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Research Article

Quality Assessment of a Learning Resources Centers' Services at Omani Private Schools Using SERVQUAL Scale

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Abstract

The increasing role of learning resources, electronic publishing, and the emergence of new innovations in LRCs necessitate significant changes in educational schemes, systems, methods, and resources. Studies highlight the significance of a school resource center in aiding students and teachers in designing, producing, using, and delivering resource materials, improving classroom environments, and providing a diverse range of learning resources. This study examines the perceived and expected service quality at the Learning Resources Center of Seeb International School in Oman. As well as investigating the significant differences in service quality due to some variables (gender, job, and experience). Utilizing the SERVQUAL model, the research explores five dimensions of service quality: reliability, responsiveness, assurance, tangibility, and empathy. The sample group comprised 15 participants, including teachers and administrators. The findings indicate that participants at Seeb International School's LRC perceive a higher level of service quality than predicted by the SERVQUAL model, with favorable opinions and high mean scores suggesting their expectations have been met or exceeded. The analysis reveals that gender does not significantly impact perceived service quality, but job category influences perceptions, with administrators rating service quality lower than teachers. Additionally, experience plays a significant role, as participants with more experience rate service quality higher than those with less experience. These results contribute to understanding service quality at the LRC of private schools in Oman and provide valuable insights for school administrators to enhance their learning resource services.

Keywords

Learning Resource Centers, SERVQUAL Scale, LRC Services Quality, Private Schools

1. Introduction

LRC can be defined as an educational institution based on 'teaching, learning, and research' supported by interaction with teachers for guidance on the use of information technology (IT) in education, including net-based information resources and audio-visual media with electronic educational programs and courseware for e-learning [4]. It focuses on teaching, learning, and research and is aided by teacher interaction for advice on using IT in the classroom. It includes web-based information resources, audio-visual media, electronic educational programs, and courseware for e-learning as [1]. LRC should form a central structure of the school system to offer the usage and dissemination of information in multimedia formats to students and teachers for the storage, provision, and utilization of learning resources that have been arranged into an integrated collection of materials of all types (print, auditory, visual, kits, and games), along with any devices and special settings. It should be provided with enough room, personnel, software, and hardware materials for students to study alone or in groups, where there are facilities for identifying individual differences, and where instructional materials made to accommodate those differences can be produced, used, and disseminated for quick access when needed [19].

1.1. Learning Resources Centers Services

Due to this significance and the new roles that learning resources now play in communities of teaching and learning at various levels, expanding the activities of electronic publishing raised issues that could not be handled by traditional educational environments, and the emergence of new innovations that accompanied the development of LRCs to become electronic, digital, or virtual centers, significant changes in educational schemes, systems, methods, and resources were necessary. In their study, [22] noted that these resource centers provide a wide range of services to users, including loaning out books, retroactive search, research journals, bibliographical tools, and reference materials. By offering these resources, LRCs play a significant role in promoting effective and efficient learning. The library's role in promoting effective learning among students cannot be overstated. Hence, LRC is a key component of the educational institutions' effort to transform education. It offers the community access to up-to-date materials and resources, internet services, and educational technology to support a learner-centered environment to accomplish educational purposes [8].

In the context of school settings, studies emphasized the importance of a school resource center in aiding students and teachers with the design, production, use, and delivery of resource materials [1, 20, 10]. They noted that a well-equipped resource center can improve the classroom environment and ensure that students have immediate access to materials, while also providing teachers and others in the community with a diverse range of learning resources.

Moreover, these accounts described educational resource centers as locations that house a range of materials, including kits, games, and printed, aural, and visual materials, and specialized equipment and settings.

The objectives of an LRC can be summarized in achieving the institutional goals and objectives; providing a wide range quality service; improving the instructional process and quality of teaching; and encouraging learners' self-development and continuous education [2]. The role of a teacher in an LRC is to create a learning environment that will promote production, interactions, and provide the students with the learning experience they require. With the support of teacher interaction, LRCs provide guidance on the use of IT in education, such as web-based information resources, audio-visual media, electronic educational programs, and courseware for e-learning [11].

For an LRC in educational institutions to succeed, it is essential that they prioritize providing their users with high-quality services. To this end, many establishments are actively seeking ways to improve their offerings. As [4]. noted, a learning resources center (LRC) is an educational institution dedicated to promoting teaching, learning, and research. It is widely acknowledged that any educational program lacking an LRC, often regarded as the cornerstone or fundamental element of any educational endeavor, cannot reach its full potential [10].

