

# ***The Impact of Third-Grade Students Joining an International Educational Program on Mastering Arabic Language***

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**Abstract:** This study examined the impact of enrolling third-grade students in an international education program on the mastery of Arabic reading and writing skills. The study sample consisted of 94 male and female students. An observation checklist containing 18 items, divided into two domains, reading and writing, was used as a data collection instrument. This study employed a quasi-experimental design. The findings showed that in the National Education Program, students significantly outperformed their peers in the international program in terms of both reading and writing skills. There was no statistically significant difference between male and female students in the program regarding skill mastery. The educational program strongly influenced the performance skills, explaining 63.9% of the variance in reading and 60.3% in writing. However, it had no significant impact on skill acquisition. Additionally, the interaction between the type of educational program and gender was not statistically significant.

**Keywords:** International and National Education Programs, Reading and Writing Skills, Arabic Language, Language Policy, Bilingual Education, and Jordanian Schools.

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## 1. Theoretical Framework

Children acquire language within their families and their surrounding environment, mainly through listening and speaking skills. According to Najiha et al. (2023), parents play a significant role in the informal learning of their children's language development. At the age of six, most children have started school, where they begin to acquire more formal aspects of language, including reading and writing. The first language learned during infancy is essential for the emerging cultural and social identity of the child. For Arabian children, their first language is Arabic (Al-Shanti & Bayar, 2022).

With the advancement of communication technologies and increased dynamics of globalization, cultural boundaries have rapidly leading to the decline of some local cultures in the face of dominant global influences (Taptiani et al., 2024). Global languages have been among the most powerful tools for this purpose. This shift, along with political movements aimed at forming an integrated cultural identity for modern nation- states, has led to the promotion of education in languages other than the mother tongue (Phillipson, 2018). However, this trend has had a negative impact on native languages, which have increasingly lost their position in favor of foreign languages (Al-Qadi, 2024).

The pressure of globalization has made development difficult. Many communities now view globalization as a threat to their languages. Strong reactions to this danger can be observed. For example, this danger started in countries such as Bangladesh, India, Lebanon, Algeria, Singapore, and all over Central and Southern Africa. Even Ireland and Scotland are not immune to this phenomenon, which is called "linguistic imperialism" by sociological backlash Phillipson, because English becomes a major language of culture and education in so many societies. Rapidly, researchers and government planners focus on the socio-political situation of local languages to avoid the danger of losing them. Fishman's work is on the language shift of notable contributions, which introduced the GIDS scale to classify languages based on their degree of danger (Al-Qadi, 2024; Fishman, 1991).

Arabic is more than a tool of communication; it is both a social phenomenon and a cognitive construction. It is used within an existing community and serves as a fundamental medium in social interaction, while representing a form of human knowledge shaped by complex mental and cognitive processes (Al-Anati, 2019). However, the use of international programs prioritizing foreign languages in Arabic affects the role of Arabic in education due to recent changes in educational trends (Al-Issa, 2017).

Scientific, linguistic, and technological progress have changed the way people teach and learn in recent years. These changes have resulted in significant adjustments in school policies and educational systems, especially regarding the language of instruction (Al-Issa, 2017). Moving towards dominance and multilingualism of globalization has increased bilingual education, in which some schools adopt international courses rather than national courses. This trend has resulted in a noticeable decline in the use of Arabic in such educational environments, an event that has a clear impact on Jordan's society and represents the main concern of this study (Shtayat & Abdullah, 2025).

A comparative point of view in developed countries shows that they are proud of their national languages and use them as their primary official languages. In contrast, the trend prevalent in the Arab world emphasizes the mastery of foreign languages (s) at the expense of Arabic. It outlines the immediate need to focus on Arabic reading

and writing skills, which children should be taught before entering school. Such early exposure convenient the recognition of letters and words and later supported the acquisition of literacy in students' school life (Al-Wahidi, 2024).

The reading is defined as a visible or silent process through which an individual explains and understands the meaning (Alyousef, 2006). It also increases memory, analytical thinking, and emotional engagement. In general, readings are classified into two types: oral readings, which include vocalizing texts and are often used in educational or public speaking contexts, and silent readings, which are commonly used for studies or personal reflections (Al-Wahidi, 2024). Jaballah et al. (2010) underlined some essential reading skills for third-class students:

- To face audiences while reading.
- Understanding words, sentences, and paragraphs.
- Flow and smooth reading.
- Reading at proper speed.
- Reading with minimal errors.
- To explain and apply punctuation marks and punctuation to increase meaning.
- Accurate pronunciation and articulation of letters.

