The Impact of In-Service EFL Teachers Training Program in The Libyan City of Messalata

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Abstract

This paper explores the impact of English language teacher training programs in the city of Messalata, Libya. This study used a descriptive and quasi-experimental method to answer the raised research questions. Data were collected through questionnaires distributed to English language teachers in the region, whether they were trained or not; and the differences between the two groups in the level of difficulties were measured using the Mann-Whitney U test. Interviews were also conducted with some of the teachers who received the training in addition to the trainer to understand the challenges they faced during and after the training. The study results showed no statistically significant differences between the two groups in most of the areas that the training program addressed except for two aspects: using the Total Physical Response method in teaching and dealing with limited resources. The study also concluded that there are other factors that affect several aspects of the teaching process, such as the educational stage and the gender of the students. In addition, some teachers complained about the generality of the training program and that although it included several aspects of the educational process, it did not guide the teacher on how to deal with the ministry's curriculum.

الملخص بالعربية

هذه الورقة تبحث في تأثير برامج تدريب المعلمين في اللغة الانجليزية في مدينة مسلاتة، ليبيا. استخدمت هذه الدراسة المنهج الوصفي والشبه تجريبي للإجابة على الاسئلة البحثية المطروحة. تم جمع البيانات من خلال استبيانات وزعت على معلمي اللغة الانجليزية في المنطقة سواء كانوا مدربين او غير مدربين؛ وتم مقارنة الفروق بين المجموعتين في مستوى الصعوبات باستخدام اختبار مان ويتني يو. كما تم اجراء مقابلات مع بعض الاساتذة الذين تلقوا التدريب والمدرب لفهم التحديات التي واجهتهم خلال وبعد التدريب. أظهرت نتائج الدراسة عدم وجود فروق معنوية احصائية بين المجموعتين في معظم المناطق التي تناولها البرنامج التدريبي ما عدا جانبين هما: استخدام طريقة الاستجابة الجسدية التامة في التدريس و التعامل مع الموارد المحدودة. كما توصلت الدراسة الى ان هناك عوامل اخرى تؤثر في عدة جوانب من العملية التدريسية مثل المرحلة الدراسية، و جنس الطلبة. بالاضافة إلى ذلك عبر بعض المعلمين عن شكواهم من عمومية البرنامج التدريبي وانه رغم انه شمل عدة جوانب من العملية التعليمية الا انه لم يوجه المعلم على كيفية التعامل مع المنهج الوزاري.

1. Introduction

The English language, renowned for its global ubiquity as a communicative tool even amongst non-native speakers, has undeniably become a crucial component of educational systems. This prominence is further stressed by the rapid progression in scientific, technological, and communicative domains, which have effectively transformed the world into a global village. As such, the acquisition of English language skills has been integrated into the curricula of numerous nations worldwide.

While acknowledging the significance of English language learning, it is equally imperative to underscore the necessity for advancements in English language instruction, as this would undoubtedly enhance the pedagogical process. In light of this, the Ministry of Education has initiated a comprehensive nationwide training program targeted at in-service English language educators in public schools. The primary objective of this program is to enhance their instructional competencies and acquaint them with contemporary trends in language teaching methodologies.

2. Objectives

The objective of this paper is to evaluate the effects of these programs on the educators in the Libyan city of Messalata city. The primary focus of the study is to assess the efficacy of such programs. Furthermore, the study aims to investigate the trained educators' perspectives and insights on the program. It also seeks to elicit their feedback on the program. This is done with the intention of improving the program by incorporating the views of the trained educators and addressing their concerns.

3. Research questions:

The research paper attempts to answer the following research questions:

1. *What are the primary topics addressed in the program and how was it conducted?*

2. *What proportion of educators in the city have undergone training?*

3. *What are the underlying reasons for not participating in the training program?*

4. *Which elements present the most significant challenges after training, and which aspects are perceived as non-problematic by the educators?*

5. *Does the program exert a positive influence on the teaching practices of educators in relation to the aspects encompassed in the program?*

6. *Do variables such as students' gender, teaching experience, school environment, and academic qualification, students' level influence teaching practices post-training?*

7. *Were there any challenges faced by the trained educators during or subsequent to the program?*

4. Significance of the study

This study primarily seeks to ascertain the efficacy of these training programs, a critical aspect of the investigation. Subsequently, the research intends to illuminate and scrutinize any

potential deficiencies within these programs with the objective of rectifying them. Furthermore, the study endeavors to determine the proportion of educators within the city who have undergone training. It also aims to explore the underlying reasons for non-participation among untrained educators. This exploration is intended to address these issues in future iterations, thereby enhancing the effectiveness of these training programs. The ultimate goal is to provide informed recommendations to decision-makers.

5. Literature review

The domain of efficiency in the context of in-service training has been the subject of extensive scrutiny and rigorous investigation across the globe. Numerous studies have been conducted, and a wealth of knowledge has been accumulated, contributing to a comprehensive understanding of the factors that influence the effectiveness of such training programs. These studies have explored various aspects, including but not limited to, the design and delivery of training, the role of trainers, the engagement of trainees, and the impact of organizational culture and environment.

Despite the global attention this field has received, it is noteworthy to mention that the literature pertaining to the Libyan context remains relatively sparse. This observation underscores a significant gap in the existing body of knowledge. The unique socio-cultural, economic, and political factors that characterize the Libyan context may influence the dynamics of in-service training efficiency in ways that are not adequately captured by studies conducted in other geographical settings.

Therefore, there is a pressing need for more focused research efforts to explore the field of in-service training efficiency within the Libyan context. Such research would not only enrich the global literature on the subject but also provide valuable insights that could inform the design and implementation of more effective in-service training programs in Libya.

Huhtaka & Vesalainen (2017) found out that Swedish language teachers had expressed their need for more in-service training programs. However, the teachers also stated that the offered training programs, at the time of the study, were far too little relevant. The study recommends that in order to have a well-functioning and useful training program, a thorough examination of the needs that the training is supposed to be an answer to is in order.

Moreover, the study argues that the training programs encounter other challenges like the lack of teachers' cooperation, the introduction of modern teaching and learning methods, and teachers' insufficient language skills. The study concludes that training programs should be based on the different needs of the teachers.

On the other hand, Önlan (2020) conducted a study aimed to examine teachers' perceptions towards in-service training in Turkey. He found that teachers have positive perceptions towards the programs. Onlan also found that there were statistically significant differences in the extent of the need and the positivity towards the training in terms of gender, experience, and place of work.

In general, the study indicated that male teachers, those teaching in state schools, and those with more experience tend to have a greater need for and a more positive view of in-service training sessions.