1.2. LRC Quality Standards

Quality is a center's level of success in attaining its aims and goals is gauged by how well it adheres to a set of quality standards. To be of high quality, an LRC needs to [2]:

1) Obtain a mission statement to gain academic credibility.

2) Work as a general consulting service for instructional problems where lecturers as well as students are being trained to understand and use newer technologies. This helps the LRC to become a viable and indispensable entity and gain credibility with continued financial support in budgeting for its equipment and materials.

3) Collaborate with teachers through a professional development strategy.

4) Conduct a comprehensive evaluation of its output.

5) Conduct research surveys; and,

6) Contribute to teaching activities.

These duties and obligations should be considered while evaluating LRC effectiveness. For resources/technology specialists and coaches, the International Society for technological in Education (ISTE) created standards and indicators that provide information about the abilities needed in a digital society [14]. The TPACK model, a three components model of TPACK (CK- content knowledge), (PK- pedagogical knowledge), and (TK- technology knowledge), implies the need to provide the LRC specialists with thorough and integrated professional pre-service preparation included in this model [15, 9].

2. Problem Statement

LRC Services Quality is a set of standards through which the degree of a center's success in achieving its goals and objectives is measured. To be of high quality, an LRC needs to [2]:

1. Obtain a mission statement to gain academic credibility.
2. Work as a general consulting service for instructional problems where lecturers as well as students are being trained to understand and use newer technologies. This helps the LRC to become a viable and indispensable entity and gain credibility with continued financial support in budgeting for its equipment and materials.
3. Collaborate with teachers through a professional development strategy.
4. Conduct a comprehensive evaluation of its output.
5. Contribute to teaching activities.

There are many ways to measure LRC services quality. In this study, we chose SERVQUAL scale as it conceptualizes service quality in five dimensions: tangibles, reliability, assurance, responsiveness, and empathy [6] (see Figure 1). The scale has been implemented majorly to evaluate the services in areas of different fields. However, most of the research conducted in the education field using SERVQUAL scale is at university level (see for example: [7, 13, 17].

In Oman, there is a lack of Omani sources regarding the services provided by LRCs in schools. However, there are a few broad studies regarding the resource centers' services. However, according to [1] there are several duties of an LRC) in Oman, including maintenance of equipment and media, circulation, classification, indexing, retrieval, distribution, and manufacturing. In their study, [1] investigated the perceptions of the stakeholders on the LRCs at Omani elementary schools in terms of their current condition and potential for improvement. Their impressions of the availability of traditional services and the lack of modern technology services have been shown by the data. Moreover, findings have shown the need to improve the quality of other duties, particularly those in the educational domains, as well as the quality of various administrative and technical LRCs' responsibilities. Findings demonstrate that the LRCs require expert advice about their own performance. Moreover, according to [3] the users of LRCs are satisfied with their centers in a public school. Another study reveals that service affect was a strong influential factor for the students' satisfaction in terms of a university LRC service quality [12]. The study of [7] found that students are satisfied with their institutional resources services only if the institutions are transparent in disseminating information about the services. Further, [23], used SERVQUAL scale to measure the service quality of the Community Service and Continuing Education Center at Sultan Qaboos University, found a high level of quality services that the center provides or plans to provide with no significant differences regarding the demographical variables of type, job and age in all the service quality dimensions. However, there is limited research available on the evaluative perceptions of the LRCs' services specifically at school level.
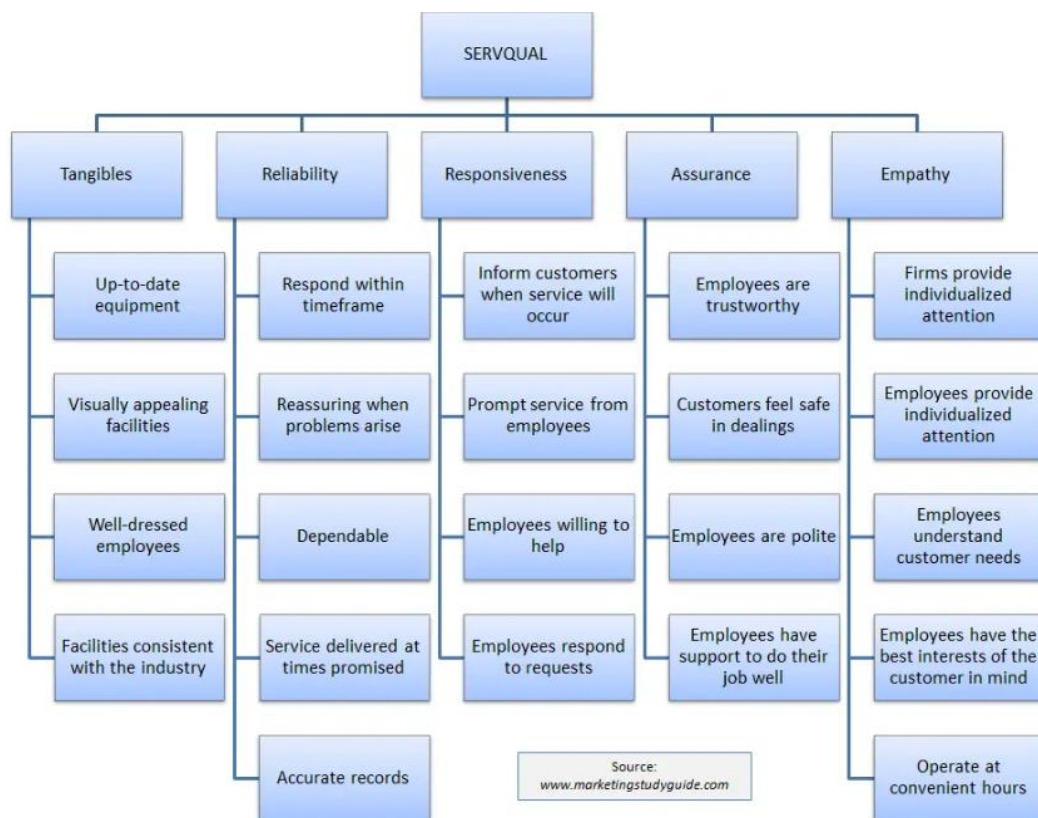

