

## Effectiveness of Teachers' Training and Academic Performance of Learners



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**ABSTRACT:** Training equips teachers with pedagogical techniques, knowledge, classroom management skills, and new perspectives in facilitating and supporting pupils in the teaching-learning process. This study focused on the effectiveness of teachers' training and learners' academic performance in Libona District II public schools. The gender, age, and years of experience among the respondents were determined. The type and effectiveness of teachers' training and the overall academic performance of learners in the second quarter were assessed, and significant differences were explored. One hundred three (103) regular permanent elementary teachers were respondents to the study through a purposive sampling. A descriptive method, with content analysis, was applied utilizing a survey to gather information and data. The study yielded the following findings: the majority of teachers were females with an age range of 36 to 45 years old and more than 10 years of experience; the teachers' training was very high; and there was a very satisfactory academic performance of grades 4 to 6 learners. Significant differences between teachers' years of experience, ages, training, and learners' academic performance were found. When teachers grow older, they become more efficient and supported with effective training. Teachers' age, years of experience, and training were found to influence learners' academic performance. This study recommends having sustained training that enhances pedagogical skills which are tailored to the needs and interests of teachers for the learners.

**KEYWORDS:** academic performance, age, effectiveness, training

### I. INTRODUCTION

Teachers' trainings play a crucial role in establishing the academic performance of learners. It serves as a cornerstone in the educational landscape. Teachers acquire pedagogical skills to create inclusive and dynamic learning environments through training. It enables them to adapt to the diverse needs of pupils and employ innovative instructional strategies. As the academic realm evolves, ongoing professional development becomes crucial for educators to stay abreast of best practices, technological advancements, and contemporary teaching methodologies.

Moreover, teachers' training is a valuable preparation that equips educators with the skills, pedagogies, and competencies needed to teach effectively (Hafeez, 2021). It serves as an avenue where teachers enhance their teaching approaches (Shrivastava & Dhamija, 2023) and are prepared for the actual teaching. Teachers' training programs must focus on a combination of theoretical foundations and practical applications, promoting continuous learning and adaptation to the changing educational trends. This could possibly lead to pupils' cognitive development, engagement, and overall scholastic achievement.

Teachers' readiness is given much attention since this is crucial in the teaching-learning process (Estrella, 2022). Since learning is the primary factor to be considered in teaching (Sayed Munna & Kalam, 2021), it needs consideration in preparing and equipping educators with the necessary teaching skills. The results of the study conducted by Sattar and Awan (2019) suggested that teachers need training for learners to perform better academically. It is a way of updating themselves with new information, skills, and trends in teaching effectively (Mufidah et al., 2021).

According to Shrivastava and Dhamija (2023), educational activities, such as forming a supportive learning environment, formulating and implementing a curriculum, and evaluating students, depend critically on teachers' training. Yet, Counihan et al. (2021) cited in their study that there is a tendency for teachers to enter classrooms underprepared for skills-based teaching and lack critical insight to solve complex learning issues. There is possibility that in service training, the learning action cell and other

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forms of training may be ineffective for teaching specific skills intended to be used in the classroom due to a lack of practice opportunities (Kirkpatrick et al., 2019).

According to Philippine lawmakers, teachers cannot enter and remain in the service without the training and resilience required of the daily and innumerable battles in public education (Panti, 2024). These support the importance of delving into the effectiveness of training given to newly hired teachers and even those who have been in service for years.

In Libona District II, the teachers' population is divided into experienced and new to the service. Both kinds need effective training to upskill or reskill themselves in terms of teaching-and-learning approaches, ICT integration that suits the diverse needs of learners nowadays, pedagogies, and approaches to teaching effectively. The type of training teachers receive needs constant revisitation and evaluation to measure its applicability and effectiveness. This study delves into the effectiveness of training given to teachers, and its possible effect on learners' academic performance in the said area. This emphasizes the importance of designing effective training for teachers that could greatly impact pupil performance.

The study is underpinned to learning by the theory of John Dewey. It is grounded in the principles of experiential learning theory, which posited that individuals learn best through direct experiences, active engagement, and reflection on those experiences (Main, 2023). With this, teachers develop practical skills, pedagogical knowledge, and confidence to engage students and facilitate learning effectively. They become more adept at adapting their instruction to meet the diverse needs of learners, fostering critical thinking, problem-solving, and meaningful learning experiences in the classroom.

Training plays a pivotal role in upskilling teachers to meet the evolving demands of 21st-century learners. Teachers have to be adept at integrating technology into their lessons, fostering critical thinking, and promoting collaboration among students. Training programs help teachers stay current with educational trends, adapt to diverse learning styles, and create inclusive environments that support all students. By investing in continuous professional development, schools ensure that teachers are well-prepared to deliver engaging and relevant education, ultimately empowering students with the skills and knowledge they need to succeed in a rapidly changing world.

Experiential learning is closely linked to effective training because it allows learners to engage actively, leading to deeper understanding and knowledge retention. It transforms theoretical concepts into practical skills within educational settings. Teachers who participate in training directly apply new methodologies and tools to their teaching practices. This approach encourages teachers to experiment with different instructional techniques, receive immediate feedback, and reflect on their experiences, fostering continuous improvement and adaptability. By engaging teachers in hands-on training, they acquire new competencies and develop a deeper understanding of their impact on pupil learning, leading to more effective and dynamic classroom environments.

In addition to the previously mentioned variables, gender, age, and years of experience were identified as moderating variables in this study. These factors influenced the dynamics between the independent and dependent variables. By examining these moderating variables, the study aimed to provide a deeper understanding of their role in enhancing academic performance. These variables were critical in explaining how the teachers' profile contribute to variations in learners' outcomes, highlighting their significance in achieving high academic success.

## II. METHODOLOGY

This study used a descriptive design with content analysis to determine the significant differences and variations in teachers' profiles, types of training, and its effectiveness that impact learners' academic performance. A descriptive research design was appropriate for discerning trends, characteristics, and categories without manipulating the variables (Singh, 2024). Content analysis involves categorizing and coding data to extract meaningful insights, often using a structured framework or set of criteria. Existing data and documents were used for the examination and interpretation.

The method involved was useful for analyzing data gathered on respondents' responses and the second-quarter academic performance of learners. It helped to describe the significant differences and variations without manipulating variables. It also offered insights into areas for improvement and the potential long-term benefits of effective training.

The researcher employed a descriptive design combined with content analysis to identify significant differences between teachers' profiles and training and the academic performance of learners. For research problems 1 and 2, the Mean and Standard Deviation were utilized to analyze data on teachers' age, gender, and years of experience. Problem 3 utilized Frequency and Percentage, Mean and Standard Deviation to determine the overall Grade 4 to Grade 6 pupils' academic performance. Then, problem 4 used t-test and ANOVA.

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### III. RESULTS AND DISCUSSION

**Problem 1.** What are the profile of teachers in terms of:

- 1.1. gender;
- 1.2. age; and
- 1.3. years of experience?

