Institutional Governance, Organisational Capability, and Sustainable Educational Quality

Building Universities Capable of Delivering What They Promise

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Abstract

Institutional quality cannot be inferred from approved programmes, qualified employees, adopted policies or installed technologies considered separately. Universities deliver education through interdependent organisational arrangements that must persist across cohorts, leadership changes, technological failures and fiscal pressures. This chapter develops an institution-wide account of enduring capability, distinguishing resources, formal readiness, enacted routines, adaptive capacity and demonstrated educational consequences. It offers a critical, Rwanda-anchored synthesis of scholarship on institutional and socio-technical organisation, academic governance, quality culture, dynamic capabilities and evidence-informed management, interpreted alongside selected official regulatory and international guidance. Twelve interconnected capability domains are examined: governance, quality culture, staffing, curriculum-design support, physical and digital infrastructure, research and supervision, information systems, data protection and cybersecurity, financial sustainability, institutional dependencies, risk governance and evaluation. Particular attention is given to the difficulties of equating documents with implementation, technological procurement with educational transformation, and performance metrics with learning. The original practical contribution is a proposed Institutional Capability Self-Assessment Instrument, comprising evidence-based maturity descriptors, non-compensatory safeguards, an institutional diagnostic matrix and an improvement-prioritisation protocol. The instrument is designed for institutional self-review, internal quality assurance and preparation for external evaluation; it is not an authorised Higher Education Council accreditation tool or a psychometrically validated maturity measure. The chapter concludes that sustainable quality depends less upon the isolated possession of assets than upon accountable coordination, credible evidence, continuous organisational learning and the ability to protect educational commitments under changing conditions.

Keywords: institutional governance; organisational capability; quality culture; African higher education; academic staffing; digital maturity; institutional sustainability

3.1 Introduction: From institutional readiness to enduring capability

An institution may truthfully report that it employs doctorate-holding lecturers, subscribes to a digital library, operates a learning-management system (LMS) and has approved a comprehensive quality-assurance policy. None of these statements establishes, by itself, that students will consistently receive appropriately challenging teaching, timely academic feedback, supervised practical experience, dependable learning resources or fair assessment. The distinction is between the possession of resources and the capacity to mobilise them, with suitable governance, to fulfil an educational obligation. A university cannot deliver its academic promises through disconnected assets. Teaching, research, assessment, student services, financial planning and regulatory accountability must function as mutually supporting practices.

The preceding chapters have established two conditions of credible higher education. Educational quality is multidimensional and purpose-referenced, while lawful operation requires careful identification of applicable national authority, qualification requirements and programme approval. The missing institutional question is consequential: which organisational arrangements enable a university to translate defensible educational purposes and legally authorised programmes into reliable practice? This chapter argues that institutional capability constitutes that connecting mechanism. It is not an interchangeable synonym for readiness, resource sufficiency, organisational size or competitive reputation. Nor is it merely a list of

departments. It is an institution's sustained capacity to coordinate people, systems, knowledge, decisions and resources so that academic commitments can be enacted, monitored and revised without sacrificing fundamental standards.

The distinction is particularly important in African higher education, where institutions differ considerably in age, mission, funding, ownership, delivery modalities and the circumstances of their students. It would be analytically unsound to presume that a small regional teaching university must resemble a research-intensive metropolitan institution to demonstrate quality. It would be equally unsound to excuse inadequate academic staffing, unsafe laboratories or unprotected student data simply because an institution operates with constrained resources. Sound evaluation therefore differentiates functionally necessary standards from contextually variable methods of achieving them. A modest institution may build reliable capability through carefully governed partnerships, shared facilities, open educational resources and transparent service arrangements, provided that responsibility, continuity and academic standards remain demonstrable.

This chapter uses a critical integrative and documentary approach. Its antecedents include the author's doctoral thesis manuscript (Sangwa, 2026), the approved scholarly book architecture and established literature on organisational theory, university governance and educational quality, supplemented by identifiable policy and professional reference documents. Sources were selected purposively for conceptual explanatory power, relevance to institutional operation or recognised normative authority. No new fieldwork, interviews, institutional case audit, exhaustive database search or PRISMA screening is claimed. The analysis distinguishes normative requirements from empirical findings, theoretical inferences and the author's proposed professional instruments. Illustrations of institutional practice are hypothetical unless explicitly identified otherwise. Rwanda provides the principal regulatory setting, not a basis for assuming that arrangements elsewhere in Africa are legally identical.

The chapter develops its argument through twelve capability areas and then assembles them into an operational assessment instrument. The treatment of institutional capabilities intentionally precedes the book's detailed discussion of curriculum design: programme teams cannot reasonably plan coherent learning unless the institution can provide the governance, staffing, instructional expertise, infrastructure and evidence services on which those plans depend. The question throughout is not whether an institution has described a desirable system, but how it knows the system exists, works for its students and can continue to work.

The analytical claim requires a distinction between a capacity's observable expressions and the organisational conditions that generate them. The doctoral work underlying this volume adopts a critical realist orientation: formal rules, institutional representations and reported outcomes provide fallible evidence about what organisations can actually do, while resources, authority relationships, incentives and collective routines may help explain observed performance (Sangwa, 2026; Sayer, 2000). Institutional theory identifies the possibility of symbolic conformity; socio-technical analysis explains why people, technologies and work practices cannot be evaluated separately; and dynamic-capabilities scholarship directs attention to adaptation rather than one-off preparedness. These perspectives are complementary but not interchangeable. The central evaluative proposition is that a university has credible capability when it can repeatedly enact legitimate educational commitments, recognise threats to delivery, and correct deficiencies on the basis of trustworthy evidence.

