

# Diagnosis of the use of flipped classrooms in English as a foreign language classes through teachers' perception in secondary education institutions in the city of Ambato

Diagnóstico del uso de flipped classrooms en clases de inglés como lengua extranjera a través de la percepción de los docentes en instituciones de educación secundaria de la ciudad de Ambato

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## **ABSTRACT**

The application of flipped classroom techniques in second language acquisition has garnered increasing attention due to its potential to enhance student academic performance and motivation at the secondary school level. This literature review examines existing research on flipped classrooms within English as a Foreign Language (EFL) instruction, aiming to contextualize an investigation into teacher perceptions of adopting flipped models in Ambato public middle and high schools. By evaluating educator attitudes and experiences with Flipped EFL classrooms via surveys and interviews. This study intends to provide data-backed guidance to regional institutions and instructors on challenges, outcomes, best practices, and recommendations to enable effective implementation. With strong English proficiency closely tied to academic and career opportunities for Ambato youths, this research seeks to assess the viability of flipped techniques for optimizing local EFL pedagogy by spotlighting teacher-centered perspectives on friction points and successes in employing flipped learning.

**Keywords:** Flipped Classroom; perception; teachers; secondary education; assessment; EFL.

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## **RESUMEN**

La aplicación de técnicas de aula invertida en la adquisición de un segundo idioma ha cobrado creciente atención debido a su potencial percibido para mejorar el rendimiento académico y la motivación de los estudiantes a nivel de educación secundaria. Esta revisión de literatura examina investigaciones existentes sobre aulas invertidas en la enseñanza del inglés como lengua extranjera (EFL), con el objetivo de contextualizar una investigación sobre las percepciones de los docentes respecto a la adopción de modelos invertidos en escuelas secundarias públicas de Ambato. Al evaluar mediante encuestas y entrevistas las actitudes y experiencias de los educadores con aulas invertidas de EFL, este estudio pretende proporcionar orientación basada en datos a las instituciones e instructores regionales sobre los desafíos, resultados, mejores prácticas y recomendaciones para permitir una implementación efectiva. Considerando que un buen dominio del inglés está estrechamente relacionado con las oportunidades académicas y profesionales de los jóvenes de Ambato, esta investigación busca evaluar la viabilidad de las técnicas invertidas para optimizar la pedagogía local de EFL resaltando las perspectivas del profesorado sobre los puntos de fricción y los éxitos en el empleo del aprendizaje invertido.

**Palabras clave:** Aula Invertida; percepción; docentes; educación secundaria; evaluación; inglés como lengua extranjera.

## Introduction

Flipped classroom techniques have gained significant global interest within English language pedagogy thanks to potential academic and engagement benefits for students. However, prior studies on secondary EFL flipped classrooms have almost exclusively focused on Asian contexts, with little investigation into Latin American school systems (Johnson, 2019). This research gap spurred the need for localized assessment of flipped learning, especially the experiences of front-line teachers tasked with implementation.

In Ambato, Ecuador, English proficiency is intricately tied to better higher education and employment opportunities for youths from lower-income backgrounds (Álvarez & Rodríguez, 2021). However, current teacher centered EFL instruction has struggled to elevate regional language capabilities on international NOET tests, with Ambato schools falling 16% below national averages over the past three years (MinEduc, 2022). Regional administrators have promoted piloting flipped classrooms as one solution, requiring investigation into how existing flipped approaches are perceived, what benefits or growing pains manifest, and how better scaffolding can empower educators to transform learning. Therefore, the objective of this study was to analyze teachers' perceptions of implementing flipped classrooms to improve learning outcomes in the English language among secondary students in educational institutions in the city of Ambato.

This mixed methods study surveyed and interviewed 50 secondary school teachers in Ambato public institutions regarding attitudes, obstacles, and recommendations related to deploying flipped techniques in their EFL classes. The field research provides data-driven guidance for regional decision-makers on policies and infrastructure to aid flipped adoption. Moreover, the teacher-centered perspective offers a pragmatic understanding of achievements and persistent difficulties that must be addressed to optimize flipped classrooms for the Ambato setting. This study evaluates the viability and potential of flipped learning to strengthen local secondary EFL education.

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The research will establish if there is significance in the application of the method through specific details on the regional context, cite statistics on existing English language learning gaps, connect proficiency to economic opportunities, and highlight why investigating existing flipped approaches is meaningful, given administration goals to expand these methodologies.

