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Exploring students' perceptions of key service attributes in vocational education

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ABSTRACT

Background: In an increasingly competitive educational landscape, understanding students' perceptions of service attributes has become essential. Educational institutions are not only expected to deliver academic knowledge but also to provide high-quality services that meet students' expectations. Methods: This research employed a descriptive approach using questionnaires for data collection. The sampling technique used was purposive sampling with a total of 82 student respondents. The study was conducted at one of the vocational schools in West Lombok. Data were analyzed using frequency distribution analysis. Findings: The findings show that although the majority of educational service attributes were rated as good (e.g., teacher adequacy 57.3%, laboratory equipment 50%, computer facilities 42.7%), toilet facilities (rated not good or very bad by 23.2% of students) and education costs (perceived as expensive or very expensive by 37.8%) received the lowest satisfaction scores, highlighting critical service gaps that vary by gender and require targeted design improvements. Conclusion: The analysis results show that most educational service attributes such as teacher competence, number of educators, syllabus availability, learning facilities, and school infrastructure are rated as good. However, two attributes, namely toilet facilities and education costs, were perceived as less satisfactory by students. Novelty/Originality of this article: This study provides empirical contributions by identifying the educational service attributes that most influence student perceptions at the vocational high school level. The focus on evaluating toilet facilities and the cost structure of education offers concrete directions for improving service quality management.

KEYWORDS: attributes of educational services; student's perceptions.

1. Introduction

According to the National Education System Law/Sistem Pendidikan Nasional (SISDIKNAS) No. 20 of 2003, national education in Indonesia is based on Pancasila and the 1945 Constitution, grounded in religious values and national culture, and is responsive to

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the changing times. The goal of national education is to develop individual potential and shape the character and civilization of an excellent nation in order to improve the quality of life for all citizens (Abdullah & Umawaitina, 2019). One of the government's efforts to achieve this goal is through the establishment of various educational institutions, ranging from the lowest level, Kindergarten/*Taman Kanak-kanak* (TK), to the highest level, Higher Education/*Perguruan Tinggi* (PT) (Amelia & Fadila, 2024). Educational institutions are organizations that provide educational services aimed at developing capabilities and shaping the character and civilization of a superior nation. As stated by Arini (2022), a service is any act or performance offered by one party to another, which is essentially intangible and does not result in ownership. Educational services are actions performed by educational institutions to serve students or learners enrolled in the institution (Arini, 2022).

One type of secondary education institution is the Vocational High School/Sekolah Menengah Kejuruan (SMK). According to Ariadi (2005), Vocational High Schools are secondary education institutions that emphasize preparing graduates to be ready to enter the workforce. Furthermore, according to Djojonegoro (1999) in Ariadi (2005), vocational education is defined as a part of the education system that prepares individuals to be more capable of working in a group of jobs or a particular field of work compared to other fields. This implies that every field of study is considered vocational education as long as the field is studied (Azmiati, 2012). Therefore, SMKs are required to offer programs that align with the needs and interests of the students so that they can obtain what they desire. This is in line with marketing theory by Bacon et al. (2021), who defines marketing as a social and managerial process through which individuals and groups satisfy their needs and wants by creating and exchanging products and values with others (Bacon et al., 2021).

This also needs to be implemented by one of the vocational high schools in West Lombok Regency, namely the State Vocational High School (SMKN) 1 Kuripan, West Lombok. SMKN 1 Kuripan is the first vocational high school established in the Kuripan District of West Lombok. The school began operating in the 1998/1999 academic year and offers several majors that prospective students can choose from, including: Agribusiness of Food Crops and Horticulture (ATPH); Poultry Agribusiness; Animal Health Care; Agricultural Product Processing Technology (TPHP); Motorcycle Engineering; and Computer and Network Engineering. With the variety of majors offered, SMKN 1 Kuripan should ideally attract many applicants. However, in reality, from the time it began operations until now, it has remained one of the less popular schools among prospective students. This can be seen from the number of students who apply and are accepted to the school. The following is data on new student admissions, from the 2007/2008 to the 2012/2013 academic years.

These attributes include, Teachers' Mastery of Subject Matter; Adequate Number of Teachers; Adequate Number of Staff; Subject Matter Syllabus; Classroom Equipment; Office Equipment; Reading Materials; Laboratory Equipment; Parking Area; Toilets; Classroom Buildings; Office Buildings; Library Buildings; Laboratory Buildings; Welfare Facilities; Cleanliness and Harmony of the School Environment; Security Facilities and Safety Procedures; Quality and Quantity of Computers; and Education Costs (Bahiyyah & Wibowo, 2019). To improve the design of its educational services, the school needs to pay attention to these educational service attributes (Dajan, 1972). However, in order to enhance these attributes, the school must first assess the current condition of its educational service attributes so that, based on the information gathered, it can identify which attributes need improvement (Engel, 1994). The researcher is interested in studying students' perceptions of educational service attributes. It is hoped that the results of this study can serve as a reference for the school in developing or improving its educational service design.

In examining students' perceptions of educational services in vocational schools, including SMKN 1 Kuripan, the SERVQUAL approach can be used as a framework to evaluate service quality based on five main dimensions: tangibles, reliability, responsiveness, assurance, and empathy. This model is relevant for identifying gaps between students' expectations and their perceptions of the educational services they receive, in line with

student satisfaction studies that emphasize the importance of a learning experience that supports job readiness (Engel, 1995). In addition, the implementation of the eight National Education Standards as stipulated in the Ministry of Education and Culture Regulation Number 28 of 2016 serves as a normative reference to ensure the quality of education services at the school level, covering aspects such as process standards, facilities and infrastructure, educators, and graduates. By integrating the SERVQUAL model, student satisfaction studies, and the SNP, the analysis of educational service attributes can be conducted comprehensively to identify strategic areas for improvement, enhance student satisfaction, and strengthen the competitiveness of SMKN 1 Kuripan amid the low public interest in vocational schools.

Students' perceptions of educational services in vocational schools play a crucial role, especially considering that the primary goal of vocational education is to prepare graduates who are ready to enter the workforce and possess competencies aligned with industry demands (Fadhilaturrahmi et al., 2021). These perceptions reflect students' direct experiences with the quality of services provided by the school, encompassing aspects such as teaching quality, the availability of facilities and infrastructure, and sufficient administrative support. In the context of Vocational High Schools, the success of educational services is not solely measured by academic performance, but also by the school's ability to foster a learning environment that supports technical skills, discipline, and job readiness (Firjanah et al., 2024). Therefore, listening to and understanding students' perceptions is essential as a foundation for evaluating and enhancing the quality of educational services.

According to the Ministry of Education and Culture Regulation (Permendikbud) Number 28 of 2016 concerning the Quality Assurance System for Primary and Secondary Education, the standards for educational quality include eight National Education Standards (SNP) that must be fulfilled by educational institutions. These include content standards, process standards, graduate competency standards, standards for educators and education personnel, facilities and infrastructure, management, financing, and educational assessment (Ghozali, 2005). All of these standards must be fully implemented to ensure the educational process runs optimally and the goals of national education are achieved. If the educational services provided do not align with students' expectations and needs, it can result in low learning motivation, decreased student satisfaction, and reduced public trust in the institution (Gloriano & Nugraha, 2022). Hence, assessing students' perceptions serves as a highly relevant and strategic evaluation tool in the development of vocational schools in particular (Hakim et al., 2021).