Figure 1. SERVQUAL Scale.

A private school is the school that is not administrated or funded by the government and supported merely by the payment of fees [5]; and therefore, they are in need to assess their cost-effectiveness in terms of service provision to be able to reduce their extra expenses. According to the educational statistics available by the Ministry of Education [18], in the academic year 72/73, there were (2) private schools in the Sultanate, but it continued to grow in terms of the number, level and types of schools. In 2021-2022 academic year, the number of private schools reached (292) schools [18]. In this study, Seeb International School was selected for its international linguicism and large size of students' body, services, and campus.

Since LRCs at Omani private schools play a crucial role in providing educational support to students, this study was conducted to assess the quality of services provided by LRCs at the Omani Seeb International School using the SERVQUAL scale from the perspective of teachers. The study investigates the five dimensions of service quality, including tangibility, reliability, responsiveness, assurance, and empathy, to identify areas of improvement and enhance the quality of services provided by the LRCs.

3. Research Objectives and Questions

This study aims to:
1. Study the perceived and expected actual service level of quality as viewed by the study sample at the Learning Resources Center (LRC) of Seeb International School.
2. Investigate statistically significant differences in service level of quality due to some variables (gender, job, and experience).
3. Recommend ways to improve the services of LRC at Seeb International School.

The following research questions are posed:
1. What is the perceived and expected actual service level of quality as viewed by the study sample at the LRC of Seeb International School?
2. Are there statistically significant differences ($\alpha=0.05$) in the service level of quality as viewed by the study sample due to their gender, job, and experience?

4. Research Significance

Investigating the gap between the quality level of the services provided by LRCs in Omani private schools and the expectations using SERVQUAL scale will benefit Seeb International School directly with the improvement recommendations provided by researchers. In addition, the findings of this study can be generalized, within limits, across private and public schools in Oman to increase the quality of services. Moreover, this study will be the starting point for other researchers to search in the field with a larger sample or a different context or research scope.

