Assessment of the Relationships among Appraisal and Feedback, Professional Development, and Teachers' Effectiveness at Bonga College of Education

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Abstract: In Ethiopia, the effectiveness of teachers plays a crucial role in the quality of education; however, many face challenges in improving their instructional practices due to limited access to quality professional development (PD) opportunities. To enhance teachers' effectiveness, much has not been done to support their academic development, and their efficacy has not been adequately evaluated through proper appraisal and feedback. Despite the availability of PD programs, low participation rates and a lack of relevant content often reduce their impact on teaching effectiveness. Similarly, appraisal and feedback (APF) systems, although in place, are hindered by inconsistent application and a general lack of feedback. This study examines the impact of PD and APF on teachers' effectiveness at Bonga College of Education (BCE). A survey research design using a quantitative approach was employed to collect and analyze data through structured questionnaires. The target population included 192 teachers (170 males and 22 females), from which a random sample of 72 teachers (50 males and 22 females) was selected, representing 37.5% of the population. The collected data were analyzed using SPSS software, applying descriptive statistics, Pearson correlation, one-sample t-tests, and one-way ANOVA. The findings highlight several challenges, including low participation in PD activities—only 28% of teachers attended workshops, and 26% were engaged in qualification programs. Experience-sharing visits were virtually non-existent, with 96% of teachers having not participated in them. A strong negative correlation between PD participation and its perceived impact points to systemic issues in the availability and quality of PD opportunities. However, teachers perceived APF as beneficial, albeit with less impact than PD. The study found that PD and APF together predicted 78.8% of the variance in teachers' effectiveness. PD showed a strong positive correlation with teaching effectiveness ($\beta = 0.868$, $p < 0.05$), while APF had a moderate effect ($\beta = 0.698$, $p < 0.05$). The study concludes that while both PD and APF contribute to teachers' effectiveness, improvements in PD design, implementation, and incentives, along with a structured experience-sharing program and enhanced feedback mechanisms, are essential for maximizing their impact. Recommendations include establishing targeted PD programs, providing regular and constructive feedback, and promoting a culture of continuous learning and development in BCE.

Keywords: Professional Development, Appraisal and Feedback, Teacher Effectiveness

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Introduction

1.1 Background to the Study

Currently, education is considered one of the most important factors contributing to a nation's economic growth. Access to quality schooling has central significance for national development. Most parents recognize that quality education can significantly influence the future life of their children and is a crucial factor in enhancing their choices. They invest in their children's education, expecting that quality education will bring significant transformation in their personal and social development (Serbessa 2009). Researchers assert that the availability of well-trained teachers, through pre-service teacher training, in-service professional development, and informal training obtained through on-the-job experience, is central to improving the quality of education at both primary and secondary levels in many countries (Harris and Sass, 2006; Mpokosa and Ndaruhutse, 2008). Content-focused teacher professional development is thought to contribute to improvements in the quality of education (Harris and Sass 2006). The presence of trained school teachers is also considered a critical element in achieving the Millennium Development Goals and the Education For All goals (Mpokosa and Ndaruhutse 2008). Thus proper education cannot be achieved without the presence of qualified teachers.

Ethiopia has made remarkable progress in education, with primary school net enrolment tripling between 2000 and 2016, reaching the current 100%. As children and young people comprise 48% of the population, Ethiopia can lift itself out of poverty by ensuring that children have access to quality education. Although most children enroll in school, many do not complete their education: 85% make it past Grade 5, and 54% past Grade 8. Sixty-three percent of students in lower primary school are not achieving the basic learning outcomes required to succeed higher up the education ladder (50% and above) (https://www.unicef.org/ethiopia/learning-and-development). The issues of education quality, in general, and teacher training and development

programs, in particular, have remained a significant challenge for the Ethiopian education system for many years.

All Education systems aim at providing quality Education for their students. UNESCO (2006) asserts that one of the most determining factors that can guarantee the quality of education is teachers' effectiveness. Nadeem (2011) claims that in all education systems, the performance of teachers is one of the handful of factors determining school effectiveness and learning outcomes.

Adewunmi (2003) defined effectiveness as the extent to which a set of goals or objectives of a school is accomplished and observed that the quality of teaching and learning should take precedence over other factors of school effectiveness. Contributing to this, Oshodi (2007) defined teachers' effectiveness as the ability of the teacher to produce desired results in the course of his/her duties. Okpala (2006) observed that to be effective, the teacher must be many things: a source of information and a guide, an organizer of learning opportunities, someone who can structure a suitable learning environment, and a consultant. Nwachukwu (2009) observed that a teacher's way of thinking and beliefs guide his/her behavior and decisions inside the classroom. This means that the quality of a teacher directly influences their effectiveness in the classroom. Therefore, effective teaching of science requires competent and qualified teachers who have good exposure and experience to foster learning in science.

Assessment is the systematic collection of data to monitor the success of a program or to help individuals with a specific problem. Oshodi (2007) pointed out twelve items for assessing teachers' effectiveness. The items include good knowledge of presentation, communication, individual rapport, examination grading, experience, assignment, coping with workload, teaching methods, students' perception of learning/teaching environment, and instructional materials. In his own contribution, Achimugu (2016) identified eight key items for assessing teachers' effectiveness, including knowledge of subject matter, use of

teaching methods, use of instructional materials, assignments to students, communication skills, attitude towards work, and involvement of students in practical activities and evaluation techniques. There are four major ways of assessing teachers' effectiveness: students' assessment, teachers' assessment, principal (Head teacher) assessment, and inspectors' (ministries and educational parastatals) assessment. When assessing teachers' effectiveness, competency indicators are used. These indicators are used as a tool to measure the effectiveness of teachers.

Teachers' competency in teaching and learning is an important factor in determining the success of a teaching session. Their ability and wisdom in handling learning activities will have a direct impact on students' active involvement in learning activities. Therefore, the development of teachers' competency, involving efforts to foster positive attitudes (Awang, Jindal-Snape, & Barber, 2013), was a major agenda to strengthen the teaching profession and ensure significant development in education quality in many countries around the world. In the Ethiopian context, the government has established specific standards for implementing quality education, in accordance with the education laws, which encompass the education curriculum, teacher competency, educational infrastructure, organization of learning activities, and educational assessment. Everything is interconnected in assuring the standard of quality. In this regard, particular attention is given to the quality of education to create a conducive environment for teaching and learning. However, the relationship between professional development, appraisal, and teachers' effectiveness is not well assessed.

This study assessed teachers' effectiveness in Bonga College of Education in relation to professional development, appraisal, and feedback.

1.2 Statement of the Problem

Students' academic performance is largely determined by how well they are taught and how effectively they learn. Teaching effectiveness remains a challenge in Ethiopian higher education institutions, despite numerous attempts to enhance the quality of education (Lemma et al., 2018). Bonga College of Education (BCE) is not isolated from this fact. Poor student performance frequently stems from teachers' ineffectiveness, which impedes the advancement of education as a whole.

