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Educational service quality in higher education: A systematic review and thematic synthesis of qualitative and mixed-methods evidence

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Abstract

This review synthesized qualitative evidence on how students, staff, leaders and employers conceptualize and perceive educational service quality in higher education. Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses 2020 statement, a Scopus search of articles published between 2020 and 2026 identified 890 records. After artificial intelligence-assisted title and abstract screening, validated manually on a random sample, and full-text assessment by two authors, 27 qualitative and mixed-methods studies were included. Quality was appraised with the Mixed Methods Appraisal Tool, and findings were analyzed through thematic synthesis. Seven analytical themes and 22 sub-themes were identified: teaching and academic quality; physical, digital and learning infrastructure; administrative and student support services; employability, practice and personal development; relational and co-created quality; institutional and organizational conditions; and well-being, safety and basic needs. All themes were retained in sensitivity analyses, although support for employability depended largely on weaker studies. Read through a structure–process–outcome lens, the themes distinguish the institutional and basic conditions of the service, its academic, administrative and relational processes, and its expected outcomes. Compared with established instruments, institutional conditions were absent, whereas basic needs, co-creation and labor-market links were insufficiently specified. The findings are limited by a single English-language database search, six unretrieved reports and the interpretive nature of the framework. Quality assurance may benefit from approaches that also consider the conditions under which educational services are produced.

Keywords: Educational service quality; Higher education; Qualitative evidence synthesis; Quality assurance; Stakeholder perceptions thematic synthesis

1. Introduction

Educational service quality has become a strategic concern for universities seeking to strengthen institutional performance and student learning experiences in increasingly competitive and internationalized systems. A growing body of literature has emphasized the need to evaluate educational services through comprehensive approaches that support evidence-based decision-making and institutional improvement (Toscano-Hernández et al., 2024), and service quality has been linked to institutional reputation, student satisfaction and loyalty, particularly in private higher education (Wider et al., 2024).

The concept, however, is contested. Quality in higher education has been understood in at least five ways: as exceptionality, as perfection or consistency, as fitness for purpose, as value for money, and as transformation of the learner (Harvey & Green, 1993). The notion of educational service quality belongs mainly to the fitness-for-purpose and value-for-money traditions: it refers to stakeholders' evaluations of the academic, administrative and support services through which higher education is delivered. It is therefore narrower than the quality of education as a whole, broader than teaching quality, and distinct from student satisfaction, which is an affective response to the service rather than an evaluation of its attributes. The service-quality approach has been criticized for framing students as consumers and education as a commodity (Molesworth et al., 2009). These tensions are relevant because the instruments that dominate the field were designed within this approach. SERVQUAL (Parasuraman et al., 1988), a generic instrument developed for

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commercial services, evaluates tangibles, reliability, responsiveness, assurance and empathy. Higher-education-specific instruments such as HEdPERF (Abdullah, 2006) and HESQUAL (Teeroovengadum et al., 2016) added academic, administrative, reputational and transformative dimensions. All of them, however, define quality a priori and measure it through student surveys.

Empirical studies from diverse contexts have reported associations between perceived service quality and student satisfaction, loyalty and institutional competitiveness (Sharma & Mishra, 2024), and between academic service quality and institutional management capacity (Rustanto et al., 2026). Constraints in strategic planning, organizational adaptability and resources have been identified as particular challenges in developing countries (Taroum & Masaud, 2024), and gaps between students' expectations and perceived services have been reported in public institutions (Amiri et al., 2025). Most of this evidence is cross-sectional and correlational, so it describes associations rather than effects.

Recent work has also suggested a broader, institutional view of quality. A systematic review of academic service quality highlighted administrative support, technological infrastructure and guidance services in addition to teaching (Harahap et al., 2025), and studies applying HEdPERF have reported associations between perceived service quality, satisfaction and loyalty (Bahadur et al., 2024). Other authors have linked educational quality to internal and external quality-assurance systems and governance (Rincón Moreno & Gordillo-Ramírez, 2025), to the integration of research, teaching and relevance in quality indicators (Araya-Pizarro & Verelst, 2023), and to the working conditions of academic staff, such as employment stability and professional recognition (Rivas-Huamán et al., 2025).

Existing reviews have mapped the dimensions, measurement models and publication patterns of the field (Harahap et al., 2025; Toscano-Hernández et al., 2024; Wider et al., 2024). These reviews draw mainly on survey-based studies that measure predefined dimensions, so they describe how quality has been measured rather than how stakeholders themselves define it. To our knowledge, no review has restricted its evidence base to qualitative data, appraised the methodological quality of that evidence, and compared the perspectives of students, staff, leaders and employers within one synthesis. Qualitative and mixed-methods studies are particularly suited to this purpose because they allow stakeholders to express what quality means to them rather than rating dimensions selected in advance. For this reason, studies that used only quantitative data were excluded, although they constitute most of the literature.

The aim of this review was therefore to synthesize the qualitative evidence published between 2020 and 2026 on how stakeholders conceptualize and perceive educational service quality in higher education. Structured with the SPIDER framework (Cooke et al., 2012), it addressed three review questions: (RQ1) How do students, academic and administrative staff, institutional leaders and employers conceptualize educational service quality? (RQ2) Which dimensions emerge from the qualitative evidence, and how strong and consistent is the evidence supporting each of them? (RQ3) How can these dimensions be organized in a conceptual framework, and how do they compare with the dimensions of established service-quality instruments? Because thematic synthesis interprets rather than tests relationships, the framework developed for RQ3 is proposed as a set of hypotheses for future research.

2. Materials and Methods

2.1. Research Design

This study is a qualitative evidence synthesis that used thematic synthesis (Thomas & Harden, 2008) and is reported in accordance with PRISMA 2020 (Page et al., 2021) and the ENTREQ statement for the synthesis of qualitative research (Tong et al., 2012); both checklists are provided as supplementary files. The review questions were structured using SPIDER (Cooke et al., 2012): sample (students, academic and administrative staff, leaders and employers in higher education), phenomenon of interest (educational service quality), design (qualitative and mixed-methods studies), evaluation (conceptions, perceptions and evaluations of service quality) and research type (qualitative and mixed methods). No protocol was registered before the review. The eligibility

criteria and analytic procedures reported here were finalized before the screening described below, and decisions that were clarified afterwards are identified as such.