5. Research Design

The descriptive research design was applied in this study to study the perceived and expected actual service level of quality as viewed by the study sample at the Learning Resources Center (LRC) of Seeb International School. Moreover, it was to Investigate statistically significant differences in service level of quality due to some variables (gender, job, and experience). According to [16], in education, nutrition, epidemiology, and the behavioral sciences, descriptive research is frequently used to study status. The idea behind it is that through observation, analysis, and description, issues may be resolved, and practices can be made better. The survey, which comprises forms, in-person interviews, phone surveys, and normative surveys, is the most popular descriptive research methodology.

Population and Sample

The study examined staff members' perceptions at a private school, specifically teachers and administrators at Seeb International School. The selection of this school was based on its international linguicism, large size of services, and proximity to the researchers. Table 1 shows that sample group comprised (15) participants, with eight male respondents (53.3%) and seven female respondents (46.7%). A substantial proportion of the respondents (60%) reported having more than ten years of experience in the academic field, and (40%) having less than ten years of experience. In addition, the participants included nine teachers from various disciplines and six administrators.

Table 1. Mean scores and standard deviations of the study sample.

Independent Variables	Value Label	N	Mean	Standard Deviation
Gender	Male	8	4.1364	.82679
	Female	7	4.2208	.71795
Job	Teacher	9	4.5960	.37992
	Administrator	6	3.5455	.74523
Experience	Less than 10	6	3.6970	.80117
	More than 10	9	4.4949	.54803

Instruments

The main instrument used in this study is a questionnaire based on the SERVQUAL model, which was first presented by [21]. This model was founded as a method to measure the quality of services. According [24] if compared to other scales, SERVQUAL's reliability is like other evaluation scales.

The scale was translated and modified to suit the research

context. Google Form site was used to design the questionnaire as it is considered an easier method to collect and analyze data. It can be accessed by participants easily, as well. The instrument used 5-points Likert scale as a measurement scale for responses in which 1 represents strongly disagree and 5 represents strongly agree (Table 2).

Table 2. Likert scale intervals and levels.

Description	Scale	Intervals	Level
Strongly disagree	1	1.00 - 1.80	Very Low
Disagree	2	1.81 - 2.60	Low
Neutral	3	2.61 - 3.40	Moderate
Agree	4	3.41 - 4.20	High
Strongly agree	5	4.21 - 5.00	Very high

The questionnaire included five dimensions to assess the quality of services provided by the LRC which are: reliability, responsiveness, assurance, tangibility, and empathy. Dimension one consisted of eight statements to test the ability of the center to provide services accurately and dependably. Dimension two has five statements to measure the responsiveness and willingness of the center to serve its users. While dimension three has four statements to evaluate confidentiality and trust of services. two statements were in dimension four to test tangibility. While three statements were in the last dimension to measure the care level of the center towards the users. The face validity of the instrument was calculated by presenting it to an expert from the Instructional and Technology Department at College of Education of Sultan Qaboos University. Based on the feedback given, the questionnaire was modified to focus on the services provided only rather than on the staff. The reliability coefficient was measured by alpha Cronbach and found to be 0.95 for the whole items. Reliability of the five sections in the questionnaire were tested separately and found to be reliable as scores were higher than 0.6.

Study Variables

This study includes one dependent variable which is the perceived service level of quality. It refers to the participants' perception of the quality of services provided by the Learning Resources Center (LRC) at Seeb International School compared to the expectations of the actual quality of services the research anticipates based on SERVQUAl scale.

On the other hand, the study includes three independent variables:

a) Gender: this variable will be used to investigate whether there are statistically significant differences in the perceived service level of quality based on gender.

b) Job: information regarding participants' job roles or positions within the school will be used to explore if there are statistically significant differences in the perceived service level of quality based on job category.

c) Experience: the participants' level of experience within their current position at the school will be utilized to examine if there are statistically significant differences in the perceived service level of quality based on experience.

Procedures and ethical considerations

To gather information for the study, a team of four researchers visited the chosen school to observe their LRC and meet the staff. They introduced the study and obtained consent from the school administration. The research team strictly emphasized voluntary participation for the targeted sample and provide them with informed consent to sign in advance of field application. The questionnaire has also stated anonymity and confidentiality of their responses.

Afterwards, the team researchers distributed a questionnaire link, created using Google Forms® to teachers and administrators. The link was available for one week to collect quantitative data. The collected data was downloaded as an Excel sheet, coded, and then analyzed using the SPSS program to answer the research questions.