Professional development (PD) activities play a vital role in improving the quality of education, enhancing teachers' performance, and enabling them to achieve higher student achievement scores. Studies conducted in Ethiopia have shown that participation in continuous professional development programs significantly influences teachers' instructional effectiveness (Abebe & Woldehanna, 2013; Betemariam, 2017). However, the extent to which PD opportunities are accessible and effective for teachers at BCE remains underexplored. Appraisal and feedback (APF) systems also serve as essential tools for enhancing teaching effectiveness. Regular assessment of teachers' performance by college leaders, external inspectors, or peers provides constructive feedback for improvement. Research in Ethiopia has demonstrated that well-structured appraisal systems can enhance teachers' motivation and instructional quality (Berhanu, 2024; Zerga, 2022). Nevertheless, gaps in feedback implementation and follow-up processes have been reported, particularly in BCE.

Although previous studies have addressed the individual impacts of PD and APF on teacher effectiveness, limited research has examined the combined influence of these factors in Ethiopian teacher training institutions. Furthermore, there is a lack of comprehensive data on the specific challenges faced by teachers in BCE in accessing PD and receiving effective feedback. This study aims to fill these gaps by investigating the interrelationships among appraisal and feedback,

professional development, and teachers' effectiveness at BCE. The identified research gap is both a knowledge gap and a practical gap. While prior research has focused on isolated aspects of teacher effectiveness, this study provides a holistic analysis of how PD and APF jointly contribute to teaching effectiveness. The findings will provide policymakers and educators with evidence-based insights to improve teacher support systems in Ethiopian colleges of education.

In this study, teachers' effectiveness was the dependent variable while professional development, appraisal, and feedback were the independent variables investigated.

1.3 Research Objectives

The general objective of this study was to investigate the relationship between professional development, appraisal, and feedback and teachers' effectiveness at Bonga College of Education.

The specific objectives were:

1. To assess the participation trends and perceived impacts of professional development platforms in BCE,
2. To assess the practice and implementation of appraisal and feedback in the college,
3. To assess the relationship between teachers' effectiveness and the independent variables, and
4. To identify the independent variable that contributes more to a given regression model.

1.4 Research questions

To achieve the above objectives, the following research questions were formulated:

1) What are the trends and perceived impacts of professional development participation of BCE teachers?
2) Are there any relationships between teachers' effectiveness and the independent variables - Professional development, Appraisal, and Feedback?
3) How do teachers perceive the practice and implementation of appraisal and feedback practices in BCE, and what is their level of agreement or disagreement regarding its impact on their effectiveness?

Research Methodology

2.1 Research Design

Survey research design was employed to investigate existing practices in professional development activities, appraisal and feedback, and teacher effectiveness. This study employed quantitative research methods to collect and analyze data using a questionnaire. As the research has a quantitative nature, analysis was conducted using both descriptive and inferential statistics. The method, therefore, proved useful in collecting statistical data on the assessment of teachers' effectiveness in terms of professional development, appraisal, and feedback at Bonga College of Education.

2.2 Target Population

The teachers and department heads in BCE were the primary focus of this investigation. Statistics obtained from the College's Human Resource Management indicated that there were three college leaders and 192 teachers (170 males and 22 females).

2.3 Sample Size and Sampling Procedure

This study employed random sampling and availability sampling techniques to obtain a sample from the target population, namely, the teachers at BCE. These techniques were employed for the following reasons:

- ✓ Our population size was so small that the chosen technique provides the best result since all candidates have an equal chance of being selected.
- ✓ Random sampling technique increases the generalizability of the results to the population, i.e., the sample would be representative of the population and less likely to be subjected to bias.
- ✓ The primary reason for using availability sampling was that it allows researchers to collect data from participants who are easily accessible, whether due to their location, willingness to participate, or other factors (Alvi, 2016).

According to Mugenda O. and Mugenda A.(2003), a sample size of 10-30% of the respondents can represent the target population. Based on this guideline, the researchers used a sample size of 37.5% of the target population. Therefore, 50 male and 22 female teachers were selected as the source of data.

2.4 Data Gathering Instrument

In this investigation, a structured questionnaire dispatched by the researchers to the participants was employed. After collecting the necessary data, analysis, interpretation, and hypothesis testing were carried out. There were no missing data.

2.4.1Quantitative Data Gathering Instrument

2.4.1.1 Structured Questionnaire

A questionnaire consisting of Likert-scale-type items was prepared to collect data from participants with regard to their teaching effectiveness in terms of professional development, appraisal, and feedback. The tool was preferred since it is not time-consuming and is easy to administer to a large population. It will also simplify the task of categorizing, tabulating, and summarizing reactions or responses from the respondents.

2.5 Data Collection and Analysis Procedures

2.5.1 Data collection and procedure

First, the researchers obtained a permit from Bonga College Research and Community Service Center to conduct the study and had approval for the research proposal. Therefore, the researchers precede their work. Based on random and availability sampling techniques, the researchers delivered the questionnaire to selected teachers in BCE. The analysis and interpretation of the collected data followed the data collection.

2.5.2 Data analysis

The responses obtained from the sample teachers using the designed instruments were analyzed using the SPSS for Windows data analysis software.

In general, the researchers used the following descriptive and inferential statistical functions to analyze the data.

1. In order to describe the data, descriptive statistics such as mean and standard deviation were used.
2. To determine the extent of the relationship among the variables, the Pearson product-moment correlation coefficient was used.
3. To see the significance of the mean difference in teachers' effectiveness due to the variables of the study, one-sample T-Test, and one-way ANOVA were used.

Results and Discussion

3.1 Results

This section presents the study's findings, focusing on participation trends in professional development activities among teachers at BCE and their perceived impacts on teaching effectiveness. The study analyzed the frequency and effects of various professional development formats, including workshops, education conferences, qualification programs, and experience-sharing visits. Additionally, it examined the relationship between these professional development activities, appraisal and feedback mechanisms, and overall teacher effectiveness, using both descriptive and inferential statistical methods. The results provide insights into the current state and effectiveness of professional development initiatives at BCE.

Table 1: Summary of participation in PD and its perceived impacts

Whether or not participated in different professional developments								
Response	PD5pa Course/Workshops related to subject matter and/or other education-related topics		PD5pb Seminars/Education conferences		PD5pc Qualification Programs (License, ELIC, IELTS, HDP)		PD5pd Experience sharing visits to other colleges	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent

Yes	14	28	45	90	13	26	2	4
No	36	72	5	10	37	74	48	96
Total	50	100	50	100	50	100	50	100
	Perceived Impact of Participation							
	PD5ia		PD5ib		PD5ic		PD5id	
Response	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
No Impact	36	72	7	14	37	74	48	96
Low Impact	5	10	16	32	3	6	1	2
Large Impact	9	18	27	54	10	20	1	2
Total	50	100	50	100	50	100	50	100

3.1.1 Professional Development Participation and Impact

3.1.1.1 Course/Workshops Related to Subject Matter (PD5pa)

Participation: The data revealed that only 28% of the teachers participated in subject matter or method-related workshops in the past 18 months, while a substantial 72% did not engage in such activities. This low participation rate highlights a significant gap in professional development opportunities within the institution.