Additionally, the teachers believe that an evaluation of the training program is crucial, as it directly relates to the learning outcomes. They accentuate active involvement in the learning

process, clear objectives, and the ability to assess whether these objectives have been met. This focus on content objectives and outcomes allows for effective evaluation and assessment.

Moreover, the study found that the consensus among the participants is that the provision of In-Service Training (INSET) on a regular basis is integral to their professional growth. Moreover, teachers express a desire for discussions on theoretical topics, indicating their eagerness to actively learn and connect theory with practice.

According to Uysal (2012), there were some organizational problems. For instance, the time afforded to trainers to prepare for the training was inadequate, as they were tasked with delivering the In-Service Training (INSET) course by the Ministry of Education a mere week prior to the commencement of the course. The absence of systematic planning and empirical research pertaining to the needs of teachers in Turkey is ascribed to an organizational structure that lacks functionality. The content of the course was not meticulously tailored to cater to the specific needs of the context, leading to complications during the execution phase. The mechanisms for course evaluation were noticeably absent, with no feedback being solicited from either the trainers or the trainees.

Furthermore, the application of acquired knowledge by teachers was impeded by a multitude of challenges inherent in the current educational environment. These include overcrowded classrooms, stringent time constraints, an intense curriculum coupled with textbook requirements, a low level of English proficiency among students, issues related to classroom management, and a shortage of materials and technological equipment.

Last but not least, Amara (2020) conducted a study in the Libyan context to measure the perceptions of trained teachers across the country targeting only the teachers who taught after having received the training. The study found out that a significant proportion of EFL instructors find the in-service teacher training programs to be satisfactory, despite encountering certain obstacles during these courses. In essence, for these in-service teacher training programs to yield successful and fruitful outcomes, they must be equipped with all the necessary materials and apparatus required for the training and teaching post training.

6. Methodology

This research has employed a mixed-methods approach, incorporating both quantitative and qualitative methodologies. Semi-structured interviews were conducted with the trainer and a selection of teachers, chosen through convenience sampling, to delve into aspects such as the areas addressed in the program, challenges encountered by trained teachers during and post-training, and any additional feedback that could contribute to the enhancement of the programs.

The quantitative approach was implemented through the use of a closed-ended difficulty scale ranging from 1 to 10 questionnaire, targeting the areas encompassed in the program. The questionnaire was disseminated among both trained and untrained teachers. The presumption was that training should render teaching less challenging compared to those untrained. Consequently, the Mann-Whitney U test was utilized to ascertain any statistically significant disparities between the two groups across the different covered areas.

Furthermore, within the group of trained teachers, variables such as students' gender, experience, students' level, and academic qualification were examined using the Kruskal-Wallis test to examine their potential impact on training outcomes.

The questionnaire scored a high reliability score, a staggering 0.89 on Cronbach alpha scale, rendering the questionnaire highly reliable.

Table 1Cronbach's Alpha reliability test

Reliability Statistics

Cronbach's Alpha	N of Items
.894	26

7. Ethical Considerations

In accordance with the ethical guidelines for research, all participants in this study engaged willingly and were fully informed about the aim and title of the research prior to their involvement. The principle of voluntary participation was strictly adhered to, ensuring that the participants were under no compulsion to partake in the study.

The anonymity of the participants was rigorously maintained throughout the research process. Any information that could potentially identify the participants was meticulously excluded from the study, thereby safeguarding their identities. This commitment to anonymity serves to protect the participants and uphold the integrity of the research.

The participants were provided with comprehensive information about the research, including its aim and title. This transparency ensured that the participants were fully aware of the purpose of the research and their role within it. This practice aligns with the ethical principle of informed consent, promoting honesty and openness in the research process.

8. Delimitation of the study

This research paper exhibits several limitations in its design and methodology. Firstly, it relies on measuring the perceived difficulty, which is a subjective factor that may not accurately reflect the actual difficulty. Secondly, the participation in the training sessions is voluntary, which implies that only a certain type of teachers will opt to attend these programs, while others will refrain. This creates a sampling bias and renders this study a quasi-experiment, as the participants in the two groups were not randomly assigned.

A more rigorous research design would have entailed randomizing and mandating the attendance to these programs, and then administering the questionnaire after the completion of the program. However, this would have been both unethical and unlawful, as it would deprive some teachers of the opportunity to benefit from the program.

Another valid research design would have involved measuring the educational inspectors' efficiency reports on the teachers, both trained and untrained, and then assessing whether there are any statistical differences between the two groups using a t-test or a Mann-Whitney U test. Regrettably, this research design was not feasible, as the Education Office in the city has not employed any inspectors since 2016.

An alternative approach to address the research question would have been to measure the difficulty scale before and after the training. Nonetheless, this would not have conclusively determined whether the training was the sole cause of any potential observed difference, as other confounding factors such as experience and placebo[1] effect might also play a role.

9. Scope of the study

This study conducts an in-depth examination of the influence exerted by in-service training programs specifically designed for English language educators in the Libyan city of Messalata. The initiation of these programs was a subsequent measure to the introduction of English language instruction from the first grade in Libyan state schools during the 2018/2019 academic year. It is noteworthy that this investigation is exclusively focused on in-service training programs and does not encompass pre-service training programs. Additionally, it is

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[1] The placebo effect is defined as a phenomenon in which some people experience a benefit after the administration of an inactive "look-alike" substance or treatment. (Kendra Cherry, n.d.)

confined to the subject matter of English language and does not extend to other subjects or geographical locations.

10. Data analysis

The survey instrument was disseminated to a cohort of 64 educators specializing in English as a Foreign Language (EFL) within the urban locale, subsequent to the extraction of topics encompassed within the training programs via a semi-structured interview with the individual responsible for training. The target demographic for this research comprised both educators who had undergone formal training and those who had not.

