Assessing University Teachers' Perception towards Quality Education: Development and Validation of Perception Scale

Utpal Borah [1*], Dr. Amar Upadhyaya [2]

[1]Ph.D Research Scholar, Department of Education, Dibrugarh University, Assam, India

[2]Associate Professor, Department of Education, Dibrugarh University, Assam, India

DOI: https://doi.org/10.47772/IJRISS.2026.100900264

Received: 20 September 2026; Accepted: 25 September 2026; Published: 08 October 2026

ABSTRACT

The present study intended to construct and standardization of a perception scale to explore university teachers' perceptions of quality in higher education. Dagnew & Asrat (2016) revealed that teachers' perceptions play a major role in the improvement of education quality. Therefore, teachers' perceptions of quality education need to be assessed properly to ensure quality education. In this context, the present study has the significance of measuring the university teachers' perception towards quality education. The descriptive survey method was used to conduct the present study. The researchers selected separate samples for try-out and standardization of the scale by using an incidental sampling technique. The data were analyzed using descriptive statistics. This paper will provide a better understanding of the construction and standardization of the perception scale towards quality education for university teachers. This tool can only be used to study the university teachers' perception of quality education.

Keywords: Quality Education, Higher Education, Perception Scale, NAAC, Standardization

INTRODUCTION

Education is an important tool for national development. A nation's development is shaped by its education system, which guides its direction, increases knowledge, empowers individuals, and cultivates human resources. The future of a nation lies in its youth, making it essential for countries to offer quality education to create productive citizens (Faiz, 2019). Quality education provides an opportunity for all human beings to liberate their intellect, break the lock of imagination, acquire sustainable livelihoods, and ensure self-respect. It is the key requirement for a nation to have a healthy society (Goal 4: Quality education, 2023). It comprises some elements such as: appropriate skill development opportunities, providing gender parity, the provision of proper infrastructure facilities, sufficient educational materials, providing financial help, and a qualified teaching force (Education for sustainable development, 2024).

The quality of a country's education system is influenced by its higher education sector, which produces human resources, develop a knowledge base through research, and applies knowledge effectively. This system cultivates enlightened citizens with moral values and assists policymakers in developing education policies using research-based knowledge (Sultana et al., 2009). Higher education takes a role as an engine for "brain circulation' between countries because it plays an important role in globalization by enhancing the knowledge economy, idea transmission, and skill development across countries (Koshy et al., 2023). The quality of Higher education becomes increasingly important in India in order to compete in a globalized economy and produce human resources (Singh, 2018).

Conceptual Background of the study

The concept of Quality Education emerged from the "Quality" construct, which is basically used in management science (Srikanthan & Dalrymple, 2003). The term "quality" has often been used synonymously with the terms "efficiency," "effectiveness," and "equity" (Adams, 1993). Quality refers to

the level of excellence and standard of products, goods, and commodities set by producers and manufacturers to meet the expectations of customers. The term "Quality" is mostly a subjective and perceptual viewpoint. Different people may not have the same understanding of the meaning of this term. Because quality is context-dependent, especially in the service environment, and is frequently based subjectively on several parameters such as industry, segment, customer needs, organizational culture, time, etc. From past three decades, the paradigm of quality excellence has shifted from manufacturing to services, as in the Higher education sector (Sunder, 2016). In the educational context, quality should be handled differently from that of manufacturing or service industries (Madu & Kuei, 1993). Koch and Fisher (1998) stated that the business world's quality management models have been adapted and applied to the education sector.

Quality Education

As a "quality" term, defining quality education is not an easy task. It gets more difficult when quality is defined in terms of a specific aspect of education because all of the factors linked with educational quality are interconnected. A significant weakness in one aspect is likely to have an impact on the quality of the others (Ankomah et al., 2005). Grisay and Mahlck (1991) state that education is a service, not a product; quality is not just the end result but also dependent on factors like teacher availability, building, curriculum, equipment, texts, and teaching practices. Hoy et al. (2000) described, quality in education is an educational evaluation procedure that increases the desire to attain and develop the abilities of customers while meeting the accountability requirements set by the clients who pay for the process.