The quality of educational services in vocational schools plays a crucial role, as it directly influences the readiness of graduates to enter the increasingly competitive job market (Hardiansyah, 2019). Vocational High Schools function not only as educational institutions but also as centers for producing skilled workers in accordance with industry demands (Herrera et al., 2018). Therefore, every aspect of educational services such as teacher competence, the adequacy of practical training facilities, and the availability of supporting infrastructure must be consistently maintained and improved to produce highquality graduates (Hutagaol, 2009). In West Lombok Regency, particularly, there remains a gap between the number of majors offered and the interest and number of applicants each year. Although the school offers various majors relevant to local needs such as agriculture, animal husbandry, engineering, and information technology the low number of applicants indicates a challenge related to public perception of the quality of educational services provided (Kaleb et al., 2019). This study aims to explore students' perceptions of the available educational service attributes, in order to identify areas that require improvement. The findings of this research are expected to serve as a basis for designing strategies to enhance the quality of educational services and to address the issue of low public interest in vocational schools in the region.

2. Methods

2.1 Types of research

In descriptive research aimed at illustrating students' perceptions of educational service attributes, the development of the research instrument becomes a crucial stage. The instrument, usually in the form of a questionnaire or survey, must be designed with careful attention to validity and reliability to ensure that the data collected truly reflect the respondents' perceptions. The questions in the instrument should be developed based on the dimensions of educational services, such as tangibles, reliability, responsiveness, assurance, and empathy, following the SERVQUAL framework. This process typically begins with a literature review and expert discussions to ensure that each indicator is contextually appropriate and easily understood by students.

After the instrument is developed, it is necessary to conduct validity and reliability testing. Validity testing aims to ensure that each item in the questionnaire accurately measures what it is intended to measure (Kotler, 1994). This can be done through content validity by consulting experts (expert judgment), or through empirical validity using itemtotal correlation analysis. Meanwhile, reliability testing is conducted to determine the consistency of the instrument when used under similar conditions. Reliability is often measured using Cronbach's Alpha coefficient, where a value above 0.7 is generally considered acceptable. These tests are essential to ensure the quality of the data that will be analyzed further.

In the context of data analysis, a frequency-based approach is commonly used in descriptive research because it provides a simple yet informative overview of students' perceptions (Kotler, 1997). Frequency analysis helps identify the distribution of respondents' answers to each questionnaire item, such as how many students expressed being "very satisfied" or "dissatisfied" with a particular service. However, this approach has limitations, including its inability to show relationships between variables or explore the underlying factors behind the perceptions. Moreover, frequency results are static and only describe the conditions at the time the research was conducted, without allowing for causal or predictive conclusions. Therefore, although useful in the initial exploratory phase, frequency analysis should be complemented by other analytical approaches if the researcher aims to gain deeper insights.

2.2 Method of collecting data

In this study, the development of the questionnaire is a crucial stage for obtaining valid and relevant data from respondents, namely active students of SMKN 1 Kuripan. The questionnaire was developed based on the research objectives and the underlying theory, particularly regarding perceptions of educational services. The development process began with identifying the variables and indicators to be measured, followed by formulating question items that are appropriate to the context and easily understood by students. Each question item was designed using a Likert scale format, for example, five points ranging from "strongly disagree" to "strongly agree," to capture the nuances of students' attitudes and perceptions in a more detailed and structured manner (Kotler et al., 2003).

The questionnaire items are grouped according to relevant dimensions of educational services. For instance, if the SERVQUAL approach is used, the items can be divided into five main categories: tangibles (facilities and infrastructure), reliability (service dependability), responsiveness (teachers' and staff's responsiveness), assurance (students' sense of security and confidence in the services), and empathy (school's care and concern for students) (Kotler, 2005). This categorization facilitates the analysis of which aspects of educational services are well-perceived and which still need improvement. Each dimension includes several items specifically and consistently designed to measure students' perceptions of that aspect.

Table 1. Data on t	he number	of students 20	12/2013	academic v	ear
Table 1. Data off th	ne number	or students 20	14/4013	acaucillic v	cai

		, ,
No	Class	Amount
1.	10	144
2.	11	139
3.	12	161
4.	Total	444

The results of our research are listed in Table 1, the reliability of the questionnaire must be assessed to ensure that the instrument is consistent and trustworthy in measuring the intended variables. One commonly used technique is reliability testing using Cronbach's Alpha method. The resulting Cronbach's Alpha value ranges from 0 to 1, and generally, a value above 0.70 is considered adequate to indicate good internal consistency among the items in the questionnaire. Additionally, validity testing should also be conducted, including both content validity and construct validity, to ensure that each item truly measures what it is intended to measure. The developed questionnaire will yield valid and accurate data as a foundation for drawing conclusions in the research.

2.3 Determination of respondents

In this study, the development of the instrument is a crucial stage to ensure that the data collected is relevant and valid according to the research objectives (Kotler, 2005). The instrument used in this case, a questionnaire is constructed based on indicators that reflect the variables under investigation, namely students' perceptions of educational services. Each question item is designed to be easily understood by respondents and capable of objectively revealing data. The instrument must also undergo validity and reliability testing to ensure that the questions truly measure what they are intended to measure and yield consistent results when used repeatedly under the same conditions.

$$n = \frac{N}{N(e)^2 + 1}$$
 (Eq. 1)

Once the instrument is developed, a quality check of the collected data is conducted. This stage includes content validity testing by experts (expert judgment), a pilot test of the instrument on a small group of students to assess response clarity and comprehension, and statistical analysis of the pilot test results, such as item-total correlation and reliability coefficient (e.g., Cronbach's Alpha). The results of these tests are used to revise or eliminate items that do not meet the criteria for validity and reliability. The final instrument used in the study is expected to provide accurate data for analysis.

$$n = \frac{N}{N(e)^{2}+1}$$

$$n = \frac{444}{444(0.1)^{2}+1}$$

$$n = \frac{444}{5.44}$$

$$n = 82 \text{ person}$$
(Eq. 2)

However, the frequency-based data analysis used in this descriptive study has several limitations. Frequency analysis only provides a general overview of how often a particular response appears in the data, without exploring causal relationships between variables. In addition, this approach tends to be simple and lacks depth compared to inferential analysis. Therefore, although frequency analysis is very useful for illustrating general trends in students' perceptions, its results cannot be widely generalized or used to draw causal

conclusions without the support of more complex data and analytical methods (Kristianti, 2012).

2.4 Data collection techniques and tools

The development of a questionnaire is a systematic process aimed at producing a valid and reliable data collection instrument. The first step in developing a questionnaire is to clearly formulate the research objectives so that the questions constructed are truly relevant to the variables being studied. Next, the researcher identifies indicators for each variable based on theories or findings from previous studies, which then serve as the basis for formulating the question items. Once the question items are composed, the questionnaire needs to undergo validity and reliability testing to ensure that the instrument can accurately and consistently measure what it is intended to measure (Lestari & Kurnia, 2023).