2.2. Search Strategy

Scopus was searched on October 2, 2026, through the Scopus web interface. Scopus was chosen for its broad multidisciplinary coverage of peer-reviewed literature in education, the social sciences and management. The exact query as executed was:

> TITLE-ABS-KEY(("educational service quality" OR "service quality" OR "quality of educational services" OR "higher education service quality" OR "university service quality" OR "academic service quality" OR "perceived service quality" OR SERVQUAL OR HEdPERF OR SERVPERF OR EduQUAL) AND ("higher education" OR universit* OR college* OR "tertiary education" OR "postsecondary education")) AND PUBYEAR > 2019 AND PUBYEAR < 2027 AND (LIMIT-TO(DOCTYPE, "ar"))

The search was limited to articles published between 2020 and 2026. No language, open-access or subject-area filter was applied, but all search terms were in English, so studies indexed only with non-English terms may not have been retrieved. The search retrieved 890 records, which were exported in RIS format on the same date. Of these, 834 were in English and 56 in other languages (mainly Chinese, Spanish and Russian); non-English records were screened using the English titles and abstracts provided by Scopus. No other database, citation searching or reference-list searching was used. Full search documentation following PRISMA-S (Rethlefsen et al., 2021) is provided in Supplementary Material S1.

2.3. Eligibility Criteria and Study Selection

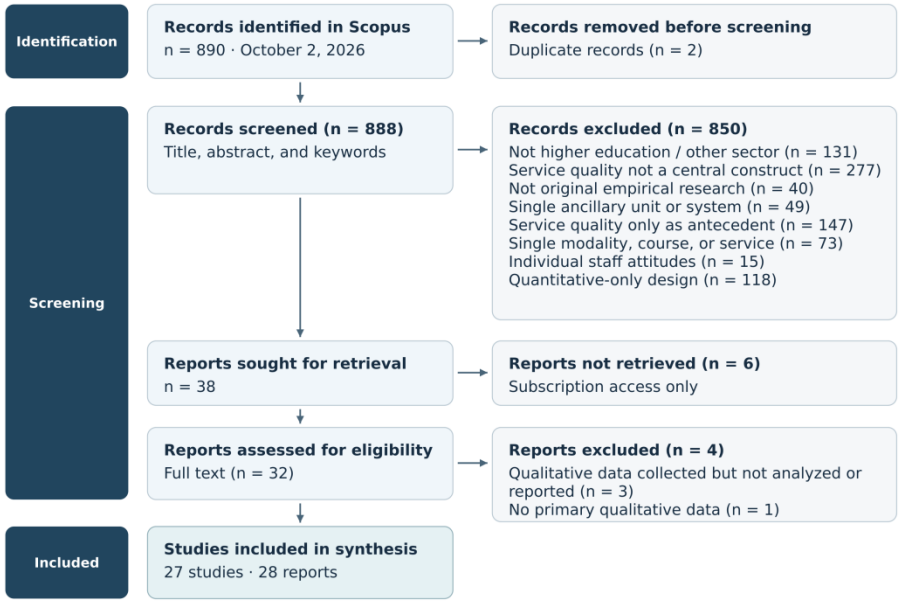
Studies were eligible if they (a) were original empirical research articles published in peer-reviewed journals; (b) examined educational service quality as a central construct in higher education institutions, that is, how it is conceptualized, perceived, evaluated or improved; (c) were published between 2020 and 2026; and (d) used a qualitative or mixed-methods design in which qualitative data were collected, analyzed and reported. Exclusion codes were applied hierarchically, so each record received the first applicable code: (E1) sectors other than higher education; (E2) educational service quality not a central construct; (E3) not original empirical research; (E4) a single ancillary unit or system, such as the library, information technology or catering, evaluated in isolation; (E5) service quality used only as a predictor or mediator of other outcomes, such as satisfaction, loyalty or reputation, without reporting how it is conceptualized or perceived; (E6) a single delivery modality, such as online learning, or a single course, office or support service; (E7) service quality treated as an outcome of individual staff attitudes; and (E8) a quantitative-only design. For E6, a degree program, school or group of programs was treated as an eligible institutional case when it was evaluated as the unit through which the whole educational service is delivered. The previous wording of this criterion ('a single office or program') was imprecise, and the study-level reasons for including borderline cases are reported in Supplementary Table S2.

Title and abstract screening was performed with the assistance of an artificial intelligence (AI) tool (Claude, Anthropic), which applied the criteria and codes to the 888 non-duplicate records and recorded a decision and a reason for each record. These decisions were validated afterwards on a random sample of 100 records (11.3%). One author (NC), blinded to the AI decisions, screened the sample independently; her agreement with the AI was 76% (Cohen's $\kappa = 0.14$). The low κ reflects the low prevalence of eligible records and a more inclusive blind screening: 23 of the 24 disagreements were records that NC included and the AI excluded, most of them quantitative-only studies. Two authors (RR and NC) then resolved each disagreement by consensus, after reviewing the AI's stated reason and answering two eligibility questions (whether the record reported original empirical research and whether it reported qualitative data collection); one abstract that did not describe the design was resolved by consulting the full text. After consensus, agreement with the AI was 98% ($\kappa = 0.74$). Of the 96 sampled records excluded by the AI, one was judged to warrant full-text assessment because its abstract did not report how data were collected (estimated

false-negative rate: 1.0%, 95% CI 0.03–5.7%); its full text could not be obtained. One record included by the AI was judged ineligible by consensus (Supplementary Table S5). All full-text decisions were made by the same two authors, who also checked the AI-assisted extraction and appraisal against the source documents. The complete AI workflow and the record-level screening log are reported in Supplementary Material S3 and Supplementary Dataset 1.

After two duplicate records were removed, 850 of the 888 screened records were excluded (E1 = 131; E2 = 277; E3 = 40; E4 = 49; E5 = 147; E6 = 73; E7 = 15; E8 = 118). Of the 38 reports sought, six could not be retrieved because they were available only by subscription and were not obtainable through institutional access or requests to the corresponding authors (Supplementary Table S4). Thirty-two reports were assessed in full text, and four were excluded because their qualitative data were not analyzed or reported, or because no primary qualitative data were collected (Supplementary Table S3). Consequently, 28 reports corresponding to 27 studies were included; two reports (Dirkse van Schalkwyk et al., 2021; Van Schalkwyk & Steenkamp, 2020) derive from the same project and were treated as one study (Supplementary Material S11). Figure 1 summarizes the selection process.