Table on the next page presents the teachers' profile. Data on gender reveals 87 or 84% out of 103 respondents were female, and 16 or 16% were males. This means that the majority of teachers in Libona District II, Division of Bukidnon are female. It implies that only a few numbers of men are attracted to teaching at the elementary level. Teaching requires patience in dealing with small children, taking care of the classroom, and implementing disciplinary measures that would correct untoward behavior, gender role is considerably associated with women. Men, who find teaching salaries as deficient in coping with family needs, choose other high-paying jobs over teaching. World Bank (2021) and Sebastian et al., (2022) attested that primary education teachers in the Philippines are mostly female. Since there is a smaller number of teachers in the country, Filipino males tend to choose other professions over teaching which has higher wages than teaching (Han et al., 2020).

**Table 1: Teachers' Profile**

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	16	16
Female	87	84
<b>Total</b>	<b>103</b>	<b>100</b>
<b>Age</b>	<b>Frequency</b>	<b>Percentage</b>
More than 45 years old	30	29.14
36 – 45 years old	46	44.66
26 – 35 years old	23	22.33
25 years and below	4	3.88
<b>Total</b>	<b>103</b>	<b>100.00</b>
<b>Years of Experience</b>	<b>Frequency</b>	<b>Percentage</b>
More than 10 years	49	47.57
4 – 10 years	43	41.75
0 – 3 years	11	10.68
<b>Total</b>	<b>103</b>	<b>100.00</b>

Data on the teachers' age show that the highest range is 36 to 45 years old with 46 or 44.66% of teachers, followed by more than 45 years old with 30 or 29.14%, next is 26 to 35 years old with 23 or 22.33%, and 25 years and below with 4 or 3.88%. These figures provide insights into age distribution among teacher respondents in the public schools of Libona District II having the highest age range of 36 to 45 years old. These teachers have maturity in dealing with classroom challenges and making decisions. This finding is affirmed by Rose et al. (2020) and Effiom and Okeke (2020) in their studies, saying most teachers belong to the young and middle adulthood categories. Also, Sarabia and Collantes, 2020) confirmed that teachers of this age range are at the peak of their productivity at work. Furthermore, chronological age is correlated with learners' academic performance (Amaewhule & Innocent, 2018).

On the other hand, the lowest range among the ages is 25 years and below. It implies that only a few belong to the younger teachers who are expected to be in the beginning years of their teaching. These teachers are in the process of acquiring knowledge, skills, and pedagogical competence in effectively facilitating learning. Thus, they need guidance from expert teachers and training to become more effective in the classroom. Amalu (2018) and Ismail et al., (2018) ascertained teachers' age significantly affects teaching effectiveness. These teachers need guidance from their expert colleagues in dealing with teaching-learning challenges. Yet, this has been opposed by Umanailo (2021) saying that age has no significant effect on the teaching performance among teachers.

The data on the years of experience show the highest range of more than 10 years with 49 out of 103 or 47.57% of the teachers, followed by 4 to 10 years with 43 teachers, and the lowest which is 0 to 3 years with 11 or 10.68%. It implies that most of the teachers in Libona District II are equipped with teaching experiences and demonstrate skills necessary for teaching children with diverse needs. These teachers have received training that enhanced their teaching. Their experiences are essential in holistically shaping the children leading to improved behavior and academic performance. It is vital and useful in becoming effective in teaching diverse learners. The study of Mufidah et.al., (2021) acknowledged that teaching experience influences

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teachers' performance. Camino (2021) and Podolsky et al. (2019) stated that teacher experience has a positive effect on students' achievement. Additionally, Mageka (2022) said that as the teaching experience increases, there is also a significant increase in the academic performance of learners.

On the other hand, the lowest range is composed of novice teachers who have 0 to 3 years of experience. Their count implies that only a few teachers have been hired since 2021, which could be influenced by the availability of teaching positions and hiring trends within the education sector. They are starting to practice the theories, approaches, and skills acquired during their teacher education. These teachers are in the process of gaining experience that enhances their teaching and need mentoring by colleagues considered experts. This is mentioned by Wolff et al. (2020), experience enables teachers to blend formal, and professional knowledge with personal and practical knowledge which is important in becoming effective. Also, Karlberg and Bezzina (2020) cited that the quality of the teacher's experience in the initial years is necessary in applying what one has learned in the initial teacher education phase. Thus, teachers bridge concepts and the application through effective training; from the approaches learned to what and how to apply in the real teaching scenario.

**Problem 2.** What is the level of teachers' training based on:

2.1. type; and effectiveness?

**Table 2: Overall Teachers' Training**

Variables	Mean	SD	Description	Interpretation
Type of training	4.20	0.54	Often	High
Effectiveness of Training	4.30	0.54	Always	Very High
<b>Overall</b>	<b>4.25</b>	<b>0.54</b>	<b>Always</b>	<b>Very High</b>

**Note:** 4.21 – 5.00 Very High; 3.41 – 4.20 High; 2.61 – 3.40 Moderate; 1.81 – 2.60 Low; 1.00 – 1.80 Very Low

Table 2 shows the overall level of teachers' training. Data shows an overall Mean of 4.25 with an SD = 0.54, described as Always and interpreted as Very High. This indicates that teacher respondents view training as sufficient in number, satisfying, and consistent. This interpretation implies that the training program is highly valued and contributes to substantial improvement of teaching skills, learner outcomes, and overall educational quality. Training should be assessed to achieve desirable outcomes among teachers that capacitate them and attain greater self-efficacy in teaching children. Jabeen et al. (2023) said that training has a strong impact on teachers' performance. According to Verma (2024), participants' satisfaction is an indicator in evaluating training. Training quality must be taken seriously to achieve the claimed advantages (Krötz & Deutscher, 2021).

The results on the overall level of effectiveness of teachers' training reveal a Mean of 4.30 and SD = 0.54, described as Always and interpreted as Very High. The consistently high mean score suggests that participants see the training to steadily meet their needs and expectations. Participants view the training to consistently deliver desired outcomes, enhance their knowledge and skills, and positively impact the teaching practice and professional development. The results suggest that the training program is highly valued and effective in meeting the needs of participants, contributing to the learning experience and professional growth.

The effectiveness of training measures its impact on the trainee's knowledge, skills, and performance (Jay, 2021). As a result, teachers go back to the classroom equipped with the knowledge to understand better and address the needs of their learners (Queens University of Charlotte, 2020). Moreover, teachers' training has a significant influence on teachers' competencies and it impacts learners' academic performance (Naz et al., 2023).

Furthermore, in terms of the type of teachers' training, it shows a Mean of 4.20 with SD= 0.54, described as Often and interpreted as High. It indicates that, on average, participants positively perceive the training to be consistently provided, and readily available. The training is regularly offered and accessible to participants, allowing them ample opportunities to engage with the content and resources provided.