The items in a questionnaire can be categorized into several types based on the form of the questions. Generally, there are two main categories: closed-ended and open-ended questions. Closed-ended questions are typically presented in the form of multiple-choice, Likert scale, or yes/no answers, which facilitate quantitative data analysis. On the other hand, open-ended questions allow respondents to freely express their opinions, experiences, or views, which is useful for gathering qualitative information (Lovelock & Wright, 2005). Additionally, questionnaire items can be classified according to measurement scales such as nominal, ordinal, interval, and ratio, depending on the characteristics of the desired data.

The reliability of a questionnaire is crucial to ensure the consistency of measurement results. One common method used to test reliability is Cronbach's Alpha, especially for questionnaires using Likert scales. An alpha value above 0.7 is generally considered adequate, indicating that the items in the questionnaire have good internal consistency. Other techniques such as test-retest or split-half reliability can also be used depending on the type of questionnaire and the research objectives. Reliability testing is essential after conducting a pilot test of the questionnaire with a small group of respondents (instrument trial) to determine the extent to which the instrument can be used in a broader research scale.

2.5 Data types and sources

In this study, the development of the questionnaire is a crucial stage aimed at systematically and relevantly collecting primary data (Lupiyoadi, 2001). The development process begins with clearly formulating the research objectives, followed by identifying the variables and indicators to be measured based on prior theories or literature reviews. Each indicator is then broken down into question items that represent the aspects being investigated. These question items are structured in a format that is easy for respondents to understand and relevant to the research context, ensuring the collection of valid data that accurately reflects the perceptions or actual conditions of the study subjects.

The questionnaire in this study consists of two categories of items: demographic items and substantive items. Demographic items include basic respondent information such as age, gender, educational background, and so on, which are useful for descriptive analysis and data segmentation (Malius & Dani, 2021). Meanwhile, the substantive items are designed to explore key information related to the research variables, such as perceptions, attitudes, or satisfaction levels with a particular service or program. These items typically use a Likert scale (e.g., a 1-5 scale) to allow for more accurate and quantitative measurement of respondents' perceptions or evaluations.

The reliability of the questionnaire is also a crucial aspect that must be considered to ensure that the results obtained are trustworthy and consistent. To test reliability, statistical techniques such as Cronbach's Alpha are used, which indicate the extent to which the items in the questionnaire correlate with each other and measure the same construct. A

Cronbach's Alpha value above 0.70 is generally considered adequate, indicating that the questionnaire has a good level of internal consistency (Maryati, 2009). A well-structured and reliability-tested questionnaire will significantly contribute to the overall validity of the research results.

2.6 Operational identification and definition

2.6.1 Identification of educational service attributes

In accordance with the problem studied, namely related to the attributes of educational services, the attributes analyzed in this study are: Teacher Mastery of Subject Matter (X1); Adequacy of Number of Teachers (X2); Adequacy of Number of Employees (X3); Subject Matter Syllabus (X4); Classroom Equipment (X5); Office Equipment (X6); Library Materials (X7); Laboratory Equipment (X8); Parking Lot (X9); Toilet (X10); Classroom Building (X11); Office Building (X12); Library Building (X13); Laboratory Building (X14); Welfare Facilities (X15); Neatness and Harmony of School Environment (X16); Security Facilities and Safety Procedures (X17); Computer Quality and Quantity (X18); and Education Costs (X19).

2.6.2 Operational definition

Teacher Mastery of Subject Matter (X1) is reflected through students' responses regarding the teacher's understanding of the material delivered. This variable is measured using a nominal scale, where responses are weighted as follows: Very Poor = 1, Poor = 2, Neutral = 3, Good = 4, and Very Good = 5. Adequacy of the Number of Teachers (X2) is assessed based on students' perceptions of whether the number of teachers is sufficient. This variable also uses a nominal scale, with the following weights: Very Inadequate = 1, Inadequate = 2, Neutral = 3, Adequate = 4, and Very Adequate = 5. Adequacy of the Number of Staff (X3) refers to students' responses concerning the sufficiency of non-teaching staff. Like the other variables, it is measured using a nominal scale with the same weighting: Very Inadequate = 1, Inadequate = 2, Neutral = 3, Adequate = 4, and Very Adequate = 5.

Subject Matter Syllabus (X4) refers to students' perceptions of the syllabus used by teachers. This attribute is assessed using a nominal scale, where responses are weighted as follows, "very inadequate" = 1, "poor" = 2, "neutral" = 3, "good" = 4, and "very good" = 5. Classroom Equipment (X5) reflects students' assessments of the condition of classroom facilities. It is also measured on a nominal scale, with the following weightings, "very poor" = 1, "bad" = 2, "neutral" = 3, "good" = 4, and "very good" = 5. Office Equipment (X6) represents students' evaluations of the state of office equipment. This attribute uses the same nominal scale, "very poor" = 1, "bad" = 2, "neutral" = 3, "good" = 4, and "very good" = 5.

Library Materials (X7) are reflected in students' responses regarding the completeness of library materials available. This attribute is measured using a nominal scale, where a response of Very Incomplete is assigned a weight of 1, Incomplete a weight of 2, Neutral a weight of 3, Complete a weight of 4, and Very Complete a weight of 5. Laboratory Equipment (X8) is indicated by students' responses concerning the condition of laboratory equipment. This attribute is also measured using a nominal scale, where Very Poor responses are weighted at 1, Poor at 2, Neutral at 3, Good at 4, and Very Good at 5. Parking Lot (X9) reflects students' perceptions of the condition of the parking area. It is assessed using a nominal scale, with Very Poor responses given a weight of 1, Poor a weight of 2, Neutral a weight of 3, Good a weight of 4, and Very Good a weight of 5.

Toilet (X10) represents student responses regarding the condition of the toilets. This attribute is assessed using a nominal scale, where responses are weighted as follows: Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5. Classroom Building (X11) reflects student feedback on the condition of the classroom facilities. It is evaluated using the same nominal scale, Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5. Office Building (X12) captures student opinions about the condition of the office building. This attribute is

also measured using the nominal scale: Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5.

The Library Building (X13) reflects student responses regarding the condition of the library. This attribute is assessed using a nominal scale, where responses are weighted as follows, Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5. The Laboratory Building (X14) represents student evaluations of the condition of the laboratory building. Like the previous attribute, this is measured using a nominal scale with the following weights: Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5. The Welfare Facilities (X15) refer to student responses concerning the condition of welfare facilities. This attribute is also measured on a nominal scale, using the same weight assignments, Very Bad = 1, Bad = 2, Neutral = 3, Good = 4, and Very Good = 5.

The Neatness and Harmony of the School Environment (X16) is reflected in students' responses regarding the cleanliness and harmony of the school environment. This attribute is measured using a nominal scale, a response of Very Bad is assigned a weight of 1, Bad is given a weight of 2, Neutral is assigned a weight of 3, Good is given a weight of 4, and Very Good is given a weight of 5. Security Facilities and Safety Procedures (X17) are shown by students' responses to the security facilities and safety procedures. This attribute is also measured using a nominal scale: Very Not Guaranteed responses are given a weight of 1, Not Guaranteed responses are assigned a weight of 2, Neutral responses are given a weight of 3, Guaranteed responses are assigned a weight of 4, and Very Guaranteed responses are given a weight of 5. Computer Quality and Quantity (X18) is shown by students' responses to the quality and quantity of computers. This attribute is measured using a nominal scale: Very Not Good responses are assigned a weight of 1, Bad responses are given a weight of 2, Neutral responses are given a weight of 3, Good responses are assigned a weight of 4, and Very Good responses are given a weight of 5. Education Costs (X19) refer to the amount of money paid by students to educational institutions. This attribute is reflected in students' responses regarding education costs, measured using a nominal scale, very not expensive responses are given a weight of 1, not expensive responses are assigned a weight of 2, neutral responses are given a weight of 3, expensive responses are assigned a weight of 4, and very expensive responses are given a weight of 5.