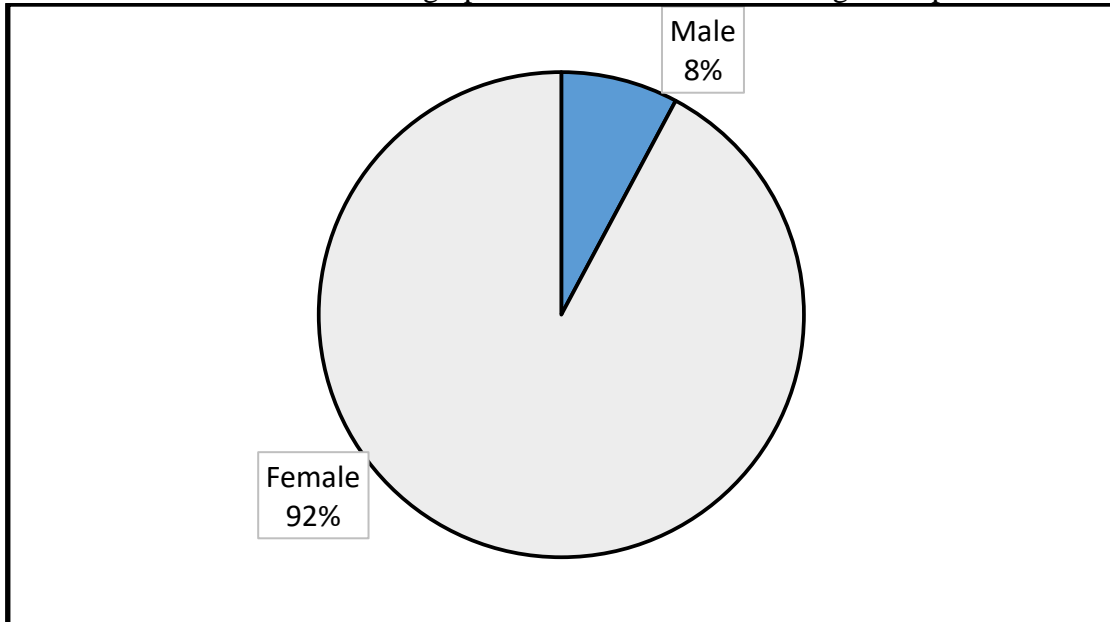The charts below illustrate the demographic characteristics of the target sample:
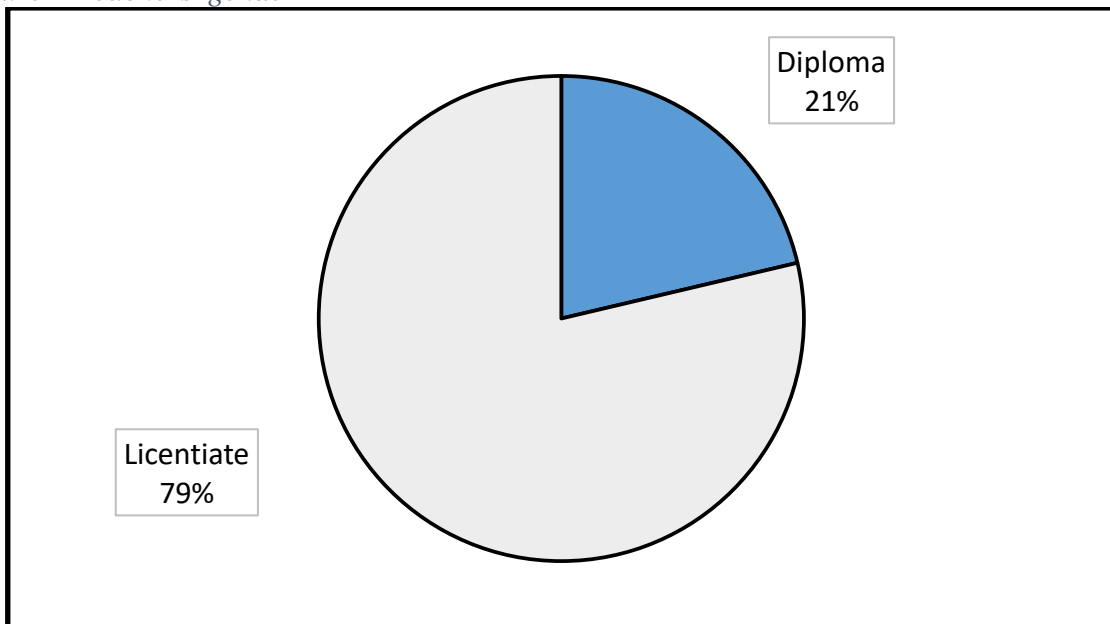

Figure 1 Teachers' gender
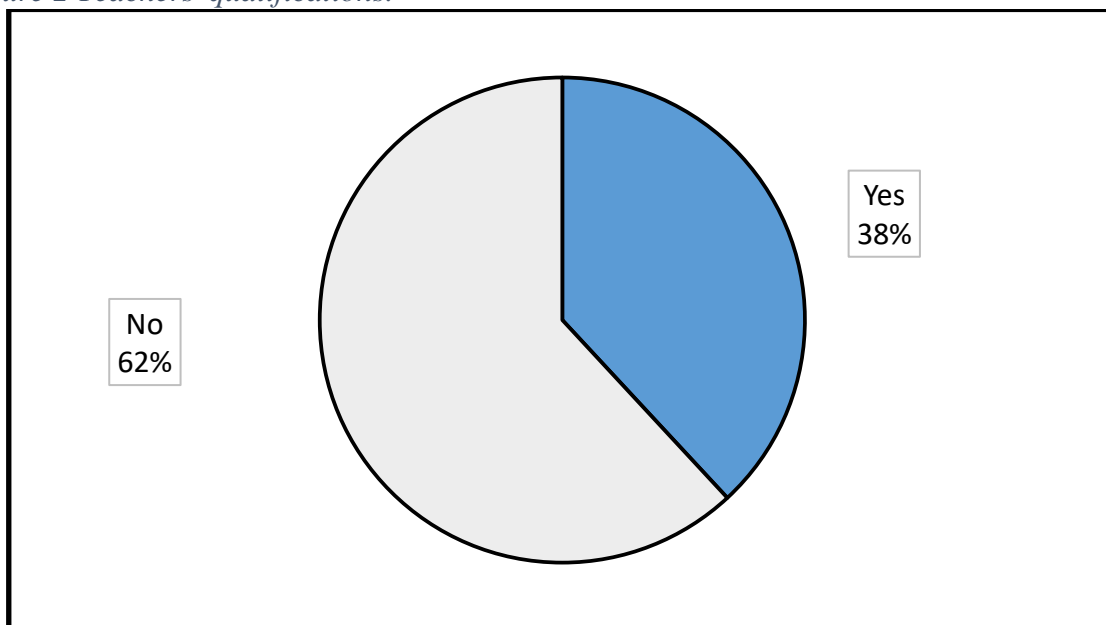
Figure 2 Teachers' qualifications.