Considering the type of training is valuable in designing programs that address the desired outcomes of teachers. This will lead to enhanced management skills, learner assessment practices, individualized learning, and harnessed ICT skills that promote digital literacy. Training equips teachers with approaches that help them to manage, connect and teach their learners while ensuring quality and applicability (Nkomo & Abdi, 2023). Training that is based on teacher needs is effective in refining their skills, knowledge, motivation, and behavioral changes (Ahmmed et al., 2022).

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**Problem 3.** What is the overall learners' level of academic performance for the Second Quarter of School Year 2023 – 2024?

**Table 3: Learners' Academic Performance**

Level of Academic Performance	Frequency	Percentage	Mean & SD	Description	Interpretation
Outstanding	195	21	87.43 (2.31)	Very Satisfactory	High
Very Satisfactory	318	35			
Satisfactory	366	40			
Fairly Satisfactory	36	4			
Did Not Meet Expectations	0	0			
<b>Overall</b>	<b>915</b>	<b>100</b>			
<b>Note:</b> 90-100 Very High      85 – 89 High      80 – 84 Moderate      75 – 79 Low 74 below Very Low					

Table 3, shows the overall learners' level of academic performance. It reveals the overall Mean of 87.43 (SD = 2.31) It is described as Very Satisfactory and interpreted as High. A very satisfactory level of learners' performance suggests a combination of effective teaching methods, supportive learning environments, engaged pupils, and relevant curriculum. Teachers' competence in facilitating learning and addressing the needs of learners is evident in the data gathered. Learning experiences may focus on holistic development, including social-emotional learning and critical thinking skills, to enhance learner performance across various academic subjects and assessments. One of the reasons for this level of learners' academic performance is parent involvement. According to Brew et al. (2021), the academic success of learners is a top priority in every educational system. Ikram et al. (2020) said that learner performance is a result of effective training. Lara and Saracostti (2019) said that parental involvement is linked to affecting the learners' academic outcomes.

Moreover, the highest level of performance is satisfactory having 366 or 40% of 915 learners. It indicates that pupils consistently meet or exceed established learning objectives and standards and have a better grasp of the subject. Their performance shows steady improvement over time, reflecting effective teaching strategies, engaged learning environments, and appropriate support systems. These findings affirm the effectiveness of educational efforts in preparing learners for academic success and lifelong learning. Profile of teachers and effective training could be contributing factors to the good performance among learners. This could be a result of effective teachers' training (Ikram, et al, 2020). Alnahdi and Schwab (2023) found in their study that teaching practices were positively associated with learners' scores in some subjects.

On the other hand, the lowest level of academic performance is fairly satisfactory, with 36 or 4%. Learners who belong to this level need fitting intervention to increase their performance. This is influenced by teacher-related factors, parental involvement, and others that are beyond the control of teachers. Koçak et al. (2021) said that learner performance could be affected by factors such as socio-economic, socio-demographic, family, and individual characteristics. Rathakrishnan et al. (2021) added that low performance was associated with smartphone addiction and lack of sleep. Furthermore, Dautov (2020) said that the high levels of laziness among learners resulted in lower academic performance. These are important aspects worth considering that support children and give activities that will further enhance learning.

**Problem 4.** Is there a significant difference between the training and profiles of teachers and the academic performance of learners?

**Table 4: Test Difference between Profile and Training of Teachers (t-test)**

Gender	Mean	SD	T-value	P-value	Interpretation
Male	4.20	0.53	1.128	0.097	Not Significant
Female	4.39	0.55			
<b>Total</b>	<b>4.30</b>	<b>0.54</b>			

**Note:** Significant when computed  $p$ -value  $< 0.05$ .

Table 4 shows the test difference between the profile and training of teachers (t-test). Results between teachers' gender and training reveal a T-value of 1.128 with a  $p$ -value = 0.097. The  $p$ -value higher than 0.05 implies no significant difference between the two variables. This suggests that gender does not play an important role in determining the level of training teachers receive. Training opportunities, content, and quality are equally accessible and effective for both male and female teachers. Schools provide an inclusive environment where training resources and opportunities are distributed fairly. Training equips teachers with approaches that help them to manage, connect and teach their learners while ensuring quality and applicability (Nkomo &

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Abdi, 2023). Training has a strong impact on teachers' performance (Jabeen et al., 2023), having it regularly is essential to stay up-to-date on the latest educational research, methodologies, and best practices (Varthana, 2024).

**Table 5: Test Significance between the Profile and Training of Teachers (F-test Anova)**

Age	Frequency	Percentage	F-value	P-value	Interpretation
More than 35 years old	4.28	0.52	6.204	0.001	Significant
36 – 45 years old	4.32	0.54			
26 – 35 years old	4.30	0.56			
25 years and below	4.17	0.55			
<b>Total</b>	<b>4.27</b>	<b>0.54</b>			
Years of Experience	Frequency	Percentage	F-value	P-value	Level of Correlation
More than 10 years	4.33	0.55	5.137	0.001	Significant
4 – 10 years	4.32	0.52			
0 – 3 years	4.37	0.55			
<b>Total</b>	<b>4.30</b>	<b>0.54</b>			

**Note:** Significant when computed *p*-value <0.05

Table 5 shows the results for test significance between the profile and training of teachers (F-test Anova). The data on age has an F-value of 6.204 with a p-value of 0.001. The significant interpretation of data indicates a connection between teachers' age groups and training outcomes. This suggests that age plays an important role in how teachers engage with or benefit from training. Age-related preferences and needs should be considered in designing training. Customizing content to address the specific professional stages associated with different age groups could enhance the overall effectiveness of training, ensuring that teachers across all ages remain engaged and supported in their growth. Training has a strong impact on teachers' performance (Jabeen et al., 2023). It reskills and upskills the receiver of training making them more productive in their field (OECD, 2023).

Referring to the same table, the highest age range of respondents is 36 to 45 years old. It has a frequency of 4.32 which indicates the relationship between age and training is statistically significant. This suggests that teachers in this age group may benefit from targeted training that account for their extensive experience. This implies that while seasoned teachers bring valuable knowledge, they may require continuous, updated training to stay effective in modern teaching contexts. According to Rashid (2023), training upgrades teaching practices, enhances content knowledge, develops classroom management skills, and increases learner motivation. Also, Ismail (2018) and Amalu (2018) found that age significantly affects teaching effectiveness.

The lowest percentage of the age range is 25 years and below. It has a frequency of 4.17 which implies age is deemed important in designing training. This variation is critical in addressing the needs of teachers in precise age brackets, whose learning capacities are unique. It means that teachers of different ages require different training which will enhance their teaching skills. Need-based training is noticeably effective in refining teachers' confidence, satisfaction, motivation, behavioral changes, time management, and technological skills (Ahmmmed et al., 2022). Teachers' age is associated with the learners' academic achievement (Amaewhule & Innocent, 2018).

