

ASSESSING ENGLISH LANGUAGE SKILLS OF HIGHER EDUCATION STUDENTS THROUGH DYNED SOFTWARE: AN INPUT TO POLICY FORMULATION

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Abstract

This paper utilizes DynEd software to evaluate higher education students' language learning skills. The DynEd Placement Exam results from 2017-2018, 2018-2019, and 2019-2020 were used in this descriptive-correlational study. Students' English placement is determined by pre-and post-tests. The correlation test confirms that students' post-test scores increased significantly for three consecutive years. Even though their post-test scores increased, their English language skills are between beginner and elementary levels, indicating that they lack the language skills needed for college. Thus, attending the DynEd program alone cannot improve students' English language proficiency. Administrators may therefore establish academic policies to help higher education students improve their language learning skills, such as (a) offering a course or program to improve student's communication skills, (b) extending the JEEP Start course from one semester to two semesters or one year, and (c) implementing an English-Speaking Policy in all subjects, including students and faculty.

Keywords: DynEd Software, Computer-Assisted Language Learning, English Language Skills.

Introduction

English is widely recognized as a global language, and it is a requirement in many academic and professional contexts. In the Philippines, English is one of the official languages, and it is used as the medium of instruction in many higher education institutions. Even though English is important, many students in the Philippines have trouble with it, especially those whose families do not speak English. Hence, HEIs offer a wide range of ways to improve English language skills, such as computer technology and other interventions. One example is how Northwestern Mindanao State College of Science and Technology added a course called Job Enabling English Proficiency (JEEP) to all of its undergraduate degree programs so that students could learn English using a program called Dynamic Education (DynEd), which helps students learn the English language with the help of computers.

The DynEd software is a language-learning program that has different modules to help people improve their listening, speaking, reading, and writing skills in a language. The software has been used in many educational settings around the world, and it has been shown to help people of all ages and backgrounds improve their language skills. In the same way, it is thought of using the brain-based Recursive Hierarchical Recognition Theory by Knowles [7]. This theory says that learning activities can take advantage of the hierarchical structure of the human brain, the interaction between listening, speaking, and memory, the pattern recognition logic at the core of human intelligence, and the use of multimedia computers to allow for multimedia input and practice. The Job Enabling English Proficiency program of the Growth with Equity in Mindanao Project, which was funded by USAID, used this software [1]. This was made to help the people of Mindanao learn English and get jobs in the future [5].

In 2015, the Fractal Dimension Analysis was used to test how proficient NMSCST students are in speaking the English language [3]. The results have shown that using DynEd software is an effective way to improve a student's language skills, but it works much better when used by students with average English skills [3]. Even so, DynEd Software was still used in all bachelor's degree programs to

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help students improve their general language skills. Hence, the researchers tried to measure the language-learning skills of higher education students at Northwestern Mindanao State College of Science and Technology over the course of three years to see if the previous claim about using this software was true.

Methodology

In this study, a descriptive-correlational method was used to find out how the DynEd software affected the student's ability to learn English. The dataset for this study was composed of the students' DynEd placement tests (pre-and post-test scores). Students who are enrolled in Job Enabling English Proficiency Start in all courses for the three (3) academic years of 2017–2018, 2018–2019, and 2019–2020, respectively, are considered participants. Students who failed to take the post-test were excluded from this research. A line graph was used to indicate the disparities between the respondents' pre-and post-test scores; a histogram or bar graph showed the frequency distribution of their placement level; and a paired t-test revealed the differences between the respondents' test scores that were statistically significant. The variables being examined are depicted or analyzed using these graphical tools and tests of significance. The level of the placement exam is a crucial predictor of how

well students are performing in the English language, even though it does not reflect their overall level of competence. The placement level reflects the level of the students in the English language. It ranges from 0.0 to 5.0 and is summarized as follows: *Level 0.0: Beginner or False Beginner; Level 0.5: Can speak and understand a few phrases in English; Level 1.0: Elementary Level; Level 1.5: Can answer simple questions; Level 2.0: Low Intermediate Level; Level 2.5: Intermediate; Level 2.7: High Intermediate-Advanced; Level 3.0: Advanced; Level 3.5: Advanced; Level 4.0: Fluent non-native; Level 5.0: Educated native speaker of English* [8] [9] [10].

