International Journal of Economics, Commerce and Management
United Kingdom ISSN 2348 0386 Vol. 14, Issue 8, Aug 2026

https://ijecm.co.uk/

INFLUENCE OF SERVICE QUALITY ON STUDENTS SATISFACTION: THE ROLE OF TANGIBLES AMONG TECHNICAL TRAINING INSTITUTIONS IN KENYA

Doreen Kendi Mutwiri
MBA Candidate, School of Business and Economics,
Meru University of Science and Technology, Kenya
kendid037@gmail.com

Clement Nkaabu
Lecturer, School of Business and Economics,
Bomet University, Kenya
clemnkaabu@gmail.com

Guyo Huka
Lecturer, School of Business and Economics,
Meru University of Science and Technology, Kenya
ghuka@must.ac.ke

Abstract

The quality of educational services is a critical determinant of competitiveness and sustainability in higher learning institutions, particularly Technical and Vocational Education and Training (TVET) institutions. Despite reforms and investments in Kenya's TVET sector, challenges related to physical facilities, equipment, and learning environments continue to influence student satisfaction. This study examined the influence of tangibles on customer satisfaction among students of technical training institutions in Meru County, Kenya. Tangibles encompass physical facilities, modern equipment, adequacy of learning spaces, and the professional appearance of staff, which collectively shape perceptions of institutional quality. The study was anchored on the SERVQUAL Model and Expectancy Disconfirmation Theory. A descriptive survey design was

adopted, targeting 2,526 Module-three students from five technical training institutions in Meru County: Meru National Polytechnic, Nkabune Technical Training Institute, Mukiria Technical Training Institute, Karumo Technical Training Institute, and Mitunguu National Polytechnic. Using stratified random sampling, a sample of 345 respondents was selected. Data were collected through semi-structured questionnaires based on a five-point Likert scale and analyzed using SPSS 25 through descriptive statistics, correlation, and regression analyses. The findings revealed a statistically significant positive relationship between tangibles and student satisfaction ($r = 0.546$, $p < 0.001$). Regression analysis indicated that tangibles explained 29.8% of the variation in student satisfaction, with a beta coefficient of 0.756 ($p < 0.001$). The results suggest that modern classrooms, well-equipped laboratories, accessible ICT resources, and professional staff significantly enhance students' perceptions of institutional quality and overall satisfaction. The study concludes that tangible aspects of educational service quality are fundamental determinants of student satisfaction. It recommends that institutional managers and policymakers prioritize investment in facilities, training equipment, learning spaces, and staff development to enhance the quality of educational services in technical training institutions.

Keywords: Tangibles, Educational Service Quality, Customer Satisfaction, SERVQUAL Model, Physical Facilities and Technical Training Institutions

INTRODUCTION

Technical and Vocational Education and Training (TVET) institutions have become the backbone of workforce development in both developed and developing economies. Globally, they play a vital role in equipping learners with technical competencies, innovation skills, and problem-solving abilities that align with the demands of modern industries. The World Bank (2022) emphasizes that quality oriented technical training is essential for sustainable industrial growth, youth employability, and socio-economic transformation. In many emerging economies, including Kenya, TVET institutions are expected to produce competent graduates who can fill technical gaps in manufacturing, construction, and digital industries. Consequently, the quality of educational services offered in these institutions has become a key determinant of student satisfaction, institutional reputation, and long-term competitiveness (Zeithaml, Bitner, & Gremler, 2020).

In service-based sectors such as education, service quality is a multidimensional construct encompassing both tangible and intangible elements. Students are not only recipients of academic instruction but also consumers of a service system that includes infrastructure, facilities, interactions, and administrative efficiency (Zeithaml, Bitner, & Gremler, 2020). Among the five SERVQUAL dimensions; tangibles, reliability, responsiveness, assurance, and

empathy, tangibles provide the first and most visible indications of quality. These include classrooms, laboratories, workshops, learning materials, and the personal appearance of staff. According to Kotler and Keller (2016), customers form initial perceptions of quality from the physical environment, even before service delivery begins. In an educational context, well-maintained physical facilities convey professionalism, institutional competence, and a commitment to excellence. Conversely, inadequate infrastructure and outdated tools undermine satisfaction and confidence in the institution's ability to deliver relevant training.