Data on years of experience show an F-value of 5.137 (p-value = 0.001). This is interpreted as significant. This means that years of experience are essential in choosing teachers' training. A variety of experiences among teachers indicate a diverse need for training needed to maintain an equilibrium of skilled teachers while addressing the needs of 21st-century learners. Educators with fewer years of experience need different training compared to experienced teachers. Considering the difference is essential in designing future training that will improve the quality of the teaching and learning process in educational institutions. According to Mufidah et al. (2021), teaching experience influences a teacher's performance (Mufidah et al., 2021). Moreover, Camino (2021) cited that teacher experience positively affects student achievement.

The highest range of teaching experience is 0 to 3 years. It has a frequency of 4.37. It means that teachers who belong to this range find training valuable and impactful. This suggests that training may be particularly essential for newer teachers in building foundational skills. It emphasizes the importance of targeted training for novice educators, focusing on practical applications and classroom management strategies that support their early development and confidence in teaching. According to OECD (2019), novice teachers lack experience in terms of classroom practices and schoolwork. Teaching experience influences a teacher's performance (Mufidah et al., 2021).



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**Table 6: Test Difference between Profile of Teachers and Academic Performance (t-test)**

Gender	Mean	SD	T-value	P-value	Interpretation
Male	4.20	0.53	1.213	0.083	Not Significant
Female	4.39	0.55			
<b>Total</b>	<b>4.30</b>	<b>0.54</b>			

**Note:** Significant when computed  $p$ -value  $< 0.05$ .

Table 6 shows the test difference between teachers' profiles and learners' academic performance. It reveals a T-value of 1.213 with a  $p$ -value = 0.83. This implies no significant difference between the variables mentioned earlier. It means that gender is not a determining factor in teaching effectiveness. By ensuring that all teachers have access to training and resources, regardless of gender, a positive and inclusive educational environment exists. This leads to a better academic performance of learners. Rose et al. (2020) found that personal characteristics variables do not affect learners' academic performance in certain subjects. Also, Effiom and Okeke (2020) confirmed that gender has no significant effect on the learners' academic outcomes. On the contrary to the said researchers, Alnahdi and Schwab (2023) said that female teachers held more positive attitudes toward teaching and were rated more positively by their learners.

The table shows data on the test significance between the profile of teachers and academic performance (F-test). With regards to age, it shows an f-value of 5.625 with a  $p$ -value = 0.001. This suggests a significant difference between the academic performance of learners and the age of teachers. This means that age plays a vital role in determining learner outcomes. It can be used to tailor training and mentorship to leverage the strengths of the teachers across different age groups. This will enhance the overall quality of education and pupil academic performance. Daniel et al. (2021) say that older teachers are more effective than younger ones. Ismail (2018) and Amalu (2018) confirmed that age significantly affects teaching effectiveness. Moreover, Amaewhule and Innocent (2018) said that a teacher's chronological age is correlated with the learners' academic achievement.

In the same table, the highest age range is 36 to 45 years old. It has a frequency of 4.32. This means that this age group finds training valuable in enhancing their teaching practices. This implies that training for older teachers should focus on integrating modern pedagogical approaches with their established practices. Tailoring training to help them adapt to new educational technologies or updated curricula could enhance their engagement and effectiveness in the classroom. Sarabia and Collantes, (2020) said that teachers in primary and secondary schools are mostly 41 to 50-year-olds, followed by 31 to 40-year-olds who are at the peak of their productivity at work. Also, results of study conducted by Ismail (2018) and Amalu (2018) found that age significantly affects teaching effectiveness.

**Table 7: Test Significance between Profile of Teachers and Academic Performance (F-test)**

Age	Frequency	Percentage	F-value	P-value	Interpretation
More than 35 years old	4.28	0.52	5.625	0.001	Significant
36 – 45 years old	4.32	0.54			
26 – 35 years old	4.30	0.56			
25 years and below	4.17	0.55			
<b>Total</b>	<b>4.27</b>	<b>0.54</b>			
Years of Experience	Frequency	Percentage	r-value	p-value	Level of Correlation
More than 10 years	4.33	0.55	5.384	0.001	Significant
4 – 10 years	4.32	0.52			
0 – 3 years	4.37	0.55			
<b>Total</b>	<b>4.30</b>	<b>0.54</b>			

**Note:** Significant when computed  $p$ -value  $< 0.05$ .

The lowest age range is 25 years and below. It has a frequency of 4.17 and a significant interpretation. It indicates that young teachers benefit from foundational training that supports their early career development. Training for this age group could emphasize essential skills like classroom management and instructional planning, enabling them to build confidence and competence as they begin their teaching journey. Training equips teachers with approachess that help them to manage, connect and teach their learners while ensuring quality and applicability (Nkomo & Abdi, 2023). This upgrades teaching practices, enhances content knowledge, develops classroom management skills, and increases learner motivation (Rashid, 2023).

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Furthermore, the years of experience show an f-value of 5.384 ( $p$ -value = 0.001). This implies a significant difference between the learners' academic performance and the teachers' years of experience. It suggests that the amount of experience a teacher has can have a substantial impact on learners' academic performance. Experienced teachers possibly possess refined teaching strategies, better classroom management skills, and a deeper understanding of the curriculum, which can enhance pupil learning and academic performance. New teachers may bring fresh perspectives and innovative methods but might lack the practical, on-the-ground experience that is critical for effective teaching. Teaching experience influences a teachers' performance (Mufidah et al., 2021). Experience in classrooms enables teachers to blend formal, professional knowledge with personal and practical knowledge, reinforcing the skills and practices necessary for effective performance (Wolff et al., 2020). Moreover, as teachers gain more years of experience, a significant improvement in the academic performance of learners are observed (Mageka, 2022).

**Table 8: Test Difference Between Teachers' Training and Learners' Academic Performance**

Variables	T-value	P-value	Description	Interpretation
Type of training conducted	5.146	0.001	Reject Ho	Significant
Effectiveness of Training	4.564	0.001	Reject Ho	Significant

**Note:** Significant when computed  $p$ -value < 0.05.

Table 8, in the previous page, shows data on the test difference between the teachers' training and learners' academic performance. The type of training conducted yielded a t-value of 5.146 ( $p$ -value = 0.001), indicating a significant difference between the variables. Consequently, the null hypothesis is rejected. This emphasized the role of quality training in the learners' academic success. In-service training should be dynamic and responsive to the needs of teachers to acquire pedagogical skills that would lead to quality pupil learning experience. Training equips teachers with approaches that help them to manage, connect and teach their learners while ensuring quality and applicability (Nkomo & Abdi, 2023). The said upgrades teaching practices, enhances content knowledge, develops classroom management skills, and increases learner motivation (Rashid, 2023). Effective teachers' training can improve teaching practices, enhance content knowledge, develop classroom management skills, foster teacher collaboration, and increase student motivation (Rashid, 2023).