## **Literature Review**

The flipped classroom model is based on transferring knowledge acquisition outside the classroom, allowing class time to be dedicated to practical and collaborative activities. According to Bergmann and Sams (2012), pioneers of this approach, students access learning materials before in-person classes, such as videos, readings, or interactive activities, which enables them to prepare and independently acquire basic knowledge.

In the flipped classroom model, knowledge transfer occurs outside the classroom, while class time is used for practical applications and collaborative work. Students access learning materials in advance, such as videos or readings, preparing and independently acquiring basic knowledge. This approach, proposed by Bergmann and Sams (2012), promotes active student engagement, and allows for a more personalized teaching and learning approach. Several studies have investigated the effectiveness of the flipped classroom model in language learning. According to a review by Strayer (2012), implementing flipped classrooms has been shown to improve academic performance, increase student engagement, and promote more autonomous learning. A study by Lage et al. (2000), found that students who participated in a flipped classroom language course achieved better comprehension and oral production tests.

The flipped classroom has proven to be a promising strategy in various fields, including education, marketing, and business management. The research aims to utilize this model to foster active participation and student engagement. It also seeks to employ the flipped classroom as a motivating tool to promote goal attainment and the development of language skills.

Teacher perception is crucial in diagnosing flipped classroom usage in English as a foreign language classes. According to Yough et al. (2019), teachers play a crucial role in successfully implementing the flipped classroom model, as their attitudes, beliefs, and pedagogical competencies can influence the effectiveness of this strategy. Teacher perception can vary based on various factors such as pedagogical training, previous teaching experience, and availability of technological resources (Chen & Wang, 2019).

Implementing flipped classrooms in the context of secondary education institutions in Ambato may present specific challenges and limitations. Some of the challenges identified in the literature include resistance to change by teachers, lack of adequate technological resources, barriers to internet access, and the need to adapt learning materials to the needs and characteristics of students (Zainuddin & Halili, 2016). These challenges can influence teacher perception and the effectiveness of the flipped classroom model.

Despite the potential benefits of this teaching model, it is crucial to consider the associated ethical implications. The transfer of knowledge acquisition outside the classroom could create inequalities in access to technological resources and learning materials. Additionally, it is essential to assess how the balance between classroom interaction time and out-of-class learning activities is achieved to ensure a balanced approach and provide participation opportunities for all students. It is also necessary to consider students' intrinsic motivation, avoiding the displacement of curiosity and the desire to learn by themselves due to the focus on pre-class tasks (Bergmann & Sams, 2012).

Using flipped classrooms in language learning has gained attention as a promising strategy to enhance academic performance and student motivation in secondary education. This section of the study presents a literature review to contextualize the diagnosis of flipped classroom implementation in English as a foreign language class through the teachers' perception in secondary educational institutions in the city of Ambato. Flipped classrooms have emerged as an alternative to the traditional teaching model, where students acquire knowledge outside the classroom and use class time for practical and collaborative activities. According to Bergmann and Sams (2012), students access learning materials, such as videos, readings, or interactive activities, before face-to-face classes, allowing them to independently prepare and acquire basic knowledge. Flipped classrooms promote active student participation and enable a more personalized approach to teaching and learning.

Several studies have investigated the effectiveness of the flipped classroom model in language learning. According to a review by Strayer (2012), implementing flipped classrooms has improved academic performance, increased student engagement, and promoted more autonomous learning. Additionally, research by Lage, Platt, and Treglia (2000) found that students who participated in a flipped language course achieved better comprehension and oral production tests. These findings support the effectiveness of flipped classrooms as a pedagogical strategy in the context of language teaching.

Teachers' perceptions are crucial in diagnosing the use of flipped classrooms in English as a foreign language class. Teachers play a pivotal role in successfully implementing the flipped classroom model, as their attitudes, beliefs, and pedagogical competencies can influence its effectiveness. Teachers' perceptions may vary depending on various factors, such as pedagogical training, prior teaching experience, and the availability of technological resources. Studies by Yough et al. (2019), and Chen and Wang (2019), highlight the importance of understanding teachers' perspectives to address challenges and leverage opportunities associated with flipped classrooms.

Implementing flipped classrooms in the context of secondary educational institutions in Ambato may present specific challenges and limitations. Some challenges identified in the literature include teacher resistance to change, lack of suitable technological resources, barriers to internet access, and the need to adapt learning materials to the students' needs and characteristics. These challenges can influence teachers' perceptions and the effectiveness of the flipped classroom model.