Figure 1
PRISMA 2020 Flow Diagram of the Study Selection Process



Note. Adapted from Page et al. (2021).

2.4. Quality Appraisal

Methodological quality was appraised with the Mixed Methods Appraisal Tool (MMAT), version 2018 (Hong et al., 2018). Qualitative studies (n = 12) were rated on criteria 1.1–1.5. For mixed-methods studies (n = 15), the qualitative component was rated on criteria 1.1–1.5 and the integration on criteria 5.1–5.5; following the MMAT guidance, the score of a mixed-methods study was the lower of the two counts of criteria met. The quantitative components were not rated separately because only qualitative and integrated findings entered the synthesis. Studies meeting all five criteria were classified as high quality (n = 9), those meeting four as moderate (n = 7), and those meeting three or fewer as low (n = 11). The appraisal was drafted with AI assistance and checked by two authors, who resolved disagreements by discussion. Quality was used in the synthesis in two ways: the quality profile of the studies supporting each theme is reported in Table 2, and the robustness of each theme was tested in sensitivity analyses (Section 2.6). The MMAT fits some designs poorly, notably computational text analysis and participatory action research. Criterion-level ratings are reported in Supplementary Table S7.

2.5. Data Extraction

For each study, the setting, design, participants, data collection and analysis, conceptual framework or instrument, and principal findings related to educational service quality were extracted into a standardized matrix (Table 1; Supplementary Table S6).

2.6. Data Analysis

The analysis followed the three stages of thematic synthesis (Thomas & Harden, 2008). The unit of coding was a finding reported in the results section of a primary study. Three types of source text were distinguished and identified in the excerpt dataset: participant accounts (verbatim quotations or open responses), findings reported by the primary authors (including dimensions derived in scale-development or gap-analysis studies), and integrated interpretations in mixed-methods studies. In the first stage, these findings were extracted and coded inductively. In the second, similar codes were compared across studies and grouped into 22 descriptive sub-themes. In the third, the sub-themes were organized into seven analytical themes, and the studies supporting each sub-theme were recorded in a coding matrix. The AI tool proposed an initial grouping of codes, which the authors reviewed and accepted.

The themes were developed from the extraction matrix before any coding in ATLAS.ti. The resulting codebook (Supplementary Table S8) was then applied in ATLAS.ti 26 to the full texts to document the evidence trail: for each study and sub-theme, one to three excerpts that best expressed the finding were coded, yielding 253 excerpts. Coding in ATLAS.ti was therefore confirmatory, and the number of coded excerpts reflects the reporting style of each article rather than the importance of a theme. Every excerpt was verified by exact string matching against its source text. The distribution of excerpts by study and theme, an audit trail from source passage to analytical theme, and contrary cases are reported in Supplementary Material S6.

Three further analyses were conducted. First, the number of supporting studies (k) was cross-tabulated by stakeholder group, region and institutional sector (Supplementary Table S12). Second, sensitivity analyses recalculated k for each theme after excluding low-quality studies, studies whose eligibility depended on the clarified criteria, and both groups (Supplementary Table S13). Third, the themes were mapped against the dimensions of SERVQUAL, HEdPERF and HESQUAL (Supplementary Table S14). Finally, the relationships among themes were interpreted and organized using Donabedian's (1988) structure–process–outcome model, and the studies supporting each proposed relationship were recorded (Supplementary Table S15).

2.7. Reflexivity

The review team comprises five higher education academics based in Latin America with backgrounds in education and management. Our professional experience in institutions with uneven resources may have made us particularly attentive to institutional conditions and basic needs. To limit this influence, every sub-theme was required to be supported by at least three studies, contrary cases were sought explicitly, and the dependence of the codebook on familiar service-quality categories was examined by mapping the themes against established instruments. Because an AI tool proposed the initial grouping of codes, its suggestions may have reproduced familiar categories; this possibility is discussed among the limitations.

2.8. Ethical Considerations

This study analyzed previously published literature only. No human participants, personal data or confidential information were involved, and ethical approval was not required.

3. Results

3.1. Characteristics of the Included Studies

Table 1 presents the 27 included studies. They were published between 2020 and 2026, and 11 of them appeared in 2025 or 2026, including advance online publications. The studies were conducted

Table 1
Characteristics of the Included Studies (N = 27)

No.	*Study*	*Setting*	*Design*	*Participants*	*Framework or instrument*	*Focus of findings*	*MMAT*
1	Abbas (2020)	Turkey; 3 private HEIs	Qualitative (interviews; focus groups)	43 students (26 interviews; 3 focus groups)	Maslow's hierarchy of needs	Teaching, facilities, support staff, employability, safety, extracurricular activities	4
2	Alemu (2023)	Ethiopia; 1 public university	Mixed (explanatory sequential)	367 students (survey); 14 students (interviews)	SERVQUAL	Negative gaps in all dimensions, explained by facility shortages and staff unavailability	4
3	Arrieta and Avolio (2020)	Peru; 1 private university (business programme)	Qualitative (multiple case study)	29 students; 20 graduates (focus groups; interviews)	None (inductive)	Professors, curriculum, infrastructure and services; process vs outcome views	5
4	Cavallone et al. (2021)	Italy; 1 public university	Mixed (case study)	801 employers (survey with open responses)	Value co-creation	Labor-market relevance, links with firms, interdisciplinary learning	1
5	Cavallone et al. (2022)	Italy; 1 public university	Mixed (case study)	1,055 students and 232 academics (survey); open-ended sub-sample	Value expectations; co-production	Divergent value expectations; weak theory–practice integration	2
6	Chen et al. (2023)	China; 15 universities (exchange programmes)	Mixed (sequential)	16 students and 17 teachers (interviews); 246 students (survey)	Expectation–quality–satisfaction model	Life, learning and interpersonal quality in exchange programs	2
7	Clemons and Jance (2024)	USA; 1 public university (business school)	Qualitative (open-ended survey)	80 students (written responses)	Evans and Lindsay quality dimensions	Accessibility, convenience and completeness of services	4
8	Dangaiso and Tsvere (2025)	Zimbabwe; 1 public university	Qualitative (interviews)	11 undergraduate students	HEdPERF; HEDQUAL	Academic staff attributes, support services, access and library services linked to achievement	5
9	El Alfy and Abukari (2020)	United Arab Emirates; 1 private university	Qualitative (interviews)	14 staff; 20 postgraduate students	Service-dominant logic; HiEdQUAL	Academic and administrative services, facilities, students' service role	5