The data on the effectiveness of training show a t-value of 4.564 ( $p$ -value = 0.001). This infers a significant difference between the two variables, learners' academic performance and the effectiveness of teachers' training. Consequently, the null hypothesis is rejected. This highlights the importance of investing in high-quality, evidence-based training for teachers. These may be according to the specific needs of teachers considering their subject areas, grade levels, and the unique challenges they face in the classrooms. This set of training is essential in acquiring skills, becoming more effective in dealing with 21<sup>st</sup>-century learners and increasing their academic performance. Training is an activity to improve the ability and performance of employees or members in carrying out their duties by increasing skills, knowledge, attitudes, and behaviors related to work (McCrie & Lee, 2022). Sattar and Awan (2019) mentioned that teachers need training to improve the academic achievements of the learners. Naz et al. (2023) said that teachers' training has a significant influence on teachers' competencies and it impacts students' academic performance. Ikram et al. (2020) emphasized that learner performance is a result of effective teachers' training.

## IV. CONCLUSIONS

The following conclusions were drawn based on the data presented:

1. Teaching is a motherly instinct and age and years of experience are essential factors that contribute to teaching effectiveness. As women who teach grow older, they have more trainings and become effective in teaching.
2. The training conducted among teachers in Libona District II, Division of Bukidnon is sufficient and able to address their needs in teaching.
3. Learners' academic performance is good enough for teachers to be contented. They do not have the highest but they are not at lowest. A rating typical for students.
4. Teachers' age, years of experience, and training are key factors that impact learners' academic performance.

## V. RECOMMENDATIONS

Below are the recommendations based on the study's conclusions:

1. Experienced teachers may guide the younger ones toward the delivery of a quality teaching and learning process. Also, effective training that prepares beginning teachers may be sustained.



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2. Topics on teacher-parent cooperation that could enhance educators' skills in driving parents to take involvement in school activities and show support to their children have to be considered in designing future training.
3. Engaging strategies and activities that suit the learning styles and intelligence of learners has to be continued.
4. Training that enhances teachers' pedagogical skills which is tailored to the needs and interests of teachers may be sustained.

## REFERENCES

- 1) Abarca, C. (2024). Dismal 2022 PISA score more than basic education problem – educator. INQUIRER.net. <https://newsinfo.inquirer.net/1904533/on-dismal-2022-pisa-results>
- 2) Abdurahman, N. A., & Jul-Aspi K. Omar. (2021). School Heads' Educational Leadership Practice and Teachers' Performance: The Case of Omar District, Division of Sulu, Philippines. Open Access Indonesia Journal of Social Sciences, 4(2), 370–381. <https://doi.org/10.37275/oaijs.v4i2.61>
- 3) Adedigba, O., & Sulaiman, F. R. (2020). Influence of Teachers' Classroom Management Style on Pupils' Motivation for Learning and Academic Achievement in Kwara State. International Journal of Educational Methodology, 6 (2) 471-480. <https://doi.org/10.12973/ijem.6.2.471>
- 4) Alnahdi, G. H., & Schwab, S. (2023). The impact of gender differences in teachers' teaching practices and attitudes on students' math and science achievement in Saudi Arabia: Evidence from TIMSS 2019 data. Frontiers in Psychology, 14. <https://doi.org/10.3389/fpsyg.2023.1066843>
- 5) Amaewhule, Prof. W. A., & Innocent, H. A. (2018). Teachers' Chronological Age and Gender in Relation to their Job Commitment and Academic Achievement of Secondary School Students in Rivers State. International Journal of Education and Evaluation, 4(9).
- 6) Amalu, M. (2018). Impact of workload-induced stress on the professional effectiveness of secondary school teachers in Cross River State. Global Journal of Educational Research. <https://doi.org/10.4314/gjedr.v13i1.3>
- 7) Ahmmed, S., Saha, J., & Tamal, M. A. (2022). Effectiveness of Need-Based Teacher's Training Program to Enhance Online Teaching Quality. Education Research International, 2022, 1–13. <https://doi.org/10.1155/2022/4118267>
- 8) Baig, M. U. A., & Naqvi, S. M. M. R. (2023). Why trainees evaluate the same trainer differently? Examining a dual-process model of training effectiveness. European Journal of Training and Development, Vol.47 No. 1/2, pp. 1-23. <https://doi.org/10.1108/ejtd-04-2021-0047>
- 9) Bhai, M., & Horoi, I. (2019). Teacher characteristics and academic achievement. Applied Economics. <https://doi.org/10.1080/00036846.2019.1597963>.
- 10) Bongco, R. T., & Abenes, R. D. (2019). Clash of Spheres - The Paradox of Being a Female Teacher in the Philippines. Beijing International Review of Education, 1(2-3), 443–459. <https://doi.org/10.1163/25902539-00102012>
- 11) Boston, C. (2019). The Concept of Formative Assessment. Practical Assessment, Research, and Evaluation, 8(1). <https://doi.org/10.7275/kmcq-dj31>
- 12) Brew, E. A., Nketiah, B., & Koranteng, R. (2021). A Literature Review of Academic Performance, an Insight into Factors and their Influences on Academic Outcomes of Students at Senior High Schools. Open Access Library Journal, 8(6), 1–14. <https://doi.org/10.4236/oalib.1107423>
- 13) C. Salvan, V. J., & M. Hambre, M. (2020). Teachers' Demographic Profile on the Learners' Performance Using K-12 Earth and Space Module. *Journal of Education & Social Policy*, 7(4). <https://doi.org/10.30845/jesp.v7n4p14>
- 14) Camino, H. (2021). Aging In Teaching: What Does It Bring? Turkish Journal of Computer and Mathematics Education, 12(3), 5279–5289. <https://turcomat.org/index.php/turkbilmat/article/download/2159/1880/4067>
- 15) Counihan, C., Humble, S., Gittins, L., & Dixon, P. (2021). The effect of different teacher literacy training programmes on student's word reading abilities in government primary schools in Northern Nigeria. School Effectiveness and School Improvement, 1–20. <https://doi.org/10.1080/09243453.2021.1991960>
- 16) Daniel, J., Ruiz, S., Scherer, R., Blömeke, S., & Nilsen, T. (2021). Age and Innovativeness: Effects of Teachers' Age on Perception of School Innovativeness. [https://www.duo.uio.no/bitstream/handle/10852/86865/Daniel\\_Master-Thesis.pdf?sequence=1&isAllowed=y](https://www.duo.uio.no/bitstream/handle/10852/86865/Daniel_Master-Thesis.pdf?sequence=1&isAllowed=y)
- 17) Davids, N., & Waghid, Y. (2020). Gender under-representation in teaching: a casualty of the feminisation of teaching? South African Journal of Higher Education, 34(3), 1–12. [http://www.scielo.org.za/scielo.php?pid=S1753-59132020000300001&script=sci\\_arttext](http://www.scielo.org.za/scielo.php?pid=S1753-59132020000300001&script=sci_arttext)