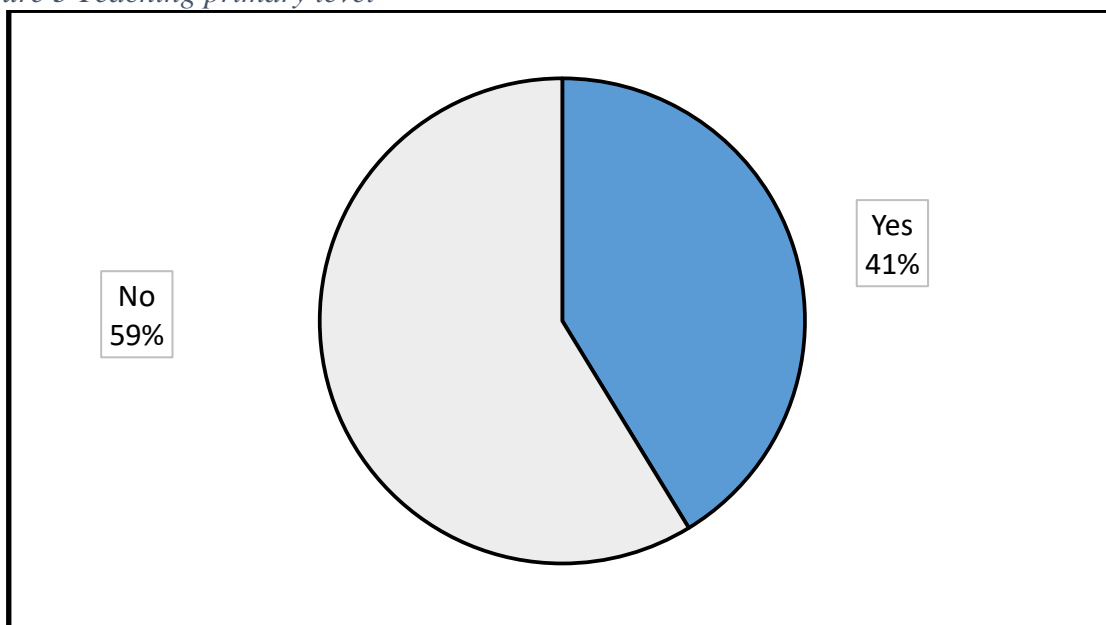*Figure 3 Teaching primary level*

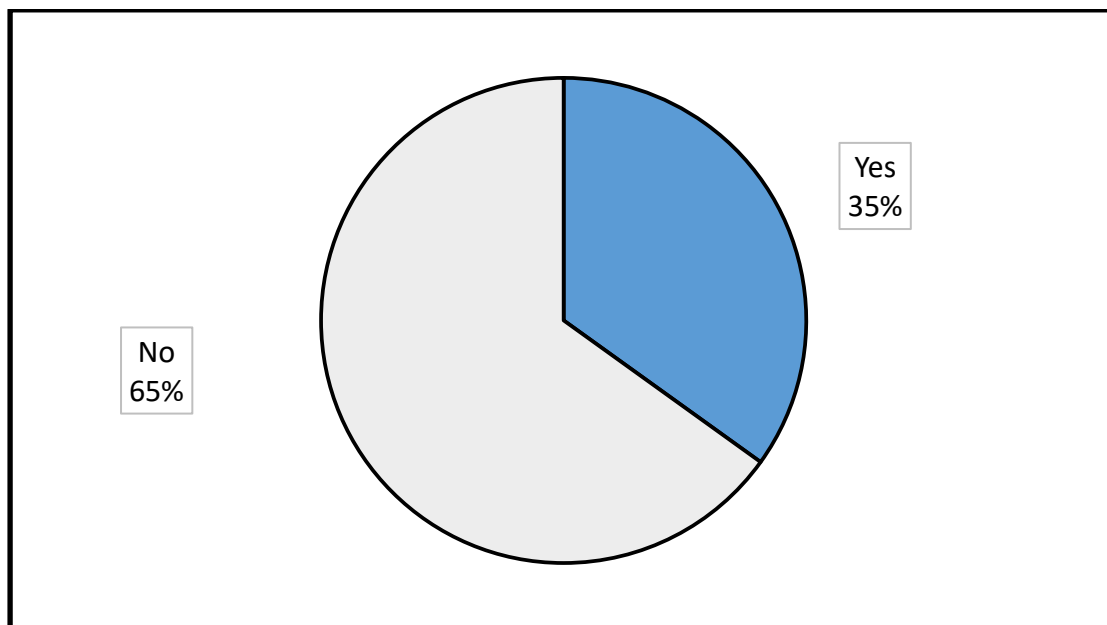*Figure 4 Teaching preparatory level*

Figure 5 Teaching secondary level
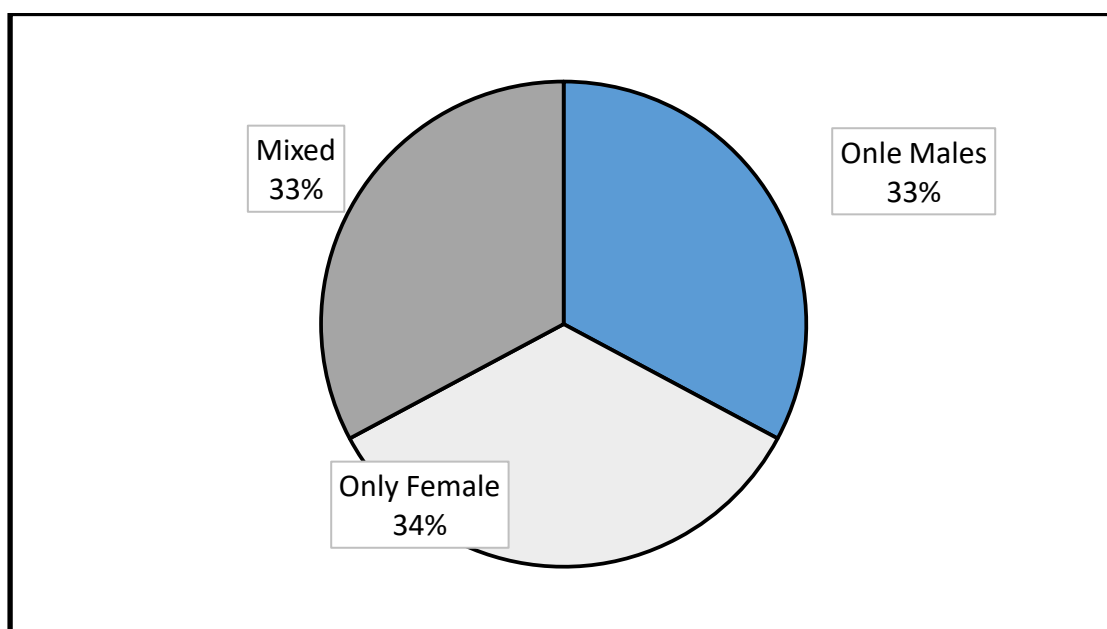
Figure 6 Classes composition in terms of students' gender
Table 2Teachers' years of experience and ages descriptive statistics

	Range	Minimum	Maximum	Mean	Std. Deviation
Age	37	26	63	37.2	8.2
Years of experience	39	2	41	13.0	9.0

The first research question was addressed by conducting a qualitative analysis of the semi-structured interviews with the teachers and the trainer who participated in the training program.