The evidentiary boundary should be explicit. A statutory instrument can establish an authority's mandate; a university's policy can establish intended conduct; a committee minute can establish that a recorded deliberation occurred; and verified student work can illuminate educational achievement. None of these forms of evidence, considered alone, establishes an institution-wide causal mechanism. The chapter therefore undertakes interpretive synthesis and proposes operational tests rather than offering estimated causal effects or claims about the average condition of Rwandan universities. Its diagnostic examples illustrate how an assessor might reason, not how an unidentified institution has actually performed. This restraint is important because sophisticated language about organisational capability can otherwise conceal an evidentiary gap between explanatory theory and observed institutional practice.

3.2 University governance structures, leadership, institutional autonomy, and strategic accountability

University governance concerns the distribution and legitimate exercise of authority over institutional purpose, academic standards, resources, risk and accountability. It includes the governing council or board, senate or other academic authority, executive management, faculties and schools, departments, specialist committees and operational services. These titles should not be assumed to have identical statutory competences across jurisdictions or institutional categories. The significant analytical issue is whether decision rights are sufficiently clear for the institution to act responsibly. Governing organs approve strategic direction and exercise stewardship within their authorisation; academic bodies safeguard qualification integrity and scholarly judgement; executives implement decisions and maintain viable operations; programme teams translate standards into teaching and assessment; specialised units supply assurance, evidence and support. When these boundaries are uncertain, important decisions may be approved by actors without the necessary mandate or implemented without adequate academic scrutiny.

Effective governance has both an authorising and a restraining function. It authorises programmes, appointments, budgets and initiatives only after proportionate inquiry. It also prevents short-term pressures from overriding academic obligations. A decision to increase enrolment should therefore be considered alongside teaching capacity, assessment turnaround, access to laboratories, library licences, student support and the timetable for additional staff recruitment. The financial attractiveness of an expansion cannot itself demonstrate its academic feasibility. Likewise, a technologically ambitious executive should not approve a new AI-supported assessment system without appropriate academic, data-protection and procurement scrutiny. Governance quality is visible in how an institution decides, how it records reasons and whether it revisits decisions when evidence changes.

The literature on institutional isomorphism warns against mistaking formally appropriate structures for functioning governance. Meyer and Rowan (1977) showed how organisations can adopt legitimate formal arrangements while decoupling them from everyday practices. DiMaggio and Powell (1983) explained why regulatory, professional and mimetic pressures can produce organisational resemblance. These insights do not imply that every adopted committee or strategy is ceremonial. Rather, they direct scrutiny to the connection between the structure's stated responsibilities, the matters it actually considers, the records of its decisions and the consequences of its oversight. A quality committee that produces regular minutes but never detects recurring grading anomalies or follows up complaints may possess procedural visibility without material influence.

Institutional autonomy is neither immunity from regulation nor a purely rhetorical privilege. Academic freedom permits reasoned inquiry and disciplinary judgement; corporate autonomy enables institutions to determine legitimate strategy and manage resources within their mandates. Accountability requires that both forms of discretion be exercised with regard to learners, public obligations and applicable law. Excessive centralisation can suffocate timely curriculum adjustment and professional responsibility. Uncontrolled decentralisation can instead produce incompatible assessment regulations, uneven digital infrastructure, fragmented data practices and varying interpretations of award requirements. A defensible model distributes authority to the lowest competent level while retaining common controls where inconsistent decisions would threaten legality, learner protection or comparability.

For Rwanda, governance analysis must be anchored in current statutory and institutional instruments rather than inherited organisational diagrams. Presidential Order No. 044/01 of 24 July 2026, reported in the preceding chapter as published in the Official Gazette on 30 July 2026, concerns the mission and responsibilities of the Higher Education Council (HEC). Its scope is relevant to institutional monitoring, programme approval and technology-related responsibilities (Republic of Rwanda, 2026). It does not mean that HEC directly substitutes for every internal academic or governing decision. An institution's statutes, authorisations and applicable HEC instruments must be consulted to determine the particular legal powers of its governing bodies. The chapter's suggested delegation and review procedures are professional proposals, not quotations of a prescribed uniform governance chart.

A practical governance audit should follow a decision from initiation to closure. Consider a hypothetical proposal to offer an existing classroom-based degree in a blended format. The department establishes

educational equivalence and teaching requirements; ICT and learning-design services test delivery; the data-protection function examines vendors and student information; finance evaluates continuing costs; academic authorities determine whether the curriculum and assessment remain academically sound; management confirms implementation responsibilities; and the designated officer checks whether the change requires HEC action. The audit asks not merely whether these actors exist but whether they were consulted at the appropriate stages and whether the final approved version matches what is delivered. Such decision traceability is the institutional counterpart of the evidence-traceable reasoning developed later in the volume.

Strategic accountability also requires attention to mission integrity. Universities may have commitments to regional development, advanced research, professional service, adult learning or a particular educational tradition. These missions legitimately affect programme priorities and organisational configurations. Yet distinctive mission cannot exempt a provider from minimum requirements for truthful advertising, competent supervision, reliable assessment or student protection. Strategy should therefore specify desired educational contributions, the capabilities required, the resources assigned, the risks accepted and the evidence by which responsible authorities will judge progress. The more explicit these connections are, the less plausible it becomes for a favourable strategic narrative to conceal persistent operational weakness.