On the other hand, writing involves making letters and words to express someone's ideas. It is a fundamental mode of linguistic communication (Hyland, 2003). Al-Raqab (2010) emphasized that writing is no less important than reading, and students often learn it through modeling, making the teacher's role important in skill development. The main writing skills for mastering third grade students include the following:

- Accurate writing using the right punctuation.
- Writing speed and precision.
- Expressing emotions and writing requirements
- Difference between different linguistic styles.
- Applying appropriate language patterns in various references.

Many learning principles support the idea that international programs implementing foreign language(s) in their curriculum can affect the reading and writing skills of third-class students. These principles include:

1. **Behaviorism:** This theory suggests that children learn language through reinforcement, which means that a foreign language can increase language skills by exposure to an educational program if students get proper motivation (Budiman, 2017).
2. **Cognitive Teaching Theory:** According to Jean Piagete, children learn through processing information, which highlights the need for a cognitively stimulating environment to support reading and writing (Piaget, 1970).
3. **Creative Education Principle:** This theory assumes that children create knowledge through experience. Therefore, interaction with authentic texts also increases literacy within a foreign language educational program (Vygotsky, 1978).

Based on the above, this study explores the effects of international educational programs on Arabic reading and writing skills among third-grade students by analyzing the contributing factors and offering recommendations to strengthen their native language amid current challenges.

### 1.1. Research Problem

Based on the researchers' experience in schools that use an international curriculum and the increasing preference among students for English over Arabic, there has been a clear decline in students' reading and writing skills in Arabic. Al-Anati (2019) suggested that we need to look into how the English language affects children's Arabic. He highlighted that English creates major challenges for students' performance in Arabic at all language levels. In addition, the researchers emphasize that with the increasing acceptance of international educational programs by schools, the advancement of digital technology has contributed significantly to the low use of the Arabic language. As a result, the native language is rapidly considered as the second or third language. Accordingly, the research problem can be formulated as follows. To investigate the impact of third-grade students' enrollment in international educational programs on their mastery of reading and writing skills in Arabic.

### 1.2. Research Questions

1. What is the level of mastery in the skills of reading and writing among students of third-class nominees in international educational programs?
2. Are there statistically significant differences in the importance level ( $\alpha \geq 0.05$ ) in the third-class students and the national system in the International Educational Program?
3. Are there statistically significant differences at the significance level ( $\alpha \geq 0.05$ ) in mastering Arabic writing skills between third-grade students in the international educational program and those in the national system?
4. Are there statistically significant differences at the significance level ( $\alpha \geq 0.05$ ) in mastering reading skills between male and female students in the international educational program?
5. Are there statistically significant differences at the significance level ( $\alpha \geq 0.05$ ) in mastering writing skills between male and female students in the international educational program?
6. Are there statistically significant differences at the significance level ( $\alpha \geq 0.05$ ) in the mean scores of students' performance in mastering Arabic reading skills due to the interaction between national programs (international/national) and gender?
7. Are there statistically significant differences at the significance level ( $\alpha \geq 0.05$ ) in the mean scores of students' performance in mastering Arabic writing skills due to the interaction between the educational programs (international/national) and gender?

### 1.3. Research Objective

The purpose of the current study is to achieve several objectives, including:

- Investigating the impact of international educational programs on the proficiency of third- grade students in reading and writing skills in Arabic
- Discovering the impact of an international educational program on the original Arabic language of the third - grade students.

### 1.4. Significance of Study

This study gets its importance from direct and practical field experience, providing insight from real educational contexts. This is particularly important for the following

reasons: it attracts the attention of the decision makers to the impact of international educational programs on the performance of the third-class students in reading and writing in Arabic. It also performs ground work for future research by encouraging scholars to conduct further studies on the impact of international educational programs on Arabic writing skills.

### *1.5. Limitations of the Study*

- 1) Subject Limit:** This study is limited to checking the impact of the nomination of students of the third-grade in an international educational program on their proficiency in the Arabic language.
- 2) Geographical Limitation:** The study was held at the Rosary Sisters School in Marge Al-Hamm and Franciscan Sisters of St. Joseph's School in Amman, Jordan.
- 3) Time Limit:** This research incorporates the first semester of the 2024/2025 academic year.
- 4) Human Border:** Study samples consist of third - grade students.

## **2. Previous Studies**

In his study, Dheeb (2022) stressed that the Arabic language is currently going through a crisis due to digital progress and the increasing diversity of languages. The study stated that Arabic is in decline, a position that is caused by widening digital intervals. The study also states that despite the ease of the digital revolution and the ease of reaching information, the number of Arabic readers is less than the number of native Arabic speakers.

Bouhlila & Hentati (2023) compared students' performance in Arabic reading and writing skills among schools that adopt foreign language instruction through international educational programs. Also, Arabic is used as the primary language of instruction. Additionally, the findings showed that students enrolled in international education schools showed weak performance in Arabic reading and writing skills in Arabic-based schools.