The training program was initiated in 2020 and would last for two weeks, with a daily duration of three hours divided into two sessions with a 15-minute intermission, totaling 30 hours of training.

The professional development intervention was exclusively focused on the pedagogical enhancement of the educators, but it did not incorporate the evaluative and administrative personnel, such as the inspectors and the school principals.

The training program was delivered by a single male trainer and employed a combination of lectures and discussions, enabling participants to reflect on various teaching techniques and share their experiences. As to location, all workshops were all held in the big schools in the center of each suburb.

According to the trainer, some of the workshops were conducted in the summer break, which elicited a high level of participation from the target audience. Conversely, others were scheduled during the academic semester, which resulted in a significantly low turnout of attendees.

The interviews also revealed that the training program covered various topics, such as:

The attributes of an effective teacher; the creation of a conducive and supportive learning environment; the application of Total Physical Response (TPR); the instruction of listening, reading, speaking, writing, vocabulary, and grammar skills; the enhancement of student motivation; the utilization of songs and games; the assessment and testing methods; the integration of technology in teaching; the communication with parents; the management of disruptive students; the alternative classroom arrangements; the lesson planning strategies; the continuous professional development opportunities; a final *Qs &As* session.

The second research question pertained to the proportion of teachers who had received professional development in the urban context. A random sample of 64 EFL teachers in the city completed a questionnaire that assessed their training status at the time of the study.
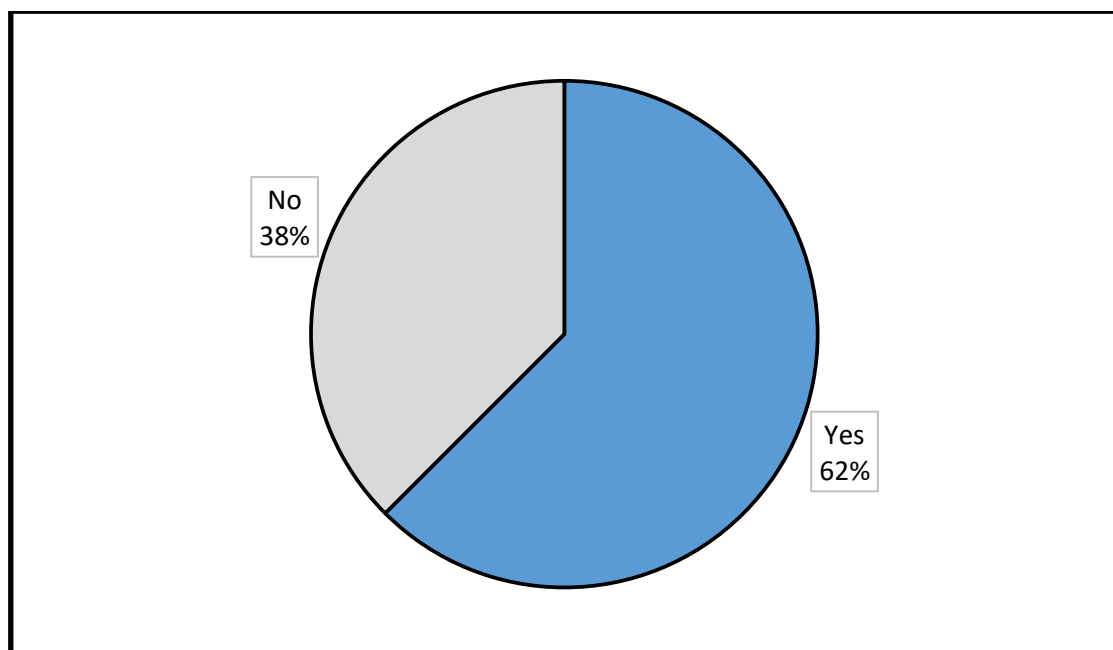

Figure 7 Have you received an in-service training?

The results indicated that 62.5% of the participants had undergone some form of training, while 37.5% had not.

As to the third research question, namely: what are the underlying reasons for not participating in the training program? The data shows the following:
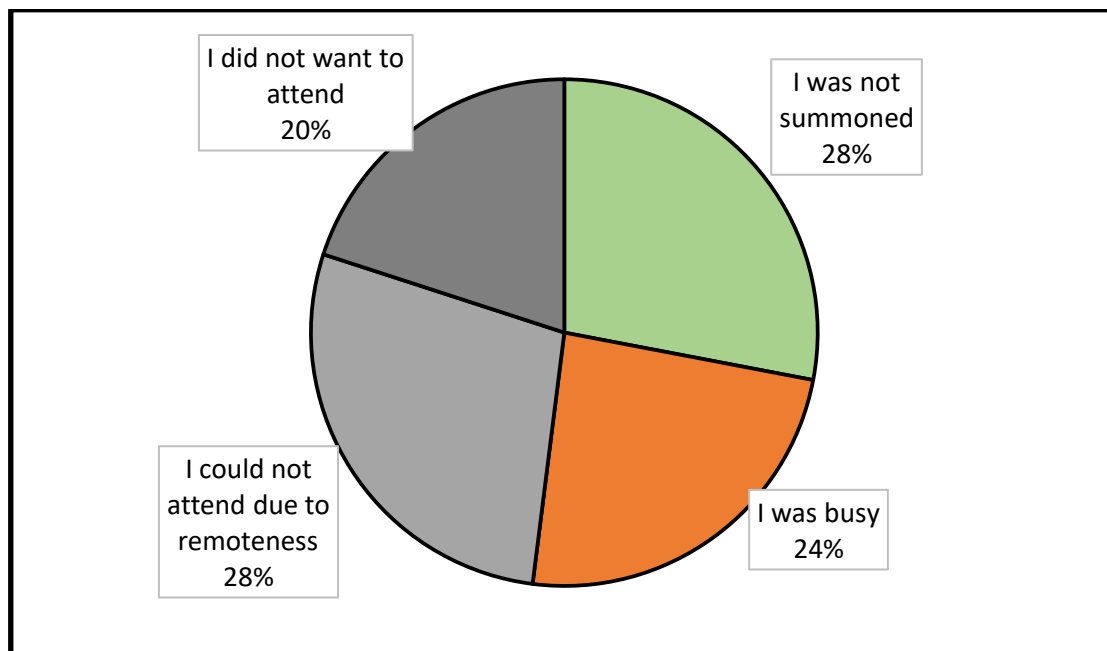

Figure 8 Reasons for not attending

The figure clarifies that the majority of teachers who did not receive training were either hindered by geographical remoteness or were not formally invited to participate in the training sessions. Conversely, approximately one-fourth of these untrained educators cited conflicting commitments during the training period as their primary reason for non-attendance. Interestingly, 20% of the untrained cohort expressed a belief in the redundancy of such training, asserting that they did not need further professional development.