2.7 Data analysis procedures

2.7.1 Validity test and reliability test

To assess whether a questionnaire is valid, a validity test is required. This test is meant to determine the extent to which the data in the questionnaire accurately reflects students' perceptions of educational service attributes. The validity test is performed by calculating the product-moment correlation coefficient. An interpretation of the correlation coefficient is then made, where items with a positive correlation to the total score and a high correlation are considered to have high validity. For an item to be considered valid, the correlation must be at least 0.3. If the correlation between an item and the total score is below 0.3, the item is deemed invalid. The product-moment correlation is used for this purpose (Sugiyono, 2005). Reliability refers to the ability of a research instrument to consistently collect data from a group of individuals (Nawawi, 1996 in Mort et al., 2020). It indicates the degree to which a questionnaire can be trusted or relied upon. Reliability can be tested using the Cronbach's Alpha (α) statistical test, and a construct or variable is considered reliable if it produces a Cronbach's Alpha value greater than 0.60 (Munoz & Gonz'alez, 2017).

2.7.2 Frequency distribution analysis

A summary data table displaying the frequency or number of items/objects in each existing class aims to provide deeper insights into the data that cannot be easily derived by simply examining the original dataset. Frequency distribution analysis seeks to determine

the frequency of each attribute based on respondents' answers and then calculate the percentage of each alternative response. From these percentages, conclusions can be drawn for each attribute studied. According to Nazir (1988), the stages of frequency distribution involve determining the number of classes for inputting data, categorizing data into the appropriate classes, calculating the frequencies, creating a frequency distribution table, and presenting a frequency graph. This study will begin by identifying the frequency of each alternative response, calculating the percentage of each, creating a frequency graph using a histogram, and finally drawing conclusions based on the frequency table and graph.

3. Result and Discussion

3.1 Marketing services

In the context of analyzing educational services, it is important to delve deeper into which service aspects received the lowest satisfaction scores from students' perspectives. Based on previous findings, the two most prominent attributes with low satisfaction levels are toilet facilities and the cost of education. These two aspects fall under the category of tangible elements in service delivery, which, according to Kotler, play a crucial role in shaping customer perceptions of overall service quality. Inadequate toilet facilities directly affect students' daily comfort and health, while education costs perceived as disproportionate to the benefits received contribute to negative perceptions regarding the value of the educational services offered (Prananda et al., 2019). This indicates that both physical and economic aspects of educational services require serious attention in strategies aimed at improving service quality.

Additionally, it is worth considering whether there are differences in perception between male and female students regarding the services provided by the school (Permadi, 2011). In many customer satisfaction studies, gender differences can influence how individuals interpret and evaluate service experiences. For instance, female students may exhibit higher sensitivity to aspects such as cleanliness and comfort of facilities like toilets, leading them to give more critical assessments of those attributes. On the other hand, male students may be more tolerant of physical shortcomings but more sensitive to issues like educational costs or the availability of vocational practice equipment. Therefore, mapping perceptions based on gender can help the school develop service approaches that are more responsive and targeted, thereby enhancing overall satisfaction for all students.

3.2 Service design

In efforts to improve service quality, an important initial step is to rank the service components that are least satisfying based on student satisfaction surveys or evaluations. By identifying the service attributes with the lowest scores, such as toilet facilities and education costs, the school can prioritize improvements that have a significant impact on the student experience (Putra et al., 2023). This approach aligns with the service design principles of Rana et al. (2023), which emphasize managing elements such as customer contact, facility design, and procedures to make services more effective and efficient. By focusing on the less satisfying attributes, the school not only enhances service quality but also provides a strong marketing stimulus to attract prospective students.

Furthermore, it is crucial to conduct cross-analysis of perceptions based on demographic variables such as gender and grade level (Rumengan et al., 2021). These perception differences can offer deeper insights into the diverse needs and expectations among different student groups. For example, female students may be more critical of cleanliness and comfort aspects of facilities, while male students tend to focus more on technical aspects such as vocational practice equipment. Similarly, senior students (grade XII) may emphasize educational readiness for the workforce more than lower-grade students. By understanding these variations, the school can implement appropriate service design approaches, such as personal service to enhance direct interaction or customer

participation to involve students in the service improvement process. Such tailored approaches will increase overall student satisfaction and loyalty.

3.3 Factors that influence the design of service facilities

In designing service facilities, various factors must be considered to create an environment that supports the effectiveness and comfort of service delivery. Fizsimmons (1994) in Ruiz-Cort'es & Alcantara-Ayala (2020) emphasized that the nature and objectives of an organization influence the facility requirements, while good facility design can offer benefits such as ease of recognition and a positive image of the service through its exterior design (Sawiji, 2011). Other important elements include land availability, space demand, flexibility, and aesthetics. An attractive and well-organized facility enhances customers' positive perception of the service (Shah et al., 2020). Furthermore, the surrounding community, construction and operational costs, and the layout of the space (including lighting, color, and graphic messaging) also determine the effectiveness of the facility (Sheffield et al., 2017). Helmi (2010) in Sasono (2003) also stated that service marketing is strongly influenced by service design, which includes factors such as facility location, layout, job design, customer participation, equipment selection, and work capacity.

However, it is also important to consider more nuanced insights from service evaluation results, such as which aspects of the service receive the lowest satisfaction scores (Velazquez-Espinoza & Alc'antara-Ayala, 2023). For instance, supporting facilities such as waiting areas or sanitation facilities often receive lower satisfaction ratings compared to core services, especially when their design does not adequately consider user comfort and needs. In addition, perceptions of service facilities may differ between men and women. Women may be more sensitive to aspects such as cleanliness, privacy, or room aesthetics, while men tend to focus more on efficiency and accessibility. These perceptual differences indicate the need for a gender-responsive design approach that takes into account the diverse preferences of user groups in order to achieve truly optimal and inclusive service quality (Vel'asquez-Espinoza & Alcantara-Ayala, 2024).

3.4 Frequency distribution analysis

The results of our research are listed in Table 2, validity and reliability tests were conducted on all questionnaire instruments using the SPSS program. The validity test results showed that all question items were valid, as seen in Appendix 4, because the total item correlation was positive and greater than 0.3. Meanwhile, the reliability test results indicated that all 19 service attributes had a Cronbach's alpha greater than 0.60, specifically 0.900. The following are the results of the reliability test, which were obtained using the SPSS program, as explained below:

Table 2. Reliability test results for all educational service attributes

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
0.900	0.901	19

Based on the results of the questionnaire distribution, the responses of respondents (students) regarding the attributes of educational services were obtained. The respondents' responses can be seen in the following frequency table and histogram diagram.