Impact: Of those who participated, 72% reported no effect on their teaching effectiveness. This suggests that the workshops either lack relevance or quality, or that the teachers find them insufficiently supportive of their professional needs. The absence of effective professional development platforms is likely a major contributor to this perceived ineffectiveness.

3.1.1.2 Education Conferences/Seminars (PD5pb)

Participation: Participation in educational conferences or seminars is notably high, with 90% of respondents attending these events, which the college hosts annually. Only 10% did not participate.

Impact: The impact of these events on teaching effectiveness is varied. While 54% of participants reported a large positive impact, 32% indicated a low impact, and 14% saw no effect. The high variability in responses could be due to the novelty of these platforms and possibly their inconsistent quality or focus. The positive feedback from a majority suggests potential benefits, but improvements are needed to maximize their impact.

3.1.1.3 Qualification Programs (PD5pc)

Participation: Participation in qualification programs such as IELT, ELIC, and HDP is low, with only 26% of teachers engaging in these activities, and 74% not participating.

Impact: Correspondingly, 74% reported no effect on their teaching effectiveness. The low engagement in qualification programs could stem from a lack of perceived benefits, such as career advancement or salary enhancement. This indicates that these programs may not be sufficiently incentivized or aligned with teachers' professional goals.

3.1.1.4 Experience Sharing Visits (PD5pd)

Participation: Sharing experiences through visits to other colleges is almost non-existent, with 96% of respondents not participating in such activities.

Impact: Unsurprisingly, 96% of teachers reported no effect from these visits. The lack of implementation of experience-sharing initiatives

significantly limits the potential for teachers to gain new insights and improve their practices through exposure to different educational environments and methodologies.

3.1.2 The Correlation between Participation and Impact

Table 2 Pearson correlation

		Participation	Impact
Participation	Pearson Correlation	1	-.889**
	Sig. (2-tailed)		.000
	N	50	50
Impact	Pearson Correlation	-.889**	1
	Sig. (2-tailed)	.000	
	N	50	50

**. Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation coefficient of -0.889 indicates a strong negative association between participation in professional development activities and their perceived impact on teaching effectiveness. This negative correlation suggests that low participation rates in various professional development activities are correlated with a low perceived impact of these activities. This is likely due to the unavailability or inadequacy of the professional development platforms provided by the college.

3.1.3 The Practice and Implementation of Appraisal and Feedback in BCE

This section presents the results of the study on the practice and implementation of appraisal and feedback in BCE, discussing the findings regarding teachers' opinions on how the college practices and implements appraisal and feedback.

Table 3: One-sample t-test on practices and implementations of appraisal and feedback

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
APF12mean	50	2.5286	.53238	.07529

One-Sample Test

	Test Value = 1.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
APF12mean	13.662	49	.000	1.02857	.8773	1.1799

From the above table, we can see that the experimental mean is 2.5286 and the test value mean is 1.5. The 2-tailed significance level (p = 0.00) suggested that the null hypothesis is rejected, indicating that the population mean and the sample mean are statistically significantly different. The researchers are 95% confident that the mean difference lies between the interval 0.08773 and 1.1799. A one-sample t-test indicated a mean rating of 2.5286 for the college's appraisal and feedback practices, significantly higher than the test value of 1.5. This suggests that teachers generally perceive the appraisal and feedback systems in a positive light. Effective appraisal and feedback are crucial as they help teachers identify areas for improvement and enhance their professional skills, ultimately contributing to better teaching outcomes.

3.1.4 Relationship between Variables

The major purpose of this section is to present the results of the study and discuss the findings related to the correlation between independent variables: Professional Development (PD), Appraisal and Feedback

(APF), and the dependent variable: Teachers' Effectiveness (TE). The results concerning the relationship between Teacher Effectiveness and each of the variables are presented in the tables below.

3.1.4.1 The overall measure of the strength of association

Table 4: Overall measure of strength of association

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2	Sig. F Change
1	.8876[a]	.788	.779	.416	.788	87.37	2	47	.000

a. Predictors: (Constant), APF, PD
b. Dependent Variable: TE

This table provides the *R* and R^2 values. The *R* value represents the simple correlation and is 0.8876, which indicates a strong degree of correlation. The R^2 value indicates how much of the total variation in the dependent variable (TE) can be explained by the independent variables. This value indicated that 78.8% of the variance in teachers' effectiveness was predicted by professional development, appraisal, and feedback. Note that this is an overall measure of the strength of association, and does not reflect the extent to which any particular independent variable is associated with the dependent variable.

3.1.4.2 Regression Equation and Data fit

The ANOVA table, which reports how well the regression equation fits the data (i.e., predicts the dependent variable), is shown below:

Table 5 ANOVA table

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.307	2	15.1535	87.39	.000[b]
	Residual	8.155	47	.1734		
	Total	38.462	49	.785		

a. Dependent Variable: TE
b. Predictors: (Constant), APF, PD

This table indicates that the regression model predicts the dependent variable (TE) with significant accuracy. The p-value indicates the statistical significance of the regression model that was run. Here, p = 0.000, which is less than 0.05, indicating that the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

The F-value is the Mean Square Regression (15.1535) divided by the Mean Square Residual (0.1734), yielding F=87.39. The p-value associated with this F value is very small (0.0000). These values are used to answer the question “Do the independent variables reliably predict the dependent variable?” The p-value is compared to our alpha level (typically 0.05) and is smaller than it. So, we can conclude “Yes, the independent variables reliably predicted the dependent variable”. We can say that the group of variables PD and APF can be used to predict teachers’ effectiveness reliably.

3.1.4.3 The independent variable that contributes statistically significantly to the model

Table 6: Regression Equation

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1										
	(Constant)	1.527	.480		3.183	.003	.562	2.492		
	PD	.812	.082	.868	9.902	.000	0.650	0.975	.810	1.234
	APF	.603	.106	.698	5.692	.000	0.391	0.815	.810	1.234

a. Dependent Variable: TE

The analysis explores the impact of two predictor variables, **Professional Development (PD)** and **Appraisal and Feedback (APF)**, on the dependent variable, **Teachers' Effectiveness (TE)**. The coefficients provided offer insights into the relationship between these variables and their statistical significance.

For **Professional Development (PD)**, the standardized coefficient (β = 0.868) indicates a strong positive relationship between PD and TE, with PD being the stronger predictor of the two. The t-value of 9.902 and p-value of 0.000 highlight the highly significant contribution of **PD** to **TE**. Additionally, the 95% confidence interval for **PD** is [0.650, 0.975], confirming the robustness of this effect. The collinearity statistics (Tolerance = 0.810, VIF = 1.234) indicate that **PD** does not have problematic correlations with **APF**, ensuring a reliable interpretation.

