

# Understanding The Levels of Productivity of Teachers Who Are Exposed to In-Service Training

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## Abstract

The need for increased teacher productivity has become widely recognized, as is the fact that it depends on efficient and effective in-service training. In-service training is founded on the idea that teachers' skills must be strengthened for schools to grow. This study compares the productivity levels of teachers exposed to in-service training and those without training. A field survey was conducted among teachers in selected secondary schools in Akowonjo Education District Lagos-State, Nigeria. A simple random sampling technique was employed for this study, and questionnaires were distributed to 80 subject teachers within the selected secondary schools. Demographic profiling, descriptive statistics, Pearson product-moment correlation, and T-test statistics were used to analyze the data collected. The study's findings demonstrated that teacher productivity is determined by in-service training. The study also revealed that teachers who participate in the training program are more likely to perform well than those who do not. The study concluded that the government should establish a body that will constantly assess and evaluate teachers' productivity levels after training and should always reward them appropriately for excellent performance.

**Keywords:** *In-Service Training, Level of Productivity, Teachers, Secondary Schools, Government*

## INTRODUCTION

In-service training is regarded as the most important factor in achieving organizational goals in human resource management because it is the only means by which other resources can be utilized (Ugwoke, Ofoegbu, & Ugwuanyi, 2012). In-service training is a workshop for employed professionals, paraprofessionals, and other practitioners to obtain new knowledge, improved methodologies, and so on to improve their skills in many fields and to distinct groups of people (Ogunbayo & Aigbavboa, 2022). Such workshop could be a training intended for a specific group of teachers at a certain school. Effective in-service training should increase the quality of programming for the growth of teachers in service by utilizing workshop trainees (Ogunbayo & Aigbavboa, 2022). To achieve success, no organization, no matter how advanced in science and technology, can be represented by its building plants and equipment; rather, by well-trained and competent staff. The world is changing quickly, especially in terms of desirable skills and technological capability (Khan & Abdullah 2019). As a result, one must accept this reality and adjust to changes such as socioeconomic shifts, political shifts, economic shifts, and technological shifts. These shifts demand a refresh of knowledge, skills, output, and values (Adesina, Raimi, Bolaji, & Adesina, 2016).

For a profession like teaching, in-service training is the ultimate foundation for skill and knowledge development because the subjects are complicated and involve a diverse range of skills, competence, and knowledge in transmitting required information to the students (Gistituati, 2020). As stated by Amaechi and Obiweluzor (2020), in-service training of teachers attracts promotion and improves teachers' public image and job performance satisfaction. They further stated that good job performance, incentive, job security, flow with scientific and technological changes, self-esteem, and self-actualization are gained through training which are the proper variables needed for teachers' level of productivity (Amaechi & Obiweluzor 2020). Ogunbayo, Aigbavboa, Thwala, Akinradewo, Ikuabe, and Adekunle (2022) argued that training is a means of exposing teachers to recent changes in workplaces to keep abreast with developments in school. Hence, teachers exposed to the training program are bound to perform better than those not because in-service training helps in skill and knowledge acquisition and is necessary for enhancing workplace productivity (Ugwoke et al., 2012).

The purpose of in-service training, however, is to teach knowledge, attitudes, abilities, and behavior that will enable teachers to improve their level of productivity in schools (Yusuf & Fashiku 2016). According to Saka, Alaba, and Hassan (2020), in-service training generates productivity, growth, and increased teacher wages. It is often through training that teachers get the skills that are needed to do their jobs. Ogunbayo and Mhlanga (2022) stated that with the training and retraining of teachers, the productivity level of teachers who undergo training is higher than those who do not undergo training. Etomes and Molua (2019) stipulated that training should be systematic in that it is properly conceived, planned, and conducted to satisfy the stated needs of the teachers. A systematic approach to training, according to Gistituati (2020), as cited by Ogunbayo (2021), includes taking the time to analyze what results in school needs from its teachers, whether teachers are achieving those results, and what training and development approach teachers need to accomplish those results better. A systematic method comprises assessing techniques before, during, and after training to ensure that teachers genuinely benefit from the training to make them productive in school.