Regionally, African countries have faced persistent challenges in maintaining and upgrading physical learning resources in TVET institutions. Ngambi (2011) notes that despite the expansion of technical education in South Africa, infrastructural limitations and poor resource allocation continue to affect student experiences. Similarly, Oketch (2016) argues that the African continent has yet to fully leverage the potential of TVET in achieving sustainable development due to underinvestment in physical and technological resources. This trend is evident in Kenya, where TVET institutions serve as critical engines for skills development but often operate with limited resources. The Republic of Kenya (2019) acknowledges that although government initiatives such as the Kenya Youth Employment and Opportunities Project (KYEOP) and the TVET Act (2013) have expanded access to technical education, most institutions still struggle with inadequate workshops, outdated machinery, and congested learning environments.

Meru County, located in Kenya's Eastern region, hosts several national and technical training institutions that contribute significantly to regional skills development. However, reports from students and trainers suggest disparities in the quality of facilities across institutions, which may affect satisfaction and overall learning experiences. As TVET enrolment continues to rise, institutions face pressure to modernize infrastructure, improve trainer professionalism, and ensure a conducive learning environment. According to Mwangi and Karanja (2015), inadequate tangible facilities remain a key barrier to effective technical education delivery in Kenya. This problem calls for empirical assessment to establish how physical and visual aspects of service quality influence students' satisfaction in these institutions.

LITERATURE REVIEW

The concept of service quality has evolved as a key construct in understanding customer satisfaction within both profit and non-profit sectors. In education, it represents the degree to which an institution meets or exceeds student expectations through its services, facilities, and interactions (Zeithaml, Bitner, & Gremler, 2020). One of the most influential frameworks used to measure service quality is the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988). The model identifies five dimensions; tangibles, reliability, responsiveness,

assurance, and empathy that collectively determine customers' perceptions of quality. Among these, tangibles are often viewed as the most visible indicators of service excellence. They include the physical facilities, teaching and learning materials, staff appearance, and general environmental aesthetics that shape users' first impressions of institutional credibility. In educational settings, tangible factors act as the physical evidence of the institution's commitment to excellence and professionalism.

The Expectancy Disconfirmation Theory (EDT) by Oliver (1980) further supports this perspective, positing that satisfaction results when actual service performance meets or surpasses user expectations. In the context of TVET institutions, when students perceive the physical environment such as workshops, laboratories, and classrooms to be modern, clean, and adequately equipped, their satisfaction levels tend to increase. Conversely, when facilities are inadequate, obsolete, or poorly maintained, students experience disconfirmation, leading to dissatisfaction. Hence, tangible service elements serve as both predictors and rein forcers of satisfaction outcomes.

The Expectancy Disconfirmation Theory provides a useful lens for explaining how the tangible aspects of service quality influence customer satisfaction. The theory posits that satisfaction is determined by the gap between customers' expectations prior to experiencing a service and their perceptions of the actual service performance (Oliver, 1980, 1997). Within this framework, tangibles referring to the physical facilities, equipment, appearance of personnel, and overall physical environment play a critical role in shaping both expectations and perceptions of service quality (Parasuraman et al., 1988). In the context of educational institutions, students often form expectations about the adequacy and modernity of classrooms, workshops, learning materials, and staff presentation even before enrollment. When the actual physical environment and resources meet or surpass these expectations, positive disconfirmation occurs, leading to higher satisfaction levels. Conversely, when the tangible elements such as outdated facilities, poorly maintained equipment, or unappealing surroundings fall short of expectations, negative disconfirmation occurs, resulting in dissatisfaction. Therefore, under the Expectancy Disconfirmation Theory, tangibles serve as a key determinant of perceived service performance, influencing whether expectations are confirmed or disconfirmed, and ultimately determining the level of student satisfaction (Oliver, 1997).

Empirical literature consistently identifies tangibles as an important determinant of student satisfaction within educational institutions. Recent studies have shown that modern classrooms, adequate learning facilities, well-equipped laboratories, digital learning resources, and the professional appearance of staff positively influence students' perceptions of service quality and institutional performance (UNESCO, 2025; Ong'injo et al., 2025; World Bank, 2022).