Results and Discussions

Figure 1 shows the results of the DynEd placement tests taken by students at the Northwestern Mindanao State College of Science and Technology in the 2017–2018 school year. On the other hand, Tables 1 and Figures 2 and 3 show the frequency distributions and the results of a correlation test between the students' pre-and post-tests.

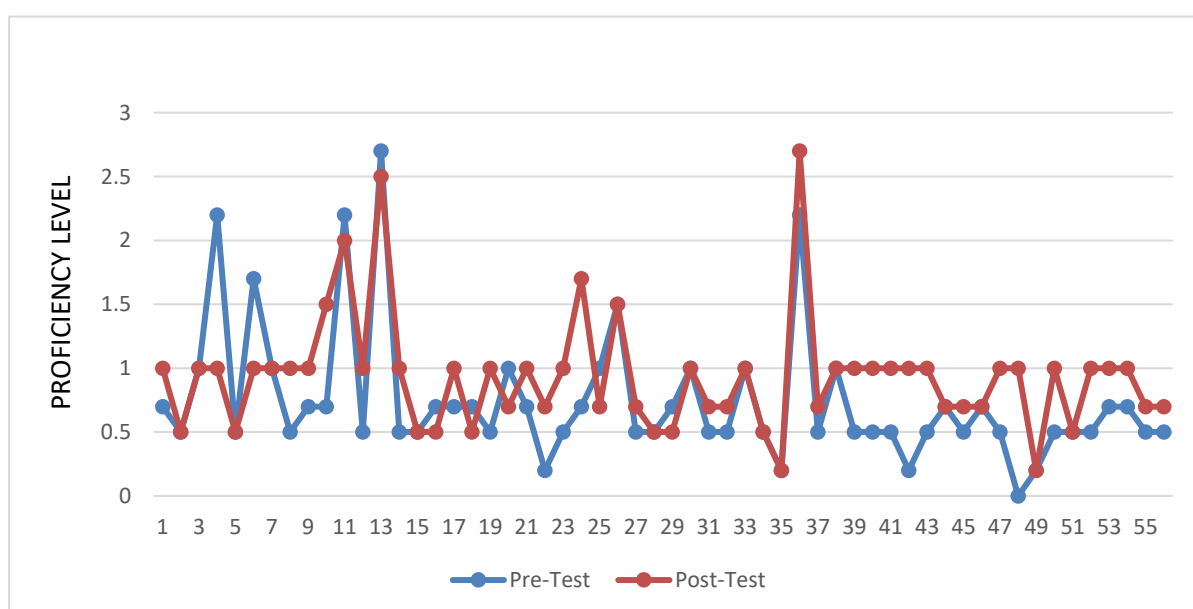


Figure 1: Graphical Representation of the Pretest and Posttest Results of the JEEP Students in their DynEd Placement Test for the Academic Year 2017-2018

Table 1: Test of Significance Difference between the Pretest and Posttest Results in their DynEd Placement (AY 2017-2018)

Sample	N	Mean	StDev	SE Mean	T-Value	P-Value
Pre-Test	56	0.7482	0.5288	0.0707	-3.61	0.001
Post-test	56	0.9321	0.4569	0.0611		

As shown in Figure 1, a few students had higher marks on their pretest than on their post-test, but the majority of them obtained a significant improvement in their post-test scores. The change in post-test scores shows how much better the students have learned English since they started using DynEd. The results of the T-value of -3.61 and the P-value of 0.001 in Table 1 from the correlation test between the pre-and post-tests at the 0.05 threshold of significance might support the latter claim.

However, there were only a few pretest scores that were better than the posttest, indicating that the program had little effect on improving their English language ability. This finding could confirm the prior study's finding that the software is far more effective for average students [3].

