The NAVIO Application to Teach EFL: An Observational Study in Palestinian Primary Schools

Ayat Tarazi[1], Raúl Ruiz-Cecilia[2,*]

[1]Doctoral Program in Educational Science, Granada University, Spain
[2]Faculty of Education, University of Granada, Granada, Spain

Abstract It is important to adopt a teaching method that matches learners' learning styles and motivates them to learn English as a Foreign Language (EFL). Therefore, this study aims to examine the effect of using the digital application NAVIO to enhance second graders' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, oral and written production, and digital competence. The study was conducted at the Scientific Academy School in the Jenin Directorate in Palestine during 2020-2021. This research adopted a quantitative design and used a questionnaire to collect data and find results. The sample of the study was chosen randomly, and consisted of 19 students in the control group and 19 students in the experimental group. The results show that there are statistically significant differences at $\alpha \leq 0.05$ between the experimental group and the control group in certain variables. However, there are no statistically significant differences between groups due to gender. The results of the control group show that there are statistically significant differences in oral and written production in favor of male students. Additionally, the results reveal that there are statistically significant differences at $\alpha \leq 0.05$ in the students' achievement in English due to the teaching method followed in each group, in favor of the NAVIO application. We conclude that the students' performance levels in the experimental group are better than those who learn English through traditional methods. Finally, we recommended Palestinian English teachers to integrate this digital application into teaching EFL to primary-level students in order to activate their interest and increase their motivation toward learning EFL in a more engaging environment.

Keywords NAVIO Application, Digital Competence, EFL, Primary School, Students' Performance, Students' Achievement

1. Introduction

English language is a compulsory subject in the Palestinian school curriculum from primary level onwards. In fact, students who are learning English as a foreign language find it difficult to learn language skills at first because there are so many things to pay attention to, such as speaking, writing, reading, listening, grammar, sentence forms, and spelling. Therefore, teachers have to fully understand the differences between students in terms of their needs, backgrounds, interests, levels, learning styles, cultures, digital competence, and comprehension ability.

In this regard, Williams and Burden [1] write that using technology in the classroom is an effective way to increase active learning in the language classroom environment. It also increases teachers' and students' creativity, and improves students' learning performance.

Yudhiantara and Nasir [2] state that students showed a positive attitude toward learning English by using interactive applications, while Syafitri, Asib, and Sumardi [3] investigate the implementation of Powtoon as a medium to enhance students' pronunciation in speaking

classes. Their results show that Powtoon improved students' pronunciation as well as their motivation, attention, and interest in learning English.

Moreover, in a study entitled "The effective use of YouTube videos for teaching English in classrooms as supplementary material", Almurashi [4] declares that using YouTube videos for teaching English provides students with deep understanding about their lessons, makes learning a foreign language more interesting, and attracts students' attention to learn. The results also show that YouTube enhances students' speaking, pronunciation, intonation, grammatical skills, and listening skills.

Bucur and Popa [5] discuss the importance of integrating technology and communication competence into EFL learning and teaching. First, it provides opportunities to practice EFL in authentic contexts. Second, it enables students to learn EFL according to their learning styles and levels. Third, it increases students' autonomous learning so they can exchange information, communicate, and participate in collaborative ways. Finally, it encourages students to engage actively in their learning better than in the traditional teaching methods of English.

This study aims to discover the effect of the NAVIO application, a next-generation digital platform, on second graders' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, oral and written production, and digital competence. We have observed that Arab students have different problems with learning English, specifically at the primary school level. For example, they have difficulties with language use, are unable to work independently on different linguistic communication tasks, show low levels of participation and engagement, and, most importantly, lack motivation when learning with the traditional teaching method.

As a solution, we proposed the use of the NAVIO application – which provides lessons with integrated audio and videos that facilitate English learning – as a modern teaching method. It also provides teachers with a transition between the coursebook and digital teaching activities; and it makes learning more engaging, motivating, and rewarding for students. In addition, it offers an effective gaming environment, and provides digital teaching and learning resources for both teachers and students that aim to produce better learning outcomes. Finally, it provides students with instant feedback so that they can manage their homework better.

In similar studies, Chan et al., Wang and Smith, and Aydin and Yildiz [6,7,8] discuss the advantages of new technologies in language teaching and learning with regard to how a foreign language can be learned and used. Some of the advantages are that foreign-language learners who use computers for their learning show high engagement levels in terms of producing more language than they did with traditional methods of learning. Foreign-language learners can also practice speaking and writing skills with native speakers virtually through platforms and social networks. It may likewise increase learners' cultural awareness by enabling communication with other learners from different cultures.

However, Lai and Liu et al. [9,10] reveal that today there are multiple sets of technologies for improving foreign-language teaching. Thus, teachers should focus on providing high-quality learning input that enables learners to use language in different contexts. Teachers should also consider the appropriate use of technology. Moreover, the authors highlight the significant role that technologies play in the improvement of foreign-language learning.

Huang and Lee [11] find that non-native students showed low engagement levels in English language classes in terms of interacting with each other, sharing ideas, speaking and initiating discussions. According to Erkaya [12], digital stories provide authentic learning for different learning styles with rich language activities that can: improve students' comprehension skills; help students to understand abstract vocabulary; increase students' motivation to learn English; and improve students' oral and written skills. Lierena and Hurtado [13] examine the use of Kahoot as an online platform tool for engaging students in learning English vocabulary. The results of the study showed that the use of Kahoot increased students' motivation to learn English and enhanced their acquisition of vocabulary. Moreover, Kahoot's vocabulary quiz stimulates students' interest in participating in Kahoot's vocabulary competitions through an interactive, fun, and inspiring game-based method.