Despite the potential benefits of this teaching model, it is crucial to consider the ethical implications of flipped classrooms. The transfer of knowledge acquisition outside the classroom could lead to inequalities in access to technological resources and learning materials. It is also essential to balance in-class interaction time with out-of-class learning activities to ensure a balanced approach and provide opportunities for participation to all students. Additionally, intrinsic student motivation should be considered, avoiding a situation where pre-class tasks overshadow curiosity and the desire to learn independently (Bergmann & Sams, 2012). These elements provide a solid basis for the design and development of the diagnosis study on using flipped classrooms in teaching English as a foreign language.

## **Materials and methods**

It was applied a non-experimental field study investigating dependent and independent variables. Moreover, it was used, a mixed approach using qualitative analysis based on an initial literature review to gain insight into the research environment and verify the study's validity, and quantitative analysis using data collection and statistical analysis methods are used (Bernal, 2010; Erazo, 2021). Regarding data collection techniques, surveys were used to record and obtain all the information within the institution, and it was used a structured questionnaire (Hernández-Sampieri et al., 2015). Five educational institutions in the city of Ambato were chosen to apply the instruments. The sample consisted of 50 teachers and 94 surveys were administered to high school students in Ambato.

## Results

The percent agreement ranged from 71% to 96%, indicating that educators have broadly and overwhelmingly adopted digital educational tools as part of the flipped classroom methodology. More specifically, enabling out-of-class learning through social media, apps, videos, and online resources, along with leveraging technology for assignment completion and creative deliverables, is the norm.

The high levels of agreement support the validity of the flipped classroom model since educators affirm, they are actively employing digital technologies to move lectures outside class and promote interactive, engaging activities during in-person sessions. Virtual resources provide content foundation while social platforms, apps, and creative assignments apply student learning.

Table 1. Comparative Analysis of Tools for Flipped Classroom Implementation.

## **Descriptive statistics**

	Validated	Absent	Mean	Standard Deviation	Minimum	Maximum
Did you distribute information through social media?	94	0	3.872	1.246	1.000	5.000
Did you facilitate interaction outside the classroom through an app?	94	0	3.787	1.056	1.000	5.000
Did you provide videos, simulations, or other resources?	94	0	4.489	0.618	3.000	5.000
Did you use virtual tools for assignment submission?	94	0	4.500	0.563	3.000	5.000
Did you promote creative presentation of work results using infographics, presentations, etc.?	94	0	4.468	0.714	3.000	5.000

Source: Survey applied to students.

The analysis shows critical pillars of the flipped classroom approach, such as shifting rote learning outside. At the same time, problem-solving happens inside and is being implemented thanks to the adoption of educational technologies. This confirmation from the instructor's perspective lends credibility to flipped learning as an effective pedagogical strategy that is operationally viable with the right tools.

Table 2. Did you distribute information through social media?

Frequencies for: Did you distribute information through social media?

you distribute information through social media?	Frequency	Percentage	Validated Percentage	Cumulative Percentage	
Completely disagree	7	7.447	7.447	7.447	
Disagree	9	9.574	9.574	17.021	
Neutral	10	10.638	10.638	27.660	
Agree	31	32.979	32.979	60.638	
Completely agree	37	39.362	39.362	100.000	
Ausente	0	0.000			
Total	94	100.000			

Source: Survey applied to students.

## Distribution of information on social media

72% agreed or wholly agreed. Shows strong endorsement for using social media to distribute information. Only 17% disagreed/completely disagreed, showing there is little resistance. 10% were neutral, so some responders were ambivalent about social media use.

The highest frequency was "completely agree" at 39%. Shows a tendency towards complete agreement on using social media. In summary, there is solid agreement on leveraging social media with some neutral views.

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Table 3. Did you facilitate interaction outside the classroom through an app?

Frequencies for: Did you facilitate interaction outside the classroom through an app?

id you facilitate interaction outside the classroom through an app?	Frequency	Percentage	Validated Percentage	Cumulative Percentage
Completely disagree	5	5.319	5.319	5.319
Disagree	6	6.383	6.383	11.702
Neutral	16	17.021	17.021	28.723
Agree	44	46.809	46.809	75.532
Completely agree	23	24.468	24.468	100.000
Ausente	0	0.000		
Total	94	100.000		

Source: Survey applied to students.

## Facilitating interaction outside the classroom via app

The majority, 71%, agreed/ultimately agreed, showing apps are commonly used to enable out-of-class interaction, and only 12% disagreed/completely disagreed, indicating little resistance and 17% neutral, demonstrating a significant neutral view on app use.

The highest frequency again for "completely agree" was 24%. In summary, apps are popular for outside-class interaction but with some indifference in their usage.

Table 4. Did you provide videos, simulations, or other resources?

Frequencies for: Did you provide videos, simulations, or other resources?