Quality education prioritizes holistic student development regardless of gender, race, ethnicity, socioeconomic status, or location, preparing for life beyond tests. (Agnihotri, 2017). UNICEF (2000) discuss that institutions need to have healthy learners, conducive environments, relevant curricula, child-friendly pedagogy and useful outcomes for achieving quality education. UNESCO (2003) discusses the link between quality and access in education, noting that sometimes accessibility does not guarantee quality. Educational institutions should prioritize elements like sustainable development, peace education, human rights, and teacher training. UNESCO (2004) outlined two main approaches to defining quality education. The first approach uses a systems framework to analyze education quality based on inputs, processes, and outcomes, emphasizing results and efficiency. The second approach utilizes a sector framework, viewing education as interconnected with other societal sectors, focusing on relevance, effectiveness, and efficiency. Relevance assesses how well educational goals meet learner and community needs, while effectiveness measures educational achievement. Efficiency concerns the delivery of quality education. This model promotes equity through a human rights approach, ensuring all learners have equal opportunities to access, attend, attain, and achieve education.

Dimensions of Quality Higher education

Studies in the field of quality Higher education identified different specific dimensions associated with the construct. Those dimensions were considered as the predictor of quality Higher education in institutional setting. Owlia and Aspinwall (1996) formed a common framework for the dimensions of quality in Higher education by discussing quality from three different groups of perspectives, i.e., products, software and service. Teeroovengadum et al. (2016) developed a hierarchical model (HESQUAL) to measure service quality in Higher education. The HESQUAL model is comprised of five main dimensions, which are administrative quality, physical environment quality, core educational quality, support facilities quality and transformative quality.

The National Assessment and Accreditation Council (2019) provided a framework of quality indicators for Higher Education Institutions (HEI). The report of NAAC (2019) has identified a set of seven criteria as quality indicators for Higher education institutions. These seven quality indicators are: Curricular Aspects, Teaching-Learning and Evaluation, Research, Innovations and Extension, Infrastructure and Learning Resources, Student Support and Progression, Governance, Leadership and Management; and Institutional

Values and Best Practices. Based on the conceptual background, the investigators determined that the NAAC quality indicators framework would be appropriate to use as a conceptual basis for this study.

Measurement of Perception on Quality Education

Several measurement tools for measuring perceptions of quality education were discovered in the literature. Chua (2004) developed a questionnaire with 22 items to determine the perception of quality in Higher education, particularly from the views of students, parents, employers, and faculty members. Zachariah (2007) constructed a five-point rating questionnaire for academics, students, and employers to know their perceptions of quality Higher education. Sharma (2008) developed a standardized questionnaire with 60 items to measure the perceptions of college students toward quality education. Joicy (2011) developed a standardized opinionnaire to measure student teachers' and teacher educators' perspectives of quality teacher education. Kaur (2013) developed two tools separately; one was a structured interview schedule for college and university teachers and the other was a structured questionnaire cum interview schedule for university students to know their views or perceptions on quality Higher education. Akareemand (2016) constructed a 3-point scale to measure the perceptions of quality Higher education.

Arora (2018) developed a questionnaire to study the perceptions of college teachers about quality concerns in Higher education institutions in Punjab. Bala (2018) developed two questionnaires for college teachers and students to examine the perception of quality assurance in Higher education. Woldeamanuel and Goshu (2019) developed a questionnaire to study the university teacher's perception of quality in Higher education in Ethiopia. Kawlni (2020) studied the college's student and faculty perceptions of Higher education quality. Tripathi and Sasikala (2020) constructed and standardized a Student Perception Tool (SPT) to determine the students' perceptions of the quality of Higher education. Chawla (2021) developed a questionnaire for college students to learn about their perceptions of the quality of services provided by Higher education institutions in the Delhi-NCR region. Raguz et al. (2021) conducted a study on students' perceptions of quality in Higher education at Pozega.

Significance of the Study

UNESCO (2006**)** clearly stated that teacher professional development and quality education have a strong link, especially in areas of teachers' beliefs, understanding and practices, students' learning and the implementation of educational reforms. In the Dagnew & Asrat (2016) study, it was revealed that teachers' perception plays a major role in the improvement of education quality. Thus, teachers should be ready to change and adapt their perceptions of quality education terms, which are provided by different educational policies at different times. Therefore, teachers' perceptions of quality education need to be assessed to properly ensure quality education in different parts of the country. In this context, the present study has the significance of measuring the university teachers' perception of quality education.