Similarly, the standardized coefficient (β = 0.698) for Appraisal and Feedback (APF) also shows a strong positive effect, albeit weaker than that of **PD**. With a t-value of 5.692 and a p-value of 0.000, **APF** significantly impacts **TE**. The confidence interval for **APF** ranges from 0.391 to 0.815, suggesting that the effect size is both significant and stable. The collinearity statistics for **APF** (Tolerance = 0.810, VIF = 1.234) similarly confirm the absence of multicollinearity concerns.

Based on the provided coefficients, the regression equation for predicting **Teachers' Effectiveness (TE)** from **Professional Development (PD)** and **Appraisal and Feedback (APF)** is:

$$TE = 1.527 + 0.868PD + 0.698APF + 0.480$$

Where:

- 1.527 is the constant (intercept),
- 0.868 is the standardized coefficient for **PD**,
- 0.698 is the standardized coefficient for **APF**.

This equation illustrates how TE is expected to change in response to changes in PD and APF, with both predictor variables having a positive impact on **TE**.

In summary, both **PD** and **APF** are significant predictors of **TE**, with **PD** showing a stronger effect. Improving **PD** and **APF** is likely to enhance TE significantly. Given the standardized coefficients, prioritizing **PD** may yield slightly greater benefits, but both predictors should be considered essential components of interventions aimed at improving teacher effectiveness. The robustness of these results is supported by low standard errors, statistically significant t-values, and confidence intervals that do not include zero.

3.2 Discussions

The discussion section delves into the interpretation of the study's results, comparing them with existing research and theoretical frameworks. It evaluates the impact of professional development activities, appraisal, and feedback on teachers' effectiveness at BCE. By examining both the strengths and limitations of these initiatives, the discussion highlights critical insights into how these elements influence teaching quality and offers a basis for recommendations to enhance

professional growth and educational outcomes. The analysis also situates the findings within the broader context of academic research, offering a comprehensive understanding of their implications.

3.2.1 Professional Development Participation and Impact

The study's findings highlight a critical issue regarding the low participation rates in professional development (PD) activities among teachers. Specifically, only 28% of teachers participated in workshops related to subject matter or teaching methods, while a significant 72% did not engage in such activities. This lack of participation could be attributed to the absence of accessible and relevant PD opportunities within the institution. The impact of these workshops on teaching effectiveness was minimal, with 72% of participants reporting no significant improvement. This suggests that the available seminars may not be sufficiently tailored to meet teachers' needs or may lack the necessary quality and depth to effect meaningful change.

The study found low participation in PD activities, especially workshops, which aligns with findings by Desimone et al. (2002), who highlighted that effective PD requires not only participation but also high-quality content and delivery. The findings of this study that many teachers did not perceive a significant impact from workshops suggest that these PD activities might lack depth or relevance, a concern echoed by Darling-Hammond et al. (2017), who emphasized the importance of sustained and coherent PD for meaningful teacher development.

3.2.2 Qualification Programs

Participation in qualification programs, such as IELT, ELIC, and HDP, was low, with only 26% of teachers engaging in these activities. Consequently, 74% reported that the change had no impact on their teaching effectiveness. This low engagement may be due to a lack of perceived benefits, such as career advancement or salary

enhancement, associated with these programs. For instance, there may be no significant difference in salary or career progression between certified and uncertified teachers, reducing the incentive to participate. To address this, the institution should consider providing clear benefits and incentives for completing these programs, such as opportunities for career advancement or financial rewards.

Low engagement in qualification programs and the perceived lack of impact are consistent with research by Fullan (2007), which suggests that professional certification programs often fail to translate into practical benefits unless they are closely tied to tangible career advancements. The lack of incentives in the studied institution might mirror broader issues in the education sector, where certification does not always lead to increased compensation or career progression, thereby reducing motivation for participation.

3.2.3 Experience Sharing Visits

Experience sharing visits to other colleges were almost non-existent, with 96% of teachers not participating in such activities. Unsurprisingly, the impact on teaching effectiveness was negligible, with 96% reporting no effect. The lack of implementation of these initiatives severely limits opportunities for teachers to gain new insights and improve their practices through exposure to different educational environments and methodologies. Establishing a structured program for experience-sharing visits could significantly enhance teachers' professional development by providing valuable opportunities for learning and collaboration.

The near absence of experience-sharing visits and their perceived impact contrasts with the findings of Hargreaves and Fullan (2012), who advocate for collaborative practices and professional learning communities. These authors argue that such interactions can significantly enhance teaching practices. The study suggests a missed

opportunity in leveraging peer learning and collaboration, indicating a need for more structured and supportive policies to facilitate these exchanges.

3.2.4 Correlation between Participation and Impact

The strong negative correlation (r = -0.889) between participation in PD activities and their perceived impact suggests a systemic issue within the institution. The low participation rates correlate with low perceived impact, likely due to the unavailability or inadequacy of PD platforms. The institution must address this by expanding and improving the quality of PD opportunities, ensuring they are relevant, accessible, and effectively meet teachers' professional needs.

The negative correlation between participation in PD activities and perceived impact may reflect systemic issues within the PD offerings themselves. This contrasts with findings by Yoon et al. (2007), who found that well-designed PD programs significantly improve teaching practices and student outcomes. The negative correlation in the current study suggests inadequacies in the design, implementation, or relevance of PD activities.

3.2.5 Appraisal and Feedback Practices

The positive perception of appraisal and feedback practices, with a mean rating of 2.5286, indicates that teachers generally find these systems beneficial. Effective appraisal and feedback are essential for identifying areas for improvement and enhancing professional skills. However, to maximize their effectiveness, the institution should ensure these practices are consistently applied and focus on providing constructive, actionable feedback that supports teachers' professional growth.

The positive perception of appraisal and feedback aligns with findings by Taylor and Tyler (2012), who demonstrated that effective feedback can

lead to improved teaching practices and student outcomes. However, the weaker impact of appraisal and feedback compared to PD in the current study might indicate that while feedback mechanisms are appreciated, they are not as transformative as robust PD initiatives.

3.2.6 Relationship between Variables

The relationship between **Professional Development (PD)** and **Teachers' Effectiveness (TE)** in the current study reveals a significant positive association. The standardized coefficient (β = 0.868) indicates a strong relationship between PD and **TE**. This suggests that as teachers engage in more professional development activities, their effectiveness improves, which is consistent with several studies that have highlighted the positive impact of PD on teaching quality. For instance, Darling-Hammond et al. (2017) found that ongoing PD programs contribute to improved teacher knowledge, skills, and ultimately, teaching effectiveness. Additionally, Guskey (2002) emphasized that PD enhances teachers' instructional practices by providing new teaching strategies and fostering self-reflection, which can result in higher teaching effectiveness. The significant relationship observed in this study underlines the crucial role of PD in improving teaching practices, which aligns with the broader body of literature on this topic.