Furthermore, Jensen [14] illustrates how students' use of digital tools depends on how they are aware of the usefulness of such tools and how they employ them to improve their language learning skills. Additionally, Gee and Hayes [15] highlight that students were interested in using digital applications in learning because of different factors, like the interactive environment, elements of fun, constant reward, instant feedback, and the ability to repeat activities at different times.

On the other hand, Edwards [16] claims that students' participation in digital education depends on their proficiency, good access to digital platforms, and the amount of time they have for using digital tools in learning. Similarly, Haelermans [17] finds that teachers show more positive attitudes toward using digital environment in language teaching and learning than students, as students related their negative attitudes to the lack of training in using digital tools in learning, and not enough time is given for completing learning activities.

Biletska et al. [18] conducted a study entitled "The use of modern technologies by foreign language teachers: Developing digital skills." The goal of this research was to create a teaching program using digital tools to train foreign language teachers. The results of the study show the effectiveness of these tools for both teachers and students, and how students can complete the tasks assigned to them more quickly, and how teachers apply

new tools in their work. In addition, the results confirm that it is important to use digital technology to learn the skills required for future professional activities. It is also critical to employ cutting-edge technology for learning a foreign language, and improving pedagogical skills.

In a study entitled "Maximizing mobile-assisted language learning (MALL) amid Covid-19 pandemic: Teachers' perception," Nuraeni [19] shows that teachers in Indonesia had a very favorable attitude on the use of MALL during the pandemic. MALL aids language learning due to its portability, interactive language learning activities, and convenience of access. In addition, teachers had a favorable attitude to the usage of MALL in home-based learning activities. The average mean score = 4.31 for teachers' perception. In short, online education is no longer an option; rather, it is a requirement. Even in times of crisis, MALL can assist in providing inclusive education. Teachers can use technology and create a variety of adaptable programs to help students learn more effectively. Similarly, Nariyati, Sudirman, and Pratiwi [20] conducted a study aimed at investigating the EFL pre-service teachers' perception of the use of mobile-assisted language learning in teaching English as a foreign language. The strategy utilized in this study was an explanatory sequential mixed-method design. The results of the study indicate that EFL pre-service teachers showed favorable attitudes toward the usage of MALL in English instruction. They also demonstrate that EFL pre-service teachers have good knowledge about utilizing MALL in English teaching.

Fansury, Januarty, and Ali Wira Rahman [21] conducted a study entitled "Digital content for Millennial generations: Teaching the English foreign language learner on COVID-19 pandemic." The mixed method with Quan-Qual approach was used to analyze research data rather than to educate. They employed questionnaires and interviews to assess the reactions of Makassar students and teachers. These tests were designed to determine how to use digital content and whether digital content can boost student motivation and interest in the subject presented. The results reveal that the use of digital content in English teaching is useful to students' understanding, and learning becomes easier when digital content is used because it can be directly incorporated into various programs such as WhatsApp groups, Zoom, Google Meet, and so on. The results also reveal that the use of digital content increases students' motivation in learning. However, the use of digital content has weaknesses due to the limitations of internet resources, including network and data packages, and lack of resources on the part of the students.

2. Materials and Methods

A quantitative method was implemented in this research. The study used an observation questionnaire

which had been prepared to gain information about the effect of the NAVIO application on the development of second graders' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, oral and written production, and digital competence.

2.1. Participants

We selected thirty-eight Palestinian students at random from the second grade, who are learning English as a foreign language at the Scientific Academy School in Jenin Directorate. The sample consisted of 19 students (12 male, 7 female) in the experimental group, and 19 students (10 male, 9 female) in the control group, as shown in Figures 1 and 2.
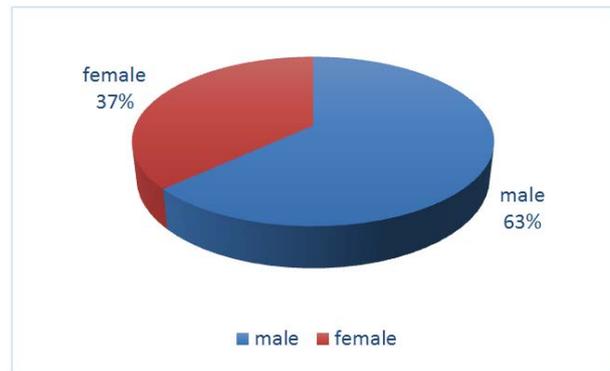
Figure 1. Gender Distribution of Students who learned via the NAVIO Method
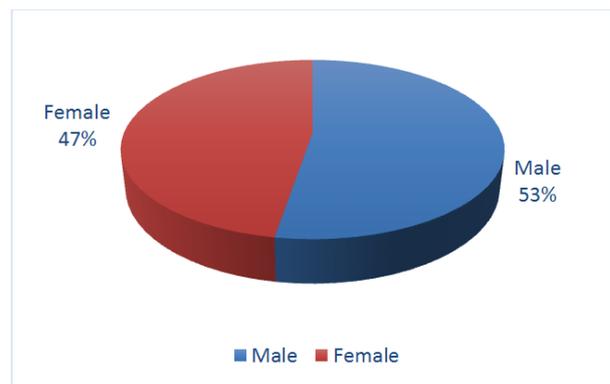
Figure 2. Gender Distribution of Students who learned via the Traditional Method