A governance structure should be judged through the decisions it is required to make, the information available when decisions are made, and the accountability that follows. A university council cannot responsibly approve a major programme portfolio expansion on forecast tuition alone if the accompanying risk analysis omits supervision capacity, full cohort costs or the educational consequences of a failed recruitment scenario. Equally, a senate's academic autonomy is weakened when curricular decisions are routinely predetermined by commercial negotiations or when technically significant changes escape scholarly scrutiny. A decision-rights matrix should therefore differentiate proposal, expert review, recommendation, approval, implementation, verification and appeal. The same person or office need not perform all these functions, and their separation may be essential where conflicts of interest or consequences for students are material.

Student representation and independent challenge are governance capabilities rather than ceremonial additions. HEC's 2021 internal quality-assurance guidelines explicitly address student participation in appropriate governance bodies, sound governance and management, research, community engagement, periodic review and information management (Higher Education Council, 2021). Their eighteen standards provide an official institutional reference, while the twelve-domain instrument developed here is an analytical reorganisation and must not be mistaken for an HEC-issued replacement. Effective participation requires access to understandable information, protected opportunities to raise concerns and evidence that issues are considered. Students should not be asked to certify the adequacy of technical matters beyond their expertise, but their lived experience can expose scheduling, assessment, accessibility and support failures that formal reporting misses.

3.3 Internal quality culture, organisational learning, and institutional effectiveness

Quality culture describes more than favourable attitudes towards accreditation. It concerns the shared habits, responsibilities and conditions through which academics, administrators and leaders identify problems, use evidence, protect academic standards and pursue improvement. A university may have an extensive internal quality-assurance manual without encouraging lecturers to report assessment failure or giving departments time to revise ineffective modules. Conversely, informal goodwill alone is inadequate where student complaints are unresolved, moderation is inconsistent or decisions lack records. A mature quality culture depends upon both formal structures and the willingness to use them honestly. It combines expectations, professional competence, constructive challenge, psychological safety and proportionate accountability.

Organisational learning supplies the dynamic element. Argyris and Schön (1978) distinguished learning that corrects departures from established assumptions from learning that questions the governing assumptions themselves. In a university, a shortfall in assessment turnaround might initially be addressed through reminder emails, an example of adjustment within the existing system. Repeated failure should prompt

deeper examination of class sizes, marking workload, moderation procedures, staff incentives and digital submission arrangements. Without that second level of inquiry, leaders may repeatedly correct visible symptoms while preserving their causes. Institutional effectiveness emerges when review processes can alter resource allocation, programme design and routine practice, rather than merely generate annual reports.

The problem of measurement is inseparable from this discussion. Retention, pass rates, completion, research publications, staff-student ratios and student satisfaction can all reveal important patterns, but none is an unproblematic measure of institutional quality. A high pass rate may indicate effective teaching, lowered academic demand, selective admissions or unreliable grading. A high publication count may hide predatory outlets, unequal workload or weak research supervision. Strong student satisfaction may coexist with undemanding learning experiences; critical but educationally rigorous modules can initially receive lower satisfaction scores. Indicators must therefore be interpreted against clear definitions, contextual characteristics and independent evidence. The purpose of a dashboard is to direct informed inquiry, not to replace it.

An important safeguard is to distinguish evidence of process from evidence of results. The existence of an annual programme review establishes that a review process is defined; completed minutes show that a review occurred; documented changes suggest institutional response; subsequent assessment samples, progression patterns or external evaluation may help establish whether changes improved learning. The strength of any conclusion depends on the question, the evidence's credibility and plausible alternative explanations. Because educational systems are open and influenced by many factors, one should rarely attribute an observed improvement exclusively to a single administrative measure without an appropriate design for doing so.

Quality culture must include the ability to disagree responsibly. Senate debate, independent external examining, staff consultation, student representation and protected channels for reporting misconduct all contribute to institutional self-correction when supported by fair procedures. Governance that punishes unwelcome evidence risks cultivating inaccurate reports and ceremonial compliance. At the same time, unstructured dissent is not itself an improvement strategy. Concerns must be recorded, evaluated and resolved through competent authority, with feedback explaining the eventual judgement. Transparent disagreement can strengthen the legitimacy of institutional decisions, especially where resource allocation requires difficult trade-offs.

A learning institution maintains what might be called a closed evidence-to-action loop. It identifies a specific concern, tests the evidence, establishes a plausible cause, assigns a proportionate intervention, appoints a responsible owner, specifies a review date and verifies whether the problem has actually been addressed. A corrective-action register should record unresolved matters as openly as completed matters. Treating an action as closed when a policy has been circulated, but before affected practice has changed, is a common category error. Closure should depend on the risk and the kind of problem: a revised assessment rule may require evidence from the next assessment cycle, while a laboratory safety failure may require immediate reinspection before use resumes.

Continental and international standards reinforce the importance of institutional responsibility without establishing one mandatory managerial template. The African Standards and Guidelines for Quality Assurance in Higher Education describe internal and external assurance functions and emphasise coherent institutional policies, programme quality, information management and periodic evaluation (HAQAA Initiative, 2018). They are a comparative professional benchmark, not a substitute for Rwanda's applicable domestic requirements. The material question is whether national standards and an institution's own academic commitments are translated into roles and regular practices that people can perform. A culture of improvement is difficult to sustain where teaching review is detached from budget decisions, where staff have no protected time to amend deficient learning activities, or where a quality office is evaluated mainly by the volume of documentation produced.