The fourth research question sought to identify the aspects of the training program that participants found most and least difficult even after training took place, in order to inform the development of future programs. This information will be used to prioritize the most challenging areas and to eliminate unnecessary content.

The following table depicts the areas covered in the training program in order of perceived difficulty, as determined by the mean of the participants' ratings on a 1-10 difficulty scale. The areas with the highest means are perceived as the most challenging, while those with the lowest means are perceived as the least challenging. This information can be used to inform the development of future training programs by prioritizing the most difficult areas and eliminating unnecessary content.

Table 3 covered areas' perceived difficulty ordered from the most difficult to the easiest

Rank	Area covered	N	Min	Max	Mean	Std. Deviation
1	How difficult is it to deal with limited resources such as teaching aids (projector, lab, etc...)?	38	1	9	5.9	2.88
2	How difficult is it to harness the different ways of sitting and exploit each of them for appropriate use?	38	1	9	5.2	2.39
3	How difficult is it to teach the speaking skill?	38	1	9	5.1	2.42
4	How difficult is it to use technology in education?	39	1	9	5.1	2.90
5	How difficult is it to use songs in class?	38	1	9	5.0	2.96
6	How difficult is it to teach the writing skill?	40	1	9	4.9	2.56
7	How difficult is it to apply groupwork and pair work within the classroom?	40	1	9	4.9	2.71
8	How difficult is it to use games in the classroom?	37	1	9	4.8	2.46
9	How difficult is it to deal with disruptive students?	40	1	9	4.7	2.77
10	How difficult is it to deal with parents?	38	1	9	4.7	2.54
11	How difficult is it to teach the reading skill?	40	1	8	4.2	2.08
12	How difficult is it to teach the skill of listening?	39	1	9	4.2	2.49

13	How difficult is it to create a supportive safe environment for a better learning?	39	1	9	4.0	2.18
14	How difficult is it to assess students continuously?	40	1	8	3.9	2.32
15	How difficult is it to develop my professional skills?	40	1	6	3.8	1.87
16	How difficult is it to use stories in teaching?	40	1	9	3.7	2.08
17	How difficult is it to apply TPR?	37	1	7	3.6	1.65
18	How difficult is it to deal with school management?	39	1	9	3.4	2.66
19	How difficult is it to motivate students to learn English?	40	1	8	3.4	1.96
20	How difficult is it to motivate myself?	38	1	7	3.3	1.85
21	How difficult is it to teach grammar?	40	1	8	3.2	2.26
22	How difficult is it to manage time during the class?	40	1	8	3.2	2.15
23	How difficult is it to manage the classroom?	39	1	8	3.0	2.12
24	How difficult is it to teach vocabulary?	40	1	6	2.9	1.62
25	How difficult is it to write exams?	40	1	7	2.7	2.00
26	How difficult is it to plan lessons?	40	1	6	2.3	1.67

The table clearly reveals that the most challenging areas of the training program were dealing with limited instructional resources, using different classroom seating arrangements, teaching speaking, and integrating educational technology into teaching. In contrast, the least

challenging areas of the training program were teaching vocabulary, classroom management, writing exams, and lesson planning.

In relation to the fifth research question, which pertains to the impact of the training program on trained teachers in comparison to untrained teachers who served as a control group, the researcher employed the Mann Whitney U test. This non-parametric test was utilized to compare the two groups across various areas, with the aim of identifying the areas in which the trained teachers benefited and those in which they did not.

It is noteworthy that there were only two areas in which a positive difference was observed between the two groups. These areas were the application of Total Physical Response (TPR) and the ability to manage limited resources, such as the lack of labs, projectors, and speakers.

A Mann-Whitney U test was conducted to compare the experiences of the trained and non-trained groups in using TPR. The results revealed that the non-trained group (U = 296.5, p < .005) found it more challenging to use TPR than the trained group, as indicated by their higher mean rank (37.15 compared to 27.01 for the trained group). This suggests that the training program was effective in equipping participants with the skills necessary to use TPR.

	Have you been trained?	N	Mean Rank	Sum of Ranks
How difficult is it to apply TPR?	Yes	37	27.01	999.5
	No	24	37.15	891.5
	Total	61		

Table 4 Mann-Whitney U test statistics for using the TPR across the two groups.

Test Statistics

	How difficult is it to apply TPR?
Mann-Whitney U	296.5
Wilcoxon W	999.5
Z	-2.214
Asymp. Sig. (2-tailed)	0.027

a Grouping Variable: Have you been trained?

Calculating the effect size of the grouping factor using the following formula:

Equation 1 Mann Whitney effect size (Mann-Whitney U-Test, 2023)

$$r = \frac{Z^2}{N}$$

Furthermore, the effect size was calculated to be 0.08, indicating that the grouping factor (i.e., whether the teachers were trained or not) accounted for 8% of the difference in the perceived difficulty between the two groups. This provides further evidence of the effectiveness of the training program in reducing the perceived difficulty of using TPR among the trained teachers.

Another dimension that exhibited a statistically significant divergence between the two groups pertains to the management of limited resources, such as the absence of labs, projectors, and speakers, which is a common issue in state schools. The Mann-Whitney U test, a non-parametric statistical hypothesis test, was employed to compare the experiences of the trained and non-trained groups in dealing with these limited resources.

The results of the Mann-Whitney U test revealed that the non-trained group (U = 242, p < .005) encountered more difficulties in managing limited resources compared to the trained group. This was evidenced by their higher mean rank of 36.4, in contrast to the mean rank of 25.87 for the trained group. This finding suggests that the training program was successful in equipping participants with effective strategies for managing limited resources.

Furthermore, the effect size was calculated to be 0.09, indicating that the training accounted for 9% of the variance between the groups in terms of their ability to manage limited resources.

	Have you been trained?	N	Mean Rank	Sum of Ranks
How difficult is it to deal with limited resources such as teaching aids (projector, lab, etc...)?	Yes	38	25.87	983
	No	20	36.4	728
	Total	58		

Table 5 Mann-Whitney U test statistics for dealing with limited resources across the two groups.

	How difficult is it to deal with limited resources?
Mann-Whitney U	242
Wilcoxon W	983
Z	-2.322
Asymp. Sig. (2-tailed)	0.02

a Grouping Variable: Have you been trained?

Transitioning to the sixth research question, which explores whether other factors continue to influence teaching practices even after the completion of training programs. This question is of paramount importance as it can help identify areas that require additional focus in future courses.