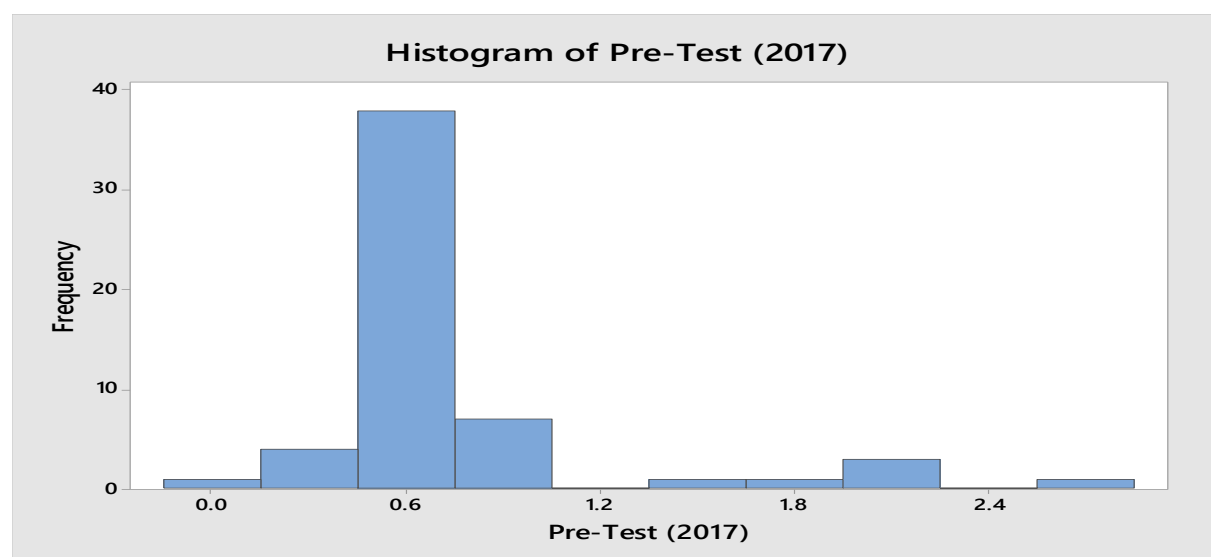


Figure 2: Histogram of the Pre-Test Results of the Students in the English Language for the Academic Year 2017-2018

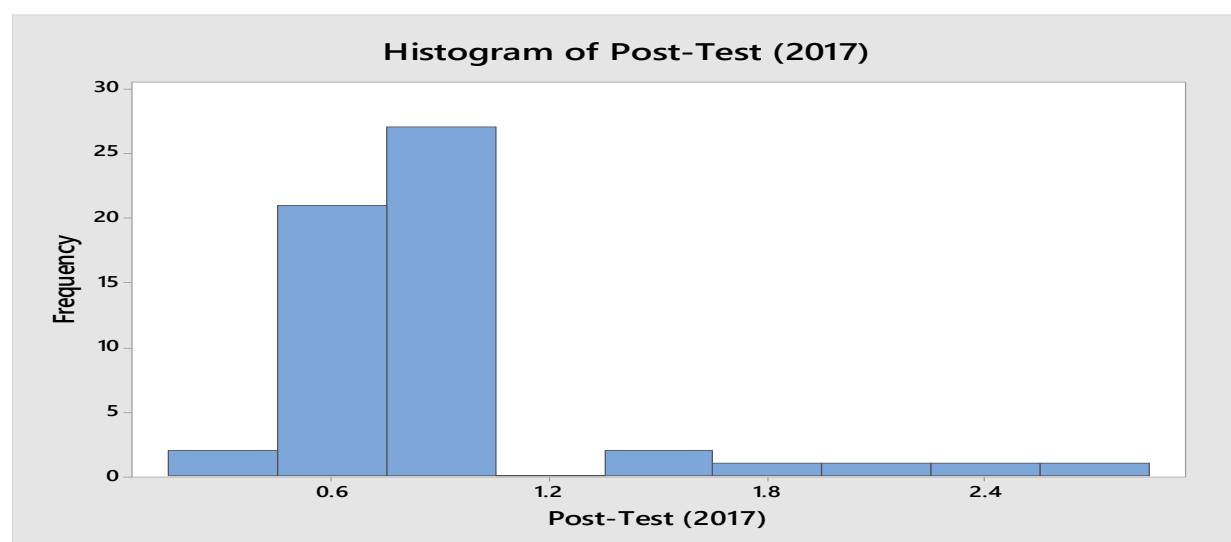


Figure 3: Histogram of the Post-Test Results of the Students in the English Language for the Academic Year 2017-2018

However, even though the students' post-test results showed a positive improvement in their English language learning, it is still clear that the majority of them still have placement levels below 1.0, indicating that their language learning is equivalent to Elementary Level. This level indicates that they

can only respond to questions in short sentences about their jobs, families, daily and weekly schedules, likes and dislikes, and the weather, but not about their past or future plans [9]. Their ability to form whole sentences is confined to simple patterns and is often brief or fragmentary.

