

Task - Based Learning Model for Improving Reading Proficiency

Modelo de Aprendizaje Basado en Tareas para Mejorar la Competencia Lectora

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ABSTRACT

The purpose of the present study was to investigate the impact of Task-Based Learning model on the development of reading competence among A2-level English learners in virtual classes. The study was conducted with a sample of 36 students from a Language Center in Quito, selected through convenience sampling. Employing a quasi - experimental design, the participants were divided into two groups, an intervention group and an observation group. The intervention group underwent ten reading lessons designed using the TBL approach, while the observation group followed the conventional teaching methodology. To measure the outcomes, pretest and posttest were administered; and the data were analyzed using the independent t-test to determine the effectiveness of the intervention. The findings revealed that, after the intervention, the group exposed to the TBL method achieved significantly higher scores compared to the observation group. These results, indicate that the TBL model has positive effects on enhancing reading competence in English learners within virtual learning environments.

Key words: TBL, reading competence, quasi-experimental, independent t-test, virtual classes.

RESUMEN

El propósito del presente estudio fue investigar el impacto del modelo de Aprendizaje Basado en Tareas en el desarrollo de la competencia lectora entre estudiantes del nivel A2 de inglés en clases virtuales. El estudio fue conducido con una muestra de 36 estudiantes de un Centro de Idiomas de Quito, seleccionados mediante el muestreo por conveniencia. Empleando el diseño cuasi-experimental, los participantes fueron divididos en dos grupos, un grupo de intervención y un grupo de observación. El grupo de intervención fue aplicado diez lecciones de lectura enfocadas en el modelo de Aprendizaje Basado en Tareas, mientras que el grupo de observación siguió la metodología de enseñanza convencional. Para medir los objetivos, se administraron el pretest y el posttest; y los datos se analizaron utilizando la prueba t-independiente para determinar la efectividad de la intervención. Los hallazgos revelaron que después de intervención, el grupo expuesto al método TBL alcanzaron puntajes significativamente más altos comparado con el grupo de observación. Estos resultados indican que el modelo TBL tiene efectos positivos en la mejora de la competencia lectora en estudiantes de inglés en entornos de aprendizaje virtuales.

Palabras clave: TBL, competencia lectora, cuasiexperimental, prueba independiente, ambientes virtuales.

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1. INTRODUCTION

The foreign language learning process includes developing of linguistics skills that pro-vide to learners the opportunity to communicate in an effective way; these skills are commonly known as the macro language competencies which are listening, speaking, reading, and writing. All of them play an important role in the communication process, however, the practice of some of them influence on the domine of the other ones. Thus, through the reading and listening practice, learners can improve their speaking and writing skills (Miyazaki, 2019).

Referring to reading proficiency, this influences on student's writing process, according to (OC-DE. & Instituto Nacional de Evaluación Educativa (España), 2020) learners who do not read have difficulties to produce written text well-structured, short as sentences, paragraphs, or long as summaries, essays, and more. Besides, they are not able to recognize vocabulary easily. Practicing reading allows students to increase their lexicon, review structures and avoid misspelling.

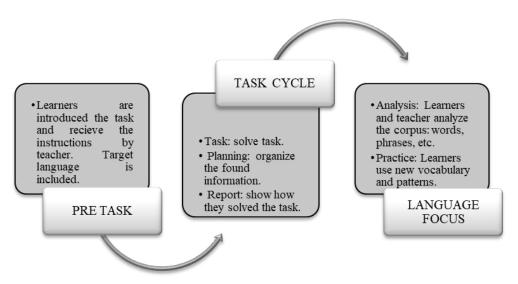
Reading is to interact with the language; readers receive the linguistic corpus through texts, which is processed in our brain and then reflexed orally or in written form. However, to achieve effective reading, readers must use their background language because the process of text comprehension is recursive, readers who are not able to recognize words in a text are not able to generate understanding. Hence the importance of selecting text familiars to us as readers (Nagua, 2023).

