LINGOKIDS

Efficacy Study

Mexico
Summary of Results

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Introduction

This paper presents a longitudinal quasi-experimental study of correlational scope which sets out to assess the impact of the Lingokids app for learning English on the performance of students at two schools: Colegio del Bosque and Colegio Giocosa. The study was carried out in a pre-post format, in which a vocabulary test was applied to the students. For the above, a quasi-experiment was carried out with a control group, which used activities in classes, and an experimental group, which used the Lingokids app. Likewise, questionnaires were handed out with contextual questions for teachers and students about the use of Lingokids.

1. Methodological Description

The methodology used in this study is a longitudinal quasi-experiment of correlational scope. The objective was to assess the impact of an English learning app on the vocabulary performance of students at two schools: Colegio del Bosque and Colegio Giocosa. The design of the study consisted of applying a pretest and a posttest of the same vocabulary test called PPTV-4 (Peabody Picture Vocabulary Test - 4th Edition) to both groups, i.e., the control group and the experimental group. The experimental group was exposed to vocabulary through the English learning app, while the control group had classes with a teacher, using traditional activities to practice English. The results were compared to assess the impact of the app on the students' vocabulary performance. Both the control and experimental groups were given questionnaires.

2. Sample Description

The study sample consisted of 58 students in total, 36 from Colegio del Bosque and 22 from Colegio Giocosa. The students were divided into two groups, a control group and an experimental group, in order to assess the impact of an app for learning English vocabulary. At Colegio del Bosque, 18 students were assigned to the control group and 18 to the experimental group. At Colegio Giocosa, 11 students were assigned to the control group and 11 to the experimental group. Overall, the distribution of students between the control and experimental groups was similar at both schools. This indicates that the sample involved


■ **36 students from Colegio del Bosque**
■ **22 students from Colegio Giocosa**

Control group   **Experimental group**

■ **Colegio del Bosque**
■ **Colegio Giocosa**
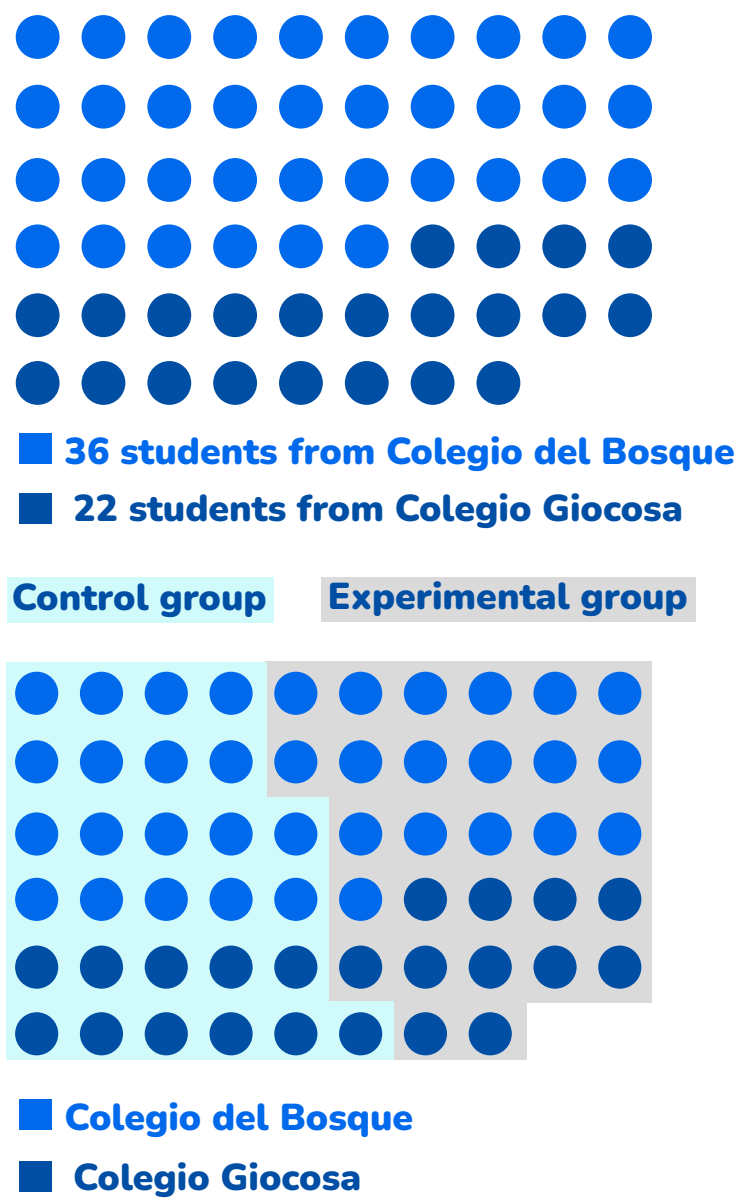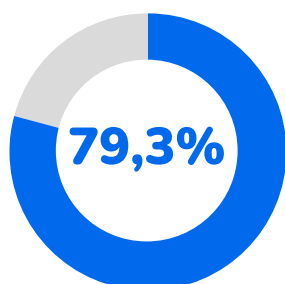
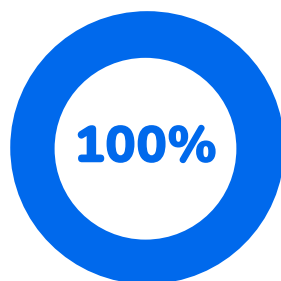**79,3%** The students learned new words in English.
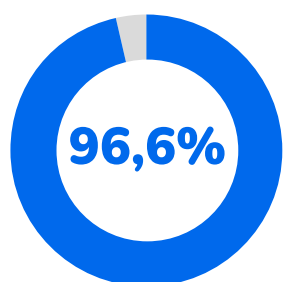
96,6% Would use an appr to learn English