## Effectiveness of Teachers' Training and Academic Performance of Learners

- 18) Education Links. (2020). Supporting Teachers in Providing Effective Reading and Language Instruction. [Www.edu-Links.org. https://www.edu-links.org/learning/supporting-teachers-providing-effective-reading-and-language-instruction](https://www.edu-links.org/learning/supporting-teachers-providing-effective-reading-and-language-instruction)
- 19) Effiom, Veronica & Okeke, Stella. (2020). Influence of Teachers' Demographics on Academic Achievement of Students in Economics. 3. 58-66.
- 20) Enggar, Y., & Wibowo, W. (2020). An Analysis Of English Teachers' Strategies In Teaching Reading Comprehension. Journal of Applied Linguistics and Literacy, 4(1). <https://core.ac.uk/download/pdf/304931242.pdf>
- 21) English language General Teacher Questionnaire. (n.d.). Nces.ed.gov. Retrieved February 24, 2024, from [https://nces.ed.gov/surveys/pisa/pisa2018/questionnaires/General\\_Teacher\\_Q\\_English.html#training](https://nces.ed.gov/surveys/pisa/pisa2018/questionnaires/General_Teacher_Q_English.html#training)
- 22) Estrella, M. R. (2022). Readiness of DepEd Teachers to Teach Reading. International Journal of Research and Review, 9(5), 152–167. <https://doi.org/10.52403/ijrr.20220524>
- 23) Feng, J. (2023). The Impact of Teacher Gender on Students' Academic Performance: Evidence from China. [https://doi.org/10.2991/978-2-38476-146-3\\_36](https://doi.org/10.2991/978-2-38476-146-3_36)
- 24) Francisco, C. D. C., & Celon, L. C. (2020). Teachers' Instructional Practices and Its Effects on Students' Academic Performance. In *ERIC* (Vol. 6). <https://eric.ed.gov/?id=ED607985>
- 25) Ganji, M., & Musaie Sejjehie, F. (2022). The Effects of Age, Gender, Teaching Experience, Teaching Context, and Academic Degree on Iranian English Teachers' Classroom Management Behaviors. *Issues in Language Teaching*, 11(1), 223–253. <https://doi.org/10.22054/ilt.2022.65363.668>
- 26) Glerum, D. R., Joseph, D. L., McKenny, A. F., & Fritzsche, B. A. (2021). The trainer matters: Cross-classified models of trainee reactions. *Journal of Applied Psychology*, 106(2), 281.
- 27) Hafeez, M. (2021). Impact of Teacher's Training on Interest and Academic Achievements of Students by Multiple Teaching Methods. *Pedagogical Research*, 6(3), em0102. <https://doi.org/10.29333/pr/11088>
- 28) Hafiz, N., Ahmed, Rizwan Pasha, A., & Malik, M. (2021). The Role of Teachers' training Programs in Optimizing Teacher Motivation and Professional Development Skills. *Bulletin of Education and Research*, 43(2), 17–37. <https://files.eric.ed.gov/fulltext/EJ1338294.pdf>
- 29) Harnessing Parent Teacher Collaboration. (2021, July 7). Western Governors University. <https://www.wgu.edu/blog/harnessing-parent-teacher-collaboration2107.html>
- 30) Ikram, M., Hameed, A., & Imran, M. (2020). Effect of Teachers Training on students academic performance. *Pakistan Journal of Humanities and Social Sciences*, 8, 10. [https://www.academia.edu/56442712/Effect\\_of\\_Teachers\\_Training\\_on\\_students\\_academic\\_performance](https://www.academia.edu/56442712/Effect_of_Teachers_Training_on_students_academic_performance)
- 31) Individualized Learning. (2021, October 27). [Www.dreambox.com. https://www.dreambox.com/resources/blogs/individualized-learning](https://www.dreambox.com/resources/blogs/individualized-learning)
- 32) Intellek (2023, March 2). Metrics for Measuring Training Effectiveness: The Importance of Key Metrics and Indicators of Success • Intellek. <https://intellek.io/blog/measuring-training-effectiveness/>
- 33) Jabeen, N., Khalil, S., & Khadman. (2023). Impact of Training on Teacher's Performance in Karachi, Sindh, Pakistan. *Pakistan Languages and Humanities Review*, 7(2), 661–668. [https://doi.org/10.47205/plhr.2023\(7-II\)59](https://doi.org/10.47205/plhr.2023(7-II)59)
- 34) Jay, S. (2021, February 16). Measuring Training Effectiveness: A Practical Guide. AIHR. <https://www.aihr.com/blog/measuring-training-effectiveness/#:~:text=achieve%20learning%20goals.>
- 35) Jobirovna, A. J. (2023). Effective Classroom Management: Strategies for Teachers. *American Journal of Language, Literacy and Learning in STEM Education* (2993-2769), 1(10), 444–450. <https://grnjournal.us/index.php/STEM/article/view/2133>
- 36) Jugović, I., Maskalan, A., & Tea Pavin Ivanec. (2022). Gender Differences and Motivation for The Teaching Profession: Why Do Men Choose (Not) To Teach? *Australian Journal of Teacher Education*, 47(9), 1–18. <https://doi.org/10.14221/ajte.2022v47n9.1>
- 37) Karlberg, M., & Bezzina, C. (2020). The professional development needs of beginning and experienced teachers in four municipalities in Sweden. *Professional Development in Education*, 48(4), 1–18. <https://doi.org/10.1080/19415257.2020.1712451>
- 38) Kaur, S. (2019). Role of a Teacher in Student Learning Process. In *International Journal of Business and Management Invention (IJBMI)* ISSN (pp. 41–45). [https://ijbmi.org/papers/Vol\(8\)12/Series-1/G0812014145.pdf](https://ijbmi.org/papers/Vol(8)12/Series-1/G0812014145.pdf)
- 39) Kirkpatrick, M., Akers, J., & Rivera, G. (2019). Use of Behavioral Skills Training with Teachers: A Systematic Review. *Journal of Behavioral Education*, 28(3), 344–361. <https://doi.org/10.1007/s10864-019-09322-z>