Including reading to the process of class is not commonly seen, most teachers prefer center in grammar, repeat structures and patterns which represent the traditional teaching method. Being the teaching method the procedure that, in concordance with the planning, is the way of teachers make students learn, this constitutes an essential tool in the classroom (Kuamr, 2022).

That is why in this paper, the Task-Based Learning model is presented as a dynamic way to develop reading skills. The method, proposed by Willis in 1996, us allows be on contact with the L2 by activities competition; teachers who function the role of monitors, provide learners task-based text to they improve reading proficiency while are in contact with the language, thus, learners' pro-duce their own knowledge.

Willis (1996), stablished the next process to this teaching model.

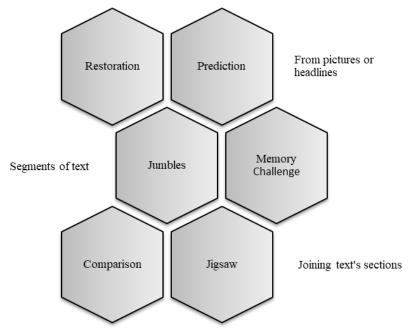
Figure 1: Task-Based Learning model



Source: (Willis, 1996)t

For developing reading proficiency, Willis in 1996 proposed Task-Based Text which are tasks that focuses on text comprehension. These tasks are designed following the next six reading strategies:

Figure 2: Task-Based Text, six reading strategies



Source: (Willis, 1996)

Around of this topic have surged some studies that have been useful to support this methodology. Following a quasi-experiemnatl design, the studies cited by (Nagua, 2023) were conducted in 2017, 2015, and 2021. In this studies the TBL was applied for developing reading skills on English learners; they divided the groups into an intervention group taught by means of

the method proposed and an observation group taught by means of the conventional teaching approach; applied a pretest and posttest, and used the statistical process to for data analysis; at the end, the authors concluded that this teaching methodology has positive effects on the development of the reading competence.

Thus, we conducted applied research that abords this thematic, and through this paper, we will present the procedure, findings and results of that study, reason why, this paper serves a contribution for the teaching and learning of a foreign language; being useful for future research and the take of decisions that promote the learning environments effective (Nagua, 2023).

2. MATERIALS AND METHOD

The research was applied to A2 English level students of the Language Center of Instituto Superior Universitario Sucre during the academic period November - April 2021. By convenience sampling, the courses of the A2 level class "A" and class "C" were adware as subjects of study; in total were 36 students (Nagua, 2023).

This selection process was possible because this level and classes were assigned to the researcher according to the institutional microplanning. These groups of study were conformed for women and men whose edges were from 19 to 40 years old; they lived in Quito and had minimal conditions to receive online classes, such as internet access, computers, and digital material (Nagua, 2023).

Being that the participants were not selected by randomization, the quasi- experimental design was the most appropriate route to conduct this study. Two groups were analyzed, the intervention group (class A-18 students) and observations group (class C-18 students). These kinds of studies determine results based on the variables' interaction and allows the groups comparison (Creswell, 2012) (Nagua, 2023).

In this sense, the proposed method was applied on the intervention group to improve reading proficiency, while the observation group was taught through of the conventional methodology for teaching English.

Pretest and posttest were the data collection instruments, these allowed to measure the effects of the method by numerical procedures, so that clarify the hypotheses; considering this, the approach of this study was quantitative. This kind of approach is effective to quantify events and prove hypotheses (Hernández-Sampieri & Mendoza, 2018) (Nagua, 2023).

These instruments were taken from A2 level Cambridge Assessment which comply with parameters of evaluation. The pretest was applied before applying the method and the posttest was applied after; both were applied on the intervention and observation groups.



Table 1. Quasi-experimental Designs

Subjects	Pretest	Method	Posttest
EG1	X	X	X
CG2	X		X

Source: (Adapted from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Técnica de Cotopaxi, Dirección de postgrado Maestría de Lingüística Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera by Viviana Nagua, 2023, p. 32) (Nagua, 2023).