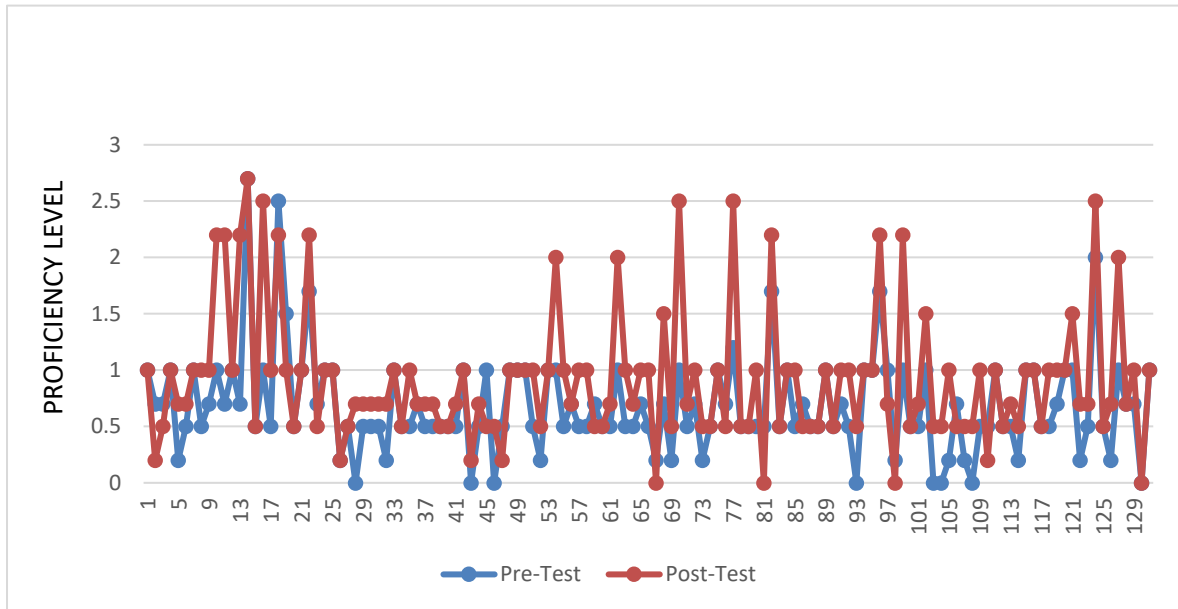


Figure 4: Graphical Representation of the Pretest and Posttest Results of the JEEP Students in their DynEd Placement Test for the Academic Year 2018-2019

Table 2: Test of Significance Difference between the Pretest and Posttest Results in their DynEd Placement (AY 2018-2019)

Sample	N	Mean	StDev	SE Mean	T-Value	P-Value
Pre-Test	131	0.6824	0.4383	0.0383	-6.66	0.000
Post-Test	131	0.9191	0.5839	0.0510		

Figure 4 is a graph that shows how the student's placement test scores improved from the beginning of the 2018-2019 school year to the end of the year when they used the DynEd software. Evidently, the results of their pre-and post-tests showed significant

differences. The result in Table 2 with the T-value of -6.66 and P-value of 0.000 provides strong evidence of their significant differences.