Hussain (2021) found that students enrolled in international educational programs face more challenges in Arabic reading and writing skills than those participating in public schools. This study underlined the importance of integrating bilingual instruction to ensure proficiency in Arabic.

Soh (2021) conducted a study to discover the impact of education in international schools on the language proficiency of third-class students. Conclusions suggest that students growing up in a non-Arabic- speaking environment face important difficulties in the Arabic language and in gaining skills.

Al-Issa(2017) examined the impact of instructions in international educational programs on Arabic language proficiency among students in private schools. The study indicated that students learning in an environment where instructions are distributed in other languages, such as the challenges in developing the skills of reading and writing in English, Arabic.

Hijazi (2018) emphasized the strong interrelation between language, culture, civilization, and the collective identity of any nation. He described the language as an essential frame that keeps all aspects related to the culture, civilization, science, knowledge, history, and human life of a nation, which questions the possibility of a rich nation without its language. According to Hijazi (2018), the importance of language

comes from its role in expressing the conditions, cultures, and unique identity of societies, Communication facility, representing people's views, and acting globally as a medium, show their cultural products, knowledge, and creativity.

Al-'Uraini (2018) calls linguistic intervention one of the characteristic Arabic language challenges, especially in the early years of education. The study takes a position that the linguistic intervention results in cultural isolation and language learning failures, with the result being low efficiency in the local languages. It has been argued that simultaneous use of two languages may restrict effective linguistic.

### *2.1. Comment on Previous Studies*

Review of current literature reveals many major comments:

1. Most of the previous studies have focused on the effects of using a foreign language on proficiency in the original language, highlighting the effects of Arabic language learning. Some studies have addressed the impact of digital and technical equipment on the acquisition of students of Arabic language skills.
2. The current study has benefited from previous studies in many ways, especially in processes and adopting developing equipment, which outlines the impact of pre-research on similar investigations. However, this study stands out in many ways, especially in focusing on third-class students, a target group that has received limited attention in the literature. Furthermore, based on the researcher's knowledge, no studies discussed the comparison among students enrolled in international and national educational programs in terms of their efficiency in Arabic.
3. This study also provides a set of practical recommendations, which describe the problem of proposing creative solutions.
4. The importance of this study stems from focusing on checking the impact of international educational programs on the mastery of students' reading and writing skills in Arabic.

## **3. Methodology**

This study adopted a quasi-experimental design to examine the impact of international and national educational programs on the mastery of reading and writing skills among third-grade students. This approach was selected, as it allows for comparison between different groups, considering the natural settings of the educational environment, providing a more accurate understanding of the impacts of two systems on the language proficiency of the students.

### *3.1. Research Sample*

The study sample included students of all third-class students nominated at the Rosary Sisters School in Marge Al-Hamm and Franciscan Sisters of St. Joseph's School in Amman. The sample consisted of two segments following the national educational system and two segments after the international educational system, including 47 male and female students in each group. The researchers used a purposive sampling while schools were selected as a participant of the study to be aligned with the objectives of this study. Both programs (national and international) are included in this study to represent the learning environment. Accordingly, the total sample included students of 94 third-class students distributed in two educational systems, which provides a balanced base to check the difference in reading and writing.

### **3.2. Research Instrument**

The data for this study were collected using an observational checklist developed by the researchers. The checklist comprised 18 Likert-type items divided into two sections. The first section included 13 items aimed at assessing students' reading skill, while the second section included 5 items focused on students' writing skill. Each item was rated on a five – point scale

Applies to a very high degree = 5

Applies to a high degree = 4

Applies to a moderate degree = 3

Applies to a low degree = 2

Applies to a very low degree = 1

Higher scores indicate stronger reading and writing skills.

#### **3.2.1 The Validity and Reliability of the Instrument**

The content validity of the research instrument was reviewed and evaluated by a panel of six judges and experts specializing in curriculum and instruction in Arabic. These reviewers were affiliated with the University of Petra and schools that teach both international and national educational programs. The experts were asked to evaluate each item in terms of its relevance to the designated section and to suggest modifications or recommendations for the removal of items as necessary. Based on their feedback and recommendations, revisions were made to the checklist items, including rewording, modification, and deletion where appropriate. Following these adjustments, the final version of the research instrument consisted of 18 items distributed across the two sections previously described. To compute the reliability of the instrument, the researchers used Cronbach's alpha in this study to assess the internal consistency. 0.89 was the overall values while subscale ranged from 0.84 to 0.91. This is an acceptable number in educational research to check the reliability of the instrument.