The positive relationship between **Appraisal and Feedback (APF)** and **Teachers' Effectiveness (TE)** is also significant, with a standardized coefficient (β = 0.698) indicating a moderate effect. This suggests that constructive feedback and performance appraisals play an important role in enhancing teachers' effectiveness. This finding is supported by research on the role of feedback in educational settings. For instance, Hattie and Timperley (2007) concluded that feedback is one of the most powerful influences on student achievement and, by extension, teacher effectiveness. Additionally, Kluger and DeNisi (1996) found, in their meta-analysis, that feedback interventions, when used appropriately, significantly improve job performance, reinforcing the value of APF in enhancing **TE**. Thus, the results of the current study corroborate the well-

established role of feedback in promoting teacher development and effectiveness.

Comparing these results with those from other studies highlights the consistency of the relationships between PD, APF, and TE across various educational contexts. For example, a survey by Avalos (2011) found that teacher PD programs positively influenced teachers' instructional effectiveness, echoing the results of the present study. Furthermore, the positive relationship between **APF** and **TE** in this study aligns with findings by Shute (2008), who identified feedback as a key factor in improving teacher performance. However, it is noteworthy that while PD and feedback are both strongly associated with teacher effectiveness, the relative strength of their impact may vary across studies due to factors such as the duration of PD programs or the type of feedback provided. For instance, in the survey by Desimone (2009), the effectiveness of PD was more strongly influenced by the alignment of PD content with teachers' needs than by the general frequency of PD participation, suggesting that the specific context of PD delivery may modulate its effectiveness.

Conclusion and Recommendations

4.1 Conclusion

The study highlights significant insights into the relationship between **Professional Development (PD)**, **Appraisal and Feedback (APF)**, and **Teachers' Effectiveness (TE)**. The findings reveal that while participation in PD activities is positively associated with teaching effectiveness, the low participation rates and perceived minimal impact of available PD activities indicate underlying issues with the quality and relevance of these programs. This points to the necessity for more tailored, meaningful PD opportunities that cater to teachers' specific needs. Furthermore, the study confirms the positive role of **APF** in enhancing teacher effectiveness, aligning with existing literature that emphasizes the importance of feedback and appraisal practices in professional growth. The strong relationship between **PD** and **TE**, as well as the moderate relationship between APF and TE, underscores the importance of integrating both elements into a comprehensive strategy for improving teaching practices.

4.2 Recommendations

1. **Improvement and Expansion of PD Opportunities**: The institution should invest in expanding the availability and quality of professional development activities. These should be aligned with teachers' specific instructional needs and should offer tangible benefits such as career progression, salary enhancements, or other incentives. Furthermore, PD should be ongoing, varied in format, and incorporate peer collaboration to ensure teachers can apply new knowledge in the classroom effectively.
2. **Incentivize Participation in Qualification Programs**: To increase participation in qualification programs such as IELT, ELIC, and HDP, the institution should provide clear incentives,

such as salary benefits, career advancement, or recognition, to encourage teachers to complete these programs. This could increase the perceived value of these qualifications and enhance their impact on teaching effectiveness.

3. **Facilitate Experience Sharing Visits**: Given the significant role of peer learning, the institution should establish a structured and consistent program for experience-sharing visits to other educational institutions. This could offer teachers the opportunity to engage with diverse teaching methodologies and promote collaborative learning.
4. **Enhance Feedback Mechanisms**: While **APF** was found to have a positive influence on **TE**, its impact could be enhanced through more frequent, constructive, and actionable feedback. Regularly scheduled feedback sessions, focusing on specific areas of improvement, can be beneficial in fostering professional growth and improving teaching practices.
5. **Contextualize PD Programs**: Future PD programs should be contextually relevant and aligned with the specific needs of the teachers, as suggested by Desimone (2009). This ensures that the PD content directly addresses the challenges teachers face and equips them with practical strategies for improving teaching effectiveness.

By implementing these recommendations, the institution can create a more effective environment for teacher development, ultimately leading to enhanced teaching quality and student outcomes.

References

Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and Student Achievement in Chicago Public High Schools. *Journal of Labor Economics, 25*(1), 95–135.CrossRefGoogle Scholar

Abebe, Tatek (2008) 'Ethiopian Childhoods: A Case Study of the Lives of Orphans and Working Children', PhD Dissertation, Norwegian University of Science and Technology, Trondheim.

Abebe, W. and Woldehanna, T., 2013. Teacher training and development in Ethiopia: Improving education quality by developing teacher skills, attitudes, and work conditions. Young Lives.

Achimugu, L. (2016). Senior secondary school students' assessment of chemistry teachers' effectiveness in teaching chemistry in Kogi State, Nigeria. The International Journal of Science & Technology, vol 4, ISSUE 4, 196 – 201.

Adewunmi, J.A (2003). Effective educational personnel and financial management in schools. In J.A. Adewunmi (Ed.), Handbook for Head teachers, Ilorin, JAADE Educational Consultancy Services.

Akiba, M., LeTendre, G., & Scribner, J. (2007). Teacher quality, opportunity gap, and national achievement in 46 countries. *Educational Researcher, 36*(7), 369–387.CrossRefGoogle Scholar

Alvi, M., 2016. A manual for selecting sampling techniques in research.

Amare, Solomon (2006) 'TESO Seen as a Strait-Jacket of Trendy Methodologies: Teachers' Perspectives', in Elizabeth Ayalew,

Proceedings of the Conference on Teacher Education for Sustainable Development in Ethiopia, 5–6 May 2006, Addis Ababa: College of Education, Addis Ababa University.

Ankomah, Yaw. A., Janet A. Koomson and Rosemary S. Bosu with George K.T. Oduro (2005) A Review on the Concept of Quality in Education: Perspectives from Ghana, EdQual Working Paper 1, Bristol: EdQual.

Avalos, B., 2011. Teacher professional development in teaching and teacher education for over ten years. Teaching and teacher education, 27(1), pp.10-20.

Awang, M.M., Jindal-Snape, D. & Barber, T. (2013). A documentary analysis of the government's circulars on positive behavior enhancement strategies. *Asian Social Science*. 9(5). 203-208

Baumert, J., Kunter, M., Blum, W., Brunner, M., Voss, T., Jordan, A., et al. (2010). Teachers' mathematical knowledge, cognitive activation in the classroom, and student progress. *American Educational Research Journal, 47*(1), 133–180.CrossRefGoogle Scholar

Berhanu, K.Z., 2024. The influence of teachers' attitude towards performance appraisal system on their job performance as mediated by secondary school teachers' motivation. Participatory Educational Research, 11(5), pp.169-187.

Betemariam BA. Generating Evidence: The Evaluation of the Teacher Continuous Professional Development Framework, in the Case of Ethiopia. Lynn University; 2017.