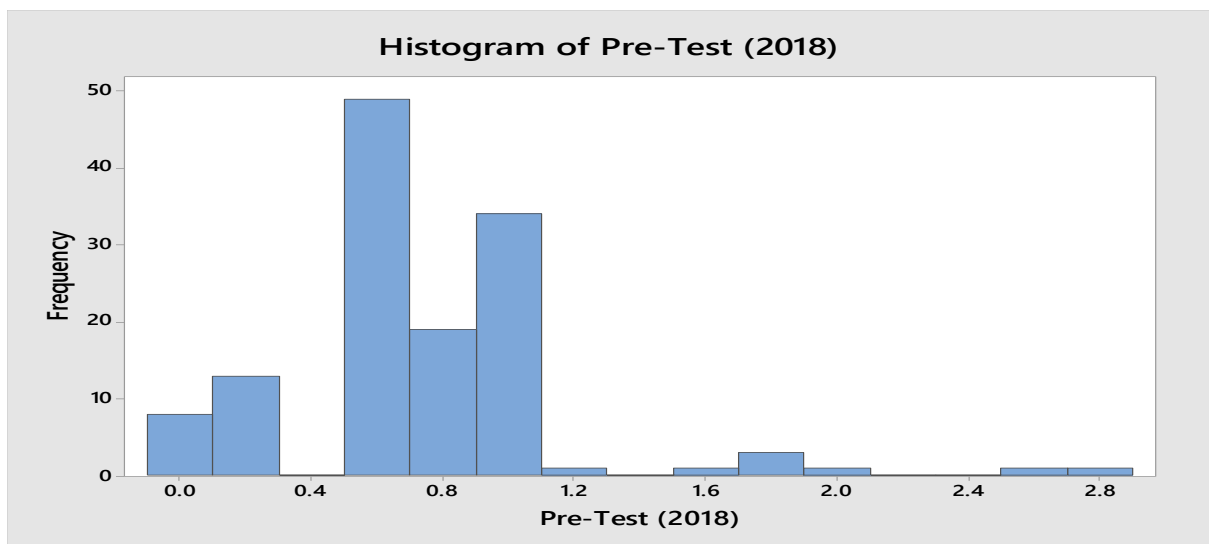


Figure 5: Histogram of the Pre-Test Results of the Students in the English Language for the Academic Year 2018-2019

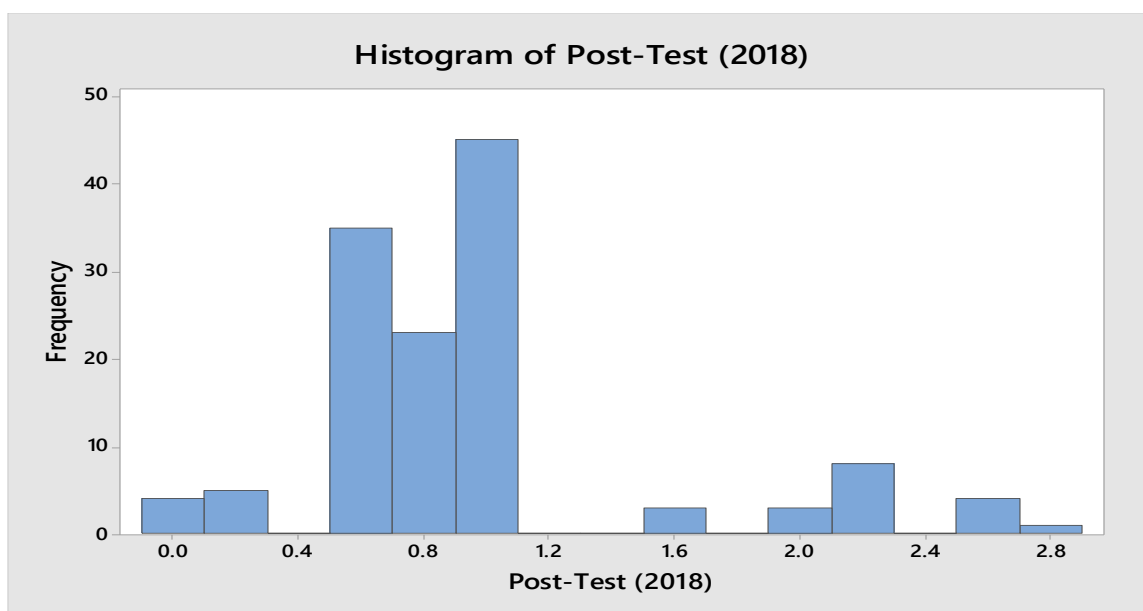


Figure 6: Histogram of the Post-Test Results of the Students in the English Language for the Academic Year 2018-2019

Contrarily, the increase in placement level scores did not correspond to the average placement level while using DynEd software. Their level is still comparable to that of the students in 2017, as seen in Figure 6. The majority of them also have a language proficiency level of 1.0 or lower, which is considered elementary. This result also indicates

that they can only use brief sentences to respond to questions about a person's job, family, daily and weekly schedule, likes and dislikes, and the weather, but not about their past or future plans. They just use simple patterns and short or fragmented phrases [9].