To ensure the reliability of the research, the researchers give the instrument for two observers who were trained earlier on how they use it. Cohen's Kappa (Cohen, 1988) used to check the inter-rater agreement which was 0.86, which reveals the high level of agreement.

#### **3.2.2 Ethical Considerations**

Prior to initiating data collection, authorization was secured from the Ethical Committee to perform the study. Informed consent was obtained from all participants via a standardized form that outlined the project. Participation was optional, and individuals were apprised of their freedom to withdraw at any time.

## **4. Findings and Discussions**

### **4.1. Research Question One**

What is the level of mastery in the skills of reading and writing among third-grade students in the international educational system?

To address this research question, the means and standard deviations for the performance of participants on the items of the research equipment were calculated. Table 1 presents results related to participants' reading and writing skills.

**Table 1: Descriptive Data for Students' Performance in International Educational Programs on Reading and Writing Skills.**

Skill	M	S. D	Level
Reading	2.88	0.62	Moderate
Writing	3.15	0.60	Moderate

Table 1 shows a descriptive profile of the reading and writing skill performance of the study sample. The study sample had a mean and standard deviation of 2.88 and 0.62. On the other hand, the reading skill, as shown above, the participants' reading achievement was moderate. The study sample had a mean and standard deviation of 3.15 and 0.60, respectively. However, Writing skills have been shown by the above table to have moderate performance. All these findings demonstrate a close resemblance in the performance of the participants in both skills, with little value addition to writing. However, general performance was averaged at a moderate skill level. For the International Educational Program, descriptive statistics were also calculated for all the items for reading skills, such as students' performance and standard deviation. Table 2 illustrates the results.

**Table 2: Descriptive Statistics for Reading Skill Items.**

Item No.	Item	Mean	S. D	Level	Rank
1	Produces long vowel sounds correctly	3.68	0.69	High	1
2	Pronounces short vowels correctly with their letters	3.44	0.68	Moderate	2
3	Pronounces a two-syllable word accurately	3.42	0.68	Moderate	3
4	Reads a two-word sentence aloud expressively.	3.21	0.78	Low	7
5	Pronounces syllable words Arabic phonemes accurately.	3.40	0.71	Moderate	4
6	Reads a three-word sentence without pausing.	2.49	0.78	Moderate	10
7	Differentiates between similar Arabic sounds, e.g.: (ص،س)، (ت،ط)، (د،ض)	3.02	0.79	Moderate	8
8	Observes punctuation marks when reading sentences and texts.	1.57	0.68	Low	12
9	Reads curriculum-appropriate paragraphs fluently in Arabic.	2.11	0.84	Low	11
10	Answer questions based on comprehension of the reading text.	2.79	0.81	Moderate	9
11	Pronounce words in the text without incorrect sound substitutions.	3.32	0.78	Moderate	6
12	Pronounce words in the text without omitting sounds.	3.36	0.79	Moderate	5
13	Applies correct grammatical case endings as indicated in the text.	1.55	0.83	Low	13
	Overall Mean	2.88	0.62	Moderate	

The outcomes reported within the scope of this study were only partially satisfactory. Level 2 reading skill of third - grade students participating in the International Educational Program could be characterized as average, with an overall mean score of 2.88 and a standard deviation of 0.62. Some skills showed higher mean scores relative to other skills. For example, skill 1, identifying long vowel sounds, scored the highest mean of 3.68, which indicates strong agreement in performing the skill among the participants. On the contrary, some skills had low mean scores, such as skill 13 accurately articulates the words seen in the lesson, which has a mean of 1.55, which is low performance for this skill.

As noted from the table, it is possible to analyze each participant's performance for responding to various skills from the reading subtest. Some participants were able to attain quite the opposite of the average number of skills they mastered, while others had limited items. This demonstrates the level of mastery of one or more specific skills that require a deeper understanding of the factors affecting these outcomes.

A descriptive statistical analysis for each item related to writing skills was also

conducted, including the calculation of means and standard deviations for the performance of students in the International Educational Program on each item. Table 3 presents the results of this analysis.

**Table 3: Descriptive Statistics for Writing Skill Items in the Int'l Educational System.**

Item No.	Item	Mean	S. D	Level	Rank
1	Observes correct spelling and clarity	3.36	1.01	Moderate	3
2	Applies to writing rules in writing	1.57	0.71	Low	5
3	Aligns letters according to Arabic calligraphically rules of height and width	3.79	0.59	High	2
4	Leaves appropriate spaces between words in Arabic writing	3.96	0.59	High	1
5	Observes Arabic writing features (e.g., diacritics, solar and lunar "L", punctuation)	3.08	0.83	Moderate	4
	Overall	3.15	0.60	Moderate	

The results shown in Table 3 indicated that the master level of writing skills among the third-class students in the International Educational Program was moderate, with an overall average score of 3.15 and a standard deviation of 0.60. These findings show that while students demonstrated moderate writing proficiency, personal writing skills differ in objects; some skills reach high levels, and others are low.