## Effectiveness of Teachers' Training and Academic Performance of Learners

- 40) Koçak, Ö., Göksu, İ., & Göktaş, Y. (2021). The Factors Affecting Academic Achievement: A Systematic Review Of Meta Analyses. *Artuklu.edu.tr*. <https://app.trdizin.gov.tr/makale/TkRJMU5EYzNOdz09/thefactors-affectingacademic-achievement-a-systematic-review-of-meta-analyses>
- 41) Krötz, M., & Deutscher, V. (2021). Differences in Perception Matter – How Differences in the Perception of Training Quality of Trainees and Trainers Affect Drop-Out in VET. *Vocations and Learning*. <https://doi.org/10.1007/s12186-021-09263-7>
- 42) Kurniawati, Y., Pranoto, S., Retno, D., Utami, F., Latiana, L., & Ahmadi, F. (2021). *Do Teachers' Experiences and Ages Contribute to Their Teaching Performance?* <https://www.ieomsociety.org/singapore2021/papers/629.pdf>
- 43) Lara, L., & Saracostti, M. (2019). Effect of parental involvement on children's academic achievement in chile. *Frontiers in Psychology*, 10(1), 1–5. <https://doi.org/10.3389/fpsyg.2019.01464>
- 44) Lee, J., Rhee, D.-E., & Rudolf, R. (2018). Teacher Gender, Student Gender, and Primary School Achievement: Evidence from Ten Francophone African Countries. *The Journal of Development Studies*, 55(4), 661–679. <https://doi.org/10.1080/00220388.2018.1453604>
- 45) Li, S., Yamaguchi, S., Sukhbaatar, J., & Takada, J. (2019). The Influence of Teachers' Professional Development Activities on the Factors Promoting ICT Integration in Primary Schools in Mongolia. *Education Sciences*, 9(2), 78. <https://doi.org/10.3390/educsci9020078>
- 46) Main, P. (2023, February 14). John Dewey's Theory. Structural Learning. <https://www.structural-learning.com/post/john-deweys-theory>
- 47) Marshall, J. (2023, August 2). What Is Phonemic Awareness? A Guide for Educators and Families. We Are Teachers. <https://www.weareteachers.com/what-is-phonemic-awareness/>
- 48) Massey, M. (2021). The Impact of Training Teachers in Multiple-Intelligences The Impact of Training Teachers in Multiple-Intelligences Instructional Strategies Instructional Strategies. [https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1363&context=fse\\_etd](https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1363&context=fse_etd)
- 49) Maung, H. H. (2021). What's my age again? Age categories as interactive kinds. *History and Philosophy of the Life Sciences*, 43(1). <https://doi.org/10.1007/s40656-021-00388-5>
- 50) Melak, D., & Derso, B. (2022). Training of youths for effective self-employment practices. *Education + Training*. <https://doi.org/10.1108/et-10-2021-0395>
- 51) Mind Tools. (2022). Kirkpatrick's Model. *Www.mindtools.com*. <https://www.mindtools.com/ak1yhhs/kirkpatrick's-four-level-training-evaluation-model>
- 52) Moss, C. M., & Brookhart, S. M. (2019). *Advancing Formative Assessment in Every Classroom: A Guide for Instructional Leaders*.
- 53) Mufidah, N., Arafat, Y., & Puspita, Y. (2021, July 19). The Effect of Training and Teaching Experience on Teacher's Performance. *Www.atlantis-Press.com; Atlantis Press*. <https://doi.org/10.2991/assehr.k.210716.030>
- 54) Mugarura, P., Ssempala, F., & Nachuha, S. (2022). Role of In-service teachers' training as a tool for the student's performance in selected public secondary schools in Kisoro District. *International Journal of Educational Policy Research and Review*, 9(1). <https://doi.org/10.15739/ijeprr.22.001>
- 55) Mustafa, B., & Paçarizi, Y. (2021). Exploring Teachers' Perceptions of Professional Development: The Case of Kosova. *Journal of Language and Linguistic Studies*, 17, 1210–1224. <https://eric.ed.gov/?q=aspects+of+trainer+effectiveness&ft=on&id=EJ1324637>
- 56) Myende, P. E., & Nhlumayo, B. S. (2020). Enhancing parent–teacher collaboration in rural schools: parents' voices and implications for schools. *International Journal of Leadership in Education*, 25(3), 1–25. <https://doi.org/10.1080/13603124.2020.1731764>
- 57) Namoun, A., & Alshantiti, A. (2020). Predicting Student Performance Using Data Mining and Learning Analytics Techniques: A Systematic Literature Review. <https://doi.org/10.3390/app11010237>
- 58) Naz, A., Zafar, D. J. M., Dinpuri, D. N., & Mukhtar, A. (2023). Effect of Teachers' Training On Students' Academic Performance At Secondary Schools. *International Journal of Contemporary Issues in Social Sciences*. ISSN (E) 2959-2461 (P) 2959-3808, 2(4), 1377–1387. <https://ijciss.org/index.php/ijciss/article/view/261>
- 59) Nkomo, N., & Abdi, U. (2023). Impacts of Training and Retraining Teachers in Primary and Post Primary Schools for Better Performance. *International Research Journal of Educational Research*, 14(3), 1–6. <https://doi.org/10.14303/2141-5161.2023.266>
- 60) Nguyen, C., Le, D., & Ngo, H. (2022). EFL Teachers' Perceptions of the Individualized Learning Model: A Case at an English Language Center. *International Journal of Instruction*, 15(1), 437–456.