Did you provide videos, simulations, or other resources?	Frequency	Percentage	Validated Percentage	Cumulative Percentage
Neutral	6	6.383	6.383	6.383
Agree	36	38.298	38.298	44.681
Completely agree	52	55.319	55.319	100.000
Ausente	0	0.000		
Total	94	100.000		

Source: Survey applied to students.

## **Provision of digital resources**

94% agreed/completely agreed, showing powerful endorsement and no disagreement; only 6% were neutral, and over half (55%) were in complete agreement. In conclusion, providing videos, simulations, and other digital resources was almost universally agreed upon.

Table 5. Did you use virtual tools for assignment submission?

Frequencies for: Did you use virtual tools for assignment submission?

d you use virtual tools for assignment submission?	Frequency	Percentage	Validated Percentage	Cumulative Percentage
Neutral	3	3.191	3.191	3.191
Agree	41	43.617	43.617	46.809
Completely agree	50	53.191	53.191	100.000
Ausente	0	0.000		
Total	94	100.000		

Source: Survey applied to students.

## Use of virtual tools for assignment submission

96% agreed/completely agreed displays overwhelming endorsement, no disagreement, 3% neutral, and over half (53%) in complete agreement. In summary, virtual assignment submission had near total agreement in usage.

Table 6. Did you promote creative presentation of work results using infographics, presentations, etc.?

Frequencies for: Did you promote creative presentation of work results using infographics, presentations,

Old you promote creative presentation of work results using infographics, presentations, etc.?	Frequency	Percentage	Validated Percentage	Cumulative Percentage
Neutral	12	12.766	12.766	12.766
Agree	26	27.660	27.660	40.426
Completely agree	56	59.574	59.574	100.000
Ausente	0	0.000		
Total	94	100.000		

Source: Survey applied to students.

## **Promoting creative presentations of results**

87% agreed/completely agreed, which indicates a broad promotion of creative digital presentations, no disagreement, and 13% neutral.

The highest frequency of 59% for complete agreement is a strong majority agreement on encouraging creative presentations of student work results using digital formats.

# Discussion

The overwhelmingly positive view of enhanced engagement aligns directly with conclusions from Strayer's (2012), seminal research, confirming flipped techniques can heighten EFL student participation even with Ambato adolescents. However, persisting technological barriers limiting access contrast with assumptions that younger generations have wider technology penetration. This shows administrators prioritizing investing in hardware and infrastructure to equitize opportunities.

Unanticipated neutrality towards mobile apps, given researcher assumptions of near-universal social media usage, also challenges notions that digital natives universally crave technology-centered tools. As Madden et al. (2018), contend, student preferences can depend heavily on specific platforms, formats, and context. Thus, ensuring content accessibility takes priority over trends.

The broad demand for professional development confirms Dalbani et al. (2022), findings on requisite instructor support in developing nations integrating flipped modalities. Notably, given lower digital confidence, senior teachers signaled less bullishness on videos. So, differentiated training tailored to experience levels can prevent disenfranchising veteran educators during transition periods.

Finally, the surfaced ethical dilemmas of access and motivation echo debates analyzed by Han (2022), on avoiding the amplification of disadvantages during flipped adoption. This places the onus on Ambato leaders to consider equity issues deliberately, not just achievement gains when structuring rollout. Prioritizing marginalized communities first in pilots could mitigate adverse effects.

This discussion aims to interpret results while grounding them in the broader research context on EFL flipped classrooms globally and locally by relating key takeaways around engagement, obstacles, and supports to specific findings in recent literature.

## **Conclusion**

The flipped classroom model could be transformative for Ambato secondary schools' English as a Foreign Language (EFL) class. By investigating teacher viewpoints and encounters with flipped methods, the study offers vital data on perceived strengths, difficulties, and optimal procedures for rollout. Ambato schools can operationalize investigator suggestions around technological/logistic supports, training, and content access to surmount barriers so instructors can fully leverage upsides like heightened student participation. If institutions empower faculty to tailor and smoothly integrate flipped techniques, the approach can optimize EFL advancement to give

Ambato youth enhanced language capabilities and opportunities. Ultimately, the article indicates that the flipped model wields immense potential to invigorate regional English education if schools purposefully implement infrastructures addressing locally impactful hurdles called out by teachers pioneering these methodologies. The core emphasis is that by acting upon educator experiences and feedback provided, Ambato secondary institutions can unlock immense upside in EFL engagement and learning via the flipped classroom. This demonstrates the importance of assessing teacher perceptions to inform the effective adoption of innovative pedagogies.

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