Table 1 continued

No.	Study	Setting	Design	Participants	Framework or instrument	Focus of findings	MMAT
10	Ghiyasvandian et al. (2026)	Iran; 1 public medical university	Mixed (multi-phase; intervention)	Educational staff: 11 (interviews); 12 intervention, 20 control (pilot)	Staff empowerment model	Staff empowerment as a condition for service quality	3
11	Grudowski and Szczepańska (2021)	Poland; 1 public university	Qualitative (nominal group technique)	245 students	SERVQUAL; ESG standards	Student-defined determinants missing from QA standards	2
12	Hailat et al. (2021)	Libya and Jordan; 2 public universities	Qualitative (interviews)	17 students, 13 academics, 11 employees	Stakeholder approach	Basic needs: sanitation, classrooms, food, safety	4
13	Jadrić (2025)	Croatia; public and private HEIs	Mixed (sequential)	20 students (2 focus groups); 458 students (survey)	SERVQUAL	Teaching staff vs individual approach (public vs private)	3
14	Kamakoty and Singh (2023)	India; professional HEIs	Mixed (scale development)	24 faculty (focus groups); 97 faculty (survey)	PHEISQUAL (developed)	Faculty view: placement, resources, faculty, assessment	2
15	Kataria and Rajput (2026)	India; 30 central, state and private HEIs	Mixed (convergent)	450 students, faculty and staff (survey); leaders and QA staff (interviews)	Modified SERVQUAL	Autonomy, resources, feedback use, policy implementation	4
16	Lakal et al. (2020)	India; private engineering institutes	Mixed (model development)	28 faculty (focus groups); 206 faculty (survey)	EESQ model (developed)	Faculty view: research orientation, teaching, workload, growth	2
17	Maduwinarti et al. (2026)	Indonesia; 1 private university	Qualitative (grounded theory)	22 students	None (grounded theory)	Academic and non-academic quality combined with digital services	2
18	Marin-Garcia et al. (2025)	Spain; 1 public university (42 departments)	Mixed (participatory action research)	Departmental administrative staff	Continuous improvement	Barriers and enablers of continuous improvement	5
19	Perez-Encinas et al. (2026)	Spain; national university system	Mixed (text mining)	1,182 online reviews by international students	None (topic modelling; SWOT)	Teaching valued; institutional services criticized	2

Table 1 continued

No.	*Study*	*Setting*	*Design*	*Participants*	*Framework or instrument*	*Focus of findings*	*MMAT*
20	Possidónio et al. (2026)	Portugal; 1 private HEI	Qualitative (focus groups)	323 students (16 class groups)	SERVQUAL, SERVPERF, HEdPERF, EduQUAL, HEADSQUAL	Facilities, well-being, academics, organization, community	4
21	Teresa and Keno (2022)	Ethiopia; 1 public university (non-regular programmes)	Mixed (explanatory sequential)	741 students (survey); 20 students (interviews)	Student satisfaction factors	Assessment transparency, advising, administration and resource shortages in non-regular programs	4
22	Thu et al. (2026)	Vietnam; multiple HEIs	Mixed (sequential; scale development)	45 students (12 interviews; 4 focus groups); 703 students (survey)	Perceived value; cost–benefit	Benefits vs costs, incl. digital experience and support	3
23	Van Schalkwyk and Steenkamp (2020); Dirkse van Schalkwyk et al. (2021)	South Africa; 6 private HEIs	Mixed (exploratory sequential)	15 managers (interviews); 647 students and lecturers (survey; 499 open-ended responses)	Total quality service	Total quality service framework; sociotechnical needs	5
24	Xu and Siripala (2026)	China; 5 arts institutions	Qualitative (grounded theory)	15 students and graduates	None (grounded theory)	Training continuity, feedback and performance support	5
25	Yabou and Nyoni (2025)	The Gambia; 1 public university	Qualitative (case study)	9 university leaders	HESQUAL	Curriculum, staffing, infrastructure under massification	5
26	Zheng and Ouyang (2023)	China; 1 Sino–UK MA programme	Qualitative (case study)	7 graduates	Transformative learning	Educational resources and responsive lecturers in TNE	5
27	Zhu and Sharp (2022)	United Kingdom; 1 public university	Mixed (survey; interviews)	139 students and 27 academics (survey); 5 students and 6 academics (interviews)	Angell et al. expectation–experience instrument	Teaching quality; two-way management of expectations	5

Note. Studies are numbered alphabetically by first author. MMAT = number of Mixed Methods Appraisal Tool criteria met (0–5); for mixed-methods studies, the lower score of the qualitative and integration components. HEIs = higher education institutions; QA = quality assurance; ESG = European Standards and Guidelines; SWOT = strengths, weaknesses, opportunities and threats; TNE = transnational education. Study 23 comprises two reports of the same project. Data collection, analysis and principal findings are detailed in Supplementary Table S6.

in 21 countries: 12 in Asia and the Middle East, eight in Europe, five in Africa and two in the Americas; Peru was the only Latin American context, which may reflect the English-language search rather than the literature itself. Twelve studies used a qualitative design and 15 a mixed-methods design. Data were collected mainly through interviews, focus groups and open-ended questionnaires, complemented by nominal group techniques, action research and text mining of online reviews. The evidence base is dominated by students: 14 studies examined only students or graduates, five examined only academics, staff or leaders, one examined employers, and seven combined several stakeholder groups. Fourteen studies were conducted in public institutions, seven in private institutions and six in both sectors or in unspecified settings. Methodological quality was high in nine studies, moderate in seven and low in 11; the most frequent weaknesses were an insufficient description of qualitative analysis and limited integration of qualitative and quantitative components.