Quality culture also requires organisational justice. Learners and staff are unlikely to report recurring problems candidly if complaints are treated as disloyalty, errors are concealed to protect institutional reputation, or similar cases receive unexplained different decisions. Conversely, an improvement culture is not a promise of consequence-free error: negligence, misconduct and discriminatory treatment require

appropriate procedures and proportionate accountability. Universities should distinguish good-faith disclosure of problems from deliberate falsification, provide credible channels for review and document how contested evidence is resolved. This relational aspect of quality is especially important in small institutions, where informal authority and concentrated responsibilities can make reporting both efficient and vulnerable to personal influence.

3.4 Academic staffing: Recruitment, qualifications, workload, professional development, and succession

Academically credible provision depends on more than the aggregate number of employees or the credentials listed beside their names. Institutional capability requires disciplinary expertise at the required qualification level, pedagogical competence, sufficient availability, manageable workload, continuity and appropriate support. A staff profile showing doctoral qualifications may offer evidence of formal expertise but cannot establish that lecturers have signed contracts, are assigned to the relevant modules, have time to supervise students or are competent to use the particular teaching modality. Reviewers should distinguish persons named in a staffing plan, persons contractually committed, persons currently employed, persons appropriately deployed and persons demonstrably performing the specified work.

Recruitment policy is therefore an academic risk-control mechanism. Appointment criteria should relate to the responsibilities of the position, and selection should consider disciplinary competence, teaching practice, research integrity and professional registration where relevant. Institutions should document qualification verification and transparent recruitment decisions without using irrelevant prestige signals as substitutes for capability. A globally recognised degree may be valuable, but the evidence that an individual can teach a demanding module or supervise a particular research topic requires disciplinary assessment. In regulated professions, academic qualifications and legally required professional authorisations may need separate verification.

Workload is a decisive but frequently hidden quality variable. Teaching involves preparation, synchronous or classroom contact, facilitation, marking, feedback, consultation, course redesign, academic advising and assessment moderation. Research-intensive responsibilities include scholarly production, grant administration, ethics compliance and supervision. Leadership and service responsibilities consume further time. A workload model that counts only contact hours may conceal substantial demands in blended provision, where discussion facilitation and feedback are distributed across a week. When programmes expand without corresponding workload revision, feedback is delayed, staff development is displaced and supervision becomes episodic. Staffing adequacy must therefore be judged against actual cohort size, assessment design, supervision intensity and the support infrastructure available.

Faculty development should be governed as an institutional system rather than a collection of occasional workshops. Initial induction should clarify academic regulations, assessment expectations, integrity obligations, student-support routes and the educational philosophy of the institution. Continuing development should respond to observed needs through peer observation, communities of practice, mentoring, short courses, research collaboration and discipline-specific updating. Attendance at a training session is weak evidence of improved teaching. Stronger evidence may include redesigned assessments, reviewed learning materials, peer feedback and observed changes in students' opportunities to demonstrate learning. Professional development also requires protected time and support; exhortation without the opportunity to change practice is unlikely to produce durable capability.

Postgraduate supervision deserves special protection because its demands are not represented by conventional classroom ratios. Capacity depends on topic expertise, availability, doctoral examination experience, access to literature and methods training, suitable ethical review, candidate monitoring and alternative supervision arrangements when staff leave. A doctorate programme dependent on one external professor for nearly every specialist topic has an evident continuity risk even if that professor's qualifications are impressive. Institutions should maintain a supervision-load register, explicit milestone expectations, a policy for co-supervision and procedures for reassignment. Such safeguards should preserve scholarly independence and confidentiality, not reduce research supervision to managerial surveillance.

Succession planning is closely related to workforce sustainability. Universities may rely on founding academics, visiting specialists or a small number of ICT and registry employees who hold knowledge unavailable elsewhere. Departure, illness or prolonged absence can interrupt whole programmes. A risk-sensitive succession plan documents critical functions, identifies deputies, preserves lawful access to essential records, trains successors and establishes recruitment contingencies. It should never imply that expertise is instantaneously interchangeable: replacement teaching and supervision require appropriate discipline and level. The institutional capability test is whether foreseeable personnel changes can be accommodated without making the educational offer misleading or imposing unreasonable harm on enrolled learners.

Staff adequacy can be tested through a transparent workload model rather than a single staff-to-student ratio. The analysis should identify contact and preparation requirements, frequency and complexity of assessments, expected feedback turnaround, supervision commitments, reasonable accommodations, academic administration and staff research or professional obligations. In a hypothetical programme admitting 120 additional students, the increase in student numbers does not mechanically identify the number of lecturers required; the answer depends on whether students need individual project feedback, small-group practice, laboratory sessions or field supervision, and whether trained teaching assistants have legitimate responsibilities. A defensible model records activity assumptions, available staff hours and bottlenecks, then tests them under realistic absence and reassessment scenarios. Such calculations are internal management analyses, not automatically national staff-ratio rules.

Professional development should also be differentiated by role. A lecturer responsible for online assessment needs skills in accessible task design, timely formative feedback and protection of academic integrity; a postgraduate supervisor needs methodological currency and ethical judgement; a curriculum chair needs qualification-level and standards-mapping competence; and academic leaders need the ability to recognise flawed performance measures. UNESCO's AI competency framework for teachers identifies human-centred practice, AI ethics, foundational knowledge, AI pedagogy and professional learning as related domains of competence (Miao & Cukurova, 2024). This does not impose a universal course on faculty, but it strengthens the case for role-specific evidence of informed human oversight rather than assuming that AI-related proficiency follows from general ICT familiarity.