2.2. Materials

The researchers used the NAVIO digital platform for learning English with the experimental group, and used the traditional method for learning English with the control group. Unit Two, entitled "Let's Go Shopping!", from the Give Me Five of the Macmillan English course was used to find out the effects of each method on students' performance and achievement in English Language. To collect data and retrieve the results, we

developed and used a classroom observation checklist. It consisted of twenty-two items distributed into six dimensions: first, students' competence in linguistic communication; second, sense of initiative and entrepreneurship; third, cultural awareness and expression; fourth, cooperative learning; fifth, oral and written production; and sixth, digital competence.

2.3. Design

The researchers in this experimental study used different variables. The independent variables were gender, NAVIO teaching method, and traditional teaching method. The dependent variables were students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, digital competence, oral and written production, and students' achievement in English Language.

2.4. Procedure

During the implementation of the study, which lasted seven weeks, we first identified the sample of the experimental and the control groups, and created a student account for each student to be able to use at home. Then the students of the experimental group started using the NAVIO application during their learning inside and outside school, working on Unit Two of Macmillan English Level Two, entitled "Let's Go Shopping!". The unit was divided into seven lessons. The researchers prepared different aims for teaching vocabulary, grammar, reading, listening, and speaking for each lesson. Then we gathered information for both groups, while the students of each group practiced their learning as indicated in the observation checklist in Appendix A.

2.5. Statistical Analysis

In order to analyze the data, we used the Statistical Package for Social Science (SPSS) version 17.0. The results of all groups are expressed as means ± standard deviation and were statistically compared using the independent sample t-test. The significance threshold was $\alpha \leq 0.05$. Various statistical tests and procedures were also used, including the following: to check the credibility and to check the validity of the study tool, we subjected it to a test by experts from Arab American University who recommended its validity for achieving the study purposes. Reliability was tested by using Cronbach's Alpha, attaining 0.948, which is acceptable for study purposes. The T-test for two independent samples used analysis of variance to make a comparison between the gender variables and the teaching method followed. In addition, a paired t-test and two-way ANOVA tests were used to estimate the differences and compare the variables between the experimental and control group. Additionally, for data analysis, we used the following scales: 1 = seldom, 2 = sometimes, 3 = usually, and 4 = always. The total score was 80.

3. Results

Let us look first at the results related to the first hypothesis, which is: *There are no statistically significant differences at α ≤ 0.05 in the students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, and oral and written production between the experimental and the control groups due to gender, and the teaching method.*

To analyze the first study hypothesis, two-way ANOVA and independent sample t-tests were used. Tables 1, 2, and 3 show the results.

Table 1 shows that there are statistically significant differences at $\alpha \leq 0.05$ between the experimental group and the control group in the students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, and oral and written production, due to the teaching methods followed. However, there are no statistically significant differences between groups due to gender.

Table 1.   Two Ways ANOVA

Source		Type III Sum of Squares	df	Mean Square	F	Sig.*
Intercept	Hypothesis	281.271	1	281.271	316.663	.036
	Error	.888	1	.888[a]		
Method	Hypothesis	14.910	1	14.910	221.287	*.043
	Error	.067	1	.067[b]		
Gender	Hypothesis	.888	1	.888	13.183	.171
	Error	.067	1	.067[b]		
Method * Gender	Hypothesis	.067	1	.067	.240	.627
	Error	9.543	34	.281[c]		