Table 3. Frequency of respondents' responses regarding teacher mastery attributes of subject matter (X1)

(A1)			
Valid	Frequency	Percent	_
Not Good	1	1.2	_
Neutral	11	13.4	
Good	41	50.0	
Very Good	29	35.4	
Total	82	100.0	

The results of our research are listed in Table 3, it can be seen that 50% of respondents stated that the teacher's mastery of the subject matter given to students was Good, 35.4% stated that it was very good and 13.4% stated that it was neutral. However, this attribute still needs to be improved because there were 1.2% of respondents who stated that it was not good. For more details, here is the frequency histogram of this attribute.

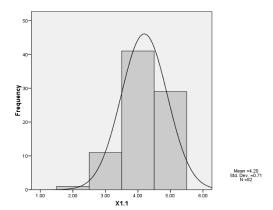


Fig 1. Frequency histogram of teacher mastery attributes of subject matter (X1)

The results of our research are listed in Fig 1, it can be seen that the highest position is a good answer with a frequency of 41 respondents and the second position is a very good answer with a frequency of 29 respondents. This shows that the teacher's mastery of the subject matter that will be given to students is included in the good category, and it can be said that the teachers on average master the material that will be delivered to students. So it can be concluded that this attribute is in good condition.

Table 4. Frequency of respondents' responses regarding the attribute of sufficient number of teachers (X2)

Valid	Frequency	Percent	
Inadequate	3	3.7	
Neutral	15	18.3	
Adequate	47	57.3	
Very Adequate	17	20.7	
Total	82	100.0	

The results of our research are listed in Table 4, it can be seen that 57.3% of respondents stated that the attribute of the adequacy of the number of teachers was adequate, 20.7% stated that it was very adequate and 18.3% stated that it was neutral. However, this attribute still needs to be improved because 3.7% of respondents stated that it was inadequate. For more details, here is a frequency histogram of the student service attribute.

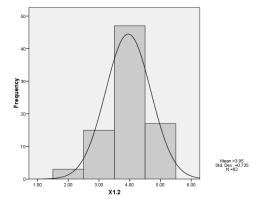


Fig 2. Frequency histogram of the attribute of the adequacy of the number of teachers (X2)

The results of our research are listed in Fig 2, it can be seen that the highest position is an adequate answer with a frequency of 47 respondents and the second position is a very adequate answer with a frequency of 17 respondents. This shows that the adequacy of the number of teachers is included in the adequate category. So it can be concluded that this attribute is in good condition.

Table 5. Frequency of respondents' responses regarding the attribute of sufficient number of employees (X3)

employees (No)			
Valid	Frequency	Percent	
Inadequate	2	2.4	_
Neutral	11	13.4	
Adequate	41	50.0	
Very Adequate	28	34.1	
Total	82	100.0	

The results of our research are listed in Table 5, it can be seen that 50% of respondents stated that the number of employees was adequate, 34.1% stated that it was very adequate and 13.4% stated that it was neutral. However, this attribute still needs to be improved because 2.4% of respondents stated that it was inadequate. For more details, here is the frequency histogram of the attribute.

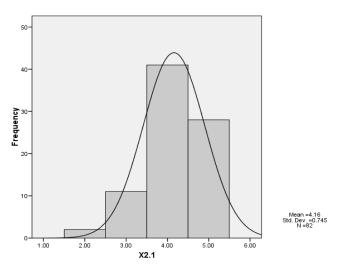


Fig 3. Frequency histogram of the attribute of sufficient number of employees (X3)

The results of our research are listed in Fig 3, it can be seen that the highest position is an adequate answer with a frequency of 41 respondents and the second position is a very adequate answer with a frequency of 28 respondents. This shows that the number of employees is included in the adequate category. So it can be concluded that this attribute is in good condition.

Table 6. Frequency of respondents' responses regarding the attributes of the subject matter syllabus (X4)

(111)			
Valid	Frequency	Percent	
Not Good	5	6.1	
Neutral	22	26.8	
Good	39	47.6	
Very Good	16	19.5	
Total	82	100.0	

The results of our research are listed in Table 6, it can be seen that 47.6% of respondents stated that the syllabus of the subject matter used by teachers was good, 26.8% stated neutral and 19.5% stated very good. However, this attribute still needs to be

improved because 6.1% of respondents stated it was not good. For more details, here is the frequency histogram of the attribute.

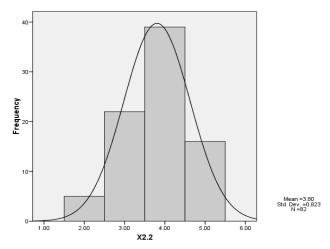


Fig 4. Frequency histogram of subject matter syllabus attributes (X4)

The results of our research are listed in Fig 4, it can be seen that the highest position is a good answer with a frequency of 39 respondents, a neutral answer with a frequency of 22 respondents, and a very good answer with a frequency of 16 respondents. This shows that the syllabus of the subject matter used by teachers is included in the good category. So it can be concluded that this attribute is in good condition.

Table 7. Frequency of respondents' responses regarding classroom equipment attributes (X5)

		(110)
Valid	Frequency	Percent
Not Good	8	9.8
Neutral	28	34.1
Good	30	36.6
Very Good	16	19.5
Total	82	100.0

The results of our research are listed in Table 7, it can be seen that 36.6% of respondents stated that the classroom equipment was good, 34.1% stated neutral and 19.5% stated very good. However, this attribute still needs to be improved because 9.8% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

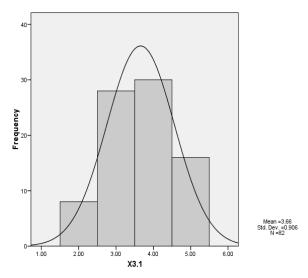


Fig 5. Frequency histogram of classroom equipment attributes (X5)

The results of our research are listed in Fig 5, it can be seen that the highest position is a good answer with a frequency of 30 respondents, a neutral answer with a frequency of 28 respondents, and a very good answer with a frequency of 16 respondents. This shows that the classroom equipment is included in the good category. So it can be concluded that this attribute is in good condition.

Table 9. Frequency of respondents' responses regarding office space equipment attributes (X6)

Valid	Frequency	Percent	
Not Good	3	3.7	
Neutral	23	28.0	
Good	41	50.0	
Very Good	15	18.3	
Total	82	100.0	

The results of our research are listed in Table 9, it can be seen that 50% of respondents stated that the office space equipment was good, 28% stated neutral and 18.3% stated very good. However, this attribute still needs to be improved because 3.7% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

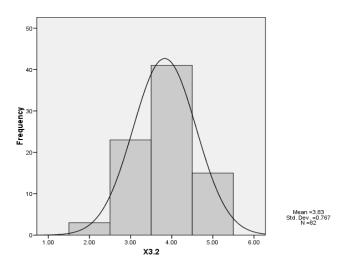


Fig 6. Frequency histogram of office space equipment attributes (X6)

The results of our research are listed in Fig 6, it can be seen that the highest position is a good answer with a frequency of 41 respondents, a neutral answer with a frequency of 23 respondents, and a very good answer with a frequency of 15 respondents. This shows that the office space equipment is included in the good category. So it can be concluded that this attribute is in good condition.