The results presented in Table 3 reflect the variation in the reactions of the participants towards various survey items. The item "Quit the appropriate vacancy between words in Arabic", indicating a high level of agreement between the participants, recorded the highest average score of 3.9574. Similarly, the item "aligns letters by the Arabic call of" height and width and also found a higher median of 3.7872, which reflects a strong awareness about its content. On the contrary, the item "enforces the writing rules". The lowest average score has been recorded in them, which gives suggestions to the participant in the contest. Variation in reactions which are related to the difference in clarity of questions or prior experiences and knowledge of students.

The findings showed that a considerable number of students who participated in the study had an intermediate literacy skill level. The reading average score was 2.8756, and writing scored a bit higher at 3.1532. It seems that there is a nearly comparable level of performance in both skills, but writing has a slight edge. This moderate performance, however, does warrant concern. Based on these results, participants have average proficiency in reading and writing, which highlights the possibility that some form of educational or training support aimed at enhancing performance may be necessary. Such a lack of adequate proficiency may stem from the position given to Arabic—described as a secondary subject—which restricts the frequency and depth of classroom engagements relative to students enrolled in national education programs. Moreover, students in international programs engage in limited communicative and academically language-focused interactions during and beyond class time, within and beyond their homes, which constrains their social circles. Al-Issa (2017) also argued that instruction provided in international programs tends to be counterproductive about the students' overall efficiency in the Arabic language. The research pointed out that a non-Arabic speaking environment does not emerge vertically for learning Arabic reading and writing skills.

#### 4.2. Research Question Two

Is there a significant difference at the level ( $\alpha \geq 0.05$ ) in mastering Arabic reading skills between third-grade students in the international educational program and those in the national program?

To answer this question, means, standard deviations, and an independent samples t-test were used for the educational program variable. Table 4 presents the results of this analysis.

**Table 4: Independent Samples t Test Results for Reading Skill by Educational Program.**

Educational System	n	M	SD	t	df	p
International	47	2.88	0.62	-12.75	92	< .001
National	47	4.53	0.64			

Analysis of the independent sample T test for reading skills revealed a significant difference between students from national and international programs. The sample analysis indicated the value of  $T = -12.753$  and a significant level of  $P < .001$ . In the national program, the students performed higher reading skill levels ( $M = 4.53$ ,  $SD = 0.64$ ) as compared to the international program ( $M = 2.88$ ,  $SD = 0.62$ ).

The findings presented here correspond to Hussain (2021), who identified that students enrolled in international educational programs face more challenges than they have more challenges in public schools than their peers. Hussain's research further outlines the importance of bilingual instruction to increase Arabic language proficiency within international educational programs.

Depending on these findings, the difference in performance may be related to the difference in the learning environment between educational methods and educational programs. To reduce this gap between national and international programs, it is necessary to prepare direct strategies within international programs to enhance Arabic reading skills.

#### 4.3. Research Questions Three

Is there a significant difference in the mastery of Arabic writing skills ( $\alpha$  0.05 in the mastery of Arabic writing skills among the students of the third class nominated in the International Educational Program and the students of the third class in the national program?

Standard deviations for educational system variables and independent samples T tests were used. Table 5 presents the results of this analysis.

**Table 5: Independent Samples t Test Results for Writing Skill by Educational Program.**

Educational System	n	M	SD	t	df	p
International	47	3.15	0.60	-11.81	92	< .001
National	47	4.65	0.62			

Analysis of the independent sample T test for writing skills led to a significant difference between students of two educational programs (national and international), where the value of  $T = -11.81$  and a substantial level of  $P < .001$ . In the national program, the students performed high reading skills ( $M = 4.65$ ,  $SD = 0.62$ ) compared to the International Program ( $M = 3.15$ ,  $SD = 0.60$ ).

Conclusions suggest that the differences between the two groups can be attributed to the educational program, especially its environment and the characteristics of the course. It appears that the national program includes more interactive directive strategies, which emphasize the development of writing skills in the Arabic language. In contrast, the international program may require a better educational approach to

more effectively support the acquisition of students' proficiency in Arabic writing. Similar results were found by Bouhlila & Hentati, (2023), who said that students enrolled in schools that adopt foreign language instruction display weaker reading and writing skills in Arabic than their peers in schools that place a strong emphasis on Arabic language instruction, such as public schools.

In comparing both skills (reading and writing) among national and international programs, it shows that international students' performance are better than those who enrolled with a national program. The researchers suggest that educational policymakers in Jordan have to consider the findings when designing bilingual curricula to get benefits from international programs on the strategies they used in reading and writing skills in a way to increase the level of mastery of Arabic language.