Table 2.   Independent Sample t- test

The NAVIO teaching method	Gender	N	Mean	Std. Deviation	T	Sig*
Competence in Linguistic Communication	Male	12	3.5833	.69359	.531	0.602
	Female	7	3.4286	.42608		
Sense of initiative and entrepreneurship	Male	12	3.7500	.39886	2.109	0.050
	Female	7	3.3571	.37796		
cultural awareness and expression	Male	12	3.3833	.74569	0.512	0.615
	Female	7	3.2286	.35456		
cooperative learning	Male	12	3.7639	.45759	0.011	0.991
	Female	7	3.7619	.16265		
oral and written production	Male	12	3.1389	.65841	1.428	0.171
	Female	7	2.7143	.55872		
T	Male	12	3.5239	.57257	0.946	0.357
	Female	7	3.2981	.33577		
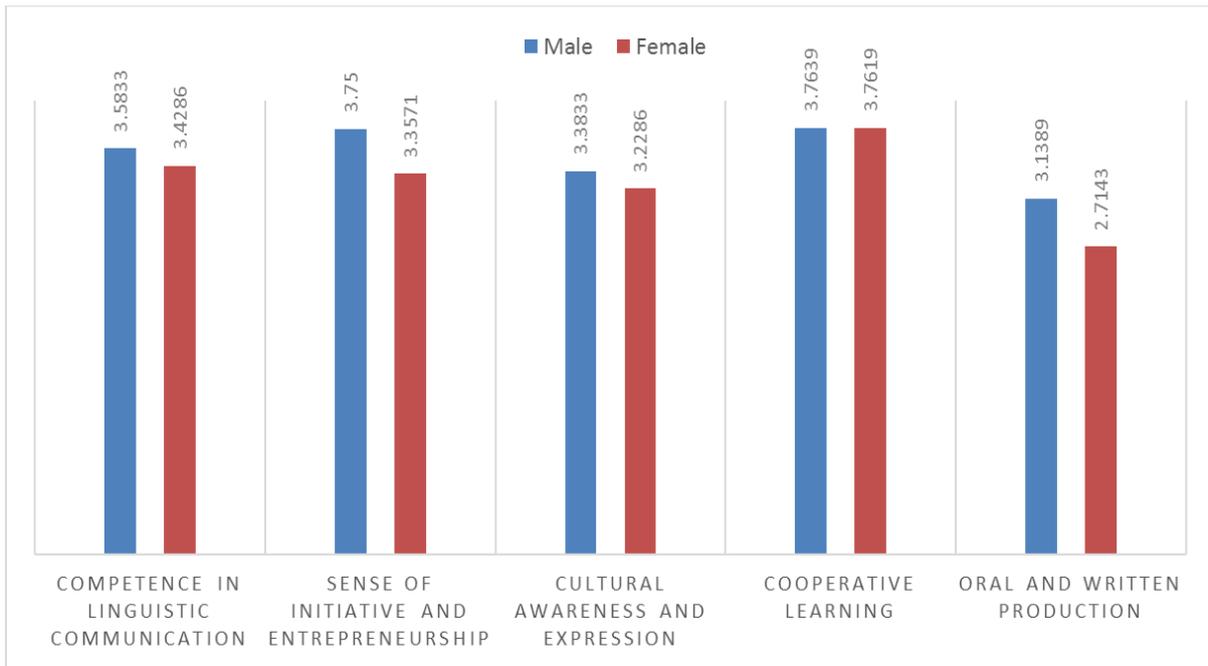
Figure 3.   Means Differences of the NAVIO Method due to Gender

Table 2 shows that there are no statistically significant differences at α ≤ 0.05 in the students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, cooperative learning, and oral and written production in the experimental group due to gender. The significant values are 0.602, 0.52, 0.615, 0.991, 0.171 and 0.357, respectively, which are higher than 0.05.

Table 3 shows that there are no statistically significant

differences at α ≤ 0.05 in the students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expression, and cooperative learning in the control group due to gender. The significant values are 0.814, 0.072, 0.198, 0.072, and 0.136, respectively, which are more than 0.05. However, there are statistically significant differences in oral and written production in favor of male students. The significant value is 0.031, which is less than 0.05.

Table 3.   Independent Sample t- test

Traditional teaching method	Gender	N	Mean	Std. Deviation	T	Sig*
*Competence in Linguistic Communi*cation	Male	10	2.0250	.44799	-0.239	0.814
	Female	9	2.0833	.61237		
Sense of initiative and entrepreneurship	Male	10	2.6000	.56765	1.916	0.072
	Female	9	2.0000	.79057		
cultural awareness and expression	Male	10	2.2200	.41580	1.339	0.198
	Female	9	1.9111	.58405		
cooperative learning	Male	10	2.7167	.40863	1.916	0.072
	Female	9	2.1852	.76578		
oral and written production	Male	10	2.1000	.44583	2.355	0.031*
	Female	9	1.5926	.49379		
T	Male	10	2.3323	.42381	1.566	0.136
	Female	9	1.9544	.61970		
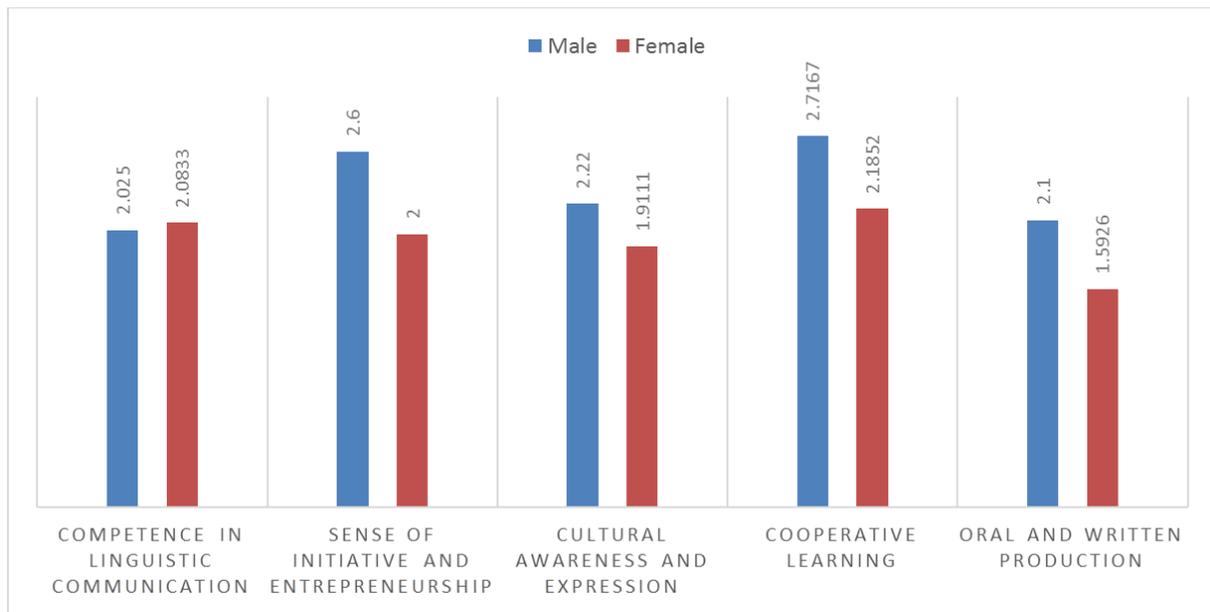
Figure 4.   Means Differences of Traditional Method due to Gender