Table 10. Frequency of respondents' responses regarding library material attributes (X7)

Valid	Frequency	Percent
Very Incomplete	2	2.4
Incomplete	2	2.4
Neutral	27	32.9
Complete	34	41.5
Very Complete	17	20.7
Total	82	100.0

The results of our research are listed in Table 10, it can be seen that 41.5% of respondents stated that the library materials available are complete, 32.9% stated neutral and 20.7% stated very complete. However, this attribute still needs to be improved because there are respondents who stated incomplete and very incomplete with the same percentage, namely 2.4%. For more details, here is the frequency histogram of this attribute.

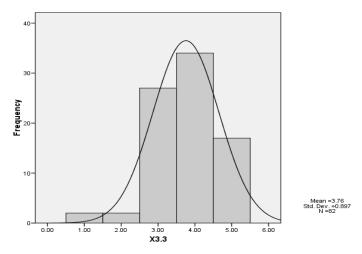


Fig 7. Frequency histogram of library material attributes (X7)

The results of our research are listed in Fig 7, it can be seen that the highest position is a complete answer with a frequency of 34 respondents, a neutral answer with a frequency of 27 respondents, and a very complete answer with a frequency of 17 respondents. This shows that the library materials available are included in the good category. So it can be concluded that this attribute is in good condition.

Table 11. Frequency of respondents' responses regarding laboratory equipment attributes (X8)

Valid	Frequency	Percent	
Not Good	2	2.4	
Neutral	14	17.1	
Good	41	50.0	
Very Good	25	30.5	
Total	82	100.0	

The results of our research are listed in Table 11, it can be seen that 50% of respondents stated that the laboratory equipment was good, 30.5% stated that it was very good and 17.1% stated that it was neutral. However, this attribute still needs to be improved because 2.4% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

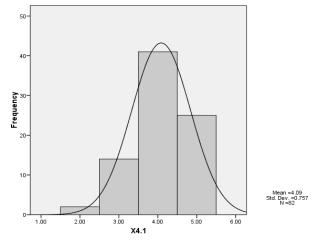


Fig 8. Frequency histogram of laboratory equipment attributes (X8)

The results of our research are listed in Fig 8, it can be seen that the highest position is a good answer with a frequency of 41 respondents and the second position is a very good

answer with a frequency of 25 respondents. This shows that the laboratory equipment is included in the good category. So it can be concluded that this attribute is in good condition.

Table 12. Frequency of respondents' responses regarding parking attributes (X9)

		8 F - 8 - 1 - 1 - 1 - 1 - 1
Valid	Frequency	Percent
Not Good	2	2.4
Neutral	12	14.6
Good	39	47.6
Very Good	29	35.4
Total	82	100.0

The results of our research are listed in Table 12, it can be seen that 47.6% of respondents stated that the parking lot was good, 35.4% stated that it was very good and 14.6% stated that it was neutral. However, this attribute still needs to be improved because 2.4% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

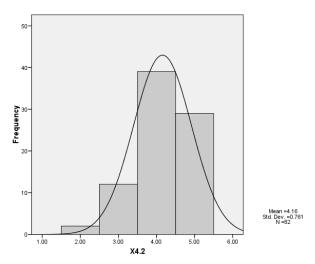


Fig 9. Frequency histogram of parking lot attributes (X9)

The results of our research are listed in Fig 9, it can be seen that the highest position is a good answer with a frequency of 39 respondents and the second position is a very good answer with a frequency of 29 respondents. This shows that the parking lot is included in the good category. So it can be concluded that this attribute is in good condition.

Table 13. Frequency of respondents' responses regarding toilet attributes (X10)

Valid	Frequency	Percent	
Very Bad	5	6.1	
Not Good	14	17.1	
Neutral	33	40.2	
Good	21	25.6	
Very Good	9	11.0	
Total	82	100.0	

The results of our research are listed in Table 13, it can be seen that 40.2% of respondents stated that the condition of the toilets was neutral and 25.6% stated that it was good. However, this attribute really needs to be improved because there were respondents who stated that it was not good, which was 17.1% and very bad with a percentage of 6.1%. For more details, here is the frequency histogram of this attribute.

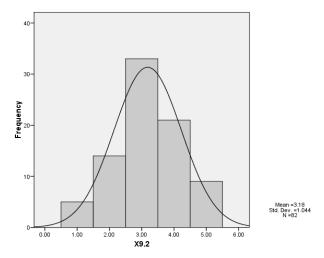


Fig 10. Frequency histogram of toilet attributes (X10)

The results of our research are listed in Fig 10, it can be seen that the highest position is a neutral answer with a frequency of 33 respondents and the second position is a good answer with a frequency of 21 respondents. This shows that the condition of the toilets is included in the fairly good category. So it can be concluded that this attribute is in fairly good condition.

Table 14. Frequency of respondents' responses regarding classroom building attributes (X11)

Valid	Frequency	Percent	
Not Good	5	6.1	
Neutral	13	15.9	
Good	42	51.2	
Very Good	22	26.8	
Total	82	100.0	

The results of our research are listed in Table 14, it can be seen that 51.2% of respondents stated that the condition of the classroom building was good, 26.8% stated that it was very good and 15.9% stated that it was neutral. However, this attribute still needs to be improved because 6.1% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

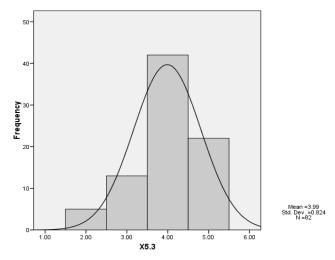


Fig 11. Frequency histogram of classroom building attributes (X11)

The results of our research are listed in Fig 11, it can be seen that the highest position is a good answer with a frequency of 42 respondents and the second position is a very good

answer with a frequency of 22 respondents. This shows that the condition of the classroom building is included in the good category. So it can be concluded that this attribute is in good condition.

Table 15. Frequency of respondents' responses regarding office building attributes (X12)

Valid	Frequency	Percent	
Not Good	1	1.2	
Neutral	11	13.4	
Good	52	63.4	
Very Good	18	22.0	
Total	82	100.0	

The results of our research are listed in Table 15, it can be seen that 63.4% of respondents stated that the condition of the office building was good, 22% stated that it was very good and 13.4% stated that it was neutral. However, this attribute still needs to be improved because 1.2% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

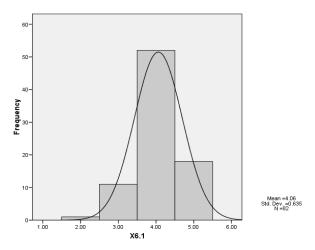


Fig 12. Frequency histogram of office building attributes (X12)

The results of our research are listed in Fig 12, it can be seen that the highest position is a good answer with a frequency of 52 respondents and the second position is a very good answer with a frequency of 18 respondents. This shows that the condition of the office building is included in the good category. So it can be concluded that this attribute is in good condition.