Similarly, research conducted in higher education institutions indicates that students tend to associate quality educational experiences with the adequacy and modernity of physical facilities, suggesting that tangible elements play a critical role in shaping overall satisfaction and loyalty. However, while most studies acknowledge the importance of tangible resources, the magnitude of their influence differs across institutional and geographical contexts, thereby necessitating further investigation within technical training institutions in Kenya.

METHODOLOGY

The study adopted descriptive design to examine the influence of tangibles on customer satisfaction among students of technical training institutions in Meru County. According to Mugenda and Mugenda (2008), a descriptive survey research design portrays the current state of affairs as they exist. This design was chosen because it is appropriate for collecting a large volume of data efficiently from a sizable population. The target population comprised 2,526 module-three students drawn from five institutions: Meru National Polytechnic, Nkabune Technical Training Institute, Mukiria Technical Training Institute, Karumo Technical Training Institute, and Mitunguu National Polytechnic. Using Yamane's (1967) formula, a sample of 345 students was selected through stratified random sampling to ensure proportional representation across departments.

The study utilized a semi- structured questionnaire consisting of measurement items adapted from established service quality and customer satisfaction literature. The independent variable, Tangibles, was measured using six items adapted from the SERVQUAL model developed by Parasuraman, Zeithaml, and Berry (1988). The items assessed the adequacy and competence of trainers, adequacy and quality of physical facilities, adequacy of learning equipment, and the extent to which institutional equipment met modern standards. The dependent variable, Customer Satisfaction, was measured using four items adapted from Oliver's (1980) Expectancy Disconfirmation Theory and previous studies on student satisfaction by Njuguna (2017). The items assessed students' perceptions of educational quality, trainers' commitment to quality service delivery, student loyalty to the institution, and willingness to recommend the institution to others. All items were measured using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The use of previously validated scales enhanced the validity and reliability of the measurement instrument.

Prior to data collection, the researcher obtained a research permit from the National Commission for Science, Technology and Innovation (NACOSTI) and sought authorization from the management of the selected technical training institutions. Structured questionnaires were then administered to the sampled respondents after explaining the purpose of the study and

assuring them of confidentiality and anonymity. Participation was voluntary, and the completed questionnaires were collected, checked for completeness, coded, and analyzed using SPSS version 25. The study targeted Module Three students because they had spent sufficient time in their institutions and had adequate exposure to the learning environment, facilities, trainers, and support services. Their experience enabled them to provide informed and reliable assessments of the quality of services offered and their level of satisfaction. Consequently, Module Three students were considered the most appropriate respondents for evaluating the influence of tangibles on customer satisfaction.

The reliability of the study constructs was assessed using Cronbach's alpha coefficient. The tangibles construct, measured using six items, yielded a Cronbach's alpha coefficient of 0.716, while the customer satisfaction construct, measured using four items, recorded a Cronbach's alpha coefficient of 0.711. Since both coefficients exceeded the recommended threshold of 0.70, the scales were considered to possess acceptable internal consistency and were therefore deemed reliable for data collection and subsequent analysis, while content validity was ensured through expert review. Data were analyzed using SPSS version 25, employing descriptive statistics, Pearson correlation, and simple linear regression to assess the relationship between tangibles and customer satisfaction.

ANALYSIS AND RESULTS

Descriptive Statistics

Descriptive statistics were employed to summarize and explain the distribution of responses related to tangibles and their influence on customer satisfaction among students in technical training institutions in Meru County. The results are presented in Table 1 below.

Table 1: Tangibles on Customer Satisfaction among Students in Technical Training Institutions

Tangibles	Mean	Standard deviation
We have adequate trainers (staff) in our institution	4.35	0.556
We have competent trainers in our institution	4.17	0.604
Our institution has enough physical facilities (lecture rooms) that enables smooth learning	3.85	0.862
The physical facilities in our institution meets the quality standards	4.08	0.717
We have adequate equipment (computers, projectors) that enables smooth learning	4.02	0.751
The institution’s equipment are in line with the modern standards	4.01	0.737
Average Score	4.08	0.705

Tangibles were assessed using three constructs: staff, physical facilities, and equipment. To summarize the respondents' perceptions regarding tangibles and customer satisfaction among students in technical training institutions, the study utilized mean scores and standard deviations. The interpretation of the mean scores was based on a five-point Likert scale, where a mean score of 4.2–5.0 indicated strong agreement, 3.4–4.2 agreement, 2.6–3.4 neutrality, 1.8–2.6 disagreement, and 1.0–1.8 strong disagreement. This approach is consistent with the use of Likert-scale data in social science research (Mugenda & Mugenda, 2008). The descriptive statistics for tangibles are presented in Table 4.5.