In Nigeria, in-service training is what a teacher receives after they enter the teaching profession and after their education at a university. Every secondary school teacher must be continually renewed, upgraded, and updated in their knowledge to be refreshed and stay up with the quickly changing society through teachers' in-service training programs (Abomeh & Peace 2015). Given the decreasing academic achievement of secondary school students in external examinations, school management in Akowonjo Education District Lagos-State has recently been concerned about teacher level of productivity (Ijov, 2019). A large number of people, including the government, parents, students, and even teachers, have expressed displeasure with the quality of teaching and learning. Despite enhanced teacher academic and professional qualifications and significant government expenditure on education, the secondary school system has failed to create students who can contribute to solving societal problems (Saka et al., 2020). To achieve better output in secondary school education, the Lagos state government has made significant efforts to promote teacher productivity by granting car loans, promotions, wages, benefits, and improved consistent salary, but this makes little or no impact (Etomes & Molua 2019). The study of Asiyai (2016) and Ogunbayo and Mhlanga (2021) proposed in-service training as a critical strategy for increasing the abilities and performance of teachers in their contribution to a solution to the low level of teacher productivity in the school. As Ayeni and Sadiku (2020) pointed out, effective professional training produces changes in teachers' productivity, which can be related to student academic performance improvements. As a result, teachers' in-service training is an excellent incentive strategy for teachers to acquire new skills and information to improve their productivity.

Ijov (2019) states that the problem of in-service training of teachers in Nigeria is that in-service program is capital intensive and most of the participants are self-sponsored. As a result, many of them cannot cope with exorbitant school fees and other incidental expenses for textbooks and personal upkeep. Etomes and Molua (2019) argue that the time factor is a major constraint of in-service training as contact hours for teachers and examinations are inadequate. Therefore, the effectiveness and scope of instruction are in doubt. Ayeni (2020) stipulates that the problem with in-service training is poor planning and organization whereby available activities for participants are impersonal and unrelated to their job settings in the classroom. Ogunbayo and Mhlanga (2021) conclude that the poor productivity of teachers in most Nigerian secondary is a result of a lack of expert trainers, research, and coverage of courses. The objective of this research is to compare the productivity levels of teachers who have received in-service training with those who have not in the Akowonjo Education District, Lagos State,

Nigeria.

## 1. Research Question

Does the productivity level of teachers depend on their in-service training in Akowonjo Education District Lagos-State, Nigeria?

## 2. Research Hypothesis

The productivity level of teachers exposed to in-service training will not be significantly higher than those not exposed to training in Akowonjo Education District Lagos-State, Nigeria.

## LITERATURE REVIEW

The need for increased teacher productivity in secondary schools is well acknowledged and depends on efficient and effective in-service training (Saka et al., 2020). Investment in training has become even more vital as the modern world has progressed. As a result, the importance of teacher in-service training cannot be overstated. However, the need for schools to begin teacher training programs has become clear. Teachers' ineptitude, inefficiency, and ineffectiveness are frequently manifested in the absence of this program. Khan and Abdullah (2019) stated that in-service training aims to build technical, conceptual, and management competencies to advance individual and school achievement.

Khan and Abdullah (2019) argued in their research article that in-service training is the most significant aspect of today's business world. They concluded that training is the only way to improve teachers' and schools' quality and productivity levels. As Ayeni (2020) asserted, teachers should have sufficient skills to accomplish their tasks effectively. In-service training programs ensure teachers are familiar with the abilities they need to do their jobs properly. According to Adejare, Olaore, Udofia, and Emola (2020), regular teacher training programs and effective professional training produce productivity changes, which can be related to student academic performance improvements. As a result, teachers' training is an excellent incentive strategy for teachers to acquire new skills and information to improve their productivity (Ogunbayo, Aigbavboa, & Thwala, 2022). Furthermore, they stated that in-service training programs are the only way for teachers' personalities to be moulded, their attitudes to be correctly shaped, their working habits to be reformed, and their identities to be established (Ogunbayo et al., 2022). Ayeni (2020) argued that teachers' level of productivity in teaching is the outcome of in-service training.