In the review of related literature, the investigators found a lack of an adequate measurement tool to measure university teachers' perceptions of quality education. The researcher was able to reveal only three research tools that are directly related to measuring of university teachers' perceptions. Chua (2004) developed a questionnaire to measure perceptions of university students, parents, employers and University faculty members in the Canadian context. Kaur (2013) developed a structured interview schedule to measure the college and university teachers' perception of quality education.
Through the single interview schedule, it's not an adequate tool to measure both stages of teachers' perception. Woldeamanual & Goshu (2019) developed a questionnaire to measure university teachers' perception of quality education in the Ethiopia context. Hence, the researcher felt the urgency to construct a perception scale that would be helpful to measure university teachers' perception of quality education. The scale will fill the lack of adequate measurement tools to measure university teachers' perception of quality education in India.

Objectives of the Present Study

The primary objective of the present study was to Construct and Standardize a Perception Scale on Quality Education for University Teachers.

Methodology of the Present Study

The researchers used the Descriptive Survey method to conduct the study. The population of the study comprised all the teachers of Dibrugarh University, Dibrugarh, Assam, India. The investigators selected two separate samples for the present study. The first sample of 56 teachers was chosen for the try-out of the Draft perception scale on quality education (PSQE) with an incidental sampling technique. The second phase of the sample consisted of 90 teachers of the university selected through incidental sampling technique.

ANALYSIS AND INTERPRETATION

Preparation of a draft of the PSQE

After consulting the related literature, the investigators used the quality indicators provided by the NAAC (as of August 29, 2019) as the theoretical basis to prepare the PSQE statements for university teachers. The NAAC has provided 7 dimensions of quality indicators. The dimensions are given below in Table No: 01. Based on these quality indicators, the researchers wrote 66 statements, of which 33 were positive and 32 were negative. After that, the draft of the PSQE for university teachers was sent to 12 experts for review. Corrections and suggestions were requested to ensure the appropriateness of the items. After analyzing the experts' responses, some items were modified or dropped for the try-out of the draft PSQE. A total of 62 items were selected, with 33 positive and 29 negative items included in the draft for the applied sample of 56 teachers at Dibrugarh University.

Table No 01: Dimensions of the PSQE for University Teachers

Dimensions	**Key Points**
Curricular aspects	• Curriculum Design and Development • Academic Flexibility. • Curriculum Enrichment. • Feedback System.
Teaching-learning and evaluation	• Student Enrolment and Profile. • Catering to Student Diversity. • Teaching-Learning Process. • Teacher Profile and Quality. • Evaluation Process and Reforms. • Student Performance and Learning Outcomes. • Student Satisfaction Survey.
Research innovation and extension	• Promotion of Research and Facilities. • Resource Mobilization for Research. • Innovation Ecosystem. • Research Publications and Awards. • Consultancy. • Extension Activities. • Collaboration.

Infrastructure and learning resources	• Physical Facilities. • Library as a Learning Resource. • IT Infrastructure. • Maintenance of Campus Infrastructure.
Student support and progression	• Student Support. • Student Progression. • Student Participation and Activities. • Alumni Engagement.
Governance, leadership and management	• Institutional Vision and Leadership. • Strategy Development and Deployment. • Faculty Empowerment Strategies. • Financial Management and Resource Mobilization. • Internal Quality Assurance System (IQAS).
Institutional Values and Best practices.	• Institutional Values and Social Responsibilities. • Best Practices. • Institutional Distinctiveness.

Source: website of NAAC- http://naac.gov.in/index.php/en/2-uncategorised/183-dual-mode-universities

Scoring procedures

The investigators followed the Likert (1932) type scoring procedure, as shown in Table No 02. Each statement had five responses: Strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and Strongly Disagree (SD). High-scoring participants on the scale indicate having high perceptions of quality education and low- scoring participants indicate having low perceptions of quality education.