3.2. Thematic Synthesis

Table 2 presents the seven analytical themes, their 22 sub-themes and the studies supporting each of them. The k values indicate how many studies reported each theme; they reflect the questions asked by the primary studies, many of which used instruments that include teaching items by design, and should not be read as measures of importance. Teaching and academic quality was reported in 24 of the 27 studies, followed by physical, digital and learning infrastructure (k = 20), administrative and student support services (k = 16), employability, practice and personal development (k = 15), relational and co-created quality (k = 15), institutional and organizational conditions (k = 14), and well-being, safety and basic needs (k = 8).

The quality of the supporting evidence differed between themes. Teaching, infrastructure and institutional conditions were supported by six to eight high-quality studies each, whereas employability relied mostly on low-quality studies (eight of 15). In the sensitivity analyses, all seven themes were retained after excluding low-quality studies, borderline studies, or both, and teaching and infrastructure remained the two most supported themes in every scenario. The support for employability, however, fell from 15 to seven studies, and the sub-theme 'integration of theory and practice' was supported only by low-quality or borderline studies (Supplementary Table S13). Confidence in this theme is therefore lower.

The sources of evidence also differed. Institutional and organizational conditions were reported mainly in studies that included academics, staff or leaders (10 of 14), whereas administrative services were reported mainly by students (12 of 16; Supplementary Table S12). Well-being, safety and basic needs came from eight studies conducted in Africa, the Middle East, Asia and Portugal, and one study contributed 35% of its coded excerpts, so this theme is interpreted with caution. The synthesis also included contrary cases. In one study, the perceived quality of life services did not mediate students' satisfaction, whereas learning and interpersonal quality did (Chen et al., 2023). In another, students in public and private institutions rated tangible facilities as the least important dimension (Jadrić, 2025). Strong teaching coexisted with weak institutional services in international students' reviews (Perez-Encinas et al., 2026). Further cases are reported in Supplementary Table S11.

3.3. Thematic Network

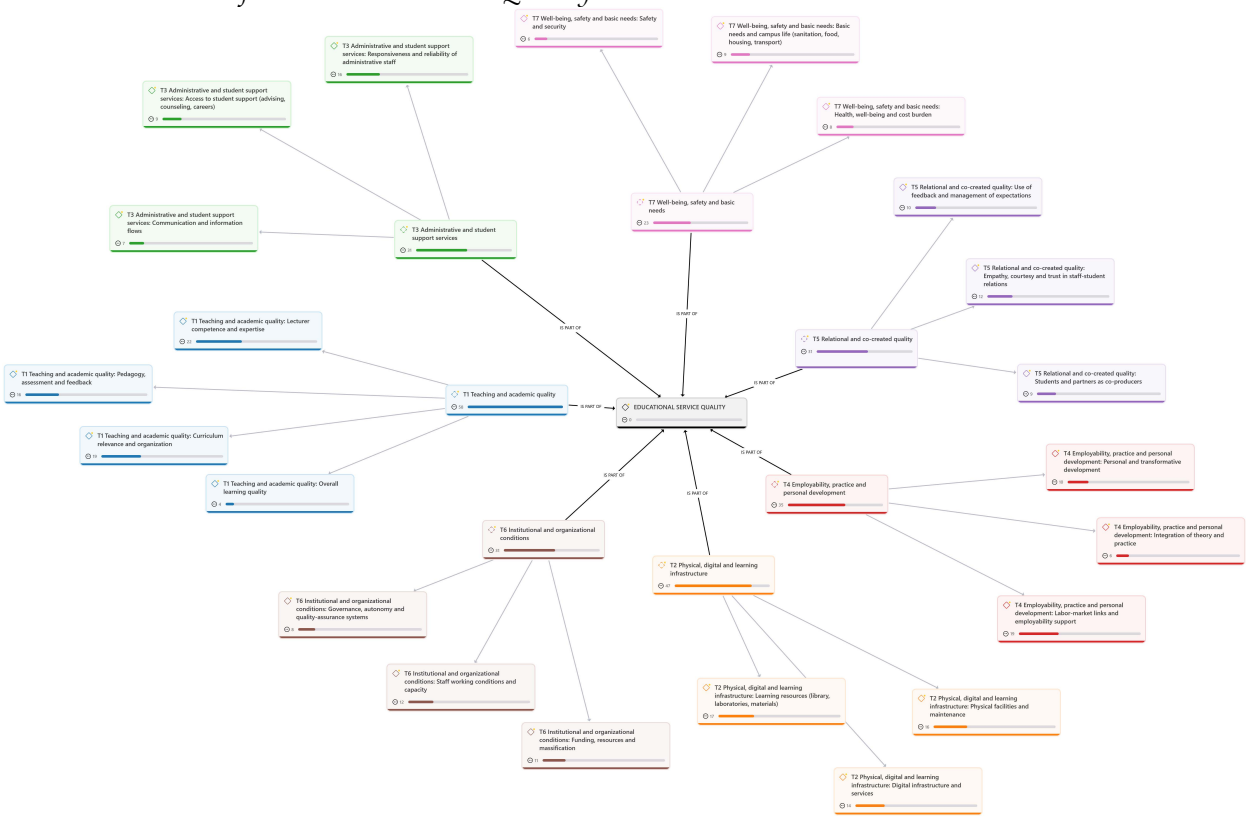
Figure 2 presents the codebook as a network that links the 22 sub-themes to the seven analytical themes. Each node shows the number of excerpts coded in ATLAS.ti, which documents the evidence trail of the synthesis but does not indicate the number of independent studies or the importance of a theme; the number of supporting studies is reported in Table 2.