Blank, R. K., & De Las Alas, N. (2009). *The effects of teacher professional development on gains in student achievement: How meta-analysis provides scientific evidence useful to education leaders*. Washington, DC: Council of Chief State School Officers. Retrieved from https://files.eric.ed.gov/fulltext/ED544700.pdf.

Blazar, D. (2015). Effective teaching in elementary mathematics: Identifying classroom practices that support student achievement. *Economics of Education Review, 48,* 16–29.CrossRefGoogle Scholar

Blomeke, S., Olsen, R., & Suhl, U. (2016). Relation of student achievement to the quality of their teachers and instructional quality. In T. Nilson& J. Gustafsson (Eds.), *Teacher quality, instructional quality and student outcomes*. IEA Research for Education (Vol. 2, pp. 21–50). Cham, Switzerland: Springer. Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-41252-8_2.

Boyd, D. J., Grossman, P. L., Lankford, H., Loeb, S., & Wyckoff, J. (2009). Teacher preparation and student achievement. *Educational Evaluation and Policy Analysis, 31*(4), 416–440.CrossRefGoogle Scholar

Boyd, D., Grossman, P., Lankford, H., & Loeb, S. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy, 1*(2), 176–216.CrossRefGoogle Scholar

Camilleri, M.A., 2021. Using the balanced scorecard as a performance management tool in higher education. *Management in Education*, *35*(1), pp.10-21.

Cattaneo, M., Oggenfuss, C., &Wolter, S. (2016). *The more, the better? The impact of instructional time on student performance.* Institute for the Study of Labor (IZA) Discussion Paper No. 9797. Bonn, Germany: Forschungsinstitutezur Zukunft der Arbeit/Institute for the Study of Labor. Retrieved from ftp.iza.org/dp9797.pdf.

Chetty, R., Friedman, J. N., &Rockoff, J. E. (2014). Measuring the impacts of teachers II: Teacher value-added and student outcomes in adulthood. *American Economic Review, 104*(9), 2633–2679.CrossRefGoogle Scholar

Chingos, M., & Peterson, P. (2011). It's easier to pick a good teacher than to train one: Familiar and new results on the correlates of teacher effectiveness. *Economics of Education Review, 30*(3), 449–465.CrossRefGoogle Scholar

Clotfelter, C. T., Ladd, H. F., &Vigdor, J. L. (2006). Teacher-student matching and the assessment of teacher effectiveness. *Journal of Human Resources, 41*(4), 778–820.CrossRefGoogle Scholar

Collinson, V. (1999). Redefining teacher excellence. *Theory Into Practice*, *38*(1), 4–11. Retrieved from https://doi.org/10.1080/00405849909543824.

Common Core Standards Initiative. (2018). Preparing America's students for success [www document]. Retrieved from http://www.corestandards.org/.

Constantine, J., Player, D., Silva, T., Hallgren, K., Grider, M., & Deke, J. (2009). *An evaluation of teachers trained through different routes to certification.* National Center for Education Evaluation and Regional Assistance paper 2009-4043. Washington, DC: National Center for Education Evaluation and Regional

Assistance, Institute of Education Sciences, US Department of Education. Retrieved from https://ies.ed.gov/ncee/pubs/20094043/.

Creemers, B., T. Peters and D. Reynolds (eds) (1989) School Effectiveness and School Improvement, Amsterdam: Swets and Zeitlinger.

Cullen, J., Joyce, J., Hassall, T. and Broadbent, M., 2003. Quality in higher education: from monitoring to management. *Quality assurance in Education*.

Darling-Hammond, L. (2000). Teacher quality and student achievement. *Education Policy Analysis Archives*, *8,* 1. Retrieved from https://epaa.asu.edu/ojs/article/viewFile/392/515.

Darling-Hammond, L., Holtzman, D. J., Gatlin, S. J., & Vasquez Heilig, J. (2005). Does teacher preparation matter? Evidence about teacher certification, Teach for America, and teacher effectiveness. *Education Policy Analysis Archives, 13,* 42. Retrieved from https://epaa.asu.edu/ojs/article/view/147.

Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). Effective Teacher Professional Development. Palo Alto, CA: Learning Policy Institute.

DeNisi, A. and Smith, C.E., 2014. Performance appraisal, performance management, and firm-level performance: A review, a proposed model, and new directions for future research. *Academy of Management Annals*, *8*(1), pp.127-179.

Desimone, L. M. (2009). Improving Impact Studies of Teachers' Professional Development: Toward Better Conceptualizations and Measures. Educational Researcher, 38(3), 181-199.

Desimone, L., Porter, A., Garet, M., Yoon, K., &Birman, B. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation and Policy Analysis, 24*(2), 81–112.CrossRefGoogle Scholar

Desimone, L., Smith, T., & Phillips, K. (2013). Teacher and administrator responses to standards-based reform. *Teachers College Record, 115*(8), 1–53.Google Scholar

Desimone, L.M., 2009. Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. Educational researcher, 38(3), pp.181-199.

Elicker, J.D., Levy, P.E., and Hall, R.J., 2006. The role of leader-member exchange in the performance appraisal process. *Journal of Management*, *32*(4), pp.531-551.

Elliott, K., 2015. Teacher performance appraisal: More about performance or development? *Australian Journal of Teacher Education (Online)*, *40*(9), pp.102-116.

Fagan, M.T., 1985. College Teacher Evaluation: A Goal-oriented Model. *Asia Pacific Journal of Human Resources*, *23*(1), pp.16-21.

Fullan, M. (2007). The New Meaning of Educational Change (4th ed.). New York: Teachers College Press.

Gagné, M. and Deci, E.L., 2005. Self-determination theory and work motivation. *Journal of Organizational behavior*, *26*(4), pp.331-362.

Garet, M. S., Heppen, J. B., Walters, K., Parkinson, J., Smith, T. M., Song, M., et al. (2016). *Focusing on mathematical knowledge: The impact of content-intensive teacher professional development*. National Center for Education Evaluation and Regional Assistance paper 2016-4010. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, US Department of Education. Retrieved from https://ies.ed.gov/ncee/pubs/20094010/.

Geo, L., Bell, C., & Little, O. (2008). Approaches to evaluating teacher effectiveness: A research synthesis. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved March 3, 2009, from http://www.tqsource.org/publicaiton/Evaluating teaching effectiveness.pdf.

Gerritsen, S., Plug, E., &Webbink, D. (2014). *Teacher quality and student achievement: Evidence from a Dutch sample of twins*. CPB discussion paper 294. The Hague, The Netherlands: Central Plan Bureau/Netherlands Bureau for Economic Policy Analysis. Retrieved from https://ideas.repec.org/p/cpb/discus/294.html.

Goe, L. (2007). *The link between teacher quality and student outcomes: A research synthesis*. NCCTQ Report. Washington, DC: National Comprehensive Center for Teacher Quality. Retrieved March 3, 2009, from http://www.gtlcenter.org/sites/default/files/docs/LinkBetweenTQandStudentOutcomes.pdf.