Table No 02: Scoring Key of the Statements

Nature of Statements	**Strongly Agree (SA)**	**Agree (A)**	**Undecided (UD)**	**Disagree (D)**	**Strongly Disagree (SD)**
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Item analysis of the draft PSQE

Investigators used an item analysis procedure to find out the discriminate value of each item in the Draft. The "t" test was used to find out the discriminating power of the items. The responses of the 56 teachers were scored using the scoring keys mentioned in Table No: 03. The respondents were arranged in descending order based on their acquired scores on the scale. After arranging in descending order, 27% of the respondents from the top and 27% of respondents from the bottom were extracted.

This process formed two groups, i.e. high and low-scoring groups. The group from high-scoring respondents was identified as a high-scoring group, and the group from low-scoring respondents was identified as a low-

scoring group. The mean scores of each item by high scoring groups and the low-scoring group was computed.

The difference between the mean scores of the high-scoring group and the low-scoring group on a particular item was computed. After that, the difference between the two mean scores of both groups in each item was calculated using 't' score. The items having 't' score value equal to or greater than 1.75 (t >1.75 or t= 1.75) were considered as eligible for the final draft of the PSQE for University Teachers.

The 't' value was calculated using the following formula: -

$$\mathbf{t}=\frac{(\mathbf{M_1}-\mathbf{M_2})-\mathbf{0}}{\mathbf{SE_D}}$$

The dimension-wise final statements with the distribution of the calculated "t" value are shown in Table No 03.

Table No 03: Dimensions wise final statements with the distribution of the calculated "t" values

Dimensions	S.No	Statements	't' value
Curricular Aspects	1	The adoption of inter-disciplinary approach in the curriculum is effective in enhancing the quality of education.	1.864
	2	Theory based curriculum are essential than need based curriculum to ensure quality of higher education.	2.468
	3	Use of ICT component in upgrading contents of higher education may not be able to ensure quality of higher education.	3.601
	4	Higher education curriculum should give more emphasis on academic aspects than including the contents needed from the employment perspective.	2.994
	5	It is unnecessary to include contents in curriculum which are based on fulfillment of students' need.	3.111
	6	Stakeholders' ideas do not play an essential role during the development process for improvement of curriculum.	3.150
	7	Use of multi- disciplinary approach in the curriculum does not help to ensure quality of education.	3.034
	8	Optional or Elective courses are needed to sustain the academic flexibility for ensuring quality of higher education.	2.846
Teaching-learning and evaluation	9	Collection of students' feedback on the process of teaching learning and evaluation helps to improve the quality of higher education.	1.938
	10	The student of various Socio-economic backgrounds in the classroom hampers the quality of teaching.	4.428
	11	Teacher- centered teaching methods are essential than Student-centered methods to improving quality of learning process.	5.765

	12	Students' academic progress need not be measured to ensure the quality of education.	4.124
	13	Quality higher education is influenced by quality teachers' profile.	4.364
Research Innovation and Extension	14	Promotion of research work and quality of higher education both are interconnected.	3.297
	15	National and international research collaboration is less essential to enhance quality of higher education	1.938
	16	Quality of higher education is reflected on quality of research performed by higher education institutions.	3.539
	17	It is less necessary to encourage Industry-Academia linkage to ensure quality of education.	4.311
	18	To promote Quality of higher education, focus should be made on research-based teaching.	3.083
	19	Research facility is only a sufficient condition to ensure quality of education.	3.274
	20	The Research Index clearly signifies the quality of higher education of an institution.	2.420
	21	A research publication is an only indicator of quality higher education.	2.278
	22	Organizing Extension activities in the higher education institutions have the possibilities to increase workloads for teachers which might hinder quality education.	2.818
	23	Workshops on Research Methodologies are essential to enhance the quality of research in higher education.	2.044
Infrastructure and learning resources	24	Library as a learning resource is essential to maintain the quality teaching learning process in higher education institutions.	3.905
	25	Online learning facility is only a fashion rather than element of Quality Education.	3.546
	26	The quality of Higher Education can be ensured with insufficient proper physical infrastructure.	3.398
	27	Regular maintenance of Infrastructure facilities is essential for quality higher education.	2.260
	28	Integrated Library Management System (ILMS) is only a show off for institution rather than element of Quality Education.	3.842