Table 16. Frequency of respondents' responses regarding library building attributes (X13)

Tuble 10. Frequency of respondents responses regarding library building detributes (N15)			
Valid	Frequency	Percent	
Very Bad	2	2.4	
Not Good	6	7.3	
Neutral	23	28.0	
Good	31	37.8	
Very Good	20	24.4	
Total	82	100.0	

The results of our research are listed in Table 16, it can be seen that 37.8% of respondents stated that the condition of the library building was good, 28% stated neutral and 24.4% stated very good. However, this attribute still needs to be improved because there were respondents who stated that it was not good, which was 7.3% and very bad with a percentage of 2.4%. For more details, here is the frequency histogram of this attribute.

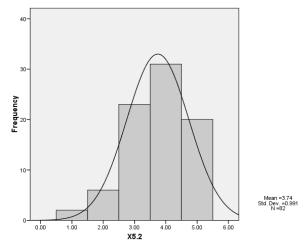


Fig 13. Frequency histogram of library building attributes (X13)

The results of our research are listed in Fig 13, it can be seen that the highest position is a good answer with a frequency of 31 respondents, a neutral answer with a frequency of 23 respondents, and a very good answer with a frequency of 20 respondents. This shows that the condition of the library building is included in the good category. So it can be concluded that this attribute is in good condition.

Table 17. Frequency of respondents' responses regarding laboratory building attributes (X14)

Valid	Frequency	Percent
Very Bad	2	2,4
Not Good	5	6.1
Neutral	25	30.5
Good	26	31.7
Very Good	24	29.3
Total	82	100.0

The results of our research are listed in Table 17, it can be seen that 31.7% of respondents stated that the condition of the laboratory building was good, 30.5% stated neutral and 29.3% stated very good. However, this attribute still needs to be improved because there were respondents who stated that it was not good, which was 6.1% and very bad with a percentage of 2.4%. For more details, here is the frequency histogram of this attribute.

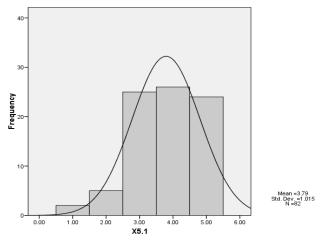


Fig 14. Frequency histogram of laboratory building attributes (X14)

The results of our research are listed in Fig 14, it can be seen that the position of the three alternative answers such as neutral, good and very good are almost parallel, but the highest is the good answer with a frequency of 26 respondents, the neutral answer with a frequency of 25 respondents, and the very good answer with a frequency of 24 respondents. This shows that the condition of the laboratory building is included in the good category. So it can be concluded that this attribute is in good condition.

Table 18. Frequency of respondents' responses regarding welfare facility attributes (X15)

Valid	Frequency	Percent	
Not Good	1	1.2	
Neutral	11	13.4	
Good	47	57.3	
Very Good	23	28.0	
Total	82	100.0	

The results of our research are listed in Table 18, it can be seen that 57.3% of respondents stated that the welfare facilities were good, 28% stated that they were very good and 13.4% stated that they were neutral. However, this attribute still needs to be improved because 1.2% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

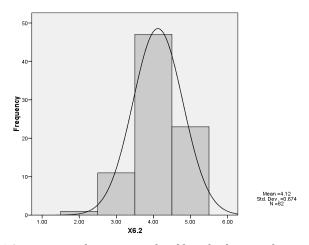


Fig 15. Frequency histogram of welfare facility attributes (X15)

The results of our research are listed in Fig 15, it can be seen that the highest position is a good answer with a frequency of 47 respondents and the second position is a very good answer with a frequency of 23 respondents. This shows that welfare facilities such as places of worship, health, sports and arts are included in the good category. So it can be concluded that this attribute is in good condition.

Table 19. Frequency of respondents' responses regarding the attributes of neatness and harmony of the school environment (X16)

Valid	Frequency	Percent	
Not Good	2	2.4	
Neutral	12	14.6	
Good	34	41.5	
Very Good	34	41.5	
Total	82	100.0	

The results of our research are listed in Table 19, it can be seen that 41.5% of respondents stated that the neatness and harmony of the school environment were very good, the same percentage also stated that it was good and 14.6% stated that it was neutral.

However, this attribute still needs to be improved because 2.4% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

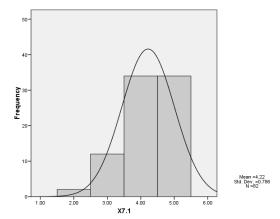


Fig 16. Frequency histogram of the attributes of neatness and harmony of the school environment (X16)

The results of our research are listed in Fig 16, it can be seen that the highest position is the very good answer and the good answer with the same frequency, namely 34 respondents. This shows that the neatness and harmony of the school environment are included in the good category. So it can be concluded that this attribute is in good condition.

Table 20. Frequency of respondents' responses regarding safety facility attributes and safety

procedures (X17)

procedures (X17)			
Valid	Frequency	Percent	
Not Guaranteed	5	6.1	_
Neutral	19	23.2	
Guaranteed	41	50.0	
Very Guaranteed	17	20.7	
Total	82	100.0	

The results of our research are listed in Table 20, it can be seen that 50% of respondents stated that the security facilities and safety procedures are guaranteed, 23.2% stated neutral and 20.7% stated very guaranteed. However, this attribute still needs to be improved because 6.1% of respondents stated that it was not guaranteed. For more details, here is the frequency histogram of this attribute.

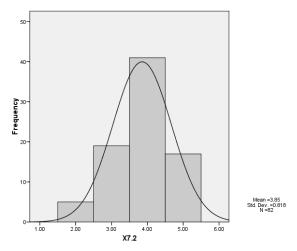


Fig 17. Frequency histogram of attributes of safety facilities and safety procedures (X17)

The results of our research are listed in Fig 17, it can be seen that the highest position is the guaranteed answer with a frequency of 41 respondents, the neutral answer with a frequency of 19 respondents, and the very guaranteed answer with a frequency of 17 respondents. This shows that the security facilities and safety procedures are included in the guaranteed category. So it can be concluded that this attribute is in good condition.

Table 21. Frequency of respondents' responses regarding computer quality and quantity attributes (X18)

(NIO)			
Valid	Frequency	Percent	
Not Good	2	2.4	
Neutral	15	18.3	
Good	35	42.7	
Very Good	30	36.6	
Total	82	100.0	

The results of our research are listed in Table 21, it can be seen that 42.7% of respondents stated that the quality and quantity of computers were good, 36.6% stated that they were very good and 18.3% stated that they were neutral. However, this attribute still needs to be improved because 2.4% of respondents stated that it was not good. For more details, here is the frequency histogram of this attribute.

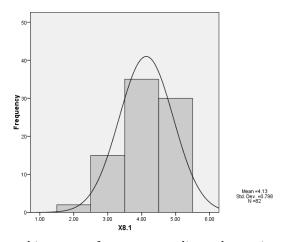


Fig 18. Frequency histogram of computer quality and quantity attributes (X18)

The results of our research are listed in Fig 18, it can be seen that the highest position is a good answer with a frequency of 35 respondents and the second position is a very good answer with a frequency of 30 respondents. This shows that the quality and quantity of computers are included in the good category. So it can be concluded that this attribute is in good condition.