6. Data Analysis and Findings

Regarding the first research question about the perceived and expected actual service level of quality as viewed by the study sample at the LRC of Seeb International School, the descriptive statistics (Table 3) show that the participants' perceived reliability of the services provided by the LRC has a mean score of (4.17). This suggests that, on average, the participants rated the LRC's ability to provide accurate and dependable services at a high level. Similarly, the participants' perceived responsiveness of the LRC, indicating the willingness of the center to serve its users, has a mean score of (4.16). This indicates that the participants rated the LRC's responsiveness to their needs and requests at a high level. As assurance from participants' point of view, which evaluates the confidentiality and trustworthiness of the LRC's services, has a mean score of (4.2), it demonstrates that the participants rated the assurance provided by the LRC at a high level. Likewise, tangibles as experienced by the participants, concerning the physical facilities and materials of the LRC, have a mean score of (4.26). This shows that the participants rated the tangibility aspect of the LRC's services at a very high level. Comparably, participants' perceptions of empathy, indicating the care and individualized attention provided by the LRC, has a mean score of (4.26). This testifies that, generally, the participants rated the level of empathy displayed by the LRC at a high level.

Table 3. Descriptive Statistics of participants perceived services level of quality.

Item	N	Minimum	Maximum	Mean	Std. Deviation
Reliability	15	2.75	5.00	4.1667	.74950
Responsiveness	15	2.60	5.00	4.1600	.82531
Assurance	15	2.75	5.00	4.2000	.77460
Tangibles	15	3.00	5.00	4.2667	.67788
Empathy	15	2.33	5.00	4.1333	.96609
All Domains	15	2.95	5.00	4.1758	.75140

The findings presented in Table 3 indicate positive perceptions held by the sample participants towards the service level of quality. This finding is further supported by the participants' perceived level encompassing all the dimensions has a mean score of (4.17), which implies that participants rated the overall service quality of LRC at a high level.

Relating to the second research question, three analyses have been administered based on gender, job, and experience.

As for gender, independent samples t-test has been conducted to find the significant differences (α=0.05) in the service level of quality as viewed by the study sample due to their gender (Table 4).

Table 4. T-Test of gender variable.

Item	N	t	df	Mean	Std Deviation	Sig. (2-tailed)	Mean Difference
Gender	15	.210	13	1.47	.516	0.837	-.08442

Since the p-value obtained in Table 4 from the t-test (0.837) is greater than the significance level (α = 0.05), it indicates that there are no statistically significant differences in the service level of quality between male and female participants.

Regarding analysis based on job, independent samples t-test has been carried out to compare the mean scores of the two job groups (teachers and administrators) to determine if there is a statistically significant difference (Table 5).

Table 5. T-Test of job variable.

Item	N	t	df	Mean	Std Deviation	Sig. (2-tailed)	Mean Difference
Job	15	3.624	13	1.40	0.507	.003	1.05051

Table 5 indicates that the p-value obtained from the t-test (0.003) is less than the significance level (α = 0.05), it demonstrates that there is a statistically significant difference in the service level of quality between teachers and administrators.

Concerning analysis based on experience, independent samples t-test has been conducted to detect the significant differences (α=0.05) in the service level of quality as viewed by the study sample based on their years of experience (Table 6).

Table 6. T-Test of experience variable.

Item	N	t	df	Mean	Std Deviation	Sig. (2-tailed)	Mean Difference
Experience	15	2.304	13	1.60	.507	.038	-.79798

Table 6 shows the p-value obtained the t-test (0.038) is less than the significance level ($\alpha = 0.05$), it indicates that there are statistically significant differences in the service level of quality between the more and less experienced participants.

7. Discussion and Conclusion

This study was conducted to assess the quality of services provided by LRCs at the Omani Seeb International School using the SERVQUAL scale from the perspective of teachers. It seems that the service level of quality as viewed by participants at the LRC of Seeb International School is higher than their expected actual service level of quality as defined by the SERVQUAL model. Based on the high mean scores, the participants hold positive views of the LRC's services, indicating that their expectations are likely being met or even exceeded. This result corresponds with [23] findings in that the study participants held a high-level perception of quality for their center's services. Based on the analysis, there is no evidence to support that gender and years of experience have a significant influence on the perceived service level of quality as viewed by the study sample. However, the results support that the job category has a significant influence on the perceived service level of quality as viewed by the study sample and the mean scores indicate that administrators rated the service level of quality lower compared to teachers.