The intervention process was characterized for sequential activities that granted the investigator conduct the study much better. That is how, after analyzing how the Task-Based Learning model functions, designed gradually ten reading lesson plans; it means, first plan and then apply (planning + application + planning + application).

These reading lessons were developed following the six reading strategies (memory challenge, prediction, jumbles, restoration, comparison, jigsaw) and the stages of the Task-Based Learning model proposed by Willis in 1996, in his book "A framework for Task-Based Learning".

The academic program of the A2 level contemplated five units of study, for this reason two reading strategies were applied per unit; the didactic material was the Top Toch 2 digital book 3rd Edition of the Pearson Company. In the chart below, we will see an extract of the reading lesson plans applied.



Table 2. Reading Lesson plans

	TASK-BASED LEAR	NING: READING LESSON PLANS					
Lesson / Stra-	Learning	Process					
tegy	Objective						
UNIT 1		PRE-TASK:					
Ger	tting Acquainted	The instructions for the task following the strategy are na-					
Lesson 1	To deepen the content of a text describing accurate de-	med by the teacher:					
Strategy:	tails of it.	- Read a text for about 5 minutes and keep in the mind as many details as it can.					
Memory Cha- llenge Task		- Analyze the headlines and observe the picture shown.					
Lesson 2	To predict what the text re-	- Look at the sections in wrong order of text. Think about it.					
Strategy:	fers based on headlines.	- Identify the missing words of the text in the chart. Think about it.					
Prediction Task	LINUTA	- Read the description of hotels. Imaging how they look.					
	UNIT 2	TASK CYCLE					
Goi Lesson 3	ing to the movies	Task					
	To arrange a reading using keywords.						
Strategy: Jum- bles		Teacher makes groups and, following the strategy, can ask:					
Lesson 4	To organize a text in its correct form identifying and	- Write the information you remember on a piece of paper: names, phrases, events, etc.					
Strategy:	using keywords.	- According to you, the text refers to					
Restoration Task		- Discuss the better order of words or paragraphs.					
	UNIT 3	- Identify the location of the missing words.					
S	taying in hotels	- Discuss the differences between texts.					
Lesson 5	To deep the content of a	- Read the assigned text, answer the questions related to it.					
Strategy:	text to detect the differences among the hotels and make	Planning					
Comparison Task	comparisons.	The teacher asks students to prepare a report in a collaborative document, where it shows the solving task.					
	UNIT 4	Report					
Lesson 6	ars and driving To describe a reassembled	The teacher asks groups to expose the report about reading. Students compare the information.					
	text answering established						
Strategy:	questions for better comprehension.	Full exposure: Teacher shows students the initial reading.					
Jigsaw Task		LANGUAGE FOCUS					
		Analysis					
		The teacher asks: Identify words or phrases followed by prepositions, the principal idea of text, words with similar meaning. What is the function of the word in the reading? What is the synonym of? etc.					
		<u>Practice</u>					
		The teacher asks students to complete the activities related to the reading, these can be true or false, match words or para- graphs, fill in the blanks, etc.					

Source: (Adapted from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Técnica de Cotopaxi, Dirección de postgrado Maestría de Lingüística Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera by Viviana Nagua, 2023, p. 72-97) (Nagua, 2023).

These reading lesson plans were applied to the intervention group in periods of online classes of forty-five minutes during almost two months, at the same time, the observation group was applied the conventional English methodology.

Before applying the method, the pretest was applied to both groups, the intervention and observation ones, while the posttest was applied before applying the method. The results of both tests were examined using the independent t-test to contrast the groups and determine whether there were significant differences or not.

According to (Herreras, 2005), the SPSS V.25 program is a "tool of data processing and statistical analysis" cited by (Nagua, 2023). This program contains an independent t-test which allows the data analysis quantitatively. By means of this mechanism it was established differences between the intervention and observation groups.

