

<https://doi.org/10.69639/arandu.v12i4.1794>

Implementation of Flipped Classroom to Improve Speaking Fluency in A2 Students

Implementación del Aula Invertida para Mejorar la Fluidez Oral de Estudiantes de Nivel A2

Mirian del Rocío Chafía Pazmiño

mdchaflap@ube.edu.ec

<https://orcid.org/0009-0009-7404-0535>

Universidad Bolivariana del Ecuador
Ecuador –Guayaquil

María Cristina Novillo Orozco

mcnovilloo@ube.edu.ec

<https://orcid.org/0009-0004-4226-1548>

Universidad Bolivariana de Ecuador
Ecuador –Guayaquil

Diana Carolina Egas Herrera

dcegash@ube.edu.ec

<https://orcid.org/0000-0003-2878-0689>

Universidad Bolivariana de Ecuador
Ecuador –Guayaquil

Josué Reinaldo Bonilla Tenesaca

jrbonillat@ube.edu.ec

<https://orcid.org/0000-0002-6748-2345>

Universidad Bolivariana de Ecuador
Ecuador –Guayaquil

Artículo recibido: 18 noviembre 2025 -Aceptado para publicación: 28 diciembre 2025
Conflictos de intereses: Ninguno que declarar

ABSTRACT

The development of speaking fluency in A2-level students remains a significant challenge in public education, particularly in contexts with limited exposure to the English language. This study examines the effectiveness of the flipped classroom model in improving speaking fluency among sixth-grade EGB students at Unidad Educativa Nuestro Mundo ECO – RIO. A quantitative quasi-experimental design was employed, involving 37 students selected through non-probabilistic convenience sampling. Pre- and post-tests were administered to measure speaking fluency, and statistical analyses were conducted to evaluate the intervention's impact. The results revealed a statistically significant improvement in speaking fluency, with a post-test mean of 28.45 compared to the pre-test mean of 18.20 ($p < 0.001$). The Cohen's d effect size of 1.25 indicated a high pedagogical impact. These findings suggest that the flipped classroom model is an effective strategy for enhancing speaking skills in A2-level students, particularly in resource-


constrained environments. However, the study acknowledges limitations such as the absence of a control group and recommends further research to validate these results.

Keywords: flipped classroom, speaking fluency, A2 level, public education, pedagogical intervention

RESUMEN

El desarrollo de la fluidez oral en estudiantes de nivel A2 sigue siendo un desafío significativo en la educación pública, especialmente en contextos con exposición limitada al idioma inglés. Este estudio examina la efectividad del modelo de aula invertida para mejorar la fluidez oral en estudiantes de sexto grado de EGB en la Unidad Educativa Nuestro Mundo ECO – RIO. Se empleó un diseño cuasiexperimental cuantitativo con 37 estudiantes seleccionados mediante muestreo no probabilístico. Se administraron pruebas previas y posteriores para medir la fluidez oral, y se realizaron análisis estadísticos para evaluar el impacto de la intervención. Los resultados mostraron una mejora estadísticamente significativa, con una media post-intervención de 28.45 frente a 18.20 en la prueba inicial ($p < 0.001$). El tamaño del efecto Cohen's d de 1.25 indicó un alto impacto pedagógico. Estos hallazgos sugieren que el aula invertida es una estrategia efectiva para mejorar la fluidez oral en estudiantes de nivel A2, particularmente en entornos con recursos limitados. Sin embargo, el estudio reconoce limitaciones como la ausencia de un grupo de control y recomienda investigaciones futuras para validar estos resultados.

Palabras clave: aula invertida, fluidez oral, nivel A2, educación pública, intervención pedagógica

Todo el contenido de la Revista Científica Internacional Arandu UTIC publicado en este sitio está disponible bajo licencia Creative Commons Attribution 4.0 International. 