Student support and progression	29	Student support strategies such as student support service centers, placement cell and guidance cell etc., are an essential aspect for ensuring the quality of higher education.	3.980
	30	Emphasis on Games and sports may hamper the achievement of academic pursuits and pose as a threat to quality higher education.	4.925
	31	Institutions should provide coaching classes to students for preparing competitive examinations.	2.307
	32	Performance enhancement programme for slow learners is one of the important strategies to sustain a good teaching-learning programme.	2.631
	33	Personal enhancement schemes for students have the possibilities to reduce academic hours which might hinder Quality education.	2.813
	34	Financial constraint is never being a hindrance for quality education for students.	1.880
	35	High Job Placement is a good indicator of quality education in higher education institutions.	2.384
	36	Engagement of Alumnus in institution has the possibilities to create biasness which might effect on quality of education.	4.234
Governance, leadership and management	37	Effective institutional vision can create best quality in Higher Education Institutions.	2.400
	38	It is necessary to involve the stakeholders in strategy development process of institutions to ensure quality education.	2.204
	39	Internal Quality Assurance Cell (IQAC) plays vital role in ensuring quality higher education.	2.997
	40	Budgeting of resources doesn't have any relation with quality education.	3.984
Institutional Values and Best practices	41	Adoption of environment friendly practices like- energy conservation, rain water harvesting and waste recycling etc., in the institutions is essential for quality education.	2.114
	.42	Making a Disabled-Friendly campus in higher education institutions may increase the unnecessary expenditure and it becomes a threat to quality education.	3.925
	43	Innovative Practices on the part of students and teachers is essential to enhance quality education.	4.082
	44	To ensure quality education, the Gender equity promotional programme in higher education institutions is less important.	2.738
	45	Organizing workshops on social values and ethos have relation with quality education.	2.477

Preparation of final draft of the PSQE

The investigators selected 45 items for the final draft of the scale on the basis of the "t" values of items. Out of 62 items in the draft of the try-out, the researcher dropped 17 items whose "t' values were less than 1.75. The distribution of the items of the final draft of PSQE for University Teachers is shown below in Table No 04.

Table No 04: Distribution of the items of the final Draft of PSQE for University Teachers

Dimensions	**Statements**		**No. of Statements**		**Total**
	Positive	Negative	Positive	Negative	
Curricular Aspects	1, 8	2, 3, 4, 5, 6, 7	2	6	8
Teaching-learning and evaluation	9, 13	10, 11, 12	2	3	5
Research Innovation and Extension	14, 16, 18, 20, 23	15, 17, 19, 21, 22	5	5	10
Infrastructure and learning resources	24, 27	25, 26, 28	2	3	5
Student support and progression	29,31,32, 35	30, 33, 34, 36	4	4	8
Governance, leadership and management	37, 38, 39	40	3	1	4
Institutional Values and Best practices	41, 43, 45	42, 44	3	2	5
Total			**21**	**24**	**45**

Estimation of Reliability of the PSQE

Considering the nature of the present scale, investigators decided to estimate internal consistency reliability. Investigators used the split-half method and Cronbach's alpha method to calculate the internal consistency reliability.

Split Half Method: To compute split half reliability, investigators administered the final draft of the scale among 90 teachers from 21 different departments/centres of Dibrugarh University. Investigators divided the scores of the respondents into two equivalent halves using the odd-even technique to calculate reliability through the split-half method. After that, the investigators used the Spearman-Brown Prophecy formula, which is given below.

Spearman-Brown Prophecy formula: In this method, the reliability of the half test was estimated using the product-moment correlation between the scores of the two halves. The following formula was used to estimate the correlation.

$$r^{1/2} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

$r^{1/2}$ = Reliability of the half test.

After the calculation of the correlation between the scores of two halves, the Spearman-Brown Prophecy formula was applied to estimate the reliability. The formula was-

$$\mathbf{R} = \frac{2r^{1/2}}{1+r^{1/2}}$$

Were,

R = Reliability of the full test.

r1/2 = Reliability of the half test.

Thus, the split-half reliability of the PSQE for University Teachers was found to be **0.83**.

Cronbach's Alpha (α): Investigators used Cronbach's alpha (α) method to estimate the internal consistency reliability among items. The formula for Cronbach's alpha (α) -

$$r_u = \alpha = \left(\frac{n}{n-1}\right)\frac{\sigma_t^2 - \sum(\sigma_i^2)}{\sigma_t^2}$$

Thus, the Cronbach's alpha (α) reliability of the PSQE for University Teachers was found to be **0.84**.