Nwosu Jonathan (2018) noted that in-service training programs aim to improve teachers' abilities, expertise, transferable skills, or dispositions. A person's incentive to do a good job grows due to training. According to Usoroh, Umoren, and Ibang (2016), in-service training has the following benefits: enhanced productivity and performance, improved work quality, development skills, knowledge, deeper understanding, and attitudes. Utami and Vioresa (2021) postulated that teacher training improves professional competence, capabilities, and qualities, as well as worker performance and productivity.

Hervie and Winful (2018) studied the relationship between job performance and in-service training. The relationship between job performance and in-service training course participation was investigated in the study through a survey of 15,570 participants who represented Ghana's 24,500-strong labor force. It was discovered that 15,570 teachers had 12,744 in-service training courses and 1,709 teachers had 2,929 external training courses; 85.4 % of in-service training participants said that training improved their job performance, while 84.8 % of external training participants said that training improved their job performance and level of productivity. However, 6.8% of in-service training participants and 6% of external training said the training had no major impact on their level of productivity. This may be due to the participant's attitudes toward the training. Moreover, the perception that training improves teachers' productivity was slightly higher among females than male teachers.

Alhassan, Seini, and Mahamadu (2020) examined the following variables, among others, in

their study of on-the-job training and its implications: on-the-job training as an investment in human capital, measures of on-the-job-training, who receives on-the-job-training, how well do we do on-the-job training, the impact of training on wage and productivity; and training and firm recruiting strategies. The study discovered that in-service training leads to enhanced production, growth, and salary growth among respondents, despite a little loss in the starting wage. On the other hand, schools increase their recruiting efforts to find teachers for positions requiring more on-the-job training to avoid costly blunders.

According to the report on teachers' education survey in 2016, if the government wants to encourage on-the-job training schools, it should target untrained teachers or graduates with no teaching qualifications and allow the Education Ministry to choose the most effective training technique. They should also be aware that implementing more formal training could increase costs without increasing the number of teachers who receive training (Usoroh et al., 2016). Adesina, Raimi, Bolaji, and Adesina (2016) found that in-service training goes through four stages: output training, task training, performance training, and strategy training, based on a survey of over a hundred schools conducted by Alhassan et al. (2020). Alhassan et al. (2020) study findings showed that teachers were exposed to in-service training only when new equipment, products, or teachers were introduced into the school, so the output training was focused on them.

Selected teachers in Egbeda Akowonjo Education Districts were exposed to short-term training or school-based courses as part of the task training, which addressed the individual and the school's mutual needs (Nwosu Jonathan 2018). Performance training was used only when the school had expanded significantly and established itself. The training process to improve teachers' productivity is meticulously planned, budgeted, and evaluated here. When a school recognizes and practices training as an inherent aspect of its management policy, it is referred to as strategic training. It was discovered that teachers who were just given output training did exceptionally well, and their welfare was considered. On the other hand, the task training improved only those teachers who were graduates, not those with lower educational qualifications. Furthermore, teachers from well-established schools outperformed those from newer schools in strategic training.