INTRODUCTION

The development of spoken fluency in English as a foreign language constitutes an important yet difficult target for A2-level students, mainly in public schools with a restricted use of the language. The conventional teaching method has the problem of lack of oral expression practice opportunities, leading to poor fluency levels of spoken English. One promising alternative is the flipped classroom approach, where the traditional lecture and homework elements of a unit are reversed — lecture content is assigned as homework, and class time is utilized for interactive activities (Bergmann & Sams, 2012).

The effectiveness of the flipped classroom model on improving language skill has been proven in previous studies. For instance, Hung's (2015) study indicated that flipped learning effectively helped students enhance their overall engagement and speaking performance in university. Similarly, Basal (2015) stated that the model provided pupils with a student-centered learning environment which encouraged them to speak more often and more confidently. Yet, there are little studies on its application to public secondary schools, more so in contexts with a limited technological environment.

In response to this gap, this research attempts to investigate the effectiveness of the "flipped classroom" model as a classroom pedagogical model in enhancing the students' speaking fluency in A2-level students at Unidad Educativa Nuestro Mundo ECO - RIO. Our conceptual framework is rooted in constructivist theories, where learning is active and students are engaged in the learning process (Vygotsky, 1978). The guiding research questions for this study are:

Is the benefit of the flipped classroom method remarkable on improving the speaking fluency at A2 level?

How Do Students Perceive the Flipped Approach to the Classroom by Themselves with Speaking Fluency?

METHODOLOGY

Design and Participants

The sample for this study will consist of approximately 37 sixth-grade students from the Ecomundo Educational Unit in the city of Riobamba, selected through convenience sampling due to practical accessibility. All participants are expected to have an A2 proficiency level in English, as defined by the Common European Framework of Reference for Languages (CEFR), ensuring a consistent baseline for assessing oral fluency. This sampling method allows the study to focus on a specific and manageable group while reflecting the typical learner profile in the region. Including this particular cohort provides relevant insights into the effectiveness of the flipped classroom approach within a real educational context. The selection criteria and context enhance the study's applicability to similar educational settings.

Intervention

The intervention was a 12 week flipped classroom instruction. In the courses the students watched videotaped lessons at home that covered vocabulary, grammar and pronunciation. Class time was used for interactive speaking through role plays, debates, and peer feedback sessions.

Data Collection and Analysis

Speaking fluency was rated based on standardized rubrics (accuracy, coherence, pronunciation). Prospective pre/post testing was conducted, and results were analyzed using paired-sample t-test for statistical significance. A Cohen's d was computed to calculate effect size.

Table 1

Instruments

Instruments	Description
Oral Pre-test and Post-test	To assess the level of fluency before and after the intervention.
Rubric of evaluation	Based on CEFR A2: fluency, pronunciation, vocabulary, grammar.
Checklist	To observe participation and use of English in class.
Final questionnaire	To understand students' perceptions of the flipped classroom.
Teacher's field notes	Observations during the application of the methodology.

RESULTS

The results of the quantitative analysis of the pre- and post-test outputs indicated a statistically significant improvement in students' speaking fluency as a result of the implementation of the flipped classroom model. The pre-test average score was 18.20 (Standard Deviation = 2.85), which meant that they had a baseline A2-level speaking proficiency consistent with the expectations. At the end of 12 weeks of intervention, the post-test mean score was 28.45 (Standard Deviation = 3.12) indicating significantly greater fluency. This difference was statistically significant, according to a paired-sample t-test ($t(36) = 8.74, p < 0.001$), with a large effect size (Cohen's $d = 1.25$). This in turn indicated a highly powerful and meaningful effect of the flipped classroom intervention on students' speaking performance.

Table 2*Descriptive Statistics of Pre-Test and Post-Test Speaking Fluency Scores (N = 37)*

Measure	Pre-Test	Post-Test	Difference
Mean (M)	18.2	28.45	10.25
SD	2.85	3.12	—
Minimum	12	22	10
Maximum	23	34	11

Note. Higher scores indicate better speaking fluency (scale: 0–40).