3.5 Curriculum-development and instructional-design capabilities

Curriculum development is often assigned to an ad hoc committee constituted shortly before external submission. This can produce a technically completed dossier while leaving uncertain whether the organisation has a continuing capacity to design, update, assess and govern its academic programmes. A durable institutional capability requires a repeatable process connecting programme rationale, graduate competencies, qualification descriptors, curriculum sequencing, intended learning, assessment, staffing, learning resources, student support and regulatory verification. Constructive alignment helps explain this requirement: educational outcomes must correspond coherently with learning activities and assessment tasks (Biggs, 1996). Yet programme alignment is not achieved merely because the same outcome wording appears in several templates.

A mature curriculum function combines disciplinary judgement with educational design expertise. Academics protect the knowledge structures and methods of their fields. Curriculum specialists support outcome formulation, workload planning and assessment mapping. Digital-learning professionals advise on meaningful interaction, accessibility and modality. Librarians determine whether students can access appropriate literature. Laboratory, placement and clinical coordinators assess practical feasibility. Registry and quality-assurance teams check credit arithmetic, award rules, version control and approvals. Finance evaluates recurrent affordability rather than simply start-up expenditure. Coordination does not mean that all participants hold a veto over academic substance; it means that academic decisions are informed by constraints that affect whether students can actually learn.

Programme design should be treated as an institutional knowledge asset. Approved programme specifications, definitive module descriptions, curriculum maps, assessment blueprints and external approval conditions should be stored with clear identifiers, effective dates, owners and change histories. An isolated

Word document saved on a lecturer's personal computer is a fragile master record. Institutions need controlled baselines so that a new cohort is taught the version authorised for that cohort and so that amendments are reviewed for consequences across prerequisites, progression, credit totals, learning outcomes and student-facing regulations. Incoherent duplicate module codes or contradictory year allocations indicate more than typographical shortcomings: they reveal deficiencies in configuration control.

The advent of AI-assisted content production intensifies, rather than diminishes, the need for academic ownership. Generative systems can help propose outlines, reading questions or example scenarios, but fluent text does not establish disciplinary correctness, local relevance, copyright permission or alignment with qualification standards. A university should define which uses are permitted, how human review occurs, where confidential curriculum data may be processed and who remains accountable for the final approved material. AI output should not become a substitute for engagement with current scholarship, applicable law or disciplinary peer review. These decisions must be developed institutionally even where individual lecturers retain appropriate pedagogical discretion.

Instructional-design capability also concerns the feasibility of learning for actual students. A programme offered to working professionals may need carefully paced asynchronous study, accessible materials and predictable consultation. A laboratory-intensive degree may need scheduled physical practice and verified equipment access. A low-bandwidth cohort cannot be assumed to experience a sequence of high-definition synchronous classes on equal terms. UNESCO (2023) cautions against technological adoption disconnected from equity, appropriateness and sustainability. Institutions should therefore test proposed learning pathways with expected device, connectivity, timetable and accessibility conditions. This is not a request to lower intellectual standards; it is a request to make the educational means adequate to the declared ends.

The next chapter undertakes the detailed pedagogical and regulatory work of programme design. The institutional issue here is prior and enabling: does the university have a competent and durable system capable of producing coherent curricula, checking feasibility, preserving their authorised versions and improving them in response to evidence? A positive response requires records of real design work, cross-functional review and subsequent improvements, rather than merely a curriculum policy or a list of committee members.

Curriculum governance becomes more reliable when institutions define the route by which academic decisions are checked before a programme is promised to students. A formal design gate should verify that the proposed qualification's academic level, credit structure and assessment philosophy are defensible; a feasibility gate should test staffing, learning resources and practical delivery; and a regulatory gate should determine which current approvals or notifications are required. These gates need not form a slow bureaucratic chain. They can operate through a coordinated review if all professional responsibilities remain visible and material objections are resolved in the authoritative record. Crucially, a programme specification is not the only output: a sustainable system must also provide mechanisms for reviewing student achievement and changing the programme without losing control of its authorised baseline.

The relationship between institutional and programme capability is asymmetric. A strong institutional curriculum office can make a coherent programme possible, but it cannot guarantee that every proposed degree has a defensible graduate profile. Conversely, an impressive degree proposal may have been produced by temporary consultants while the university lacks staff able to implement or maintain it. Review must therefore ask both whether the programme itself is academically sound and whether the institution can support recurring programme-design cycles. This distinction prevents external accreditation preparation from becoming a one-time substitution for embedded academic design competence.

3.6 Educational infrastructure: Classrooms, laboratories, libraries, LMS platforms, digital systems, and connectivity

Infrastructure becomes an academic capability only when it is fit for a specific educational purpose, accessible to the intended cohort, reliably maintained and governed through accountable arrangements. A classroom inventory says little about timetabling clashes, furniture suitability, power reliability, accessibility or acoustic conditions. A laboratory catalogue does not establish equipment functionality, consumable availability, safety controls, technical support or sufficient practical time. A digital library subscription does

not demonstrate that the assigned readings are covered by licences permitting student access. Infrastructure evaluation should therefore begin with programme requirements and learner pathways rather than an institution-wide inventory of assets.

Physical infrastructure demands discipline-specific interpretation. Engineering workshops, clinical simulation centres, science laboratories, studios and fieldwork sites serve fundamentally different learning processes. Some activities can be supported by simulation; others involve embodied procedures, professional judgement, safe handling and supervised performance that cannot be inferred from watching a video. The relevant evidence may include operational logs, maintenance and calibration records, inspection findings, timetables, student access records, consumable budgets, safety incident procedures and agreements with external placement providers. The appropriate standard is not identical infrastructure for every programme, but credible provision of the experiences needed to meet its legitimate learning outcomes.