Through the t-test analysis, we obtained the score average from the data of the pre-test and posttest, it means the mean (arithmetic) of both groups, experimental and control group. (Miranda et al., 2006; Rendón Macías et al., 2016). Second, based on the comparisons of number means be-tween experimental and control group, it was determined the level of significance between the independent samples. "The student's t test (also called T test) is used to compare the means between two groups and there is no need for multiple comparisons as a unique P value is observed" (Nagua, 2023; Prabhaker et al., 2019).

For establishing whether to reject the H0 was necessary to calculate the value of the independent t-test, this value is obtained from the comparison of means of both groups. If this value is < 0.05 the H0 is rejected otherwise if this value is > 0.05 the H0 is not rejected. This processing has a Confidence Interval of the Difference of 95% (García et al., 2002; Nagua, 2023).

 Table 3. Independent T-Test

Level of significance						
P value	< 0.05	H0 not accepted				
	> 0.05	H0 accepted				

Source: (Adapted from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Tecnica de Cotopaxi, Direción de postgrado Maestría de Linguistica Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera by Viviana Nagua, 2023, p. 37) (Nagua, 2023).

3. RESULTS AND DISCUSSION

For identifying the effects of the proposed method on the improvement of reading competence, it analyzed the pretest and posttest' results of the intervention and observation groups using the independent t-test, the results obtained were the next:

Table 4. Mean of the pretest and posttest on the experimental and control group.

Group Statistics									
	Group Student's Number Mean Dev. Error average								
Pretest	EG	18	12,89	1,060					
score	CG	18	12,72	1,209					
Posttest	EG	18	20,72	0,921					
score	CG	18	14,28	0,969					

Source: Taken from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Tecnica de Cotopaxi, Direción de postgrado Maestría de Linguistica Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera (Nagua, 2023).

Table 5. The independent t-test on the pretest of the experimental and control group.

	Independent T-test									
F Levene's Test for Equality Variances		T-test	T-test for Equality of Means							
Si		Sig.	Т	DF	Sig. 2 tailed	Mean Diff.	Std. error Diff.	95% Confidence Interval of the Diff.		
							Lower	Upper		
Pre-	Equal variances assumed	,286	,596	,104	34	,918	,167	1,608	-3,102	3,435
test	Equal varian- ces not assu- med			,104	33,425	,918	,167	1,608	-3,104	3,437

Source: (Adapted from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Técnica de Cotopaxi, Dirección de postgrado Maestría de Lingüística Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera by Viviana Nagua, 2023, p. 39) (Nagua, 2023).

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Table 6. The independent t-test	on the posttest scores of the	e experimental and contro	ol group

Independent T-test											
Levene's Test for Equality Variances				T-test for Equality of Means							
F Sig.			Т	DF	Sig. 2 tailed	Mean Diff.	Std. error Diff.	95% Con Interval o	fidence of the Diff.		
								Lower		Up	per
Posttest	Equal v		,363	,551	4,819	34	,000	6,444	1,337	3,727	9,162
Score	Equal v ces not med				4,819	33,911	,000	6,444	1,337	3,727	9,162

Source: (Adapted from Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Técnica de Cotopaxi, Dirección de postgrado Maestría de Lingüística Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera by Viviana Nagua, 2023, p. 40) (Nagua, 2023).

After analyzing the results, we can see in the table 4 that the scores from the pretest between the groups of study had a standard value of 12; while the scores from the posttest showed a range of the difference of 6,44% between the intervention and observation groups.

From this, in the table 5, the data from the pretest do not represent a relevant difference between the groups of the study. According to the exposed data, the level of significance was 0.918 (S. 2tailed) with a confidence interval of 95%, which means > 0.05, and for determining the existence of significant differences between the groups of study the p-value must be < 0.05, in this respect, it can say there was not any relevant difference before applying the method (Nagua, 2023).

Although there was a minimum difference of 0,17% between the means, this difference was not significant. That is, both groups had the same level of reading comprehension before starting the treatment (Nagua, 2023).