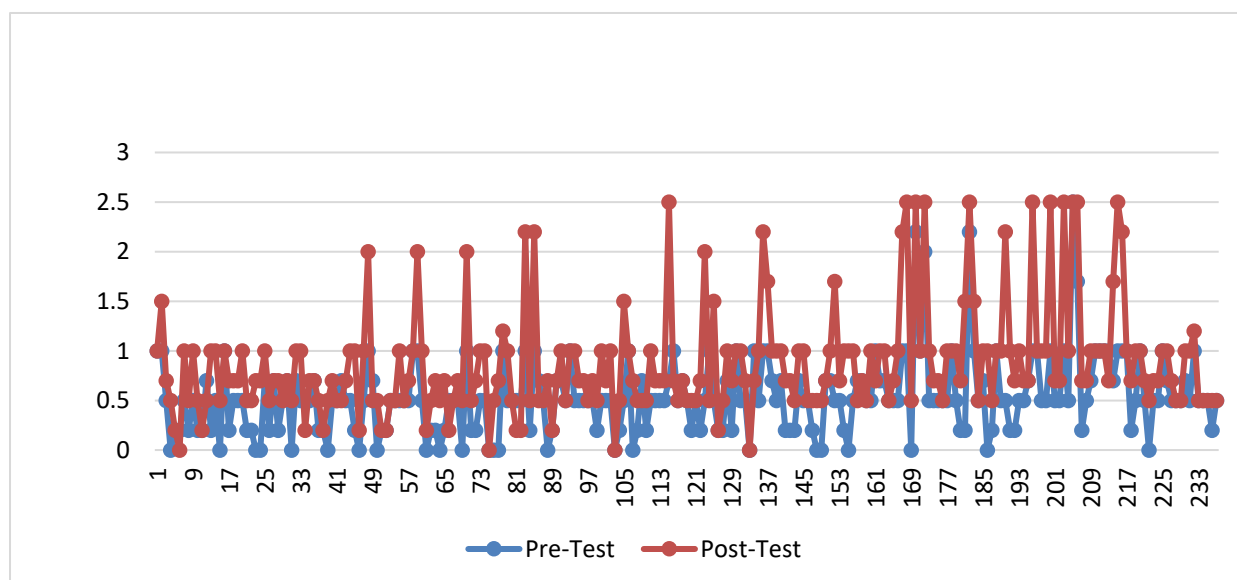


Figure 7: Graphical Representation of the Pretest and Posttest Results of the JEEP Students in their DynEd Placement Test for the Academic Year 2019-2020

Table 3: Test of Significance Difference between the Pretest and Posttest Results in their DynEd Placement (AY 2019-2020)

Sample	N	Mean	StDev	SE Mean	T-Value	P-Value
Pre-Test	237	0.5342	0.3806	0.0247	-13.03	0.000
Post-Test	237	0.8730	0.5423	0.0352		

Figure 7 shows the results of the students' pre- and post-test placement levels for the JEEP Start Course for the academic year 2019–2020. It is clear from the graphical representation that the majority of the students' post-test scores greatly improved. With a

significance level of 0.05, as shown in Table 3, the correlation test result is significant.

Table 5: Distribution of Responses on the Level of the Work Attitude of the Teachers in Terms of Sense of Efficacy