Digital infrastructure is similarly more than the acquisition of an LMS licence. The institution must assure identity and access management, secure account provisioning, course navigation, assessment submission, gradebook integrity, backups, integration with the student information system, accessibility, help-desk support and continuity during interruption. Interoperability can reduce the risks associated with information silos, but integration creates additional responsibilities for security, data quality and change control. A working pilot should test the intended academic workflows, not merely confirm that users can log in. For example, a complete assessment test should cover submission, late and special arrangements, feedback, moderation, release of marks, appeal evidence and export of final authorised grades.

Library capability is an intellectual rather than decorative resource. Academic holdings must correspond to discipline, qualification level, research methods and the language needs of learners. The capacity to retrieve, evaluate and ethically use scholarly literature is especially important for postgraduate study and AI-mediated information environments. Resource adequacy involves cataloguing, discovery, remote authentication, accessible formats, user orientation, licensing compliance and professional support. Open educational resources can improve access and contextualisation, but openness does not guarantee accuracy, suitability or permanence. Institutions should provide processes for academic evaluation, licence checking, version review and replacement where access or quality changes.

Connectivity and electricity reveal an important boundary between institutional assets and learner experience. A campus may possess strong broadband while remote learners depend on unstable household access, expensive mobile data or shared devices. Institutions cannot remove every national infrastructure constraint, but they can avoid designing programmes around implausible access assumptions. Downloadable resources, mobile-compatible interfaces, alternative low-bandwidth media, accessible asynchronous participation and reasonable recovery arrangements can reduce exclusion where consistent with programme requirements. For staff, reliable power, secure off-site access and contingency communication are likewise necessary for continuity. These design choices should be tested rather than merely announced in an online-learning strategy.

Asset stewardship also requires total-life-cycle thinking. A donated laboratory may be difficult to maintain without parts, technicians or recurrent supplies. A promotional platform discount may disappear after initial enrolment. A library package may impose restrictions on simultaneous use; a vendor may discontinue a service. Decisions should therefore consider replacement, depreciation, licensing, staff training, security patches, transition costs and the ability to export institutional data in usable formats. Procurement should be accompanied by accountable ownership and maintenance plans. The basic assessment question is whether educational services can continue as promised at a sustainable standard, not whether the institution can display modern equipment on the day of inspection.

Accessibility is a technical, pedagogical and institutional property of the learning environment. An online platform may permit keyboard navigation while required documents remain inaccessible; a classroom may have an accessible entrance while practical laboratories or examination arrangements remain unusable for particular students. The World Wide Web Consortium's Web Content Accessibility Guidelines 2.2 provide a recognised technical benchmark for digital content and interfaces, although legal applicability and the appropriate conformance target must be checked separately (World Wide Web Consortium, 2024). A competent institutional process tests a representative student journey, including authentication, content

access, submission, interaction, feedback and help-seeking, and includes people with relevant access needs in responsible evaluation. The target is substantive participation in demanding learning, not the production of a self-declared accessibility badge.

Evidence of infrastructure capability should be collected across locations and times. A facility inspection during an unusually quiet week may miss congestion caused by concurrent teaching; a successful LMS demonstration may miss peak assessment demand; and a digital-library access test performed by a privileged staff account may not reproduce the experience of a newly enrolled student. Sampling should therefore reflect likely peak use, different user roles, relevant campuses, connectivity conditions and contractual constraints. Asset availability and actual educational service are related but separate propositions. When a critical service is supplied externally, the institution should identify who can inspect performance records, authorise alternatives and protect learner interests if the partner fails.

Learner-support services also form part of infrastructure in the functional rather than merely physical sense. Reliable admission advice, orientation, academic guidance, disability support, accessible library assistance, assessment accommodations and fair complaints procedures must be available to the learners and programmes for which they are promised. HEC's internal QA standards address student recruitment and support as well as learning resources (Higher Education Council, 2021). A self-assessment should therefore examine case-handling capacity, staff competence, confidentiality and the effect of support interventions, rather than counting offices or publishing contact addresses. This chapter establishes institutional ownership of those functions; their curriculum-level design and differentiated student-success implications are developed later in the volume.

3.7 Academic research, postgraduate supervision, scholarly publication, and research-capacity development

Research capability is a substantive dimension of university quality, although its configuration should reflect institutional mission and award levels. A teaching-focused institution may reasonably devote a different share of resources to research than a doctoral research university, but it cannot treat disciplinary currency, research integrity or scholarly inquiry as irrelevant. Degree programmes rely on knowledge whose methods and conclusions must be critically examined. Postgraduate qualifications make further demands: a research master's or doctorate requires appropriate supervision, research governance, scholarly resources and defensible examination. An institution's declaration that it values research is not sufficient evidence of its ability to sustain these functions.

Research capability comprises interrelated conditions: a critical mass of competent scholars, time for inquiry, access to literature and research infrastructure, methodological expertise, ethical oversight, research administration, funding or realistic low-cost research pathways, dissemination opportunities and dependable supervision. The relative importance of these conditions differs by discipline. Laboratory-based experimental research may depend on costly consumables and technical support; archival, theoretical, educational or documentary research may require extensive library access, data management and advanced methodological judgement. A single generic research productivity target can conceal these differences and can encourage substitution of countable outputs for scholarly quality.