Regarding staff, the results indicated that most institutions have a sufficient number of trainers, with a mean score of 4.35 and a standard deviation of 0.556. According to the five-point Likert scale, a mean above 4.2 and a moderate standard deviation suggest that a significant proportion of respondents strongly agreed with this statement. Additionally, the study found that a majority of institutions employ competent trainers, reflected by a mean of 4.17 and a standard deviation of 0.604. This falls within the 'agree' range on the Likert scale, indicating that most respondents concurred with the statement.

In terms of physical facilities, the data revealed that the majority of institutions possess adequate facilities (such as lecture rooms) to support effective learning, with a mean of 3.85 and a standard deviation of 0.862. A mean score above 3.4 and a moderate standard deviation imply general agreement among respondents. Furthermore, the study found that most institutions’ physical facilities meet the required quality standards, evidenced by a mean of 4.08 and a standard deviation of 0.717. This again indicates that most respondents agreed with the statement.

Concerning equipment, the findings showed that the majority of institutions are well-equipped with necessary tools (e.g., computers and projectors) that facilitate effective learning, with a mean of 4.02 and a standard deviation of 0.751. With a mean above 3.4 and a moderate standard deviation, the results suggest broad agreement among the respondents. Additionally, the study established that most institutions' equipment aligns with modern standards, supported by a mean of 4.01 and a standard deviation of 0.737. Based on the Likert scale, this again indicates that a majority of respondents agreed with the statement.

These findings suggest that tangible aspects such as qualified staff, adequate infrastructure, and modern equipment significantly contribute to student satisfaction in technical institutions. The findings are in concurrence with those of Muthengi and Kithae (2023), who found that physical and human resources directly impact student satisfaction and institutional reputation. Similarly, Omollo et al. (2022) highlighted that well-equipped learning environments enhance students’ educational experiences and outcomes.

Inferential Statistics

Inferential statistics enable researchers to draw conclusions and make generalizations about a population based on data collected from a sample. In line with this, the researcher employed correlation and regression analysis as suitable parametric statistical methods. Correlation analysis was conducted to assess the strength and direction of the relationship between the independent (predictor) variables and the dependent variable. Accordingly, the Pearson Product Moment Correlation was used to measure the degree of association. Regression analysis was then carried out to determine the statistical significance of the relationship between the independent variable (tangibles) and the dependent variable (customer satisfaction). The findings from the regression analysis were presented through regression model table, ANOVA table, and regression coefficients table. The study results are as shown in table 2, 3, 4 and 5 below.

Table 2: Pearson Product Moment Correlation between Tangibles and Customer Satisfaction

		Tangibles	Customer satisfaction
Tangibles	Pearson Correlation	1	0.546**
	Sig. (2-tailed)		0.000
	N	270	270
Customer satisfaction	Pearson Correlation	0.546**	1
	Sig. (2-tailed)	0.000	
	N	270	270

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

The bivariate correlation analysis was conducted to examine the linear relationship between Tangibles and Customer Satisfaction using Pearson's product-moment correlation coefficient. The results show a moderately strong, positive, and statistically significant correlation between the two variables ($r = 0.546$, $p < .001$, $N = 270$). This indicates that as the quality of tangibles such as physical facilities, equipment, and appearance of staff improves, customer satisfaction also tends to increase.

The significance value ($p = 0.000$) is less than the standard alpha level of 0.01, confirming that the relationship is statistically significant and not due to chance. This finding suggests that tangible elements of service delivery play a meaningful role in shaping how satisfied students are with the services provided by their institution.