Several factors and limitations have an impact on the outcomes of this study as it focused on one private school and its LRC and relied solely on the perceptions of teachers about LRC services. In addition, the study was conducted in four weeks during the academic year 2022-2023 and used a small sample of (15) participants. These limitations might influence the results and their interpretations and, in turn, reduce the possibility of generalizing such results to different educational settings. This implies the need to investigate a larger sample of different groups of users for a longer period in the future.

8. Study Recommendations

Based on the findings of the study evaluating service quality at the Learning Resources Center (LRC) of Seeb International School, the following recommendations can be made:

Continuous improvement: Despite the overall positive perception of service quality, the LRC should strive for ongoing improvement. Regular feedback from users, such as teachers and administrators, can be solicited to identify areas for enhancement and address any potential gaps in service delivery.

Professional development: Given the difference in perceived service quality between administrators and teachers, the LRC should consider providing targeted professional development opportunities for administrators. These initiatives can focus on enhancing their understanding of the LRC's services, resources, and overall impact on student learning.

Communication and Awareness: The study highlights the importance of raising awareness among all stakeholders about the services and resources available at the LRC. Efforts should be made to effectively communicate the LRC's offerings, including workshops, training sessions, and support services, to ensure all users are aware of and can benefit from them.

User engagement: Encouraging active user engagement can further enhance the LRC's services. The LRC should explore strategies to involve teachers and administrators in the decision-making processes, seeking their input on resource selection, service improvements, and overall LRC planning.

Performance evaluation: Implementing a structured performance evaluation system for LRC services can help identify areas that require improvement and provide a benchmark for measuring progress over time. Regular evaluations should consider feedback from users, service usage data, and performance indicators aligned with the dimensions of service quality identified in the study.

By implementing these recommendations, the LRC at Seeb International School can further enhance its service quality, better meet the needs of teachers and administrators, and ultimately contribute to an improved learning environment for students.

Abbreviations

LRC	Learning Resources Centre
SERVQUAL	Service Quality
IT	Information Technology
TPACK	Technology, Pedagogy and Content Knowledge

Author Contributions

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Shams Al-Zakwani: Data curation, Formal Analysis, Investigation, Methodology, Writing – original draft

Salim Al-Oweimri: Data curation, Formal Analysis, Investigation, Methodology, Writing – original draft

Mahmood Al-Hosni: Data curation, Formal Analysis, Investigation, Methodology, Project administration, Writing – original draft

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Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] Al Musawi, A., & Amer, T. (2017). Stakeholders' Perceptions of Quality and Potential Improvements in the Learning Resources Centers at Omani Basic Education Schools. *International Education Studies*, (9), 124-140. https://doi.org/10.5539/ies.v10n9p124

[2] Al Musawi, Ali (2004). *Effectiveness of Learning Technology and Resources Centers*, Omani Studies Centre Publications, SQU Press, Oman. https://www.squ.edu.om/research/Research-Centers/Omani-Studies-Research-Center/

[3] Al Qahtani, R. & AlAmro, N (2020). The extent to which female learning resource center specialists are satisfied with their centers in public secondary schools in the city of Riyadh, *Journal of Education-Egyptian Sohag University*, 71. (In Arabic). https://jedu.sohag-univ.edu.eg/wp-content/uploads/11-1-7.pdf

[4] Bang, T (2003). Knowledge Sharing in a Learning Resource Center by Way of a Metro Map Metaphor. *Proceedings of the 67th IFLA Council and General Conference*. http://www.ifla.org/IV/ifla67/papers/088-99e.pdf

[5] Benveniste, L., Carnoy, M., & Rothstein, R. (2013). *All Else Equal: Are Public and Private Schools Different?* Routledge. https://www.routledge.com/.../book/9780415931977

[6] Brochado, A. (2009). Comparing alternative instruments to measure service quality in higher education. *Quality Assurance in Education*, 17(2), 174-190. https://doi.org/10.1108/09684880910951381

[7] Bwachele, V., Chong, Y, Krishnapillai, G. (2023). Perceived service quality and student satisfaction in higher learning institutions in Tanzania. *Humanities and Social Sciences Communications,* 10, 444. https://doi.org/10.1057/s41599-023-01913-6

[8] CAS - College of Applied Sciences (2014). *Learning Resource Center at CAS- Nizwa*, Oman. https://nizwa.cas.edu.om/Pages/Learning-Resource-Center.aspx (In Arabic)