Pressure to publish illustrates the danger. Publication counts can be useful descriptive measures but should not become the sole criterion of research effectiveness. Journal legitimacy, peer-review quality, intellectual contribution, methodological transparency, correct attribution, open scholarship and the sustainability of research activity matter. Institutions need safeguards against predatory outlets, invented citations, plagiarism, manipulated authorship and inappropriate use of generative AI. Research evaluation should consider different forms of legitimate output, including books, disciplinary scholarship, evidence syntheses, datasets where ethically releasable, policy studies and applied contributions assessed through appropriate disciplinary criteria. The emphasis should be on scholarly merit and integrity, not merely quantity or publisher prestige.

Postgraduate research quality depends on the relationship between admission promises and supervisory provision. Institutions should know which academics are qualified to supervise at each level, what topical areas they cover, how many candidates are assigned to them and what arrangements exist for feedback,

monitoring, examination and appeal. An applicant should not be admitted into a topic for which the institution cannot provide appropriate expertise or legitimate external arrangements. Co-supervision can strengthen disciplinary and methodological support, but roles, availability and intellectual responsibility should be specified. Supervisory feedback must be prompt enough to permit meaningful progress without reducing scholarly independence to a fixed production schedule.

Research governance must also protect participants, researchers and academic records. Ethics review requirements should be proportionate to the method and risk; secondary-data and public-document research should not be automatically represented as involving human participants, although privacy, copyright and data security questions can still arise. Institutions should distinguish ethical approval, scientific or scholarly validity, disciplinary supervision and legal compliance rather than relying on one committee to certify every aspect. Research data management, secure storage, retention, publication permissions and conflict-of-interest rules should be governed consistently with applicable requirements. Where work involves international collaborations, contractual data control and publication rights deserve particular attention.

Research-capacity development is best understood as an institutional learning process. Early-career scholars need access to research mentoring, methodological seminars, critical peer feedback, grant-writing support where relevant and opportunities to join credible disciplinary networks. Staff must have time to develop their intellectual work, not merely a formal expectation that they publish. Collaboration with better-resourced partners may expand access to equipment and expertise, but agreements should address equitable attribution, intellectual-property arrangements, research agenda-setting and the ability of the local institution to retain expertise. Partnerships that produce short-term outputs without building local scholarly responsibility may intensify rather than reduce dependence.

A useful research-capability evaluation distinguishes input, operation, scholarly output and educational contribution. Input evidence includes qualified researchers, library access and allocated research time. Operational evidence includes supervision meetings, methodological support, ethics processes and peer critique. Output evidence includes defensible publications, completed theses and research products. Educational contribution may be demonstrated through updated teaching, student participation in inquiry, improved postgraduate progression or useful engagement with professional and public problems. None should be presumed from another without examination. This distinction prevents institutional publicity about a handful of celebrated publications from substituting for systematic evidence of a research environment capable of supporting the awards it offers.

Research assessment creates strong incentives, making its design an aspect of institutional governance. The Hong Kong Principles call for researcher evaluation that values responsible methods, transparent reporting, open scholarship where appropriate, diverse research contributions and the work that supports reliable inquiry (Moher et al., 2020). Their relevance is not that universities should abandon assessment of contribution, but that crude counting of papers or citations can reward quantity without testing trustworthiness. A credible research strategy uses disciplinary peer evaluation, recognises different knowledge outputs and reports conflicts of interest, while distinguishing publications produced by staff from the support that students actually receive. An institution should be especially cautious about accepting indexing claims, editorial-board lists or paid publication promises as evidence of genuine scholarly review.

Rwanda's HEC Postgraduate Degree Framework, dated July 2026 and listed on the Council's publications site in October 2026, provides a more recent official reference for postgraduate programme organisation, research ethics, supervision, milestones and examination (Higher Education Council, 2026). Its publication strengthens the need for award-specific capability tests rather than a generic claim that a university has 'research-active faculty'. A proposed doctoral pathway should identify the research contribution expected, the competence and independence of supervisors and examiners, candidate progression arrangements and the applicability of each regulatory requirement. The existence of the framework must not be read as proof that a particular university or pathway has obtained accreditation; the authorised programme approval and its conditions remain separate evidence.

Institutional research capability should also connect responsibly with public engagement, without reducing academic inquiry to contract consultancy or public-relations activity. HEC's IQA guidelines identify

community engagement as a distinct assessment area (Higher Education Council, 2021). Institutions can demonstrate such responsibility through credible knowledge exchange, policy research, professional training, community partnerships and research dissemination, with clear safeguards for scholarly independence and attribution. Public-engagement activities should be evaluated for relevance, quality, reciprocity and evidence of delivery; the mere signing of memoranda of understanding establishes neither research impact nor service value. This connection matters because sustainable quality is partly judged by whether institutional capabilities enable the university to fulfil its stated contribution beyond the campus.

3.8 Institutional information systems, evidence management, and learning analytics

An institution cannot govern what it cannot describe accurately, but the existence of abundant data does not guarantee knowledge. Academic administration commonly generates information through admissions, registration, student finance, timetabling, the LMS, examinations, human resources, library systems and research offices. When these systems use inconsistent identifiers, definitions or effective dates, administrators may produce conflicting figures for the same student population or programme. Such contradictions are not simply information-technology inconveniences. They affect student progression, award accuracy, financial planning, regulatory reporting and the fairness of academic decisions.

Institutional evidence capability begins with clear data ownership and definitions. Universities should maintain an authorised programme register, a student-record system, an approved academic calendar, controlled staff-deployment records and reliable qualification and module identifiers. Core definitions such as active enrolment, withdrawal, progression, completion, full-time-equivalent workload and research supervision load should be documented. When figures are reported, a reviewer should be able to identify the source, population, extraction date, transformations and authorised owner. Without this provenance, a dashboard may look precise while its underlying data remain ambiguous. Data stewardship is therefore a governance function involving academic, registry, quality and ICT personnel, not merely a task assigned to database administrators.