The second hypothesis is: *There are no statistically significant differences at α ≤ 0.05 in the students' achievement in English between the experimental and control groups due to gender, and the teaching methods.*

In order to analyze the second hypothesis, an independent sample t-test was used and Tables 4 and 5 below show the results:

Table 4.   Independent Sample t- test

	Gender	N	Mean	Std. Deviation	T	Sig.*
Score	Male	22	57.8182	16.63226	0.468	0.643
	Female	16	55.2500	16.83053		

Table 4 shows that there are no statistically significant

differences at α ≤ 0.05 in the students' achievement in English in the experimental and control groups due to their gender. The significant value is 0.643, which is more than 0.05.

Figure 5.   Means and Standard Deviation of Students' Achievement due to Gender

Table 5. Independent Sample t- test

	Method	N	Mean	Std. Deviation	T	Sig*
Score	Traditional	19	44.1053	11.13500	-7.336	*0.000
	Navio	19	69.3684	10.06761		

Table 5 above shows that there are statistically significant differences at α ≤ 0.05 in the students' achievement in English due to the teaching method followed. The significant value is 0.000, which is less than 0.05, with the differences being in favor of the NAVIO teaching method.

Figure 6. Means and Std. Deviation of Students' Achievement in English due to Teaching Method
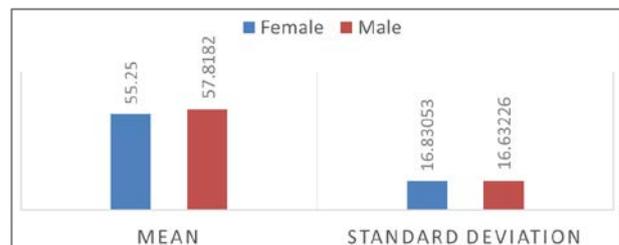
The third hypothesis is: *There are no statistically significant differences at α ≤ 0.05 in the digital competence of the students in the experimental group due to their gender.*

In order to analyze the third hypothesis**,** an independent sample t-test was used and Table 6 below shows the results:

Table 6. Independent Sample t- test

Gender		N	Mean	Std. Deviation	T	Sig.
q1	Male	12	3.8333	.38925	-0.130	0.898
	Female	7	3.8571	.37796		
q2	Male	12	3.1667	.71774	0.827	0.420
	Female	7	2.8571	.89974		

Table 6 above shows that there are no statistically significant differences at α ≤ 0.05 in the digital competence of the students in the experimental group due to their gender. The significant values are 0.898 and 0.420, which are more than 0.05.

The fourth hypothesis is: *Students' performance levels in the experimental group are better than those who learned English with traditional methods (Control Group).*

In order to analyze the fourth hypothesis, a paired t- test was used and Table 7 below shows the results.

Table 7 shows that there are statistically significant differences at α ≤ 0.05 between the experimental group and the control group in the students' competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expressions, cooperative learning, and oral and written production due to the teaching method followed. The significant values are 0.000 for all domains, which are less than 0.05 in favor of the experimental group (NAVIO Method). The improvement in competence in linguistic communication, sense of initiative and entrepreneurship, cultural awareness and expressions, cooperative learning, and oral and written production are in favor of the experimental group (NAVIO Method).