#### 4.4. Research Question Four

Is there a significant difference at the level ( $\alpha \geq 0.05$ ) in Arabic reading proficiency between male and female students in the international educational program?

Standard deviations and an independent samples t- test were used for the gender variable for this question. Table 6 presents the results of this analysis.

**Table 6: Independent Samples t Test Results for Reading Skill by Gender (International Educational Program).**

Gender	n	M	SD	t	df	p
Male	51	3.68	1.05	-0.28	92	.778
Female	43	3.74	1.04			

To examine whether the International Educational Program had an effect of gender on the proficiency of Arabic reading among students, an independent sample was held a T-Test. As shown in Table 6, the results have no significant difference between male and female students,  $T(92) = -0.28$ ,  $p = 0.778$ . Both groups performed the same average score in reading proficiency, with men's scoring ( $M = 3.68$ ,  $SD = 1.05$ ) and women's scoring ( $M = 3.74$ ,  $SD = 1.04$ ).

It can be concluded that the proficiency of Arabic reading between male and female students in the international educational program is comparable, with no significant differences between the two groups. These findings suggest that the educational environment and course within the international program have a similar impact on the development of reading skills in both genders. It supports the hypothesis that directive references and course design play a more effective role in shaping language skills than biological or social factors. The interpretation aligns with the findings of Stoet and Geary (2013), who stated that gender inter -countries are consistent in the performance of countries and are more affected by educational practices than the underlying biological differences.

#### 4.5. Research Question Five

Is there a significant difference at the level ( $\alpha \geq 0.05$ ) in mastering writing skills between male and female students in the international educational program?

To address the fifth research question, means, standard deviations, and an independent samples t-test were conducted to examine the effect of gender on writing skill. Table 7 presents the results of the statistical analysis.

**Table7: Independent Samples t-Test for Differences in Writing Skills by Gender (the International Educational Program).**

Writing Proficiency	Gender	N	M	SD	t	df	Sig. (2-tailed)
	Male	51	3.85	1.02	-0.576	92	0.566
	Female	43	3.96	0.91			

As shown in Table 7, the average score of writing skills between male students ( $M = 3.85$ ,  $SD = 1.02$ ) was slightly lower than female students ( $M = 3.96$ ,  $SD = 0.91$ ). However, the independent samples T-test revealed that this difference was not statistically significant,  $T(92) = -0.576$ ,  $P = .566$ . This indicates that there is no significant difference in mastery of writing skills between male and female students within the International Educational Program. These findings suggest that both genders' writing performance is comparable, which indicates that the educational reference can provide an equitable environment for language skill development regardless of gender.

#### 4.6. Research Questions Six

Is there a significant difference at level ( $\alpha$ ) 0.05 in the average score ( $\alpha$ ) 0.05 of students' performance to master Arabic reading skills due to interaction between Arabic and English educational programs and gender?

The difference in the proficiency of Arabic reading was analyzed to examine the effect of interaction between two variables: the educational program (National vs. International) and Gender (Male vs. female). Table 8 presents descriptive data that depicts the difference between groups.

**Table 8: Descriptive Statistics of Reading Proficiency Based on the Interaction Between Educational Programs and Gender.**

Educational Program	Gender	N	Mean	S. D
International Program	Male	26	2.87	0.65
	Female	21	2.87	0.58
	Total	47	2.87	0.62
National Program	Male	25	3.67	1.05
	Female	22	3.73	1.04
	Total	47	3.70	1.04
Combined Programs	Male	51	3.67	1.05
	Female	43	5.73	1.04
	Total	94	3.70	1.04

Table 8 shows a clear difference in the average score between the two educational programs. Students enrolled in the National Educational Program showed much more proficiency in Arabic reading ( $M = 4.5319$ ) than in the International Program ( $M = 2.8756$ ). However, when comparing male and female students within each educational program, the average scores were very close, which shows the minimum gender-based differences:

Within the international program, the average score for male students was 2.8728, while female students were 2.8791 - an insignificant difference. Within the national program, men had 4.5108 compared to 4.5559 for men, very minor differences. When checking the gender difference in both educational programs, the difference remains minimal. The overall meaning for male students was 3.6757, while for female students, it was 3.7370.

These findings show that the type of educational program has a significant effect on reading proficiency compared to gender. In the national program, the students go far

beyond those in the international program. In contrast, gender is not an important factor in determining students within each program or in both programs. To determine whether the interaction between the educational program and gender is statistically significant, a two-way analysis of variance (Two-Way ANOVA) was conducted to investigate if the effect of the educational program on reading proficiency varies by gender, or whether the educational program itself serves as the primary factor influencing performance, with no effect of gender. A two-way analysis of variance (Two-Way ANOVA) was conducted to examine if there were statistically significant differences in students' mean scores in Arabic reading proficiency based on the interaction between educational programs (national vs. international) and gender (male vs. female). Table 9 presents the results of this analysis.