## **THEORETICAL FRAMEWORK**

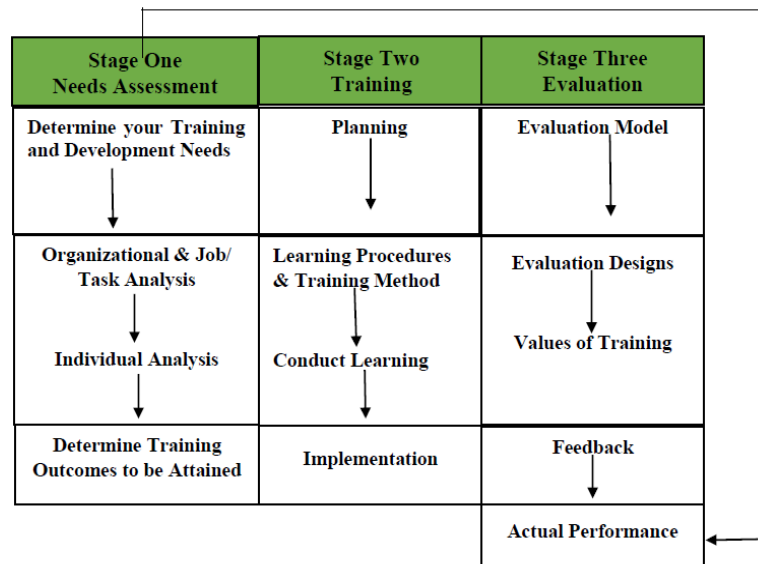
Needs Assessment Training (NAT) processes play a strategic function because they establish clear rules for which professional skill inadequacies must be addressed and what the profile of future trainees should be. Underdeveloped abilities, insufficient information, or incorrect worker attitudes, according to Gaspard and Yang (2016), are the causes of training needs. Training needs are defined by Altschuld and Lepicki (2009) as identified gaps between employees' current performance and the performance that the organization expects of them.

Before considering training design issues, a thorough needs analysis is required to build a systematic understanding of where training is required, what must be taught or trained, and who will be trained. It may not be easy to rationally justify providing training unless a thorough needs assessment has been completed. Such a needs assessment should explain why training activities should be carried out and demonstrate that training is the appropriate answer to the productivity problem (Muma, Iravo, & Omondi, 2014).

Any organization preparing a program or course can benefit from a needs assessment. An accurate needs assessment can aid in developing a program or course tailored to the actual needs of the individuals it is intended to benefit. Because training programs typically have a limited amount of time, courses that take the needs of learners into account can ensure that the most important information is provided (Pierre, Matthews, & Walsh, 2020). The general system theory for teacher training is depicted in Figure 1.

The three stages imply the Needs Assessment Training and Evaluation theory in Figure 1 above (Gaspard & Yang 2016). The initial step in the procedure is to assess the situation. According to Muma et al. (2014), the word "need" implies that something is lacking, whereas "training" implies that this deficiency can be addressed through regular training. They went on to say that the organization must plan ahead of time to identify the individuals that require training. Altschuld and Lepicki (2009) argued that training methods must be determined if there is a gap or need. Individuals must undertake and

implement learning after assessing the need for training (Pierre et al., 2020). To establish if the trainees are genuinely trained, evaluation methods such as evaluation design and value of training must be used (Kim, Dunkin, Paige, Eggerstedt, Nicholas, Vassilliou, & Scott, 2014). They concluded that feedback on trainees' performance is required to determine whether training has taken place. However, the Needs Assessment Training theory is pertinent to this study since teachers always need training to improve their skills, knowledge, and ineptitude to convey knowledge to students effectively.



**Figure 1** Needs assessment training and evaluation (adapted from Gaspard and Yang (2016))

## RESEARCH METHOD

This study is based on a survey conducted among teachers in five (5) selected secondary schools in Akowonjo Education District Lagos-State, Nigeria. The study population comprised eighty teachers from 5 public secondary schools in Akowonjo Education District who participated in in-service training workshops during 2020/2021. Primary and secondary data were used for this study to obtain the best and most genuine results. Secondary data was gathered from books, journals, publications, research studies, articles, and readily available websites. A Structured Questionnaire with closed-ended questions and rating scale questions was used to collect primary data. Eight (8) male and eight (8) female teachers from the five selected schools were distributed questionnaires. In total, 80 questionnaires were distributed using a stratified random sampling technique using a 4-point Likert scale ranging from 1 to 4. The questionnaire is a 4-point Likert time model with responses ranging from strongly agree, Agree, Disagree, and strongly disagree and is administered with a 100% response rate.