Table 7. Paired t- test

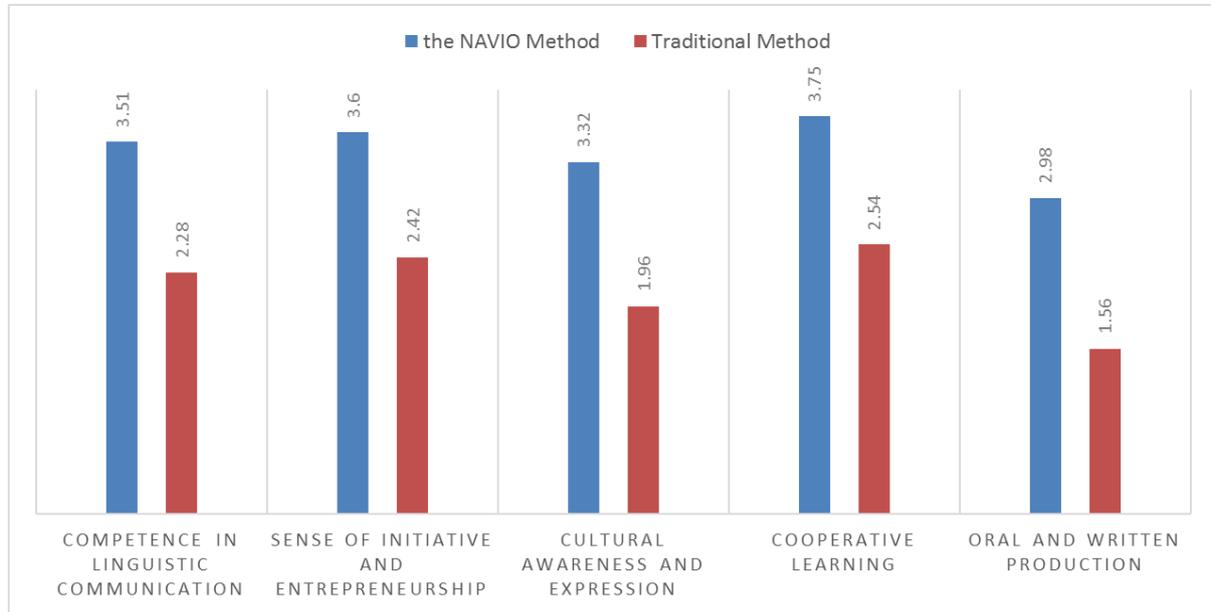| Domains		Competence in Linguistic Communication	Sense of initiative and entrepreneurship	Cultural awareness and expressions	Cooperative learning	Oral and written production	T
Control (n=19)	Mean	2.0526	2.3158	2.0737	2.4649	1.8596	2.1533
	S. D	.51760	.73050	.51299	.64688	.52488	.54596
Experimental (n=19)	Mean	3.5263	3.6053	3.3263	3.7632	2.9825	3.4407
	S. D	.60032	.42749	.62258	.36983	.64285	.50045
Improvement		1.47368	1.28947	1.25263	1.29825	1.12281	1.28737
Df		18	18	18	18	18	18
T		-10.700	-8.104	-8.892	-8.591	-8.952	-10.310
Sig.*		0.000*	0.000*	0.000*	0.000*	0.000*	0.000*

Figure 7. Means Differences between the NAVIO and Traditional Methods

4. Discussion

The integration of digital applications in language teaching should be advocated as a method for teaching and learning English as a foreign language, especially at the primary level. It is worth mentioning that the results show that using the NAVIO application has positive effects on enhancing students' performance levels. In this respect, we observed that most of the students who learned English through the NAVIO method are able to identify and produce all of the food vocabulary easily, ask and answer questions about food using "a" and "an" with minimal difficulties, understand most of the grammar dialogue and are able to use it with some difficulties. In contrast, we observed that the students who learned English through the traditional method have greater difficulty or are unable to ask and answer questions about food, have difficulty in understanding some of the grammar dialogue, and need a lot of support. Similarly, students who use the NAVIO application are able to make and play communication games largely independently, or require some support. However, students who learn English through the traditional method are unable or have difficulty in making and playing communication games, or require a lot of support. Furthermore, experimental group students always participate in the lessons and contribute as much as they can, produce good quality work most of the time, and consistently cooperate well or rarely need to be reminded of the need to cooperate in different activities.

The results also show that the students' achievement in the experimental group is higher than those in the control group. That is, the NAVIO method has a positive effect on increasing students' achievement in the Macmillan English course. In addition, the results show that there are no differences in students' digital competence due to gender, which means that males and females are equal in their digital competence.

The results of the study are in line with Biletska et al. [18], Nuraeni [19], and Fansury, Januarty and Ali Wira Rahman [21], who find that the use of digital content and tools are useful in teaching English as a foreign language. Moreover, students' show high levels of motivation, engagement, and understanding toward learning English content.

The results of the study also agree with Huang and Lee [11] and Erkaya [12], who show the usefulness of the digital environment in enhancing students' comprehension, and oral and written skills. In contrast, with traditional methods, students show a low engagement level, and are unable to initiate discussion.

However, the results of the current study disagree with Haelermans [17], who finds that students show negative attitudes toward using digital tools in learning.

5. Conclusions

The researchers conclude that the use of the NAVIO application produces an interesting course that stimulates students' interest in learning and mastering English skills according to their levels and needs. The use of the NAVIO method in foreign language classes also creates a relaxed and fun environment that motivates students to acquire the foreign language and take part in classroom activities with great enjoyment. Therefore, it is important to adopt a teaching method that matches the learner's learning style and motivates them to learn a foreign language with ease.

Appendixes

Classroom Observation Tool (Appendix A)

School: Scientific Academy School
Subject: English (Macmillan: Give Me Five Level 2)/Unit Two
Observer: (Researcher)
Teaching Methods: Traditional vs. NAVIO App

