workplace that students can use when they are free to be able to work offline.

Future Directions of Research

All this made me reflect on teacher education, and also on the teachers that are now in service. Usually, these teachers do not have time to analyze what happens in the classroom because they are forced to submit a lot of documents during the school year, and they have to work with over 40 students in one class. Therefore, I would like to modify this research a little and adapt it to other levels in the subsystems of education in my country, such as high school or even elementary school, as a way to analyze students' thinking and teachers' questions, with the purpose of providing teachers with a new perspective to enhance questioning skills of students through the implementation of flipped classrooms.

References

Aidinopoulou, V. & Sampson, D. G. (2017). An action research study from implementing the flipped classroom model in primary school history teaching and learning. *Educational Technology and Society, 20*(1), 237-247.

Bergann, J. & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. Eugene, OR: International Society for Technology in Education.

Bishop, J. L., & Verleger, M. A. (2013). The flipped classroom: A survey of the research. In *ASEE National Conference Proceedings, Atlanta, GA 30*(9), 1–18.

Bloom, B. S. (1956). *Taxonomy of educational objectives, handbook I: The cognitive domain*. New York: David McKay Company, Inc.

Brame, C. (2013). Flipping the classroom. *Vanderbilt University Center for Teaching*. Retrieved from http://cft.vanderbilt.edu/guides-sub-pages/flipping-the-classroom/

Cashin, W.E. (1995). *Answering and asking questions. Idea paper # 31*. Manhattan, KS: Center for Faculty Evaluation and Development.

Elder, L., & Paul, R. (2003). Critical thinking: Teaching students how to study and learn (Part IV). *Journal of Developmental Education, 27*(2).

Lindahl, K. (2016). To HOTs or not? Higher order thinking for ELLs. TESOL International Association. Retrieved from http://blog.tesol.org/to-hots-or-not-higher-order-thinking-for-ells/

Paul, R., & Elder, L. (1996). The critical mind is a questioning mind. Foundation for Critical Thinking. Retrieved from http://www.criticalthinking.org/pages/the-critical-mind-is-a-questioning-mind/481

Ramsey, I., Gabbard C., Clawson K., Lee L., & Henson K. (1990). Questioning: An effective teaching method. *Clearing House, 63*(9).

Rojas, V. P. (2001). A view from the foxhole: Elevating foreign language classrooms. In A. L. Costa (Ed.), *Developing minds: A resource book for teaching thinking*. 3rd Edition. Alexandria, VA: ASCD.

Schafersman, S. (1991). An introduction to critical thinking. Retrieved from http://facultycenter.ischool.syr.edu/wp-content/uploads/2012/02/Critical-Thinking.pdf

Seker H., & Komur S. (2008). The relationship between critical thinking skills and in-class questioning behaviours of English language teaching students. *European Journal of Teacher Education, 31*(4), 389–402.

Strayer, J. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environment Research, 15*, 171–193.

Walvoord, B.E., & Anderson, V. J. (1998). *Effective grading: A tool for learning and assessment.* San Francisco: Jossey-Bass.

Yang, Y., Newby, T., & Bill, R. (2005). Using Socratic questioning to promote critical thinking skills through asynchronous discussion forums in distance learning environments. *American Journal of Distance Education, 19*(3), 163–181.

Appendix A: Survey

FLIPPED CLASSROOM: A NEW PERSPECTIVE TO ENHANCE STUDENTS' QUESTIONING SKILLS

Email address*

1. Have you experienced flipped classrooms before?
   Yes ( ) No ( )
   If your answer is "yes", describe your experience.

2. Do you think that the implementation of flipped classrooms motivate students to take action on their own learning process?
   Yes ( ) No ( )
   Justify your answer

3. Do you think questioning is important in the learning process? Why?

4. How does questioning relate to thinking?

5. Do you usually ask questions in the classroom?
   Yes ( ) No ( )
   Justify your answer

6. Do you think that flipped classrooms could help students to be more engaged in questioning?
   Yes ( ) No ( )

   Justify your answer.

Appendix B: Framework of Categories

Question	**Answer**	**Category I**	**Emerging Category**	**Conclusive Approximation**
Experience with Flipped Classroom	Protagonist, exciting, challenging, meaningful, external, understand, dynamic, refreshing	Experience	Active participation	Through the use of flipped classrooms, students feel more active in the learning process.
Motivation of students to take action in the learning process through Flipped Classrooms	Active, comfortable, responsibility, building knowledge, diversification, ownership, production	Motivation	Knowledge construction	Students expressed that they felt a new responsibility for the process, and the need to construct their knowledge
Importance of Questioning in the Learning Process	Thinking, reflection, understand, builder, productive, development, evolving, meaningful	Importance	The path to thinking	The majority of students agreed that questioning is the path to thinking. It is the way to build our own knowledge and new ideas.
Relation between Questioning and Thinking	Think deeper, organize, creation, thinking process, real learning, doubts, reflection	Relation	Creation	Through questioning, emerges the possibility of creating new ideas and dive deep into knowledge.
Attitude towards questioning	Need, clarification, specific, research, point of view, quiet,	Attitude	The need	Students who ask questions are more conscious about the learning process, and

Question	Answer	Category I	Emerging Category	Conclusive Approximation
	learn, improve, shy, active			understand that questioning is necessary. Other students are too shy to ask, but try to answer their questions through internet and classmates.
flipped classrooms to engage students in questioning	Active, opportunity, push, commitment, interesting, creative, production, perspective, confidence	Engagement	Commitment	flipped classrooms allow students to feel empowered and committed to the learning process. It is the opportunity to be creative and confident about your ideas.

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