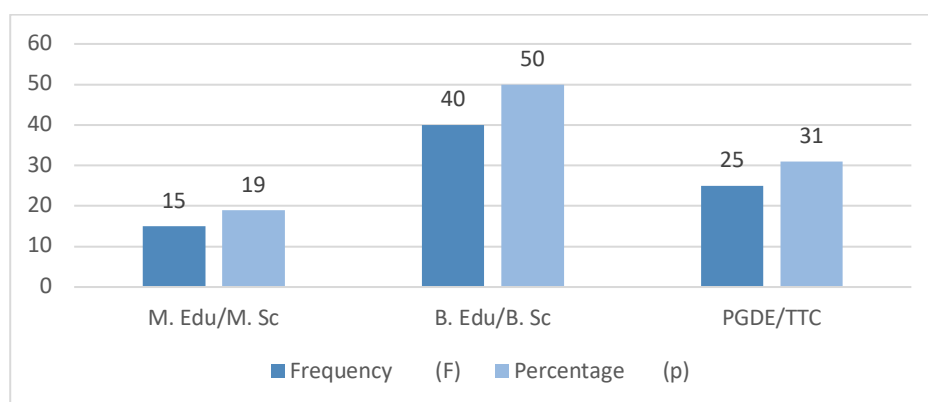
The questionnaire was divided into three sections. Section A reveals the demographic profile of the respondents, Section B analyzes the productivity level of teachers after exposure to training, and Section C displays the study hypothesis indices. Section B includes questions on both the dependent and independent variables, whereas Section C compares the productivity levels of teachers who are exposed to in-service training and those who are not exposed to training. In addition, a Proforma titled Productivity Level of Teacher Questionnaire (PLTQ) on teachers' in-service training was used to collect data from male and female respondents. Descriptive analysis, t-test statistics, and Pearson product-moment correlation statistics were used to analyze the data collected and processed with the SPSS (27.0) version.

This study used the research survey because it produces more accurate results, especially when data from a large population is needed. It is a design approach aiming to collect data and systematically describe a population's characteristics, features, or facts (Leavy, 2017).

## RESULTS

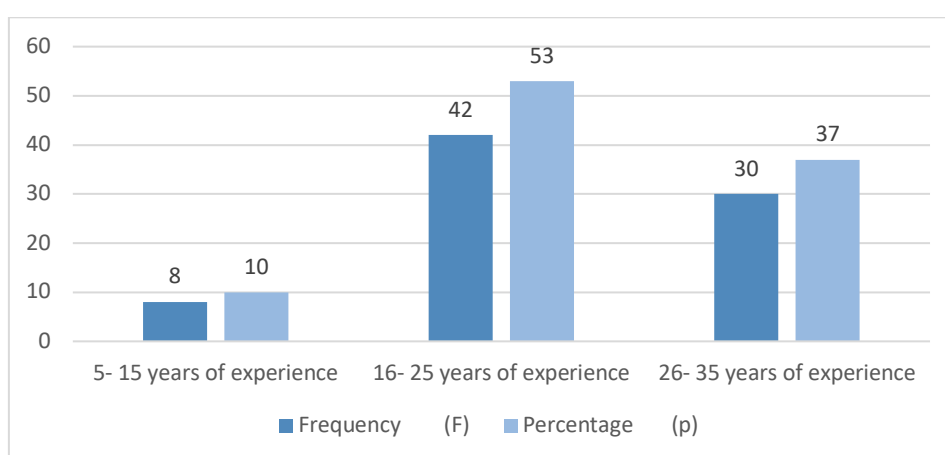
### 1. Demographic of Respondents (Section A)

Demographic profiling is fundamentally a method of generalizing the study population. This study looks at demographic factors such as academic qualifications, years of experience, gender, and age. Figure 2 indicates the academic qualifications of the respondents in the secondary schools sampled within the study area. Among the 80 respondents, 50% (40) had B. Edu/ B.Sc degree, while 31% (25) had PGDE/TTC degree, and 19% (15) had M. Edu/M.Sc. Degree. This finding indicates that the sampled schools have a good number of well-qualified and trained teachers, which can influence their level of productivity and thus have a greater impact on student's academic performance.