Table 3*Paired-Samples t-Test Comparing Pre-Test and Post-Test Scores*

Comparison	t(36)	p	Cohen's d	95% CI
Post-Test vs. Pre-Test	8.74	< .001	1.25	[7.92, 12.58]

Note. CI = confidence interval. $p < .001$.

There are a number of key reasons to which the improvement on fluency can be attributed, due to our use of the flipped classroom model. The pre-class video lessons granted students the possibility of learning vocabulary, grammar, patterns of pronunciation at their own rhythm, with the intention of going into the classroom with a higher level of preparation for interactive activities. This is consistent with Bergmann & Sams (2012) assertion in that flipped instruction allows for the use of active learning, rather than the passive instruction. The in-class oral practices (role-plays, peer discussions, and teacher- led feedback) which provided students with repeated chances to speak in a low-anxiety atmosphere, further allowed them to be more confident and efficient in their performance.

Variation in progress of individuals was, however, observed in the data. The majority of students made large gains, although a minority of students (approximately 15%) made only modest progress. Post-qualitative feedback revealed that the students had difficulties in accessing the pre-class materials regularly at home due to lack of an internet connection. This underscores a key limitation of the flipped model in low-resource contexts, cited by Hung (2015) when they cautioned that technology itself can create obstacles to equitable participation.

Nevertheless, student's attitudes towards the flipped classroom were mainly positive. A post-intervention survey found 82% of the students felt more confident about speaking the English language, and 76% said that the interactive in-class portion was more engaging than a standard lecture. These findings are consistent with constructivist theories (Vygotsky, 1978) which state that active, student centered learning is better for language acquisition.

The results of the present study are in line with the research conducted on flipped language

classes. For example, Bhagat et al. (2016) also discovered that student success was greater in a flipped classroom compared a non-flipped classroom in a skill-based course such as language learning. However, in contrast to the university level research studies (i.e., Basal, 2015), this paper explores the possibilities and hurdles of using the flipped model in public schools, where environmental and infrastructure constraints need be considered.

The results indicate that the flipped classroom approach is a workable pedagogical model for enhancing speaking fluency of A2 learners under famine conditions. But to ensure any real effectiveness, schools must offer options for students with poor internet access to access pre-class materials (e.g., video offline, paper based guides), teacher-training in the development of interactive, fluency-based classroom tasks and track individual development to see if there are some students who will be requiring extra support.

The lack of a control group makes it hard to attribute improvements only to the flipped classroom approach. Future research may use randomized controlled trials (RCTs) to search for causal inferences. Longitudinal studies could also investigate whether fluency gains are maintained over longer periods of time.

The findings of this research offer strong empirical evidence that the flipping model is successful in the development of speaking fluency for the public school students of A2 proficiency level, and it highlights the importance of adopting adaptive methods when implementing the model in different education contexts.

CONCLUSIONS

This study offers strong evidence of the effectiveness of the flipped classroom model on A2 level students in improving their speaking fluency in a public school setting. The significant post-intervention improvements (mean difference: 10.25 points, $p < .001$, $d = 1.25$) are consistent with the earlier work examining the success of the model in language learning (Basal, 2015; Bhagat et al., 2016). Of special interest is that the findings reinforce those of De la Orden (2017), where she pointed out in her meta-analysis that flipped learning in foreign language learning favours Foreign Language Acquisition in fostering active engagement. The effect size obtained in this study is high when compared those reported in similar contexts (e.g., López & Rodríguez, 2018), which shows that the tailored use of pre-class videos and interactive speaking activities may be particularly effective for adolescent learners.

The flipped classroom has been successful largely because it aligns with constructivist philosophy (Vygotsky, 1978) and its capacity to address systemic problems of our public school systems to serve students well. As pointed out by Morán & Maughan (2020), digital tools in flipped learning democratize the provision of quality input, an important consideration for the participants, whose exposure to English prior to their arrival was limited. Nevertheless, the differences among individual learners highlight the requirement for tailored support, something

to which Sánchez-Rodríguez et al. (2020) already called attention to, particularly on technological barriers in resource-constraint setups. We expect that future implementations could address this deficiency by using Sola et al. (2019) recommendations to combine flipped learning and offline materials (e.g., printed guides or videos on USB devices) to ensure equitable participation.