Table 2
Analytical Themes, Descriptive Sub-Themes and Supporting Evidence

Analytical theme	*Descriptive sub-themes [supporting studies]*	*k*	*Quality profile (H/M/L)*	*Evidence sources*
1. Teaching and academic quality	Lecturer competence and expertise [1, 3, 8, 9, 11, 13, 14, 16, 19, 20, 21, 22, 25, 26, 27] Pedagogy, assessment and feedback [1, 2, 7, 11, 16, 20, 21, 22, 24, 26] Curriculum relevance and organization [3, 4, 5, 8, 11, 17, 20, 21, 22, 24, 25, 26] Overall learning quality [6, 15, 23]	24	8/6/10	S 14; St 3; E 1; M 6
2. Physical, digital and learning infrastructure	Physical facilities and maintenance [1, 2, 3, 8, 12, 19, 20, 23, 24, 25] Learning resources (library, laboratories, materials) [1, 2, 3, 8, 9, 14, 15, 16, 20, 21, 22, 27] Digital infrastructure and services [4, 8, 9, 11, 12, 15, 17, 20, 21, 22, 25]	20	7/6/7	S 11; St 3; E 1; M 5
3. Administrative and student support services	Responsiveness and reliability of administrative staff [1, 2, 9, 10, 11, 13, 15, 18, 19, 20, 21, 22] Access to student support (advising, counselling, careers) [1, 3, 7, 8, 17, 21, 22] Communication and information flows [1, 3, 11, 19, 20, 21]	16	4/6/6	S 12; St 2; E 0; M 2
4. Employability, practice and personal development	Labor-market links and employability support [1, 3, 4, 5, 11, 13, 14, 19, 20, 22, 23] Integration of theory and practice [4, 5, 11, 20, 24] Personal and transformative development [1, 3, 8, 16, 22, 24, 25]	15	5/2/8	S 9; St 3; E 1; M 2
5. Relational and co-created quality	Empathy, courtesy and trust in staff–student relations [1, 2, 6, 7, 8, 20, 21, 26] Students and partners as co-producers [4, 5, 9, 13, 27] Use of feedback and management of expectations [1, 5, 11, 13, 15, 27]	15	4/6/5	S 9; St 0; E 1; M 5
6. Institutional and organizational conditions	Funding, resources and massification [5, 8, 15, 21, 23, 25, 27] Governance, autonomy and quality-assurance systems [9, 11, 15, 18, 23] Staff working conditions and capacity [10, 14, 16, 18, 20, 21, 25, 27]	14	6/3/5	S 4; St 5; E 0; M 5
7. Well-being, safety and basic needs	Safety and security [1, 12, 23] Basic needs and campus life (sanitation, food, housing, transport) [2, 6, 12, 20, 23] Health, well-being and cost burden [20, 21, 22, 23]	8	1/5/2	S 5; St 0; E 0; M 3

Note. Numbers in brackets identify the supporting studies as numbered in Table 1. k = number of studies supporting the theme; a study can support more than one theme, and k indicates how often a theme was reported, not its importance. Quality profile = number of supporting studies of high (H), moderate (M) and low (L) methodological quality. Evidence sources: S = students or graduates only; St = academics, staff or leaders only; E = employers; M = multiple stakeholder groups. Sensitivity analyses and the cross-tabulation by region and sector are reported in Supplementary Tables S12 and S13.

Figure 2
Thematic Network of Educational Service Quality



Note. Created by the authors with ATLAS.ti 26. Nodes show the seven analytical themes and their 22 sub-themes. The number in each node is the number of coded excerpts (groundedness); it documents the evidence trail and does not indicate the number of supporting studies (see Table 2) or the importance of a theme.

The network shows that most sub-themes are anchored in several studies and that no theme rests on a single source. Teaching-related sub-themes concentrate the largest number of excerpts, but this partly reflects the number of teaching items in the instruments used by the primary studies. The sub-themes of institutional conditions and basic needs, by contrast, appear mainly in studies that gave voice to staff, leaders or students in resource-constrained settings.

3.4. Conceptual Framework

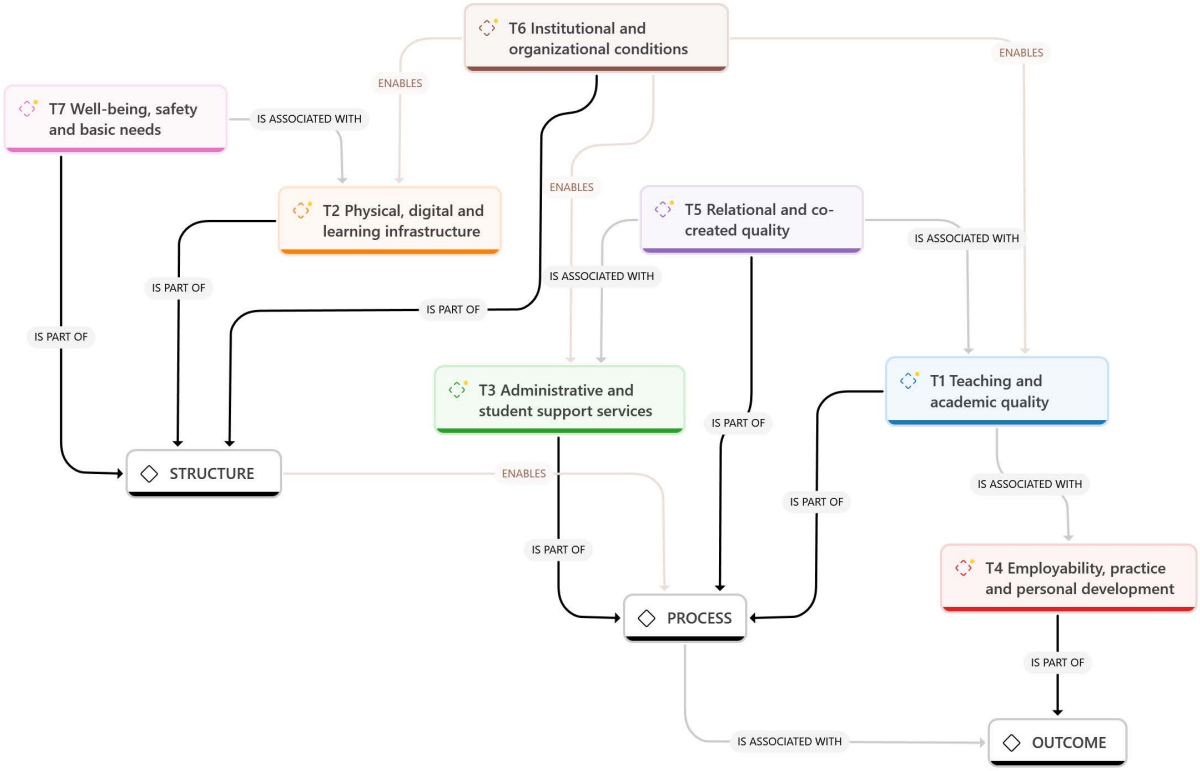
Figure 3 organizes the seven themes using Donabedian's (1988) structure–process–outcome model, which distinguishes the conditions under which a service is provided, the activities through which it is delivered, and its results. Institutional and organizational conditions, physical, digital and learning infrastructure, and well-being, safety and basic needs were classified as structural conditions. Teaching and academic quality, administrative and student support services, and relational and co-created quality were classified as service processes. Employability, practice and personal development was classified as an outcome. The links in the figure are interpreted relationships, not causal effects.