Table 3: Regression Results for Tangibles and Customer Satisfaction

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.546[a]	0.298	0.295	3.14419

a. Predictors: (Constant), Tangibles

The model yielded an R value of 0.546, indicating a moderate positive correlation between tangibles and student satisfaction. The R Square (R^2) value is 0.298, which means that approximately 29.8% of the variation in customer (student) satisfaction can be explained by the tangible aspects of service delivery, such as physical facilities, equipment, and the staff. The remaining 70.2% of the variation is attributed to other factors not included in this model.

Table 4: Analysis of Variance between Tangibles and Customer Satisfaction

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1122.741	1	1122.741	113.570	0.000[b]
	Residual	2649.422	268	9.886		
	Total	3772.163	269			

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constant), Tangibles

The analysis of variance results assesses the statistical significance of the regression model examining the effect of tangibles on customer (student) satisfaction. The regression model shows a sum of squares value of 1122.741, with 1 degree of freedom, indicating the variation in student satisfaction explained by tangibles. The residual sum of squares is 2649.422, representing the unexplained variation. The model produced an F-value of 113.570 with a significance level (p-value) of 0.000, which is less than the conventional threshold of 0.05. This indicates that the regression model is statistically significant, and tangibles have a significant predictive influence on student satisfaction in technical training institutions. Therefore, the null hypothesis that tangibles have no effect on student satisfaction is rejected.

Table 5: Regression Coefficients for Tangibles and Customer Satisfaction

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.631	1.743		1.936	0.010
	Tangibles	0.756	0.071	0.546	10.657	0.000

a. Dependent Variable: Customer satisfaction

The relationship between tangibles and student satisfaction was modeled using the Ordinary Least Squares (OLS) method, represented by the linear equation:

OLS Model: $Y= \beta0 + \beta1X1 + \varepsilon$

Where:

Y= Student Satisfaction

X1= Tangibles

β_0= constant

β1= Slope

ε = Error term

From the results in Table 5, the estimated regression model is: $Y=1.631 + 0.756X1 + \varepsilon$ This means that a one-unit increase in the tangibles score leads to a 0.756-unit increase in student satisfaction, assuming other factors remain constant. The model is statistically significant ($p < 0.05$), indicating that tangibles are a key predictor of student satisfaction in technical training institutions.

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

The study established that tangibles, as a dimension of service quality, have a significant and positive influence on student satisfaction among technical training institutions in Meru County. The correlation and regression results revealed that improvements in tangible elements such as physical facilities, adequacy of equipment, and staff appearance lead to higher levels of satisfaction among students. These findings support the propositions of the Expectancy Disconfirmation Theory (Oliver, 1980), which explains that satisfaction occurs when the actual performance of a service meets or surpasses prior expectations. In this study, students formed expectations about the quality and modernity of facilities, classrooms, laboratories, and learning tools before joining their institutions. When these expectations were fulfilled or exceeded such as through clean, modern, and well-equipped environments, students experienced positive disconfirmation, leading to greater satisfaction. Conversely, when facilities were outdated, overcrowded, or poorly maintained, students reported dissatisfaction, indicating negative disconfirmation.

The results also align with previous studies that emphasize the importance of physical facilities and appearance as visible indicators of quality in educational settings. Theresia and Bangun (2017) found that tangible factors such as classroom design, staff grooming, and general cleanliness directly enhance student satisfaction. Similarly, Panda and Das (2014) observed that the availability of modern teaching aids and infrastructure improves perceptions of institutional quality. In the Kenyan context, Mwangi and Karanja (2015) highlighted that

inadequate workshops, obsolete machinery, and congested classrooms undermine the quality of technical education. Consistent with these findings, this study reinforces that tangible aspects are not merely decorative but functional components that determine the effectiveness of learning and the credibility of technical institutions. The appearance and professionalism of trainers also contribute to the perception of quality, as students view staff as reflections of institutional standards. Hence, tangibles serve as both physical and psychological indications through which students evaluate the institution's commitment to excellence.

Based on these findings, the study concludes that tangible elements remain a fundamental determinant of satisfaction within technical training institutions. Students interpret physical infrastructure, equipment, and staff presentation as concrete evidence of institutional quality. Therefore, when tangible resources are adequate, modern, and well-maintained, students perceive higher value in their educational experience, leading to improved satisfaction and loyalty. The findings confirm the assumptions of the Expectancy Disconfirmation Theory that satisfaction is shaped by the comparison between expected and actual service performance. Thus, enhancing tangible quality not only improves the overall learning environment but also strengthens the reputation and competitiveness of technical institutions in the education sector.