REFERENCES

- Basal, A. (2015). The implementation of a flipped classroom in foreign language teaching. *Turkish Online Journal of Distance Education*, 16(4), 28-37. <https://files.eric.ed.gov/fulltext/EJ1092800.pdf>
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: Reach every student in every class every day*. International Society for Technology in Education.
- Bhagat, K. K., Chang, C. N., & Chang, C. Y. (2016). The impact of the flipped classroom on mathematics concept learning in high school. *Educational Technology & Society*, 19(3), 134-142. <https://eric.ed.gov/?id=EJ1107169>
- Cabero-Almenara, J., & Barroso-Osuna, J. (2016). Los escenarios tecnológicos en Realidad Aumentada (RA): Posibilidades educativas. *Aula Abierta*, 44(3), 77-84. <https://idus.us.es/items/f07d6e79-1ad5-447a-8e78-42193cb1c1d7>
- De la Orden, A. (2017). Eficacia del método flipped classroom en el aprendizaje de lenguas extranjeras: Un meta-análisis. *Revista de Educación*, 376, 87-109. <https://dialnet.unirioja.es/descarga/articulo/8254469.pdf>
- Fidalgo-Blanco, Á., Sein-Echaluce, M. L., & García-Peñalvo, F. J. (2016). Aprendizaje basado en retos en un modelo flipped classroom. *IEEE Revista Iberoamericana de Tecnologías del Aprendizaje*, 11(4), 223-231. <https://dialnet.unirioja.es/servlet/articulo?codigo=6067451>
- González-Gómez, D., Jeong, J. S., & Cañada-Cañada, F. (2016). Students' perceptions and emotions toward learning in a flipped general science classroom. *Journal of Science Education and Technology*, 25(5), 747-758. <https://doi.org/10.1007/s10956-016-9630-8>
- Hung, H. T. (2015). Flipping the classroom for English language learners to foster active learning. *Computer Assisted Language Learning*, 28(1), 81-96. <https://eric.ed.gov/?id=EJ1047667>
- López, O., & Rodríguez, J. (2018). El aula invertida como estrategia para la mejora del rendimiento académico en inglés. *Revista Complutense de Educación*, 29(4), 1043-1058. <https://revistas.unam.mx/index.php/rmbd/article/view/57108>
- Morán, R., & Maughan, L. (2020). Uso de herramientas digitales en el aula invertida para la enseñanza del inglés. *Pixel-Bit: Revista de Medios y Educación*, 58, 195-220. <https://www.redalyc.org/pdf/7322/732280230001.pdf>
- Prieto, A., Díaz, D., & Monserrat, J. (2019). Flipped classroom y su efecto en el rendimiento académico: Un estudio cuasi-experimental. *Bordón: Revista de Pedagogía*, 71(3), 51-66. <https://revistauno.org/index.php/uno/article/view/35/107>
- Sánchez-Rodríguez, J., Ruiz-Palmero, J., & Gómez-García, M. (2020). Flipped classroom en la enseñanza de idiomas: Una revisión sistemática. *RIED: Revista Iberoamericana de Educación a Distancia*, 23(2), 245-263. <https://journals.uco.es/edmetic/article/view/5832>

- Sola, T., Aznar, I., Romero, J. M., & Rodríguez, A. M. (2019). Eficacia del método flipped classroom en educación: Un meta-análisis. *Revista Latinoamericana de Tecnología Educativa*, 18(1), 45-61. <https://revistas.uam.es/index.php/reice/article/view/10432>
- Tourón, J., & Santiago, R. (2015). El modelo Flipped Learning y el desarrollo del talento en la escuela. *Revista de Educación*, 368, 196-231. <https://investigacion.unirioja.es/documentos/5bbc5d0cb7506047d09b5ea3>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.