Some relationships were described explicitly in the primary studies, whereas others are inferences made by the authors (Supplementary Table S15). The enabling role of institutional conditions was described explicitly in seven studies of teaching, six of infrastructure and five of administrative services, mainly from the perspective of staff and leaders, who linked funding constraints, staff shortages, governance and promotion criteria to the quality of the service. The association between relational quality and the teaching and administrative processes was also explicit, for example where opaque assessment generated mistrust between students and instructors. The link between teaching quality and employability was reported in eight studies. The association between basic needs and infrastructure, by contrast, rests on themes that were reported together rather than explicitly linked, and the overall structure–process–outcome

ordering is an inference anchored in Donabedian's model. The framework therefore separates the conditions, processes and outcomes of the educational service, which previous versions of the construct tended to merge.

Figure 3

Conceptual Framework of Educational Service Quality Based on the Structure–Process–Outcome Model



Note. Created by the authors with ATLAS.ti 26, based on Donabedian (1988). Links are interpreted relationships, not causal effects. "Is part of" assigns each theme to a level of the model; "enables" denotes an enabling condition described in the primary studies; "is associated with" denotes themes reported as related. The studies supporting each link, and the links that are author inferences, are listed in Supplementary Table S15.

4. Discussion

This review synthesized qualitative evidence on how stakeholders conceptualize educational service quality in higher education. The comparative studies cited in this section were drawn mainly from records in the same Scopus dataset that were excluded for design or focus reasons, such as quantitative-only or antecedent studies, together with a few theoretically relevant sources. They are used to situate the findings, not as additional evidence.

Teaching and academic quality was the most frequently reported theme, with lecturer competence, curriculum relevance and pedagogical practices as its main sub-themes. Survey studies have likewise reported that lecturers' knowledge, credentials, industrial experience and motivation are associated with student satisfaction (Latip et al., 2020), and that teaching quality and faculty leadership are significant predictors of students' evaluations (Fauzan et al., 2026). The qualitative evidence adds that stakeholders value academic competence in relation to the lecturer's ability to connect disciplinary knowledge with professional practice. Its prominence should nevertheless be read with caution, because many primary studies used instruments that include teaching items by design.

Physical, digital and learning infrastructure was the second most frequently reported theme. Satisfaction in teacher education colleges in Tanzania was most strongly predicted by the availability of teaching aids, practical materials and adequate facilities (Swai et al., 2022). The relationship between electronic service quality and student satisfaction has been reported to vary with students' digital literacy (Lu & Khan, 2024), and students' accounts of technology-mediated higher education underline the role of digital literacy in making meaningful use of online services

(Azennoud, 2022). Evidence from university information systems further suggests that digital service experiences should be evaluated alongside information quality and governance arrangements rather than technical availability alone (Rustanto et al., 2026). Infrastructure therefore appears as a condition whose value depends on users' capacity and on institutional governance, not only on its existence.

Administrative and student support services were reported mainly by students, with the responsiveness and reliability of administrative staff as their most salient aspect. In a mixed-methods study of registrar services, responsiveness, clarity and timely assistance were students' top priorities, and most attributes were classified as basic requirements whose absence generates dissatisfaction (Chavez & Namoco, 2026). The contribution of non-academic staff remains underexplored, which has motivated the development of scales of their service competencies (Nga et al., 2025).

Relational and co-created quality showed that students and external partners can act as participants in producing quality rather than as recipients of a service. Perceived service quality and institutional image have been associated with students' value co-creation behaviors through their loyalty (Pinna et al., 2023), and giving students a meaningful choice over feedback formats has been associated with perceived autonomy, clarity and engagement. However, the reviewed studies also showed that student feedback is often collected but rarely acted upon. Student evaluations can improve services (Gaftandzhieva et al., 2023) and prompt lecturers to adjust their pedagogy when they are taken seriously (Sevnarayan, 2022), but institutions often lack mechanisms to analyze and act on them.

Institutional and organizational conditions were reported mainly by academics, staff and leaders, and remain largely invisible in student-centered evaluations. Survey evidence has associated academic staff's job satisfaction and organizational commitment with students' perceptions of service quality (Al-Refaei et al., 2024), and recent changes in higher education have been associated with less favorable workplace perceptions among faculty (Blair et al., 2024). Supervisors' accounts of digital dissertation guidance similarly describe feedback, procedural constraints and supervisory relationships from the perspective of service provision (Boukhobza et al., 2026).

These findings suggest that stakeholders may conceptualize quality differently, but this conclusion must be qualified. Only seven studies included more than one stakeholder group, and only two compared students' and academics' expectations directly (Cavallone et al., 2022; Zhu & Sharp, 2022). In both, academics described quality as a shared, two-way responsibility, whereas students attributed it mainly to staff behavior. The other staff-perspective studies were instrument-development studies conducted solely with faculty (Kamakoty & Singh, 2023; Lakal et al., 2020), so differences between them and student-only studies may reflect different research questions, countries, institutional types and disciplines rather than stakeholder status. Within-study comparisons are therefore needed before the divergence can be considered established.

Employability, practice and personal development was the outcome dimension of the service, but it was the theme most dependent on low-quality studies. Survey evidence has associated academic quality and career opportunities with students' self-perceived employability (Goel, 2026) and graduates' preparation with the perceived value of their education (García-Valdez et al., 2025). Treating employability as an indicator of service quality is nevertheless contested, because it reinforces an instrumental and market-oriented view of higher education (Molesworth et al., 2009). The theme is therefore better understood as an expected outcome than as a dimension of the service itself.