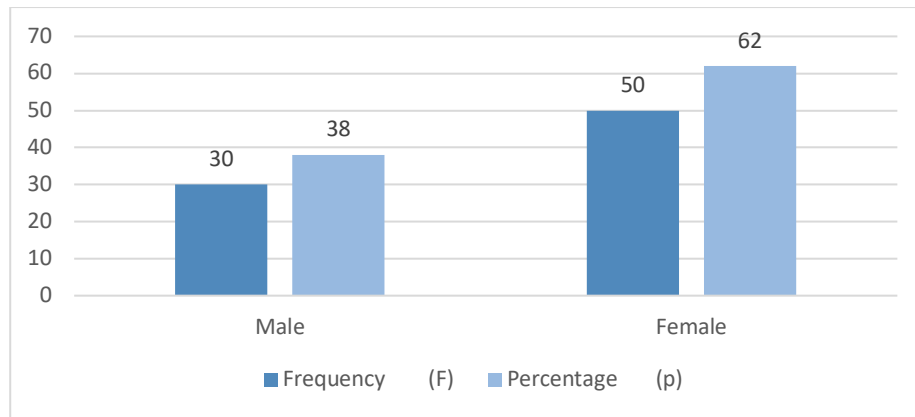
**Figure 2** Respondents' academic qualification

The length of service of the teachers exhibits that 53% (42) of the respondents have 16 to 25 teaching years of experience, 37% (30) have 26 to 35 teaching years of experience, and 10% (8) of the respondents have 5 to 15 teaching years of experience as illustrated in Figure 3. This study found that the teachers have sufficient experience and understand how to improve their level of productivity through in-service training.



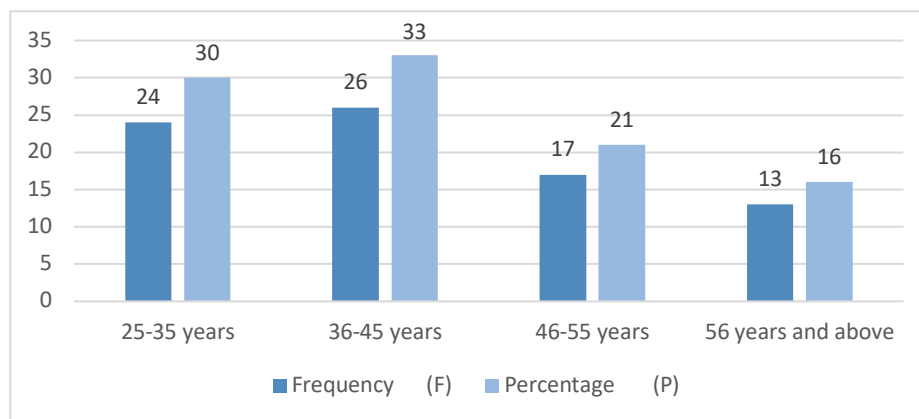
**Figure 3** Respondents' years of experience

Among 80 selected respondents, Figure 4 shows that 38% (30) respondents were male, while 62% (50) respondents were female.



**Figure 4** Respondents' gender

Out of the total sample of 80 respondents, the majority of the respondents, 33% (26), were between 25-35 years of age, 24 (30%) respondents were between 25-35 years of age, while 21% (17) respondents were between 46-55 years of age, and 16% (13) respondents were between 56 years of age and above as presented in Figure 5. The findings revealed that teachers have the ability to work for longer periods and focus on training.