[9] Chai, C., Koh, J., Tsai, C. (2013). A review of technological pedagogical content knowledge. *Educational Technology & Society*. 16, 31-51. https://www.jstor.org/stable/jeductechsoci.16.2.31

[10] Griadhi, M., Hery, W., Nyoman, T. (2022). Determinant of Students Digital Literacy Index on Achievement Motivation and Learning Achievement at Universitas Pendidikan Ganesha (Undiksha), Bali. *Library Philosophy and Practice (e Journal)*. The University Libraries of the University of Nebraska--Lincoln, Lincoln, Nebraska. Vol. 0, https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=14371&context=libphilprac

[11] Gurikar, R., & Gurikar, R. (2015). Use of library resources and services by Karnatak University research scholars: A case study. *DESIDOC Journal of Library & Information Technology,* 35(5), 361-367. https://doi.org/10.14429/djlit.35.5.8275

[12] Huynh, T., Nguyen, M., Bang, VD (2021). Service Quality Assessment at the Learning Resource Center in Can Tho University, Vietnam. *International Journal of Science and Management Studies (IJSMS),* 4(4), 82-92. https://doi.org/10.51386/25815946/ijsms-v4i4p109

[13] Hwang, Y. & Cho, Y. (2019). Higher education service quality, student satisfaction, institutional image, and behavioral intention. *Social Behavior and Personality*, 47(2), 1–12. https://doi.org/10.2224/sbp.7622

[14] ISTE- International Society for technological in Education (2024). ISTE Standards. https://iste.org/standards

[15] Koehler, M., Mishra, P., Akcaoglu, M., Rosenberg, J. (2013). The Technological Pedagogical Content Knowledge Framework for Teachers and Teacher Educators. In Panigrahi, M. (ed.) *ICT Integrated Teacher Education Models*, Pp. 20-30. Commonwealth Educational Media Centre for Asia, New Delhi. https://www.cemca.org/.../ICT/IntegratedTeacherEducation...pdf

[16] Manjunatha, N. (2019). Descriptive Research, *International Journal of Emerging Technologies and Innovative Research,* 6(6), 863-867. http://www.jetir.org/papers/JETIR1908597.pdf

[17] Mashenene, R. (2019). Effect of service quality on students' satisfaction in Tanzania Higher Education. *Journal of Business Education*, 2(2), 1–8. https://www.researchgate.net/publication/330985551

[18] MOE - Ministry of Education (2023). *Educational Statistics Yearbook 2021-2022*. MOE, Oman. https://home.moe.gov.om/library/29/show/1112 (In Arabic)

[19] Ngoka, G. N. (1995). The Organization of Center for Educational Technology. In F.A. Okwo and G.A. Ike (eds.) *Educational Technology: Basic Concepts and issues*. Nsukka, University Trust Publication.

[20] Obielodan O. O., & George-Oputa G. O. (2017). The impact of the utilization of resource centers for effective service delivery in Nigerian primary schools. *International Journal Of Management Technology*, 4(2), 22–29. https://www.eajournals.org/wp-content/uploads/

[21] Parasuraman, A., Zeithaml, V., & Berry, L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing,* 64(1), 12–40. https://www.researchgate.net/publication/200827786

[22] Saadany, M. A. & Abdelrahman, M. (2013). The reality of the use of Learning Resource Centers Specialist for libraries and digital resources as a tool for Continuing Professional Development: A comparative study between Egypt and Saudi Arabia. *Proceedings of 4th International Conference on e-Learning-*Best Practices in Management, Design and Development of e-Courses: Standards of Excellence and Creativity. https://doi.org/10.1109/econf.2013.21

[23] Saladin, N. & Al-Bartmani, M. (2018). University Service Quality in the Community Service and Continuing Education Center at Sultan Qaboos University: An Empirical Study Using SERVQUAL Scale. Journal of Educational and Psychological Studies. 12(1), 16-29. https://doi.org/10.24200/jeps.vol12iss1pp16-39 (In Arabic)

[24] Stodnick, M. & Rogers, P. (2008). Using SERVQUAL to measure the quality of the classroom experience. *Decision Sciences Journal of Innovative Education*, 6(1), 115-133. https://doi.org/10.1111/j.1540-4609.2007.00162.x

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