Competence in Linguistic Communication	Lesson	1	2	3	4	Results
Identifies and names different food (L, S, R, W)	1	Identifies and produces little or none of the food vocabulary.	Identifies and produces some of the food vocabulary.	Identifies and produces most of the food vocabulary.	Identifies and produces all of the food vocabulary.	
Asks and answers questions about food using 'a', 'an' and 'some' (L, S, R, W)	2	Has great difficulty or is unable to ask and answer questions about food using 'a', 'an' and 'some'.	Is able to ask and answer questions about food using 'a', 'an' and 'some', but requires a lot of support or prompting.	Is able to ask and answer questions about food using 'a', 'an' and 'some', but with some difficulty or prompting.	Asks and answers questions about food using 'a', 'an' and 'some' with minimal or no difficulty or prompting.	
Understands and acts out a grammar dialogue (L, S)	3	Understands little or none of the grammar dialogue and finds it very difficult or impossible to act out.	Understands some of the grammar dialogue and is able to act it out, but with difficulty.	Understands most of the grammar dialogue and is able to act it out, but with some difficulty.	Understands all of the grammar dialogue and is able to act it out without any difficulty.	
Asks about prices using 'How much (is this / are these)? (L, R, W)	4	Has great difficulty or is unable to ask about the price of things using 'How much is this / are these?'	Is able to ask about the price of things using 'How much is this / are these?', but with a lot of difficulty.	Is able to ask about the price of things using 'How much is this / are these?', but with some difficulty.	Is able to ask about the price of things using 'How much is this / are these?' with minimal difficulty.	
Sense of initiative and entrepreneurship	Lesson	1	2	3	4	Results
Works with a Talk Partner to practise and reinforce learning (L, S)	All	Has great difficulty or is unable to work well with a Talk Partner.	Works well with a Talk Partner some of the time.	Works well with a Talk Partner most of the time.	Works well with a Talk Partner all of the time.	
Makes and plays a communication game (L, S)	5	Has great difficulty or is unable to make and play the communication game.	Makes and plays the communication game, encountering difficulties and/or requiring a lot of support.	Makes and plays the communication game largely independently, encountering some difficulties and/or requiring some support.	Makes and plays the communication game with minimal or no difficulties or support.	
Cultural awareness and expression	Lesson	1	2	3	4	Results
Sings two songs (L, S, R)	1 &4	Sings little or none of the songs. Rarely or never does the actions.	Sings some of the songs, but with difficulty. Does some of the actions.	Sings most of the songs, but with some difficulty at times. Does most of the actions.	Sings all of the songs without any difficulty. Does all of the actions.	
Understands and acts out a story (L, S, R)	3	Understands little or none of the story and finds it very difficult or impossible to act out.	Understands some of the story and is able to act it out, but with difficulty.	Understands most of the story and is able to act it out, but with some difficulty	Understands all of the story and is able to act it out with minimal or no difficulty	

Table Continued

		1	2	3	4	
Learns about Pancake Day in Britain (L, S, R)	6	Has great difficulty or is unable to understand this cultural aspect or answer simple questions about it.	Understands this cultural aspect, but with some difficulty. Can answer some simple questions about it.	Understands this cultural aspect. Can answer simple questions about it.	Understands this cultural aspect. Can answer simple and more detailed questions about it.	
Thinks about their own culture (S)	6	Has great difficulty or is unable to think and talk about their own culture, even when prompted	Is able to think and talk about their culture, but with difficulty or prompting.	Is able to think about their culture, but with some difficulty or prompting.	Is able to think about their own culture with minimal or no difficulty or prompting.	
Reads, understands and writes a recipe (L, R, W)	7	Has great difficulty or is unable to read and understand the recipe. Writes very little or none of the recipe.	Reads and understands some of the recipe, but requires a lot of support. Writes some of the recipe, but with difficulty. Makes a lot of spelling or grammatical mistakes.	Reads and understands the recipe, but requires support. Writes most of the recipe, but with some difficulty. Makes some spelling or grammatical mistakes	Reads and understands the recipe without any difficulty. Writes the recipe with minimal or no support. Makes few or no spelling or grammatical mistakes.	
Cooperative learning	**Lesson**	**1**	**2**	**3**	**4**	**Results**
Working with others	All	Generally does not work well in a group. Rarely or never shows respect for others.	Works well with others some of the time. Does not show respect for others some of the time.	Works well with others most of the time. Shows respect for others most of the time.	Always works very well with others. Always shows respect for others.	
Turn-taking	All	Constantly interrupts without raising their hand. Usually doesn't respect turns when doing activities.	Often forgets to raise their hand to speak. Often doesn't respect turns when doing activities.	Usually raises their hand to speak. Usually respects turns when doing activities.	Always raises their hand to speak. Always respects turns when doing activities.	
Participation	All	Rarely or never participates in or contributes to the lesson.	Participates in the lesson and contributes well some of the time.	Participates in the lesson and contributes well most of the time.	Always participates in the lesson and contributes as much as they can.	
Making an effort	All	Rarely makes an effort. Produces poor quality work.	Makes an effort sometimes. Quality of work varies.	Makes an effort most of the time. Produces good quality work.	Always makes an effort. Produces high quality work	
Sharing	All	Does not share well. Often enters into conflict with classmates	Shares well some of the time. Sometimes enters into conflict with classmates.	Shares well most of the time. Sometimes needs to be reminded of the need to share.	Always shares well. Rarely or never needs to be reminded of the need to share.	
Working with a Talk Partner (L, S)	All	Does not work well with a Talk Partner most of the time.	Works well with a Talk Partner some of the time.	Works well with a Talk Partner most of the time.	Works well with a Talk Partner all of the time.	