**Figure 5** Respondents' age

## 2. Descriptive Analysis (Section B)

The study result came from the research question, "Does the productivity level of teachers depends on their training in Akowonjo Education District Lagos-State, Nigeria?" The descriptive analysis was analyzed on the criterion mean of 2.50. This is addressed in the Table 1.

Table 1 revealed that all of the items were rated positively by the respondents, indicating that male and female teachers have the same perspective on these variables on the productivity level of teachers in Akowonjo Education District Lagos-State, Nigeria. All the items in the table show that these variables, such as training and retraining of teachers, the productivity level of teachers who undergo training are higher than those who did not undergo training, In-service training of teachers attracts promotion, training improves the public image of teachers, the satisfaction of job performance through training, training alone is a necessary pre-requited to good job performance, incentive during training, good job performance guarantees job security, training and retraining of teachers enable them to flow with scientific and technological changes, and self-esteem and self-actualization are gained through training indicates a high level of teachers productivity in Akowonjo Education District Lagos-State, Nigeria. The finding was based on a cluster mean score of 2.89 for males and 2.98 for females, which were higher than the criterion mean of 2.50.

**Table 1** Mean responses of male and female teachers on the productivity level of teachers

S/N	Questionnaire	Male			Female		
		$\bar{X}$	SD	Dec	$\bar{X}$	SD	Dec
1	Training and retraining of teachers enhanced their productivity level of job performance.	3.08	0.98	SA	2.68	1.04	A
2	The productivity level of teachers who undergo training is higher than the productivity level of those who do not undergo training.	3.18	0.74	SA	2.78	1.00	A
3	In-service training of teachers attracts promotion and increased pay.	2.56	0.92	A	2.66	1.06	SA
4	Training improves the public image of teachers.	2.84	0.94	A	3.21	0.69	SA
5	Through trained am satisfied with my job performance.	2.64	0.74	A	3.43	0.69	SA
6	Training alone is a necessary pre-requited to good job performance.	2.78	1.02	A	2.81	1.08	A
7	Incentive during training does not affect teachers' job performance.	2.76	0.98	A	1.04	2.83	A
8	Good job performance guarantees job security and tenure.	2.75	0.75	A	0.68	3.11	SA
9	Training and retraining of teachers enable them to flow with scientific and technological changes in society.	2.64	0.93	A	0.94	3.01	SA
10	Self-esteem and self-actualization are gained through training.	2.74	0.79	A	0.64	3.19	SA
<b>Cluster Mean</b>		<b>2.89</b>	<b>0.88</b>	<b>A</b>	<b>0.88</b>	<b>2.98</b>	<b>A</b>

### 3. Hypothesis (Section C)

The second study result came from the research hypothesis that “the productivity level of teachers who are exposed to training will not be significantly higher than those not exposed to training in Akowonjo Education District Lagos-State, Nigeria.” The hypothesis was tested at 0.05 and 0.10 alpha levels using t-test statistics and Pearson Product Moment Correlation as presented in Table 2 and Table 3.

**Table 2** Differences between productivity levels of teachers who attended training and those without training

Teachers	N	$\bar{X}$	SD	DF	Prob.	T.Cal	T.Cri	Remark
With Training	154	40.04	3.45	186	0.05	3.36	1.96	Significant
Without Training	34	36.72	5.53					

**Table 3** Differences between productivity levels of teachers who attended training and those without training

Teachers	N	$\bar{X}$	SD	DF	Prob.	T.Cal	T.Cri	Remark
With Training	154	40.04	3.45	186	0.05	3.36	2.57	Significant
Without Training	34	36.72	5.53					

From the results in Table 2 and 3, the calculated t-value of 3.36 is greater than the critical t-value of 1.96 at the 0.05 level of significance, and the calculated t-value of 3.36 is greater than the critical t-value of 2.57 at the 0.01 level of significance. Both results are significant. Hence they do not support the hypothesis that the productivity level of teachers who are exposed to training will not be significantly higher than those not exposed to training. Hence this hypothesis is rejected.