Nonetheless, when applying the independent t-test to the posttest of both groups, we observed, in table 4, a difference between the means of both groups. The intervention group had a mean of 20,72 with an average error of 0,921% contrasting with the mean of 14,28 with an average error of 0,969% of the observation Group. The percentage difference between the means was 6,44%. The level of significance between the means, in table 6 shows us that this value was 0,000 (S. 2tailed) with a confidence interval of 95% (Nagua, 2023).

Based on the p-value of independent t-test, it needs to be < 0.05 to claim important variations between the samples. Thus, the difference of means of the intervention and observation groups is relevant, for this reason the H1 was accepted.

4. CONCLUSIONS

It was confirmed the premise about the TBL method is an appropriate to develop reading skills



in online settings since, through the meaningful tasks, the students are exposed to the English. The lesson plans based on the TBL method, which contain Text-Based Tasks, are a practical material to develop language skills, its application on the experimental group allowed us to denote that this method is a satisfactory alternative to improve reading proficiency.

Being that it was not possible to select the subjects of study by randomization, the quasi-experimental design was the most adequate design to conduct our research. That is how we guaranteed the correct application of the method.

REFERENCES

- Creswell, J. W. (2012). Educational Research for Planning, Conducting, and Evaluating Quantitative and Qualitative Research. In *Pearson* (Fourth Edi). Pearson. https://drive.goo-gle.com/file/d/1BJEXJW7FKCzLNzrj-2VSII42vPGq1lqG/view?usp=sharing
- García, F. J., Villatoro Velázquez, J. A., Karina, E., & Lugo, L. (2002). *Apuntes de Estadística Inferencial*. http://www.rincondepaco.com.mx/rincon/Inicio/Apuntes/Inferencial.pdf
- Hernández-Sampieri, R., & Mendoza, C. (2018). Metodología de la investigación. Las rutas cuantitativa, cualitativa y mixta. In *McGraw Hill Education* (Unique edi). https://drive.google.com/file/d/1 f9MOdvl0OM9VrByrzdCbzIxzbI6-5ZE/view?usp=sharing
- Herreras, E. B. (2005). Spss: Un Instrumento De Análisis De Datos Cuantitativos. *Revista de Informática Educativa y Medios Audiovisuales*, 2(4), 62–69. https://xdoc.mx/documents/spss-un-instrumento-de-analisis-de-datos-cuantitativos-60430eaeea368
- Kuamr, A. (2022). Teaching Methods, Teaching Strategies, Teaching Techniques and Teaching Approach. *International Journal of Advanced Research in Science, Communication and Technology (IJARSCT, 2*(2). https://doi.org/10.48175/568
- Miyazaki, K. (2019). The Effect of an Online Vocabulary Learning Tool on Passive and Active Vocabulary Use at a Range of Proficiency Levels. *Journal of Pan-Pacific Association of Applied Linguistics*, 23(1), 85–108. https://doi.org/10.25256/paal.23.2.5
- Nagua, V. (2023). Informe de Investigación: Task-Based Learning Model for Improving Reading Proficiency. Universidad Tecnica de Cotopaxi, Dirreción de postgrado Maestría de Linguistica Aplicada a la Enseñanza del Idioma Inglés como Lengua Extranjera. https://repositorio.utc.edu.ec/bitstream/27000/10303/1/MUTC-001464.pdf
- OCDE., & Instituto Nacional de Evaluación Educativa (España). (2020). *Panorama de la educación 2020 indicadores de la OCDE : informe español*. Ministerio de Educación y Formación Profesional, Subdirección General de Atención al Ciudadano, Documentación y Publicaciones.
- Prabhaker, M., Uttam, S., Chandra M., P., Priyadarshni, M., & Pandey, G. (2019). Application of Student's t test, Analysis of Variance, and Covariance. *Annals of Cardiac Anaesthesia*, 22(4), 407–411. https://doi.org/10.4103/aca.ACA
- Willis, J. (1996). A framework for Task-Based Learning. In *Longman Handbook for Language Teachers*. Longman Handbook for Language Teachers. https://drive.google.com/file/d/1VS11-fhxQThR4YXI6IRSCH6GyRKJAiHH/view?usp=sharing