Well-being, safety and basic needs was the least widespread theme and was concentrated in settings marked by political instability, campus violence or economic hardship. University infrastructure evaluations have included security, public facilities and cafeteria services alongside academic resources (Judi et al., 2020), service quality has been associated with dimensions of students' psychological well-being (Abdelnaeim et al., 2025), and after a natural disaster students valued contact from institutional staff as an important source of support (Temli-Durmuş, 2026).

Contrary evidence also exists: in a well-resourced exchange program, perceived life-service quality did not mediate satisfaction (Chen et al., 2023). Basic needs therefore appear to become salient when they are not met.

Taken together, the themes show partial overlap with existing instruments. The mapping in Supplementary Table S14 indicates that teaching, infrastructure and administrative services are covered by SERVQUAL, HEdPERF and HESQUAL, and that HESQUAL's transformative-quality dimension partly covers personal development. Institutional and organizational conditions are absent from all three instruments, because they are conditions of provision rather than attributes perceived by students. Basic needs, co-creation and labor-market links are present only generically, within tangibles, support facilities or empathy, without items that capture what the reviewed studies reported. The dominance of SERVQUAL-based approaches in the literature (Wider et al., 2024) may therefore limit the visibility of these aspects. Rather than proposing new dimensions for existing scales, the structure–process–outcome distinction suggests evaluating the conditions, processes and outcomes of the service separately, a possibility that remains to be tested empirically (Latha et al., 2026; Sohail & Hasan, 2021).

4.1. Practical and Theoretical Implications

From a theoretical perspective, the review distinguishes the structural conditions, service processes and outcomes of educational service quality, which existing instruments tend to merge into a single list of dimensions. Anchoring the framework in Donabedian's model clarifies which elements are evaluated by students and which are conditions of provision that require other sources of evidence. It also supports the view that responsibility for educational quality is shared among students, educators, institutions and policymakers.

From a practical perspective, and with the caution required by an interpretive synthesis, the findings suggest several actions. Because institutional conditions were reported in 14 studies, mainly by staff and leaders, quality-assurance systems could incorporate indicators of workload, staffing and institutional support alongside student surveys. Because infrastructure was reported in 20 studies, digital services could be evaluated by their usability, accessibility and pedagogical integration rather than their availability alone. Because relational quality was reported in 15 studies, institutions could integrate student feedback into internal quality-assurance cycles and report the actions taken, treating student participation as a governance mechanism rather than only a source of satisfaction data. In resource-constrained contexts, safety, basic needs and affordability may warrant attention in institutional evaluation, although this recommendation rests on only eight studies.

4.2. Limitations and Future Research

This review has several limitations. First, it searched a single database, used English terms only, was restricted to journal articles and did not use citation or reference-list searching; studies indexed elsewhere or only in other languages may have been missed, and the scarcity of Latin American studies may reflect this design. Second, six reports (16% of those sought) could not be retrieved; their titles suggest content related to existing themes, but their absence may reduce the support for specific sub-themes. Third, the eligibility criteria excluded quantitative-only studies, studies limited to a single modality or service, and studies in which service quality was only an antecedent of loyalty or other outcomes; the review therefore covers a particular subset of the field. Fourth, the evidence base is dominated by students, and its methodological quality was heterogeneous; 11 studies were of low quality. Fifth, title and abstract screening, extraction, appraisal and the initial grouping of codes were assisted by an AI tool. Screening was validated on a random sample of 100 records screened blind by one author (estimated false-negative rate 1.0%), and the other steps were checked by two authors, but no protocol was registered and inter-coder reliability was not calculated for the coding, and the AI may have anchored the codebook in familiar service-quality categories. Sixth, the corpus is concentrated in 2025–2026 and includes advance online publications. Finally, the counts of supporting studies do not estimate effects or

relative importance, and the framework in Figure 3 is interpretive. The least certain conclusions are those concerning employability, basic needs and differences between stakeholder groups. Future research should test the framework through within-study comparisons of stakeholder groups, extend the search to Spanish- and Portuguese-language databases such as SciELO and Redalyc, and develop instruments that evaluate the conditions, processes and outcomes of educational services separately.

5. Conclusion

This review synthesized qualitative evidence from 27 studies on how stakeholders conceptualize educational service quality in higher education. The seven themes identified show that stakeholders' conceptions extend beyond the dimensions measured by most instruments. Read through a structure–process–outcome lens, the evidence distinguishes the institutional and basic conditions under which educational services are produced, the academic, administrative and relational processes through which they are delivered, and the outcomes that stakeholders expect from them. The support for these themes is uneven, strongest for teaching, infrastructure and institutional conditions and weakest for employability and basic needs, and the relationships among them remain to be tested.

For quality assurance, the main implication is that student satisfaction surveys capture the service processes but not the conditions that make them possible. Combining student evaluations with indicators of institutional conditions, and evaluating structures, processes and outcomes separately, may provide a more complete picture of educational service quality, particularly in institutions with uneven resources.

Artificial intelligence (AI) use disclosure: The authors used Claude (Anthropic; Claude Opus 5.5 model) to assist in (a) preliminary title and abstract screening against the predefined eligibility criteria; (b) extraction of the findings of the included studies; (c) drafting the MMAT ratings; (d) proposing an initial grouping of codes into sub-themes and themes; (e) locating candidate excerpts for coding in ATLAS.ti; (f) language editing; (g) drafting support for sections of the manuscript; and (h) drafting support for the response to reviewers. All AI-assisted text was reviewed and revised by the authors. Screening decisions were validated on a random sample screened by one author blinded to the AI decisions, with disagreements resolved by two authors; full-text decisions were made by two authors, and extraction, appraisal and coding were checked by the authors, who take full responsibility for the content of the manuscript. The workflow is documented in Supplementary Material S3.

Data availability: The record-level screening log (Supplementary Dataset 1), the coded excerpts and coding matrix (Supplementary Dataset 2), and the supplementary tables documenting the search, eligibility decisions, AI workflow, extraction, appraisal, coding, sensitivity analyses, instrument mapping and framework evidence (Supplementary Material) are provided with this article. The ATLAS.ti project is available from the corresponding author upon request.

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Ethical statement: Ethical approval was not required for this study, as it was a systematic review based exclusively on previously published literature and did not involve the collection of primary data from human participants or animals.

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