## DISCUSSION OF FINDINGS

The research question that guided the study focused on the productivity level of teachers exposed to training in Akowonjo Education District Lagos-State, Nigeria. The result of the research question shows that with the training and retraining of teachers, the productivity level of teachers who undergo training is higher than those who did not undergo training. In-service training of teachers attracts promotion, improves the public image of teachers, and the satisfaction of job performance. They further stated that



good job performance, incentive, job security, flow with scientific and technological changes, self-esteem, and self-actualization are gained through training which are the proper variables needed for teachers' level of productivity.

The present finding supported the earlier study of Ayeni (2020), who stated that teachers' level of productivity in teaching is the outcome of in-service training received. Furthermore, Usoroh, Umoren, and Ibang (2016) stipulated that in-service training has the following benefits: enhanced productivity and performance, improved work quality, developed skills, knowledge, deeper understanding, and attitudes. It also supports Yusuf and Fashiku (2016) that the purpose of in-service training is to teach knowledge, attitudes, abilities, and behavior that will enable teachers to improve their productivity in schools. Also, Adejare et al. (2020) asserted that effective professional training produces changes in teachers' productivity, which can be related to student academic performance improvements. As a result, teachers' training is an excellent incentive strategy for teachers to acquire new skills and information to improve their productivity.

The research hypothesis that guided the study focused on the differences between the productivity levels of teachers who are exposed to training and those who are not exposed to training in Akowonjo Education District Lagos-State, Nigeria. The hypothesis that teachers' productivity level is not significantly higher than those not exposed to training was rejected, as shown in tables 2 and 3. In-service training exposes teachers to recent changes in workplaces to keep abreast with developments in that school. Hence, teachers exposed to the training program are bound to perform better than those not. Training helps in skill and knowledge acquisition and serves as a necessity for enhancing productivity in any workplace. The observation of Saka et al. (2020) is in line with this finding. Saka et al. (2020) found that in-service training generates productivity, growth, and increased wages. It is often through training that teachers get the skills that are needed to do their jobs. This finding likewise agreed with Khan and Abdullah (2019) that training is the only way to improve teachers' and schools' quality and productivity. The finding also agreed with Ayeni (2020) that teachers should have sufficient skills to accomplish their tasks effectively. The study further revealed that in-service training programs ensure teachers are familiar with their abilities to do their jobs properly (Ogunbayo & Mhlanga, 2022).

## **CONCLUSION**

This study established the use and numerous benefits of in-service training to teachers who receive training compared to those who do not receive training to teach in schools effectively. According to the study's findings, in-service training can improve teachers' teaching effectiveness by boosting their topic knowledge, teaching methods, and pedagogical content knowledge. In conclusion, any in-services training program designed specifically for teachers to increase teacher level of productivity should always address both the teachers' needs and the educational requirements. The government should make an effort to provide incentives to teachers in training, whether monetary or otherwise, to encourage high levels of productivity in school teachers.

## **RECOMMENDATIONS**

The findings of the study have several important implications for teachers, schools, and the government. It is recommended that the government establish a dedicated body to regularly assess and evaluate teachers' productivity, ensuring that outstanding performance is appropriately rewarded. The results of such assessments should also be communicated to teacher trainees to support the enhancement of their professional competencies. Furthermore, participation in in-service training should be considered a key criterion for job promotion, job security, and salary increments. Both government and school authorities are encouraged to motivate teachers to attend in-service training programs organized by educational bodies. Training should be viewed as a continuous process that begins at the point of recruitment through induction and orientation and continues throughout a teacher's career until retirement. Ultimately, it is essential that all secondary school teachers receive adequate training to improve the overall quality of education.

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## **DATA AVAILABILITY**

Data will be made available on request.

## **CONFLICT OF INTEREST**

The authors declare no conflicts of interest.

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