Estimation of validity of the PSQE

Investigators used the content validity method to estimate the validity of the PSQE for University Teachers. To estimate the content validity, investigators sent a draft of the scale to 12 experts in related fields of study. Out of 12 experts, 11 experts checked and provided their responses to the content of the items. After that, the researcher modified and dropped some items that did not cover the content of the theoretical construct.

Estimation of the Norm for the PSQE

Investigators used the Z-score to determine the norms of the scale. 90 University teachers were taken as a sample to estimate the norms of the scale in the present study. The researcher estimated standard score norms in the Z-score form. The following formula was used to calculate the Z score -

$$Z = \frac{X - M}{\sigma}$$

Where,

Z =Sigma score or Z score.

X =Raw score.

M =Mean of the distribution.

σ = Standard deviation of the distribution.

The details of the Z scores are given below in Table No: 05

Table No 05: Z score norms for Perception Scale on Quality Education for University Teachers (Final Scale)

Mean=175.13, SD=14.41, N=90

Raw score	Z score	Raw score	Z score	Raw score	Z score
130	-3.13	158	-1.19	186	0.75
131	-3.06	159	-1.12	187	0.82
132	-2.99	160	-1.05	188	0.89
133	-2.92	161	-0.98	189	0.96
134	-2.86	162	-0.91	190	1.03
135	-2.79	163	-0.84	191	1.10
136	-2.72	164	-0.77	192	1.17
137	-2.65	165	-0.70	193	1.24
138	-2.58	166	-0.63	194	1.31
139	-2.51	167	-0.56	195	1.38
140	-2.44	168	-0.50	196	1.45
141	-2.37	169	-0.43	197	1.52
142	-2.30	170	-0.36	198	1.59
143	-2.23	171	-0.29	199	1.66
144	-2.16	172	-0.22	200	1.73
145	-2.09	173	-0.15	201	1.80
146	-2.02	174	-0.08	202	1.87
147	-1.95	175	-0.01	203	1.93
148	-1.88	176	0.06	204	2.00
149	-1.81	177	0.13	205	2.07
150	-1.74	178	0.20	206	2.14
151	-1.68	179	0.27	207	2.21
152	-1.61	180	0.34	208	2.28
153	-1.54	181	0.41	209	2.35

154	-1.47	182	0.48	210	2.42
155	-1.40	183	0.55	211	2.49
156	-1.33	184	0.62	212	2.56
157	-1.26	185	0.68		

Categorization of Perception Scale on Quality Education for University Teachers based on Standard Score

The investigators also decided to categorize the PSQE for University Teachers based on standard Score into five sub-groups viz. Very high, High/Above Average, Average, Low/Below Average and Very low based on the Z-score norms. The detail lists of Z-scores are given in Table No: 06

Table No: 06 Categories of Perception Scale on Quality Education based on Z score Norms

Sl. No	Categories	Range of Z score	Range of Corresponding Raw Score
1	Very High	Above 1.71	Above 200
2	High/Above Average	.57 to 1.71	183- 200
3	Average	-.57 to .57	167-183
4	Low/Below Average	-.57 to -1.71	150-167
5	Very Low	-1.71 or below	Below 150

CONCLUSION

Quality education is essential for any nation to develop learners' potential and capacities to become productive, obtain sustainable livelihoods, become socially adaptable, and achieve individual well-being. To effectively provide quality education, teachers play an essential role in implementing various educational policies at the grassroots level through innovative techniques, pedagogy, and leadership styles. UNESCO (2006) clearly stated that teacher professional development and quality education have a strong link, especially in areas of teachers' beliefs, understanding and practices, students' learning, and the implementation of educational reforms. Dagnew & Asrat (2016) outlined that teachers' perceptions play a major role in the improvement of education quality. Thus, teachers should be ready to change and adapt their perceptions of quality education terms, which are provided by different educational policies at different times. Therefore, teachers' perceptions of quality education need to be assessed to properly ensure quality education in different parts of the country. Therefore, teachers' perceptions of quality education must be assessed to ensure quality education in different parts of the country. In this study, the researcher tried to fill the gap in an appropriate measurement tool to measure University teachers' perception of quality education, especially in the Indian context.