One such factor that emerged from the study is the students' educational level. It was observed that teachers who instruct at the primary level tend to experience a higher perceived difficulty in dealing with parents compared to those who do not teach at the primary stage. This finding suggests that the challenges associated with parent-teacher interactions may be more pronounced at the primary level, necessitating additional training or support in this area for teachers working with younger students.

The effect size associated with this finding was calculated to be 16%, indicating that the students' level accounts for approximately 16% of the variance in teachers' perceived difficulty in dealing with parents. This substantial effect size underscores the significance of the students' educational level as a factor influencing teachers' experiences and suggests that this aspect should be given due consideration in the design of future training programs.

	Do you teach primary level?	N	Mean Rank	Sum of Ranks
How difficult is it to deal with parents?	Yes	12	25.21	302.5
	No	25	16.02	400.5
	Total	37		

Table 6 Mann-Whitney U test statistics for dealing with parents across the two groups of primary and non-primary teachers

Test Statistics

	How difficult is it to deal with parents?
Mann-Whitney U	75.5
Wilcoxon W	400.5
Z	-2.481
Asymp. Sig. (2-tailed)	0.013

a Grouping Variable: Do you teach primary level?

Conversely, teachers who are engaged in instructing at the preparatory level appear to encounter a greater perceived difficulty in cultivating a supportive learning environment compared to their counterparts who do not teach this particular age group. This observation is elucidated in the subsequent table:

	Do you teach preparatory level?	N	Mean Rank	Sum of Ranks
How difficult is it to create a supportive safe environment for a better learning?	Yes	17	23.65	402
	No	21	16.14	339
	Total	38		

Table 7 Mann-Whitney U test statistics for creating a supportive environment across the two groups of preparatory and non-preparatory teachers

Test Statistics

	How difficult is it to create a supportive safe environment for a better learning?
Mann-Whitney U	108
Wilcoxon W	339
Z	-2.11
Asymp. Sig. (2-tailed)	0.035

The effect size associated with this finding was calculated to be 0.11, indicating that the teaching level (i.e., preparatory) accounts for approximately 11% of the variance in teachers' perceived difficulty in creating a supportive learning environment:

The final variable under consideration pertains to the gender composition of the students' classes, which is categorized into three distinct groups: classes comprising solely of male students, classes comprising solely of female students, and mixed-gender classes. To examine the influence of this tripartite variable, the researcher employed the Kruskal-Wallis test, a non-parametric method used for comparing two or more independent samples of equal or different sample sizes (Dörnyei, 2007).

The empirical data indicates that this variable exerts an impact on several aspects of teaching, including teaching listening, teaching speaking, classroom management, the use of Total Physical Response (TPR), the use of technology, exam writing, dealing with disruptive students, creating a supportive environment, developing teachers' professional skills, and continuous assessment.

In all these cases, teachers of mixed-gender classes reported a statistically lower perceived difficulty than teachers of classes comprising solely of male students and/or only female

students. This finding suggests that mixed-gender classes may provide the most conducive environment for teaching.

For instance, with respect to the teaching of listening skills, a statistically significant difference was observed between classes comprising solely of male students and mixed-gender classes. The following figures provide a visual representation of this difference:

Table 8 Kruskal-Wallis statistics for teaching listening across the three groups of class gender compositions.

3	The distribution of How difficult it is to teach the skill of listening? is the same across categories of Students_Gender.	Independent-Samples Kruskal-Wallis Test	.033	Reject the null hypothesis.
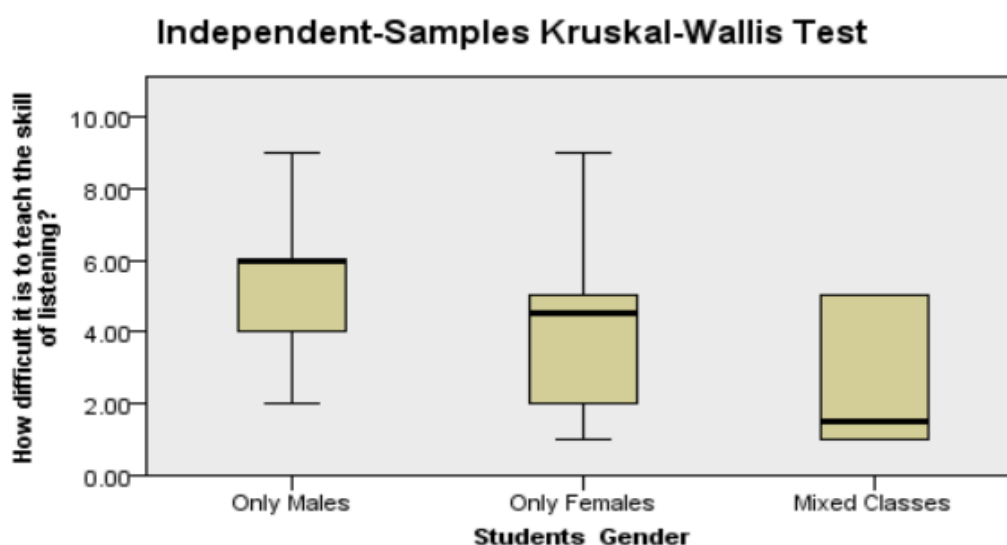
Independent-Samples Kruskal-Wallis Test

Each node shows the sample average rank of Students_Gender.