Guskey, T.R., 2002. Professional development and teacher change. Teachers and teaching, 8(3), pp.381-391.

Gustafsson, J., &Nilson, T. (2016). The impact of school climate and teacher quality on mathematics achievement: A difference-in-differences approach. In T. Nilson& J. Gustafsson (Eds.), *Teacher quality, instructional quality and student outcomes*, IEA Research for Education (Vol. 2, pp. 81–95). Cham, Switzerland: Springer. Retrieved from https://link.springer.com/chapter/10.1007/978-3-319-41252-8_4.

Hanushek, E., &Luque, J. (2003). Efficiency and equity in schools around the world. *Economics of Education Review, 22*(5), 481–502.CrossRefGoogle Scholar

Hanushek, E., Piopiunik, M., & Wiederhold, S. (2018). The value of smarter teachers: International evidence on teacher cognitive skills and student performance*. Journal of Human Resources* (in press). https://doi.org/10.3368/jhr.55.1.0317.8619r1.

Hargreaves, A., & Fullan, M. (2012). Professional Capital: Transforming Teaching in Every School. New York: Teachers College Press.

Harris, D. N., & Sass, T. R. (2011). Teacher training, teacher quality, and student achievement. *Journal of Public Economics, 95*(7–8), 798–812.CrossRefGoogle Scholar

Harris, Douglas N. and Tim R. Sass (2006) Teacher Training, Teacher Quality and Student Achievement, Working Paper 3, Center for Analysis of Longitudinal Data for Education Research, Madison, WI: University of Wisconsin.

Hattie, J. and Timperley, H., 2007. The power of feedback. Review of educational research, 77(1), pp.81-112.

Hill, H., Rowan, B., & Ball, D. (2005). Effects of teachers' mathematical knowledge for teaching on student achievement. *American Educational Research Journal, 42*(2), 371–406.CrossRefGoogle Scholar

https://www.unicef.org/ethiopia/learning-and-development

Jerrim, J., Lopez-Agudo, L., Marcenaro-Gutierrez, O., & Shure, N. (2017). What happens when econometrics and psychometrics collide? An example using the PISA data. *Economics of Education Review, 61,* 51–58.CrossRefGoogle Scholar

Kaplan, R.S. and Norton, D.P., 1995. Putting the balanced scorecard. *Performance measurement, management, and appraisal sourcebook*, *66*, pp.66-74.

Kaplan, R.S. and Norton, D.P., 2001. Transforming the balanced scorecard from performance measurement to strategic management: Part 1. *Accounting horizons*, *15*(1), pp.87-104.

Kluger AN, DeNisi A. The effects of feedback interventions on performance: a historical review, a meta-analysis, and a preliminary feedback intervention theory. Psychological Bulletin. 1996 Mar;119(2):254.

Kuvaas, B., 2006. Performance appraisal satisfaction and employee outcomes: mediating and moderating roles of work motivation. *The International Journal of Human Resource Management*, *17*(3), pp.504-522.

Ladd, H. F., & Sorenson, L. C. (2017). Returns to teacher experience: Student achievement and motivation in middle school. *Education Finance and Policy, 12*(2), 241–279. Retrieved from https://www.mitpressjournals.org/doi/10.1162/EDFP_a_00194.

Lavy, V. (2015). Do differences in schools' instruction time explain international achievement gaps? Evidence from developed and developing countries. *The Economic Journal, 125*(11), 397–424.CrossRefGoogle Scholar

Lemma, G., Leka, W. and Tebeje, W., 2018. Evaluation of the effectiveness of teaching and learning in public higher education institutions of Ethiopia. The Ethiopian Journal of Higher Education, 5(1), pp.127-176.

Levy, P.E. and Williams, J.R., 2004. The social context of performance appraisal: A review and framework for the future. *Journal of Management*, *30*(6), pp.881-905.

Luschei, T., &Chudgar, A. (2011). Teachers, student achievement, and national income: A cross-national examination of relationships and interactions. *Prospects, 41,* 507–533.CrossRefGoogle Scholar

Metzler, J., & Woessman, L. (2012). The impact of teacher subject knowledge on student achievement: Evidence from within-teacher within-student variation. *Journal of Development Economics, 99*(2), 486–496.CrossRefGoogle Scholar

MOE (1998) Education Sector Development Program I (ESDP I): Action Plan, Addis Ababa: Ministry of Education.

MOE (2002) Education Sector Development Program II (ESDP II), Addis Ababa: Ministry of Education.

MOE (2005) 'Education Sector Development Program (ESDP-III), Final Draft,' Addis Ababa: Ministry of Education.

MOE (2006) Education Sector Development Program (ESDP) III, Addis Ababa: Ministry of Education.

MOE (2010a) Education Sector Development Program IV (ESDP IV), Addis Ababa: Ministry of Education.

MOE (2010b) Education Statistics Annual Abstract 2008/09, Addis Ababa: Ministry of Education.

MOE and USAID (2008) Review of the Ethiopian Education and Training Policy and its Implementation, Addis Ababa: Ministry of Education.

Montt, G. (2011). Cross-national differences in educational achievement inequality. *Sociology of Education, 84*(1), 49–68.CrossRefGoogle Scholar

Mpokosa, Chikondi, and SusyNdaruhutse (2008). Managing Teachers: The Centrality of Teacher Management to Quality Education. Lessons from Developing Countries, London and Reading: CfBT and VSO

Mugenda, O. &Mugenda, A. (2003***).*** *Research methods*: Quantitative and Qualitative Approaches. Nairobi Acts press

Nadeem, M. (2011). *Teacher competencies and factors affecting the performance of female teachers in Bahawal*, Pakistan, retrieved on 20th January 2016 from www, ijjbssnet.com

Nwachukwu, R.O (2009). Understanding Teachers' Professional Competences for Educational Effectiveness, Owerri, Springfield Publisher Limited.

Okpala, L. (2006). Towards effective music in Nigerian schools", International Journal of Research Education, 3, (1), 157 – 163.

Organization for Economic Co-operation and Development. TALIS 2013 Results: An International Perspective on Teaching and Learning. Paris: OECD; 2014

Orodho,J,A.(2009).*Element of Education and Science Handbook for Africa*; East Africa.Nairobi: Educational publishers.

Oshodi, O.O. (2007). Students' Assessment of Science Teachers' effectiveness for sustainable development. In U. Nzewi (Ed.) 50th Anniversary Conference proceedings of Science Teachers' Association of Nigeria, 244 – 248, Ibadan, HEBN Publisher PLC.