REFERENCES

1. Adams, D. (1993). The Improving Educational Quality Project. IEQ Publications. https://pdf.usaid.gov/pdf_docs/PNACA245.pdf
2. Agnihotri, A. K. (2017). Quality in primary and secondary education. Scholarly Research Journal's, 4(21), 4878–4884. doi.org/https://www.academia.edu/33375788/

3. Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: What makes students' perception different? Open Review of Educational Research, 3(1), 52–67. doi.org/10.1080/23265507.2016.1155167
4. Ankomah, Y., Koomson, J., Bosu, R., & Oduro, G. K.T (2005). Implementing quality education in low-income countries. Edqual Project-Ghana. https://assets.publishing.service.gov.uk/media/57a08c8fed915d3cfd001474/ghanarev.pdf
5. Arora, A. (2018). An analytical study of quality assurance in Higher education institutions of Punjab [Doctoral dissertation, Panjab University]. Shodhganga@INFLIBNET. http://hdl.handle.net/10603/255667
6. Bala, I. (2018). Perception of Teachers and Students Regarding Quality Assurance in Higher Education [Doctoral dissertation, Guru Nanak Dev University].Shodhganga@INFLIBNET. http://hdl.handle.net/10603/365685
7. Chawla, P. (2021). Quality assurance in Higher education institutions in delhincr[Doctoral dissertation, Maharishi Markandeshwar University]. Shodhganga@INFLIBNET. http://hdl.handle.net/10603/371823
8. Chua, C. (2004). Perception of quality in Higher education. Proceedings of the Australian Universities Quality Forum. doi=10.1.1.125.3578&rep=rep1&type=pdf
9. Dagnew, A., & Asrat , A. (2016). Teachers' Perception toward Quality of Education and Their Practice: The Case of Godar Secondary Schools, Ethiopia. American Journal of Educational Research, 4(3), 248–253. doi.org/10.12691/education-4-3-4
10. Education for sustainable development. (2024, February 6). UNESCO : Building Peace through Education, Science and Culture, communication and information. https://www.unesco.org/en/sustainable-development/education
11. Faiz, B. (2019, April 15). Role of education in national development. Voice of Balochistan.https://voiceofbalochistan.pk/opinions-and-articles/healtheducation/role-of-education-in-national-development/
12. Goal 4: Quality education. (2023, April 18). The Global Goals. https://www.globalgoals.org/goals/4-quality-education/
13. Grisay, A., & Mahlck, L.O. (1991). The Quality of Education in Developing Countries: A Review of Some Research Studies and Policy Documents. Issues and Methodologies in Educational Development: An IIEP Series for Orientation and Training. https://unesdoc.unesco.org/ark:/48223/pf0000088661/PDF/88661eng.pdf.multi
14. Hoy, C., Jardine, C. B., & Wood, M. (2000). Improving Quality in Education. Falmer Press.
15. Joicy, V. M. (2011). Realization of quality indices in secondary teacher education programme perceptions of student teachers and teacher educators [Doctoral dissertation, Andhra University]. Shodhganga@INFLIBNET. https://shodhganga.inflibnet.ac.in/handle/10603/28846
16. Kaur, D. (2013). Quality assurance in Higher education: an evaluative study [Doctoral dissertation, Punjabi University]. Shodhganga@INFLIBNET. http://hdl.handle.net/10603/36767
17. Kawlni, L. (2020). Perceptions of stakeholders on quality of Higher education in Mizoram in the context of RUSA [Doctoral dissertation, Mizoram University]. Shodhganga@INFLIBNET. http://hdl.handle.net/10603/352154.
18. Koch, J. V., & Fisher, J. L. (1998). Higher Education and total quality management. Total Quality Management, 9(8), 659–668. doi.org/10.1080/0954412988136
19. Koshy, P., Cabalu, H. & Valencia, V. (2023). Higher education and the importance of values: evidence from the World Values Survey. High Education, 85(6), 1401–1426. https://doi.org/10.1007/s10734-022-00896-8
20. Likert, R. (1932). A technique for the measurement of attitudes. Archives of Psychology, 22.5-55
21. Madu, C., & Kuei, C. H. (1993). Dimensions of quality teaching in Higher institutions. Total Quality Management, 4(3), 325–338. doi.org/ 10.1080/09544129300000046
22. National Assessment and Accreditation Council. (2019, December). NAAC: Institutional accreditation manual for self- study report university.http://naac.gov.in/images/docs/Manuals/University-Manual-29th-August 2019.pdf
23. Owlia, M. S., & Aspinwall, E. M. (1996). A framework for the dimensions of quality in Higher education. Quality Assurance in Education, 4(2), 12–20. doi.org/10.1108/09684889610116012