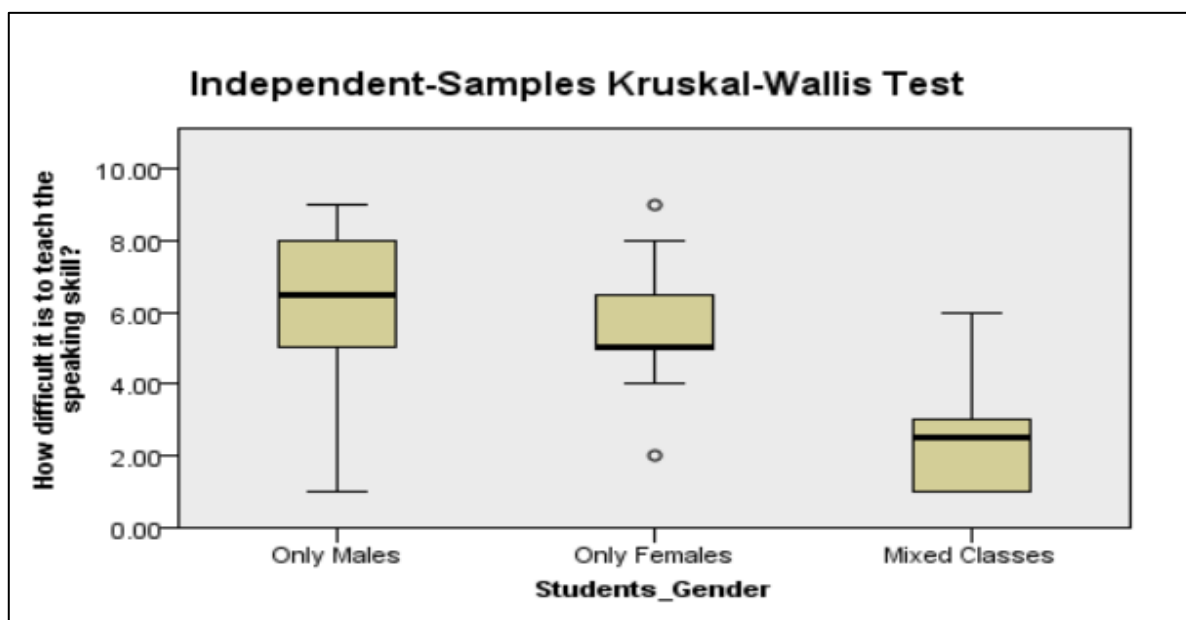| Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Mixed Classes-Only Females	7.150	4.637	1.542	.123	.369
Mixed Classes-Only Males	11.917	4.572	2.606	.009	.027
Only Females-Only Males	4.767	4.162	1.145	.252	.756

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

Whereas the speaking skill's perceived difficulty is statistically significant easier in mixed classes than both only males' classes and only females' classes. The following charts illustrate:

Table 9 Kruskal-Wallis statistics for teaching speaking across the three groups of class gender compositions.

6	The distribution of How difficult it is to teach the speaking skill? is the same across categories of Students_Gender.	Independent-Samples Kruskal-Wallis Test	.001	Reject the null hypothesis.

Independent-Samples Kruskal-Wallis Test

Each node shows the sample average rank of Students_Gender.

Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj.Sig.
Mixed Classes-Only Females	12.492	4.697	2.660	.008	.023
Mixed Classes-Only Males	16.044	4.422	3.628	.000	.001
Only Females-Only Males	3.552	4.189	.848	.396	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .05.
Significance values have been adjusted by the Bonferroni correction for multiple tests.

In conclusion, the seventh and final research question sought to investigate whether teachers who had undergone training encountered any difficulties during or after the completion of their training. To this end, semi-structured interviews were conducted with a selection of teachers, chosen based on convenience.

One teacher expressed dissatisfaction with the training content, stating that it covered too broad a range of topics in the field of teaching, without providing specific guidance on how to navigate the ministry's curriculum. This suggests that the content of the training programs should be designed from the bottom up, based on the needs of the teachers, rather than being dictated from the top down.

Several teachers voiced complaints about the lack of facilities available during the training. Furthermore, some felt that the duration of the training was insufficient, while others suggested that a summative final exam should be implemented to assess whether the teachers had benefited from the training. Additionally, it was proposed that a follow-up program be established to monitor whether the trained teachers were implementing the new methods they had learned, with rewards offered as an incentive.

Furthermore, one teacher suggested that each level of teaching should have its own dedicated training program, as each level has unique features that need to be addressed.

Post-training, one teacher noted that while she did not have a problem with applying what she had learned per se; however, the new methods were time-consuming and therefore more time should be added to the class session. Another teacher cited difficulties with teaching listening skills due to the lack of labs, CD players, and speakers in the school. State schools also lack video projectors, which could be used to show videos to students to reinforce listening skills with visual aids.

Another teacher suggested that training programs on computer use targeting teachers would be beneficial, as this could make their work more efficient and accurate. In addition, the publicity of these training programs also needs to be improved, as many teachers were unaware of them and therefore did not attend. Finally, it was suggested that female trainers be provided, as some teachers were uncomfortable attending training with male trainers.

11. Findings

The questionnaire was administered randomly across the city, thus ensuring the representativeness of the sample. The target population comprised almost two thirds of teachers who had undergone in-service training and one third who had not at the time of this study. The mean age of the teachers was 37 years and the mean teaching experience was 13 years. The sample was predominantly female (92%) and most of the teachers held a licentiate degree (79%). The main reasons for not attending the training program were logistical obstacles (80%) and lack of interest (20%).

The study revealed that the training program had a limited positive impact on the teachers' practices. Only two aspects of the program showed a statistically significant difference between the trained and non-trained groups: the use of Total Physical Response (TPR) and the management of limited resources. The most challenging aspects for the teachers, were dealing with limited instructional resources, using different classroom seating arrangements, teaching speaking, and integrating educational technology into teaching. These aspects require more attention and depth in future programs.

The study also indicated that factors such as students' level, influenced the perceived difficulty of some aspects even after the training. For example, teachers of primary classes reported more difficulty in dealing with parents than teachers of other levels, while teachers of

preparatory classes faced more difficulty in creating a safe and supportive environment for learning than teachers of other levels.

The study further demonstrated that the gender composition of the classes had a statistically significant effect on some aspects, such as teaching listening and speaking, classroom management, the use of TPR, the use of technology, exam writing, dealing with disruptive students, creating a supportive environment, developing teachers' professional skills, and continuous assessment. The study found that mixed classes were the most conducive to teaching, followed by female classes and male classes.

The trained teachers expressed their dissatisfaction with the content of the program, which they found too broad and irrelevant to the ministry's curriculum. They also criticized the lack of summative assessment and follow-up for the program. Moreover, they complained about the classes time constraints to apply the new methods, the lack of visual aids, and the lack of technology skills that prevented them from applying what they had learned in the program. Additionally, they suggested having female trainers and providing more frequent programs.

12. Recommendations

In light of the findings, and in order to improve the efficiency of these programs, we can present the following suggested solutions to the decision makers:

1. Training programs should be built from bottom up, starting with a needs analysis for the teachers to tailor make their needs.
2. Programs should be held on a regular basis and should be well publicized. Moreover, they should be organized in different hotspots around the city.
3. Teachers should be provided with choice of a female trainer so they can attend with more convenience.
4. The program might need a follow-up section to make sure teachers are following what has been taught.
5. Variables such as students' gender, students' level should be given more attention when designing training programs as they have an effect on the process of teaching.

6. A possible way to enhance the participation of teachers in these programs is to schedule them during the summer breaks and to promote them more effectively.
7. It is advisable to have a form of summative evaluation at the end of the program to ensure that the teachers have acquired the intended learning outcomes.
8. The implementation of the new pedagogical methods requires more time; thus, the duration of the classes should be extended.
9. In addition to these programs, teachers should also receive training on how to use the computer and technology in their teaching.

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