Regarding the students who used the app (experimental group), 100% of those from Colegio Giocosa mentioned that they had learned new words in English and that it was easy and fun learning new words with the app. Meanwhile, 18 students (83.3%) from Colegio del Bosque mentioned that they had learned new words, 26 (88.9%) students that it was easy to learn English with the app, and 100% said that it was fun learning new words with the appde los estudiantes refieren que el proceso fue divertido.
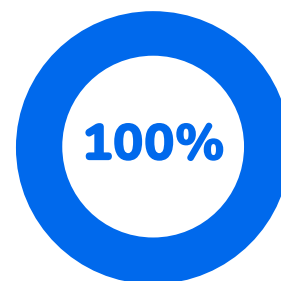
Colegio Giocosa
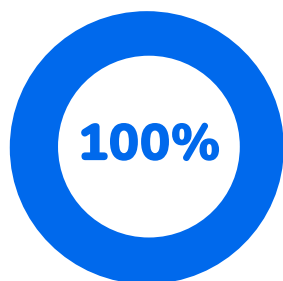
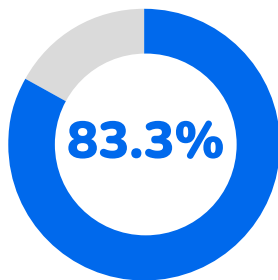**100%** Learned new words in English
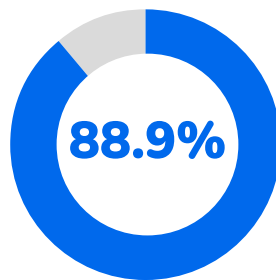
100% Easy to learn English with the app
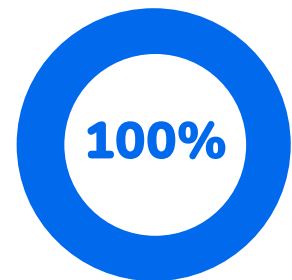
100% Fun learning new words with the app

Colegio del Bosque

83.3%

Learned new words in English

88.9%

Easy to learn English with the app

100%

Fun learning new words with the app

4. Psychometric Analysis of the Test Instrument

In order to use the results for subsequent analyses, it is important to check the reliability or accuracy of the test used and its validity. The first analysis addressed reliability, which identifies the stability and consistency of the measurements. The instrument used in the study had a high level of reliability, as the Cronbach's Alpha obtained was 0.84. The value given in this study suggests that the items are highly related to each other. In addition, it was observed that 87.5% of the items had a satisfactory discrimination, greater than 0.3, which means that the score of each item is related to the total score from the students.

For validity, principal component analysis (PCA) showed the creation of 9 components with an eigenvalue greater than 1. The percentage of explained variation was 71.32%, which suggests that the main components are able to adequately explain the total variation of the original variables, i.e., the instrument manages to satisfactorily assess the English vocabulary of the assessed students.

3. Contextual Question Analysis

3.1 Questions to teachers

100% of the teachers who participated in the experimental group liked the Lingokids app as an English vocabulary learning tool for their students.

As strengths, they mentioned the use of technology, the interaction and attention that it triggered among the students, the inclusion of new material, and the possibility of keeping track of the students' profiles.

3.2 Questions to students in the control and experimental groups

As for the students in the control group, 23 (79.3%) mentioned that they had learned new words in English. This is consistent with the fact that 22 (75.8%) liked learning vocabulary in this class. Out of these students, 28 (96.6%) said that they would like to use an app to learn English.

75,8% **Linked learning vocabulario in this class**

5. Test Score Analysis

5.1 Pretest-posttest analysis

As can be seen, differences are observed in favor of the posttest in both the control and the experimental group. The following sections will investigate whether these differences are statistically significant.

Type	Momnt	Sample (n)	Mean	Deviation
Control	Pretest	29	15,14	5,24
	Posttest	29	17,52	4,21
Experimental	Pretest	29	15,93	5,11
	Posttest	29	18,17	3,14

Table 1. Sample size, mean and standard deviation of the control and experimental group during the pretest and posttest

The table shows that the control group increased by 2.38 points while the experimental group increased by 2.24. It is noteworthy that the deviation of the scores in the posttest was lower in both the control and the experimental group. However, greater homogeneity is observed in the case of the experimental group, reflected in a lower standard deviation. This would suggest greater equity in learning achievement for the experimental group.

6. Conclusions

As for the test, there is evidence on the reliability and validity of the instrument, so it can be used for the purposes of the study. The results of the test reveal an increase in the score of the students in both the experimental and the control group after 6 weeks of work. However, as there is a lower standard deviation in the experimental group, greater equity in educational achievement is revealed. That is to say, most students scored similarly. In other words, it would be possible to say that the students improved their scores through the use of the Lingokids app, which benefited the learning of English vocabulary.

Regarding motivation for the use of the app, the group that learned vocabulary using the app showed 36.6% greater motivation than the group that received traditional classes, as the class with the app seemed more fun to 100% of the students. 96.6% of the students in the control group mentioned wanting to learn through the app if they had the chance. In addition to motivation, 83% of the students considered that learning with the Lingokids app was easy. In this sense, there is a high level of motivation for using the app. This happens in both the control and the experimental group. Consistent with the above, the teachers in the experimental group said that strengths were the use of technology, enhanced interaction, attention among students, and the possibility of keeping track of the students' profiles.

Control group

96,6%

Would like to learn English with an app.

Experimental group

100%

Had fun using the app.

There is a high level of motivation for using the app, both in the control group and in an experimental setting.

The teachers of the experimental group said that strengths were the use of technology, enhanced interaction, attention among students, and the possibility of keeping track of the students' profiles.