## Effectiveness of Teachers' Training and Academic Performance of Learners

<https://eric.ed.gov/?q=Individualized+Learning&id=EJ1331163>

- 61) OECD. (2019). *PISA*. Oecd.org. <https://www.oecd.org/pisa/>
- 62) OECD. (2019). Creating Effective Teaching and Learning Environments: First Results from TALIS – Teaching Practices, Teachers' Beliefs and Attitudes. <https://www.oecd.org/berlin/43541655.pdf>
- 63) Panti, L. (2024, February 13). Bill seeks P50,000 entry-level salary for public school teachers. GMA News Online. <https://www.gmanetwork.com/news/topstories/nation/897356/bill-seeks-p50-000-entry-level-salary-for-public-school-teachers/story/>
- 64) Paige, D. (2020). Reading Fluency: A brief history, the importance of supporting processes and the role of assessment.
- 65) Podolsky, A., Kini, T., & Darling-Hammond, L. (2019). Does teaching experience increase teacher effectiveness? A review of US research. *Journal of Professional Capital and Community*, 4(4), 286–308. <https://doi.org/10.1108/jpcc-12-2018-0032>
- 66) Queens University of Charlotte. (2020). Importance of Prof Development for Educators | Queens Online. Qnstux. <https://online.queens.edu/resources/article/professional-development-for-educators/>
- 67) Qurious-media. (2023, July 10). The Importance of Parent-Teacher Collaboration for Student Success. NASCANS. <https://www.nascans.com/the-importance-of-parent-teacher-collaboration-for-student-success/>
- 68) Rashid, M. H. A. (2023, March 28). Impact of Teachers' training on Student Learning | limbd.org. Library & Information Management. <https://limbd.org/impact-of-teacher-training-on-student-learning/#:~:text=In%20conclusion%2C%20teacher%20training%20is>
- 69) Rose, A., Francisco, S., & Mariano, J. (2020). Teachers' Personal and Professional Demographic Characteristics as Predictors of Students' Academic Performance in English, Technology, and Social Sciences (IJMITS) a Refereed International Journal of Srinivas University, 5(2), 2581–6012. <https://doi.org/10.5281/zenodo.3997430>
- 70) Sarabia, A., & Collantes, L. (2020). Work-Related Stress and Teaching Performance of Teachers in Selected School in the Philippines. *Indonesian Research Journal in Education*, 4(1).
- 71) Sattar, A., & Awan, A. G. (2019) The impact of teachers' training on the academic achievements of students.
- 72) Sayed Munna, A., & Kalam, A. (2021). Teaching and learning process to enhance teaching effectiveness: a literature review. *International Journal of Humanities and Innovation (IJHI)*, 4(1), 1–4.
- 73) Sebastian, M., Banate, R., & Saquin, M. (2022). Gender roles among public elementary teachers: basis for gender-responsive intervention activities. *International Online Journal of Primary Education (IOJPE)* ISSN: 1300-915X, 11(2), 401–411. <https://www.iojpe.org/index.php/iojpe/article/view/243>
- 74) Seeram, E. (2019). An Overview of Correlational Research. *Radiologic Technology*, 91(2), 176–179. <http://www.radiologictechnology.org/content/91/2/176.extract#>
- 75) Shoraevna, Z., Eleupanovna, Z., Tashkenbaevna, S., Zulkarnayeva, Z., Anatolevna, L., & Nurlanbekovna, U. (2021). Teachers' Views on the Use of Information and Communication Technologies (ICT) in Education Environments. *International Journal of Emerging Technologies in Learning (IJET)*, 16(3), 261–273. <https://www.learntechlib.org/p/219032/?nl=1>
- 76) Shrivastava, A., & Dhamija, S. (2023). The Study Related to Teacher's Training and their Impact on the Academic Success of Students. Retrieved October 18, 2023, from <https://resmilitaris.net/menu-script/index.php/resmilitaris/article/download/2999/2415/4180>
- 77) Starkey, L. (2019). A review of research exploring teacher preparation for the digital age. *Cambridge Journal of Education*, 50(1), 37–56. <https://doi.org/10.1080/0305764x.2019.1625867>
- 78) Supporting Teachers in Providing Effective Reading and Language Instruction | Education Links. (2020). [Www.edu-links.org.](https://www.edu-links.org/learning/supporting-teachers-providing-effective-reading-and-language-instruction)
- 79) Talbot, C. (2020, December 28). Phonemic Awareness | Importance & Teaching Strategies. The Hub | High-Speed Training. <https://www.highspeedtraining.co.uk/hub/phonemic-awareness-teaching-strategies/>
- 80) Topchyan, R., & Woehler, C. (2020). Do Teacher Status, Gender, and Years of Teaching Experience Impact Job Satisfaction and Work Engagement? *Education and Urban Society*, 53(2), 001312452092616. <https://doi.org/10.1177/0013124520926161>
- 81) Teacher Task Force (2022). Why is the gender ratio of teachers imbalanced? <https://teachertaskforce.org/knowledge-hub/why-gender-ratio-teachers-imbalanced#:~:text=Lingering%20gender%20stereotypes%20contribute%20to>
- 82) Trainer Evaluation Forms / PDF. Scribd. Retrieved February 24, 2024, from

## Effectiveness of Teachers' Training and Academic Performance of Learners

[https://www.scribd.com/doc/229452589/Trainer-Evaluation-Forms?utm\\_medium=cpc&utm\\_source=google\\_pmax&utm\\_campaign=Scribd\\_Google\\_Performance-Max\\_RoW\\_UGC&utm\\_term=&utm\\_device=c&gclid=CjwKCAi](https://www.scribd.com/doc/229452589/Trainer-Evaluation-Forms?utm_medium=cpc&utm_source=google_pmax&utm_campaign=Scribd_Google_Performance-Max_RoW_UGC&utm_term=&utm_device=c&gclid=CjwKCAiAvJarBhA1EiwAGgZlOLVsu9FFQuSfR1Kok2kthaZRAPFsqEvp1gL9JWTLWwj4JeNZxYX41BoC5AYQAvD_BwE)

[AvJarBhA1EiwAGgZlOLVsu9FFQuSfR1Kok2kthaZRAPFsqEvp1gL9JWTLWwj4JeNZxYX41BoC5AYQAvD\\_BwE](https://www.scribd.com/doc/229452589/Trainer-Evaluation-Forms?utm_medium=cpc&utm_source=google_pmax&utm_campaign=Scribd_Google_Performance-Max_RoW_UGC&utm_term=&utm_device=c&gclid=CjwKCAiAvJarBhA1EiwAGgZlOLVsu9FFQuSfR1Kok2kthaZRAPFsqEvp1gL9JWTLWwj4JeNZxYX41BoC5AYQAvD_BwE)

- 83) Utami, A. Y. (2022). The Role of Parental Involvement in Student Academic Outcomes. *Journal of Education Review Provision*, 2(1), 17–21. <https://doi.org/10.55885/jerp.v2i1.156>
- 84) Varthana. (2024, January 31). What Is The Impact Of Teachers' training On Student Learning? <https://varthana.com/school/teacher-training-and-learning>
- 85) Will, M. (2022, August 22). The Gap Between Teacher Pay and Other Professions Hits a New High. How Bad Is It? *Education Week*. <https://www.edweek.org/teaching-learning/the-gap-between-teacher-pay-and-other-professions-hits-a-new-high-how-bad-is-it/2022/08>
- 86) Wolff, C. E., Jarodzka, H., & Boshuizen, H. P. A. (2020). Classroom Management Scripts: a Theoretical Model Contrasting Expert and Novice Teachers' Knowledge and Awareness of Classroom Events. *Educational Psychology Review*, 33(1). <https://doi.org/10.1007/s10648-020-09542-0>
- 87) Yang, C., Luo, L., Vadillo, M. A., Yu, R., & Shanks, D. R. (2021). Testing (quizzing) boosts classroom learning: A systematic and meta-analytic review. *Psychological Bulletin*, 147(4), 399–435. <https://doi.org/10.1037/bul0000309>
- 88) Yasin, G. M. (2021). Teacher Qualifications and Academic Performance of Pupils in Public Primary Schools in Hargeisa District. *Education Quarterly Reviews*, 4(3), 39–44. [https://eric.ed.gov/?q=pupils%27+academic+achievement&ff1=dytSince\\_2020&id=EJ1319298](https://eric.ed.gov/?q=pupils%27+academic+achievement&ff1=dytSince_2020&id=EJ1319298)
- 89) Zahrah Nabila Azka; Sikandar Hasib. (2020). The phenomenon study of effective communication of trainers in the induction training. *Journal of Advances in Humanities and Social Sciences*, 6(4), 147–155. <https://ideas.repec.org/a/apb/jahsss/2020p147-155.html>
- 90) Zedan, R. (2021). Parental Involvement as a Predictor of Classroom Climate, Motivation for Learning, and Learning Achievements. *Journal of Classroom Interaction*, 56(1), 56–74. [https://eric.ed.gov/?q=pupils%27+academic+achievement&ff1=dytSince\\_2020&id=EJ1297951](https://eric.ed.gov/?q=pupils%27+academic+achievement&ff1=dytSince_2020&id=EJ1297951)



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