Palardy, G. J., & Rumberger, R. W. (2008). Teacher effectiveness in first grade: The importance of background qualifications, attitudes, and instructional practices for student learning. *Educational Evaluation and Policy Analysis, 30*(2), 111–140.CrossRefGoogle Scholar

Papay, J., & Kraft, M. (2015). Productivity returns to experience in the teacher labor market: Methodological challenges and new evidence on long-term career improvement. Journal of Public Economics, 130, 105–119.CrossRefGoogle Scholar

Pedzahur, E. J. (1997). Multiple regression in behavioral research: Explanation and prediction. (3rd ed.). Toronto, Ontario: Thomson.

Phillips, K. J. (2010). What does 'highly qualified' mean for student achievement? Evaluating the relationships between teacher quality indicators and at-risk students' mathematics and reading achievement gains in first grade. *The Elementary School Journal, 110*(4), 464–493.CrossRefGoogle Scholar

Pil, F. K., &Leana, C. (2009). Applying organizational research to public school reform: The effects of teacher human and social capital on student performance. *Academy of Management Journal*, *52*(6), 1101–1124.Google Scholar

Polikoff, M., & Porter, A. (2014). Instructional alignment as a measure of teaching quality. *Educational Evaluation and Policy Analysis, 36*(4), 399–416.CrossRefGoogle Scholar

Poon, J.M., 2004. Effects of performance appraisal politics on job satisfaction and turnover intention. *Personnel review*.

Rice, J. K. (2003). *Teacher quality: Understanding the effectiveness of teacher attributes*. Washington, DC: Economic Policy Institute.Google Scholar

Rivkin, S., &Schiman, J. (2015). Instruction time, classroom quality, and academic achievement. *The Economic Journal, 125*(11), 425–448.CrossRefGoogle Scholar

Rivkin, S., Hanushek, E., & Kain, J. (2005). Teachers, schools, and academic achievement. *Econometrica, 73*(2), 417–458.CrossRefGoogle Scholar

Rockoff, J. (2004). The impact of individual teachers on student achievement: Evidence from panel data. *The American Economic Review, 94*(2), 247–252.CrossRefGoogle Scholar

Rockoff, J. E., Jacob, B. A., Kane, T. J., & Staiger, D. O. (2011). Can you recognize an effective teacher when you recruit one? *Education Finance and Policy, 6*(1), 43–74.CrossRefGoogle Scholar

Ryans, David G. A Research Study, American Council of Education (5th ed.). Menasha, Wisconsin: George Banta Company, Inc., 1970.

Salanova, M., Agut, S. and Peiró, J. M., 2005. Linking organizational resources and work engagement to employee performance and customer loyalty: the mediation of service climate. *Journal of Applied Psychology*, *90*(6), p.1217.

Schmidt, W., Burroughs, N., Cogan, L., & Houang, R. (2017). The role of subject-matter content in teacher preparation: An international perspective for mathematics. *Journal of Curriculum Studies, 49*(2), 111–131.CrossRefGoogle Scholar

Schmidt, W., Burroughs, N., Zoido, P., & Houang, R. (2015). The role of schooling in perpetuating educational inequality: An international perspective. *Education Researcher, 44*(4), 371–386.CrossRefGoogle Scholar

Schmidt, W., McKnight, C., Houang, R., Wang, H., Wiley, D., Cogan, L., et al. (2001). *Why schools matter: A cross-national comparison of curriculum and learning*. San Francisco, CA: Jossey-Bass.Google Scholar

Serbessa, Derebessa Dufera (2009) 'Quality of Teaching and Learning in Ethiopian Primary Schools: Tension Between Traditional and Innovative Teaching–Learning Approaches

Shuls, J., &Trivitt, J. (2015). Teacher effectiveness: An analysis of licensure screens. *Educational Policy, 29*(4), 645–675.CrossRefGoogle Scholar

Shute, V.J., 2008. Focus on formative feedback. Review of educational research, 78(1), pp.153-189.

Staiger, D., &Rockoff, J. (2010). Searching for effective teachers with imperfect information. *Journal of Economic Perspectives, 24*(3), 97–118.CrossRefGoogle Scholar

Taylor, E. S., & Tyler, J. H. (2012). The Effect of Evaluation on Teacher Performance. American Economic Review, 102(7), 3628-3651.

Thomas, K.W. and Velthouse, B.A., 1990. Cognitive elements of empowerment: An "interpretive" model of intrinsic task motivation. *Academy of Management Review*, *15*(4), pp.666-681.

UNESCO (2006**)** Global Monitoring Report. *The right, Equity, and Education for all*.UNESCO publishers.

UNICEF (2010) Child-Friendly Schools: Ethiopia Case Study, Addis Ababa: UNICEF

Urwick, J. and P. Mapuru (2005) Teacher Motivation and Incentives in Lesotho, Maseru: Lesotho College of Education.

Vegas, E. (2007) 'Teacher Labor Markets in Developing Countries', The Future of Children 17.1 'Excellence in the Classroom': 219–32.

Wallace, M. R. (2009). Making sense of the links: Professional development, teacher practices, and student

achievement. *Teachers College Record, 111*(2), 573–596.Google Scholar

Wayne, A. J., &Youngs, P. (2003). Teacher characteristics and student achievement gains: A review. *Review of Educational Research, 73*(1), 89–122.CrossRefGoogle Scholar

Whiting, S.W., Podsakoff, P.M., and Pierce, J.R., 2008. Effects of task performance, helping, voice, and organizational loyalty on performance appraisal ratings. *Journal of Applied Psychology*, *93*(1), p.125.

Wiliam, D. (2011). Embedded Formative Assessment. Bloomington, IN: Solution Tree Press.

Wilson, S. M., & Floden, R. E. (2003). *Creating effective teachers: Concise answers for hard questions. An addendum to the report "Teacher preparation research: Current knowledge, gaps, and recommendations*. Washington, DC: AACTE Publications. Google Scholar

Wiswall, M. (2013). The dynamics of teacher quality. *Journal of Public Economics, 100,* 61–78. CrossRefGoogle Scholar

Woessman, L. (2003). Schooling resources, educational institutions, and student performance: The international evidence. *Oxford Bulletin of Economics and Statistics, 65*(2), 117–170. CrossRefGoogle Scholar

Yoon, K. S., Duncan, T., Lee, S. W., Scarloss, B., & Shapley, K. (2007). Reviewing the Evidence on How Teacher Professional Development Affects Student Achievement. Issues & Answers Report, REL 2007-No. 033. Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for

Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest.

Zehie, Jana (2009) 'The Educational Research in Teachers' and Future Teachers' Attitudes' in the Proceedings of the First International Conference on Education Research for Development Vol. II, Addis Ababa: Addis Ababa University

ZERGA, I., 2022. The Effect of Academic Staff Performance Appraisal System on Employees' Motivation in Higher Education Institutions: The Case of Debre Berhan University (Doctoral dissertation, ST. Mary's University).

Zwiers, Jeff (2007) 'Professional Development for Active Learning in Sub-Saharan Africa Reflectively Practicing a Community-Centered Approach', Journal of Education for International Development 3:1. 1–15.