In light of these conclusions, the study recommends that technical training institutions should prioritize continuous improvement of their physical infrastructure by modernizing classrooms, workshops, and laboratories to meet industrial standards. Regular maintenance should be emphasized to ensure that facilities remain safe, clean, and conducive for learning. Additionally, institutions should invest in the acquisition of up-to-date tools, machinery, and ICT resources to align training with evolving technological needs. Staff appearance and professionalism should also be maintained through clear institutional guidelines and continuous professional development programs. Furthermore, policymakers should provide targeted funding and establish clear quality benchmarks to guide infrastructural development within TVET institutions. Finally, regular student feedback on the condition of physical facilities and learning resources should be integrated into institutional planning to ensure that improvements align with learner expectations and industry demands.

SCOPE FOR FURTHER STUDIES

While this study examined the influence of service quality dimensions on customer satisfaction among students of technical training institutions in Meru County, future research can broaden its focus in several ways. First, subsequent studies could adopt a longitudinal design to assess how changes in institutional investments, infrastructure modernization, and quality

assurance policies influence student satisfaction over time. Second, researchers may employ qualitative or mixed-method approaches such as interviews or focus group discussions to capture deeper insights into students' lived experiences that quantitative surveys may overlook. Third, future studies could explore the moderating or mediating effects of variables such as institutional culture, leadership style, digital transformation, or government funding on the relationship between service quality and satisfaction.

REFERENCES

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th Ed.). Pearson Education.

Mugenda, O., & Mugenda, A. (2008). *Research Methods: Qualitative and Quantitative Approaches.* Nairobi: Africa Centre for Technology Studies.

Muthengi, D., & Kithae, P. (2023). Influence of Service Quality on Student Satisfaction in Public Technical Training Institutions in Kenya. *International Journal of Education and Research,* 11(2), 45–58. https://www.ijern.com/?utm_source=chatgpt.com

Mwangi, M., & Karanja, P. (2015). *Service quality in technical and vocational education: Challenges and opportunities in Kenya.* Ministry of Education, Nairobi.

Ngambi, H. (2011). The relationship between service quality and student satisfaction in higher education institutions. *African Journal of Education Management, 4*(1), 33–47.

Njuguna, J. M. (2017). *Relationship between quality of student support services and students' satisfaction in public primary teacher training colleges in Kenya* (Doctoral dissertation).

Oketch, M. (2016). Financing technical and vocational education and training (TVET) in sub-Saharan Africa: Current status and prospsects. *International Journal of Educational Development, 49*, 1–12. https://doi.org/10.1016/j.ijedudev.2011.03.005

Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*(4), 460–469.

Oliver, R. L. (1997). Satisfaction: A behavioral perspective on the consumer. McGraw-Hill.

Omollo, L. A., Wanjala, G., & Kiplagat, J. (2022). Relationship between Learning Facilities and Student Satisfaction in Kenyan TVET Institutions. *African Journal of Education and Practice,* 8(1), 33–47.

Ong'injo, J. A., Komen, P. K., & Omondi, E. (2025). Impact of Performance Management on Resource Utilization and Improved Results in Kenyan TVET Institutions. *Journal of the Kenya National Commission for UNESCO*.

Panda, T., & Das, S. (2014). Service quality and customer satisfaction in the education sector. *Journal of Educational Research, 4*(3), 215–225.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40.

Republic of Kenya. (2019). *Kenya Vision 2030: Third Medium-Term Plan 2018–2022.* Government Printer.

Theresia, T., & Bangun, R. (2017). Impact of tangible and intangible service quality on student satisfaction. *International Journal of Higher Education Studies, 6*(4), 55–63.

UNESCO. (2025). *Transforming Learning and Skills Development in Africa: Second Continental Report*. UNESCO.

World Bank. (2022). *World development report 2022: Education and training for a changing world.* World Bank Publications.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2020). *Services marketing: Integrating customer focus across the firm* (8th ed.). McGraw-Hill Education.