**Table 9: Analysis of Variance for the Effect of Educational Program and Gender on Reading Proficiency.**

Source	SS	df	MS	F	Sig.	$\eta^2$
Corrected Model	64.484	2	32.242	80.493	0.000	0.639
Intercept	1280.896	1	1280.896	3197.801	0.000	0.972
Program	64.396	1	64.396	160.767	0.000	0.639
Gender	0.016	1	0.016	0.039	0.844	0.000
Error	36.451	91	0.401			
Total	1390.414	94				
Corrected Total	100.934	93				

The two-way ANOVA revealed a statistically significant difference in students' Arabic reading proficiency due to the educational program variable. The result of the educational program is  $F = 160.77$ ;  $p < .001$ , suggesting a substantial influence of the educational program on reading proficiency. The value of partial eta squared (partial  $\eta^2 = .639$ ) indicates that approximately 63.9% of the variance in reading proficiency can be related to the educational program. The results indicate that students in the national educational program demonstrated higher performance in reading ( $M = 4.53$ ) compared to their peers in the international program, who achieved a lower mean score ( $M = 2.87$ ). This difference reflects the influence of the curriculum and the instructional approaches implemented within each educational system.

Furthermore, the results indicated that there was no significant difference between gender and students' reading,  $f = 0.039$ ;  $P = .844$ , 05 level. This shows that within each educational program, there is no difference in the reading level of proficiency between male and female students. In addition, the partial ETA indicates a non-mating effect of the gender on the repayment performance (partial  $\eta = .000$ ). Analysis also revealed that the interaction between the educational program and gender was not statistically significant. This indicates that the influence of the educational program on the proficiency of reading was the same for both males and females, in which there was no significant difference in its impact on gender. The above results highlight the important role that the educational program plays in the Arabic reading of students. On the other hand, gender does not have a meaningful effect on students' performance. Lack of an important interaction between the educational program and gender suggests that both male and female students are equally affected by the type of educational program in which they are enrolled, in which no clear advantage or disadvantage is tied to the gender.

Another finding was related to the effect size ( $\eta^2 = .639$ ) which they have a great impact of the educational program on students' Arabic reading skills. According to Cohen (1988),

values of (0.01, 0.06, and 0.14) represent the low, middle, and high effects. Moreover, the value (639.) reflect a high level based on Cohen percentage, which means that the type of educational programs explains 63.9% of the average on the ability of reading skill among the 3rd grade students. This result showed that the curriculum design and learning environment improved language learning in different skills. Reading skill affected by different factors in both programs (national and international) such as (a) teaching methods, (b) language exposure, and (c) assessment standards. Based on the gender, the low value  $\eta^2$  (0.000) reflects that gender will not affect the student's reading ability. At the end, the type of educational program identifies the Arabic reading proficiency while gender does not play any role in this context.

#### 4.7. Research Question Seven

Is there a significant difference at the level ( $\alpha \geq 0.05$ ) between the mean scores of participants' performance in Arabic writing proficiency that can be attributed to the interaction between the educational program (international vs. national) and gender?

To better understand whether students' proficiency in Arabic writing is influenced by a combination of their educational program (national or international) and gender, the analysis looked at group averages and variability, and descriptive statistics were calculated for Table 10.

**Table 10: Descriptive Statistics for Arabic Writing Proficiency by Educational Program and Gender.**

Educational Program	Gender	N	M	S. D
International Program	Male	26	3.05	0.62
	Female	21	3.28	0.58
	Total	47	3.15	0.60
National Program	Male	25	4.67	0.61
	Female	22	4.62	0.65
	Total	47	4.65	0.62
Combined Programs	Male	51	3.85	1.02
	Female	43	3.96	0.91
	Total	94	3.90	0.97

The results presented in Table 10 show that the efficiency of students in Arabic writing is influenced by the educational program. In the national program, the students performed better in their writing skills than those in the international program. The national program had an average score ( $M = 4.65$ ), ( $SD = 0.62$ ) for students, which reflects high-level proficiency, while the international program had a much lower average score for students ( $M = 3.15$ ), ( $SD = 0.60$ ), indicating a medium level of performance. These significant differences highlight the impact of the educational program on the development of writing skills, suggesting that the national program can provide a more supportive environment to enhance students' Arabic writing abilities compared to the international program.