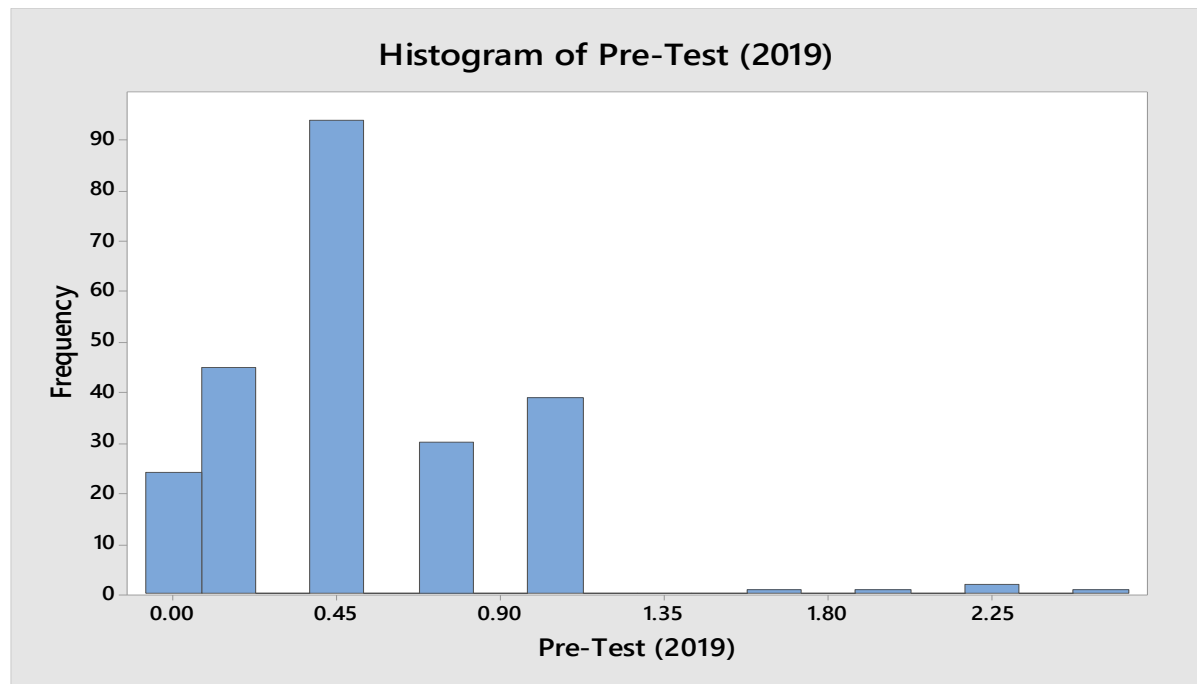


Figure 8: Histogram of the Pre-Test Results of the Students in the English Language for the Academic Year 2019-2020