Table 22. Frequency of respondents' responses regarding education cost attributes (X19)

Valid	Frequency	Percent
Very Inexpensive	4	4.9
Not Expensive	17	20.7
Neutral	30	36.6
Expensive	28	34.1
Very Expensive	3	3.7
Total	82	100.0

The results of our research are listed in Table 22, it can be seen that only 36.6% of respondents stated that the cost of education was neutral, 34.1% stated that it was expensive, 3.7% stated that it was very expensive, 20.7% stated that it was not expensive and 4.9% stated that it was very not expensive. Therefore, this attribute must be considered

by the school in making policies related to education costs. For more details, here is the frequency histogram of this attribute.

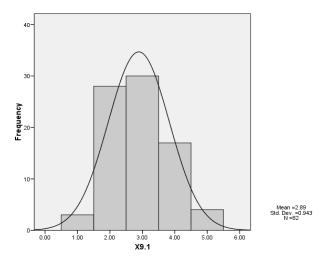


Fig 19. Frequency histogram of quality and cost of education attributes (X19)

The results of our research are listed in Fig 19, it can be seen that the highest position is a neutral answer with a frequency of 30 respondents and the second position is an expensive answer with a frequency of 28 respondents. This shows that the cost of education is included in the expensive category. For this reason, the school must find other alternatives to overcome the expensive cost of education.

3.6 Discussion

Based on the results of the frequency distribution analysis, in general, students' perceptions of the 17 educational service attributes, are considered good. This is reflected in the high scores for response options with a weight of 4 across all evaluated attributes, such as teacher mastery of subject matter, completeness of learning facilities, and the comfort of the school environment. These findings indicate that the school has made consistent efforts to meet educational service standards, both in terms of human resources and supporting physical facilities. Observations and interviews also confirm the alignment between student perceptions and actual conditions in the field, suggesting that the school has successfully built services that reflect student needs.

However, it is important to note that there are two attributes rated poorly by students: toilet facilities and the cost of education. The negative perception of the toilets is likely related to inadequate infrastructure conditions, whether in terms of cleanliness, the number of units available, or accessibility. Toilets are a basic facility essential for student comfort and health; if poorly maintained, they can create a negative impression of the entire school environment. Furthermore, neglect in this area can reduce public trust, particularly among prospective students and their parents, regarding the school's commitment to student welfare. This is in accordance with the opinion of Helmi (2010) in Parmadi (2011) who stated that:

"Physical evidence refers to the tangible aspects that help customers assess a service before they experience it. Since services are intangible, potential customers may struggle to evaluate them, increasing the perceived risk in making purchasing decisions. To reduce this risk, it is crucial in the marketing mix to provide physical evidence of the service's features. This evidence can take various forms, such as well-designed vacation brochures that include photos of the vacation destinations and accommodations."

Meanwhile, the negative perception of educational costs may be associated with the socioeconomic background of the majority of students. This research, likely serves students from lower-middle-income families, so even though the education fees may not be considered high by national standards, they can still be seen as burdensome by some. This highlights the importance of transparent financial management and providing assistance or subsidies for underprivileged students. The school also needs to improve communication regarding the benefits of the fees charged, so that students and parents can develop a more positive perception and better understand the value of investing in education.

The finding that toilet facilities and education costs are rated poorly by students, indicates a deeper issue beyond mere student perception or preference. In the context of toilet facilities, this may reflect broader structural problems related to planning, funding, and infrastructure management within the school. Toilets are often seen as a lower priority in development planning, as they are not perceived to directly affect academic quality. However, toilets are part of the tangible evidence in educational service delivery, significantly impacting student comfort and health. Poorly managed toilet facilities not only decrease student satisfaction but can also negatively affect the school's reputation in the community.

This condition may stem from budget limitations allocated for the maintenance of public facilities like toilets. Public schools in regional areas generally rely heavily on BOS (School Operational Assistance) funds, which are often prioritized for essential educational needs such as paying honorarium teachers, purchasing textbooks, or laboratory equipment. With limited funding and many urgent needs, the maintenance or renovation of facilities like toilets can be delayed or excluded from annual work plans. This suggests that the issue is not simply one of negligence, but closely tied to budget planning and financial management that has not sufficiently prioritized student physical comfort.

Meanwhile, the issue of education costs reflects a mismatch between students' perceptions of what they are paying for and what they are receiving. In many cases, students and parents may not fully understand the breakdown of education-related expenses—particularly in vocational schools, where higher costs are justified by the need for specialized equipment, laboratory maintenance, and industrial training. If the school fails to transparently communicate how these fees are structured and what services or facilities they fund, students may feel they are being unfairly charged. This highlights a communication gap between the school and its students regarding transparency and the perceived value behind these costs.

Additionally, many students may not have a clear understanding of what constitutes a fair education cost. They tend to assess the fairness of fees based on their family's financial capacity, rather than on the operational needs and service quality of the school. Therefore, the school must develop more persuasive and educational communication strategies—such as parent forums, open financial reports, or bulletin boards displaying the use of funds. If students feel that the services and facilities they receive are equivalent to what they pay, then, according to Kotler's concept of customer satisfaction, their satisfaction and loyalty toward the school will increase. They may even become effective promoters by sharing positive experiences with prospective students, thus enhancing interest in SMKN 1 Kuripan, West Lombok.

4. Conclusion

Based on the findings that more than 50% of respondents rated the educational service attributes, as good, the school administration is advised not only to maintain existing standards but also to establish continuous improvement strategies focusing on aspects that have not yet reached an excellent rating. Actionable recommendations include conducting routine data-driven evaluations of student and teacher satisfaction, providing advanced training for teachers to enhance subject mastery and implement innovative teaching methods, regularly upgrading laboratory facilities and information technology, and developing digital asset management and complaint systems to improve service efficiency.

Additionally, it is essential for administrators to involve the school committee and parents in quality improvement planning to ensure transparency, accountability, and full support for the school's strategic programs.

The framework for improving educational services can be divided into two stages: short-term and long-term. In the short term, the primary focus should be on conducting regular data-based evaluations of student and teacher satisfaction, as well as providing ongoing professional development for teachers. These actions aim to immediately improve the quality of teaching and services by using data as the foundation for decision-making. Teacher training should emphasize deeper subject mastery and the adoption of innovative teaching methods in line with current developments. In addition, improvements to basic facilities such as laboratories and information technology equipment should begin as concrete initial steps.

In the long term, the strategy for continuous improvement includes the development of a digital asset management and complaint system that can enhance the overall operational efficiency of the school. This effort should be supported by policies that involve active participation from the school committee and parents in the planning and decision-making processes. Such a participatory approach will foster transparency and accountability in the implementation of the school's strategic programs, as well as increase support for the changes being made. Long-term investments in digital infrastructure and modern governance systems will also position the school to be more adaptive to future educational challenges.

However, there are several limitations to this study, such as its reliance on respondents' perceptions, which may be influenced by subjective bias. Additionally, the study's limited scope focusing on only one school makes it difficult to generalize the findings to other school contexts. Future research could broaden the scope of the study by involving more vocational schools from different regions to obtain a more comprehensive picture. A mixed-methods approach that combines quantitative surveys with in-depth interviews is also recommended to capture the dimensions of educational service quality more holistically and contextually.

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Author Contribution

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Not available.

Conflicts of Interest

The authors declare no conflict of interest.

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