When comparing the performance of male and female students within each educational program, the differences appear minimal. In the international program, women created a little more ( $M = 3.28$ ) than men ( $M = 3.05$ ). However, both groups remained within the medium performance range. In the national program, the score was aligned even more closely, with men scoring 4.67 and 4.62 women, both reflecting

a high level of proficiency. These findings show that there is no significant gender-based difference in writing performance in each educational context. Instead, the primary factor that affects students' writing proficiency appears to be the academic program itself, rather than gender. While examining the overall writing performance in both educational programs, the average score for male students ( $M = 3.8471$ ), while female students ( $M = 3.9628$ ) obtained a little more meaning. Both scores fall under high-demonstration levels. These findings show that gender differences in writing proficiency are not important when considering two educational programs.

This confirms the hypothesis that the educational program itself is the primary factor affecting the development of writing skills, regardless of the gender of the student. Based on the previous results, it becomes clear that the learning environment and courses play a central role in enhancing students' writing proficiency. Advanced achievements displayed by students in the National Education Program show that this system provides more effective educational opportunities to develop this skill. On the other hand, the absence of significant gender differences within each program indicates that the effect of the educational program is on the supporter. In Arabic writing proficiency, there was a significant difference in students' mean scores. A two-way analysis of variance (Two-way ANOVA) was conducted to examine these differences. The analysis aimed to determine whether the observed differences were due to the main effects of the academic program (National vs. International), gender (male vs. female), or their interaction. The results of this analysis are presented in Table 11.

**Table 11: Two-way ANOVA Results for the Effect of Gender on Educational Programs and Proficiency.**

Source	Type III Sum of Squared	df	Mean Square	F	Sig.	Partial Squared Eta
Corrected Model	52.590	2	26.295	69.497	0.000	0.604
Intercept	1421.975	1	1421.975	3758.294	0.000	0.976
System	52.277	1	54.277	138.169	0.000	0.603
Gender	0.164	1	0.164	0.432	0.512	0.005
Error	34.430	91	0.378			
Total	1516.760	94				
Corrected Total	87.020	93				

The results of the two-way analysis of variance (Two-way ANOVA) revealed the statistically significant difference in the students enrolled in the international educational program and the national program at  $\alpha = 0.05$  importance in the national program at the national program at the national program. The analysis received an F value of 138.169 with  $P < .001$ , showing a strong impact of the educational system on the performance. In particular, the educational system is responsible for 60.3% of the variance in writing proficiency ( $\eta = .603$ ), highlighting its significant impact on students' skill development. In the National Educational Program, the students showed high-level writing proficiency with an average score of ( $M = 4.6468$ ) in the international program, which showed a medium level of performance ( $M = 3.1532$ ). This inequality further outlines the effectiveness of the national program in promoting Arabic writing skills.

These findings show that the educational program has a significant impact on the writing of students. In particular, the national program provides a more supportive learning environment for the development of writing skills than the international program. The

results showed no significant differences related to the penis variable, as the Analysis received an F value of 0.432 ( $P = .512$ ). This shows that male and female students demonstrated comparable writing proficiency levels, whether they participated regardless of the educational program they participated in. In addition, partial ETA paid value ( $\eta = 0.005$ ) indicates that the impact of gender on writing skills was minimal and statistically insignificant. In addition, there was no statistically significant interaction between educational programs and gender, as the importance value was more than .05. This indicates that the influence of the educational program on writing proficiency was in line with both male and female students. In other words, the effect of the educational program on writing skills was not different by gender, suggesting that both males and females benefited equally from the instructional environment provided by each program.

The results suggest that the educational program plays an important role in shaping students' efficiency in Arabic writing. In the national program, students continuously improved in the international program, indicating more effectiveness of the national course in support of writing development. On the other hand, gender does not appear to be an important factor, as males and females performed on comparable levels within both programs. In addition, the lack of statistically significant interaction between gender and the educational program shows that the effect of the program was similar in both genders. In other words, both male and female students benefit or struggle in the same way based on the educational environment, strengthening the idea that program-level factors, rather than gender, are the major drivers.

## 5. Recommendations

Researchers recommend strengthening Arabic language directions in schools after the implementation of international education programs by offering assistance programs for students studying and writing in Arabic, and developing interactive and engaging Arabic language courses. It is also important to integrate modern teaching strategies, including digital technologies and multimedia equipment, to increase students' reading and writing skills. Additionally, encouraging students to use Arabic beyond classes through reading and writing competitions can provide meaningful and pleasant opportunities to strengthen their language abilities. Teacher training programs should focus on professional development related to effective Arabic language instruction. Also, teachers should be supported by teaching strategies to face specific challenges faced by students in International Education Settings. Finally, further research is required to detect the impact of international education programs on the basic language proficiency of students by developing their language skills.

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