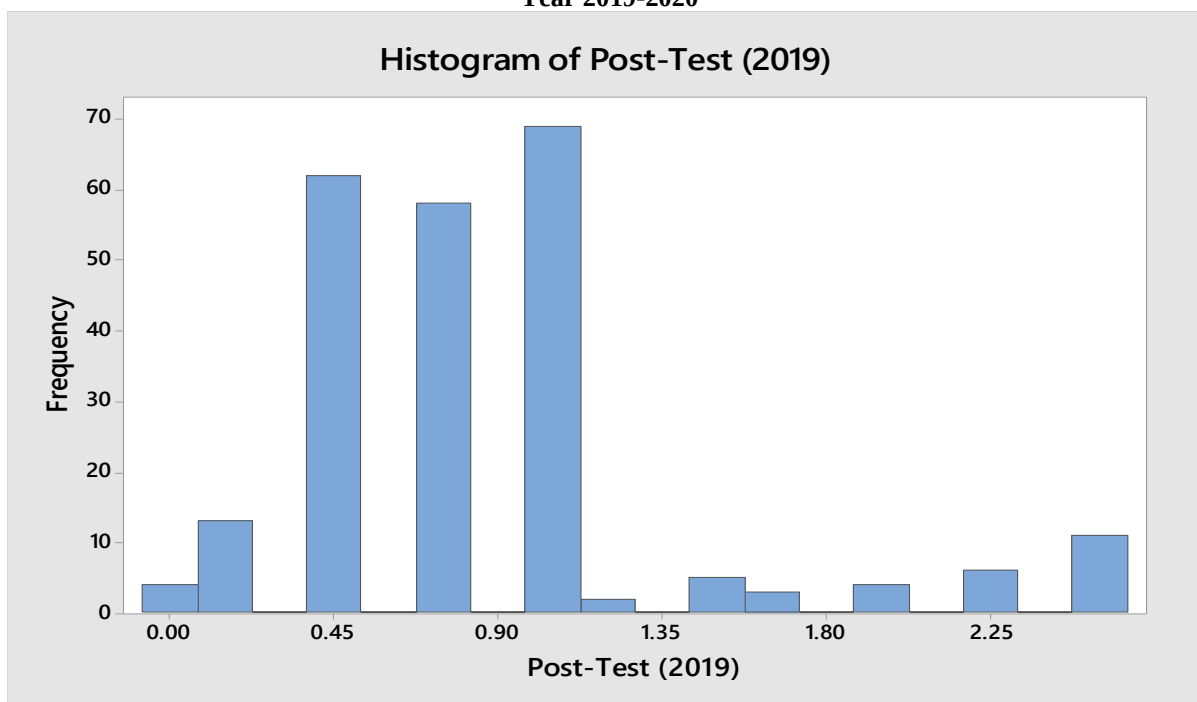


Figure 9: Histogram of the Post-Test Results of the Students in the English Language for the Academic Year 2019-2020

As shown, the histograms of the students' pre-test and post-test English language scores show that their placement levels range from 0.2 to 1.0, which is

considered beginner to elementary level in terms of their English language learning abilities.

Table 4: Summary Test of Significant Difference between the Pre and Post Tests Results in English Language (AY 2019-2020)

Test	N	Mean	StDev	SE Mean	T-Value	P-Value
Pre-Test	424	0.6083	0.4285	0.0208	-14.63	0.000
Post-Test	424	0.8950	0.5446	0.0265		

The correlation between the overall results of the pre-test and post-test for the student's placement level in the English language appears to reveal a significant difference with a T-value of -14.63 and a P-value of 0.000. According to this finding, the student's English language proficiency levels before they begin the course and after it is at different levels.

Discussion

Evidently, the college needs to include the JEEP Start Course as one of its programs to help students learn the English language, which is a common problem in higher education. The fact that the student's test scores went up showed that the class had a big effect on their overall English language skills. Even though DynEd is a successful language-learning tool, the placement level of students three years after enrolling in the JEEP Start course remains between beginner and elementary. In other words, even if students are receptive to the program, they cannot learn everything they need to know in one (1) semester of JEEP Start. Previous research revealed that DynEd is more effective for average-ability students [3].

Consequently, students with below-average performance need more time to complete the language learning program. Thus, to provide higher education students with sufficient English language exposure, the institution must adhere to the original JEEP Start course structure, which consists of a one-year curriculum [1]. In addition, the offering of a course or program to help students improve their communication is necessary to aid students with low English language proficiency in expressing and sharing ideas, and in particular, interacting with their teachers. The study conducted by Zareian and Mosalanejad (2017) [11] affirmed that communication skills training programs were effective in improving the communication skills of healthcare students.

Similarly, the English-speaking policy of the college is not properly enforced. In reality, NMSCST students struggle with speaking the English language, especially when communicating in the classroom is essential. Considering that they seldom speak English, it is similarly difficult for English instructors to teach them the language. Instructors and students must rigorously impose frequent language exposure via classroom engagement in all of their courses, not just in English subjects, because

it will help the students improve their proficiency. This was also affirmed by the findings of the study by Kamila and Fauzi (2021) [6], which found that the strict implementation of an English-Speaking Policy in a higher education institution in Indonesia led to an improvement in the student's English language proficiency, especially in speaking and listening skills.

Also, it's important to know that college students are usually given too much information, which tests their language skills. In fact, most HEIs think that being able to speak more than one language is important for the growth and spread of professional and academic knowledge [2].

So, it is important for a higher education institution to come up with academic policies that meet the needs of tertiary students right now and help them learn languages better. This includes (a) offering a course or program to help students improve their communication skills, (b) extending the JEEP Start course from one semester to two semesters or a year, and (c) putting in place an English-Speaking Policy in all subjects for both students and faculty.

Conclusion

Using DynEd, a computer-assisted language learning program, made a big difference in how well college students, especially average students, could speak English. Even so, this computer-assisted language learning program is not enough to learn English on its own. This should be emphasized by giving students lots of opportunities to use language in the classroom, not just in English class but in all of their classes. Hence, administrators may establish academic policies to help college students improve their language learning skills, such as (a) offering a course or program to help students improve their communication skills, (b) extending the JEEP Start course from one semester to two semesters or one year, and (c) implementing an English-Speaking Policy in all subjects, including students and faculty.

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Conflict of Interest

There is no conflict of interest by the author in this manuscript.

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