Table Continued

Oral and written production	Lesson	1	2	3	4	Results
Speaking activities (S)	All	Has great difficulty or is unable to complete the Talk Partner speaking activities.	Is able to complete the Talk Partner speaking activities, but with difficulty. Requires a lot of support.	Is able to complete the Talk Partner speaking activities largely independently, but encounters difficulties and requires support at times.	Is able to complete the Talk Partner speaking activities independently with minimal or no errors or support.	
Language use (S)	All	Uses little or no target vocabulary and language. Rarely produces complete sentences.	Uses some target vocabulary and language. Produces complete sentences some of the time.	Uses target vocabulary and language. Produces complete sentences most of the time.	Uses a lot of target vocabulary and language. Always produces complete sentences.	
Presenting their project (S)		Has great difficulty or is unable to present their work to the class in English, even with a lot of support.	Presents their work to the class, but with difficulty. Requires a lot of support.	Presents their work to the class clearly and using appropriate language. Needs prompting at times.	Presents their work to the class clearly and using appropriate language. Requires minimal or no prompting.	

Classroom Observation Tool (Appendix B)

Teaching method: NAVIO method

DIGITAL COMPETENCE	Lesson	1	2	3	4	Results
1. Uses the Pupil's App at school or at home (L, S, R, W)	-	Has great difficulty using or is unable to use the Pupil's App.	Uses the Pupil's App, but has difficulty completing the activities and requires support.	Uses the Pupil's App largely independently. Completes the activities encountering some difficulties and making some errors.	Uses the Pupil's App independently and completes the activities with minimal or no difficulties or errors.	
2. Learns how to find recipes online (L, S, R, W)	9	Has great difficulty learning how to find recipes online.	Has some difficulty finding recipes online and needs support.	Understands how to find recipes online and does most activities independently.	Understands how to find recipes online without any difficulty.	

REFERENCES

[1] M. Williams, R. Burden. Psychology for language teachers, TESOL, Vol.33, No.1, 235-247, 2004.

[2] R. Yudhiantara, I. Nasir. Toward Mobile-Assisted Language Learning (MALL): Reaping Mobile Phone Benefits in Classroom Activities, Register Journal, Vol.10, No.1, pp. 12, 2017. https://doi.org/10.18326/rgt.v10i1.813

[3] A. Syafitri, A. Asi, S. Sumardi. An Application of Powtoon as a Digital Medium: Enhancing Students' Pronunciation in Speaking," Journal of Multicultural and Multireligious, Vol.5, No.2, 295-317, 2018.

[4] W. Almurashi. The Effective use of YouTube Videos for Teaching English Language in Classrooms as Supplementary Material at Taibah University in Alula, European Centre for Research Training and Development UK, 2016.

[5] N. Bucur, O. Popa. Digital Competence in Learning English as a Foreign Language Opportunities and Obstacles, The 12th International Conference on Virtual Learning, 2017.

[6] W. Chan, M. Chin, T. Nagami, K. Suthiwan. Media in foreign language teaching and learning, De Gruyter Mouton, Boston, 2011.

[7] S. Wang, S. Smith. Reading and grammar learning through mobile phones, Language Learning and Technology, Vol.17, No.3, 117-134, 2013.

[8]   Z. Aydin, S. Yildiz. Use of wikis to promote collaborative EFL writing, Language Learning and Technology, Vol.18, No.1, 160-180, 2014.

[9]   Ch. Lai. A framework for developing self-directed technology use, Language learning and Technology, Vol.17, No.2, 100-122, 2013.

[10] M. Liu, Z. Moore, L. Graham, S. Lee. A look at the research on computer-based technology use in second language learning: A review of the literature, Journal of Research on Technology in Education, Vol.34, No.3, 250-273, 2002.

[11] N. Huang, D. Lee. A Discourse Analysis of Asynchronous Discussion Board on Students Critical Thinking, The World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, pp. 708–713, 2004.

[12] R. Erkaya. Benefits of Using Short Stories in the EFL Context, Asian EFL Journal, Vol.8, No.1, 38-49, 2005.

[13] E. Lierena, C. Hurtado. Kahoot! A Digital Tool for Learning Vocabulary in a language classroom, Revista Publicando, Vol.4, No. 12(1), 441-449, 2017.

[14] S. Jensen. Gaming as an English language learning resource among young children in Denmark, Calico Journal, Vol.34, No.1, 1-19, 2017.

[15] J. Gee, E. Hayes. Language and learning in the digital age, Routledge, London & New York, 2011.

[16] C. Edwards. What's behind the rising inequality in Sweden's schools, and can it be fixed? The local, Online available from https://www.thelocal.se/20180822/sweden-in-focus-educationinequality-schools.

[17] C. Haelermans. Digital Tools in Education. On Usage, Effects and the Role of the Teacher, SNS Foreleg, Stockholm, 2017.

[18] I.O. Biletska, A.F. Paladieva, H.D. Avchinnikova, Y.Y. Kazak. The use of modern technologies by foreign language teachers: developing digital skills, Linguistics and Culture Review, Vol.5, No.2, 16-27, 2021.

[19] C. Nuraeni. Maximizing Mobile-Assisted Language Learning (MALL) amid Covid-19 Pandemic: Teachers' Perception. Metathesis, Journal of English Language, Literature, and Teaching, Vol.5, No.1, 11-18, 2021.

[20] N.P.L. Nariyati, S. Sudirman, N.P.A. Pratiwi. EFL pre-service teachers' perception toward the use of mobile assisted language learning in teaching English, International Journal of Language Education, Vol.4, No.2, 38-47, 2020.

[21] A.H. Fansury, R. Januarty, S. Ali Wira Rahman. Digital content for millennial generations: Teaching the English foreign language learner on COVID-19 pandemic, Journal of Southwest Jiaotong University, Vol.55, No.3, 2020.