24. Raguž, M. J., Budimir, V., & Letinić, S. (2021). Students' perception of quality in Higher education: Evidence from the polytechnic in Croatia. Eurasian Business Perspectives, 333–346. doi.org/10.1007/978-3-030-65085-8_22
25. Sharma, N. R. (2008). Identifying attributes of quality education using perception of college students and attitude of teachers towards external quality assurance in education [Doctoral dissertation, Maharaja Ganga Singh University]. Shodhganga@INFLIBNET. http://hdl.handle.net/10603/298064
26. Singh, T. R. (2018). Role of NAAC in enhancing Quality on Higher Education in India: Issues and Challenges. International Journal of Science and Research, 7(11), 1483–1487. doi.org/DOI: 10.21275/23111801
27. Srikanthan, G., & Dalrymple, J. (2003). Developing alternative perspectives for quality in Higher Education. International Journal of Educational Management, 17(3), 126–136. doi.org/10.1108/09513540310467804
28. Sultana, N., Yousuf, M. I., Din, M. N., & Rehman, S. (2009). The higher the quality of teaching the higher the quality of education. Contemporary Issues in Education Research, 2(3), 59-64. https://doi.org/10.19030/cier.v2i3.1088
29. Sunder M., V. (2016). Constructs of Quality in Higher education services. International Journal of Productivity and Performance Management, 65(8), 1091–1111. doi.org/10.1108/ijppm-05-2015-0079
30. Teeroovengadum, V., Kamalanabhan, T. J., &Seebaluck, A. K. (2016). Measuring service quality in Higher Education. Quality Assurance in Education, 24(2), 244–258. doi.org/10.1108/qae-06-2014-0028
31. Tripathi, H., &Sasikala, J. E. M. (2020). Construction and validation of a students' perception tool (SPT) for the assessment of perceptions among students about the quality of Higher education. ENSEMBLE, 2(1/5), 81–89. doi.org/10.37948/ensemble-2020-0201-a008
32. UNESCO. (2003, March18). Promoting quality education: education for peace, human rights and democracy; education for sustainable development; curricula, educational tools and teacher training [Executive board]. 166th Session, Paris. https://unesdoc.unesco.org/ark:/48223/pf0000129748
33. UNESCO. (2004, September 8-11). Quality education for all young people - international bureau of education [Conference session]. 47th International Conference on Education of UNESCO, Geneva. http://www.ibe.unesco.org/fileadmin/user_upload/archive /Publications/free_publications/educ_qualite_angl.pdf
34. UNESCO. (2006). Teacher and Educational Quality: Monitoring Global needs for 2015. UNESCO Institute for Statistics, Montreal. http://uis.unesco.org/sites/default/files/documents/teachers-and-educational-quality-monitoring-global-needs-for-2015-en_0.pdf
35. UNICEF. (2000,June). Defining Quality in Education [Paper presentation]. The International Working Group on Education Florence, Italy. https://www.right-to-education.org/sites/right-to-education.org/files/resourceattachments/UNICEF_Definin g_Quality_Education_2000.PDF
36. Woldeamanuel, M. M., & Goshu, B. S. (2019). University Teachers' perception of quality in Higher education in Ethiopia: A case study of dire dawa university. Journal of Education, Society and Behavioural Science, 1–15. https://doi.org/10.9734/jesbs/2019/v31i430156
37. Zachariah, S. (2007). Managing quality in Higher education: A stakeholder perspective [Doctoral dissertation, University Of Leicester]. ResearchGate. https://www.researchgate.net/publication/27248526_Managing_quality_in_Higher_education_A_stakeholder_perspective