Evidence should be organised around institutional claims. If management asserts that assessment feedback is timely, the relevant evidence may include policy standards, assignment-level release logs, a sample of actual feedback, exception records and student complaints. If it asserts that all doctoral students have adequate supervision, evidence must link enrolled candidates to qualified supervisors, workloads, research topics and review records. A curriculum mapping spreadsheet cannot independently verify the quality of enacted teaching, and an annual review minute cannot by itself establish effective corrective action. Credible evidence management preserves the inferential relationship between a proposition and what the records can actually show.

Learning analytics can assist staff in recognising students who may need support, but its educational meaning must not be overstated. Platform logins, time online, resource downloads and automated engagement scores are indirect behavioural traces. Low recorded activity could indicate disengagement, offline study, poor connectivity, shared-device use or technical failure. High activity may reveal difficulty rather than success. Analytics should therefore support proportionate human inquiry, not automatically label learners as deficient or predetermine adverse academic decisions. Jisc's learning-analytics code of practice and contemporary data-ethics scholarship emphasise legitimate purposes, transparency and safeguards when institutions use learner data (Jisc, 2015; Slade & Prinsloo, 2013).

Institutional dashboards require analytic discipline. Indicators should have an explicit decision purpose, accountable owner, quality checks and interpretation guidance. Where possible, cohort outcomes should be examined by programme, stage, modality and relevant access characteristics, while observing lawful data minimisation and avoiding exposure of small or identifiable groups. Trends should be compared on consistent definitions, with structural breaks noted when curricula, assessment rules or information systems change. Composite scores deserve caution because an attractive average can conceal non-negotiable failures. For example, strong student satisfaction and research performance cannot compensate for a serious breach of assessment security or the loss of the authoritative examination record.

A meaningful information system must support not only reporting but action. Suppose programme completion declines. Rather than presenting a red indicator as a conclusion, the quality office examines how

the rate was defined, checks student pathways and assessment evidence, seeks disciplinary interpretations, identifies possible contributing factors and assigns an intervention. Subsequent monitoring establishes whether progress occurred without assuming causation from simple before-and-after comparison. The institutional capacity lies in the full cycle of valid definition, responsible interpretation, decision, implementation and learning. Investment in analytics without corresponding data literacy, staff capacity and fair governance can merely accelerate the production of misleading interpretations.

Evidence management must also reconcile transparency with appropriate confidentiality. Academic committees and external evaluators may need detailed records to establish a particular claim, but this does not justify unrestricted disclosure of student files, staff medical information or sensitive research data. Access should be role-based, proportionate and logged where necessary. Evidence extracts can be pseudonymised or aggregated, provided that authorised reviewers retain an appropriate means to verify authenticity. The aim is a traceable institutional record whose integrity can be assessed without treating every private record as a public document.

Institutions also need an explicit evidence-retention architecture. A governance record should identify the decision made, the version of the applicable rule, the person or body responsible, the period or student cohort affected and the source records that support the decision. The level of detail should reflect educational risk: a timetable change may need a short controlled log, while a doctoral examination or a serious academic-misconduct finding requires an appropriately protected and reviewable decision trail. Records should be preserved under a lawful retention schedule, with access controlled by function and corrections tracked rather than silently overwriting previous authorised outcomes. A file repository without provenance, secure permissions and an authorised owner is not a reliable institutional memory.

The professional value of evidence traceability is greatest when institutional assertions are contestable. Consider a report stating that all modules deliver feedback within fifteen working days. To evaluate that claim, the institution must establish which assessments and cohorts count, how late submissions or approved extensions are treated, which events the system records and whether a sample of actual student accounts matches the reported dates. Where the measure is incomplete, responsible reporting explains the limitation instead of presenting a falsely exact figure. Later accreditation analysis will formalise this inferential discipline through the proposed Evidence-Traceable Accreditation Judgement model, but the underlying evidence infrastructure must be created and maintained inside the institution.

3.9 Data governance, privacy, cybersecurity, and responsible technological procurement

Digital universities handle educational records, identities, research information, financial transactions, assessment submissions and communications that are integral to the continuity and legitimacy of academic provision. Data governance therefore belongs inside institutional quality assurance, not solely within a technical compliance office. A loss of student records can jeopardise progression and awards; compromise of assessment systems can undermine confidence in grades; unauthorised sharing of personal information can injure learners and staff. The educational consequences of these events make privacy and cybersecurity questions part of the university's core obligations.

Rwanda's Law No. 058/2021 of 13 October 2021 relating to the protection of personal data and privacy provides a relevant national legal reference, alongside competent-authority guidance and other applicable rules (Republic of Rwanda, 2021). A responsible institution should establish current applicability and relevant obligations for each processing operation rather than rely on generic language copied from another jurisdiction. Information governance should address lawful purposes, minimisation, access, secure processing, authorised disclosures, retention, correction and deletion when applicable, incident handling and cross-border arrangements. Educational necessity cannot be presumed to authorise indefinite retention or unlimited reuse of learner records for unrelated technology services.

Cybersecurity governance involves both technical controls and organisational preparation. The NIST Cybersecurity Framework 2.0 distinguishes the functions of Govern, Identify, Protect, Detect, Respond and Recover (National Institute of Standards and Technology [NIST], 2024). These functions offer a useful voluntary analytical benchmark; they are not a substitute for Rwanda's legal requirements. Their educational application includes assigning security accountability, identifying critical academic services, applying

appropriate authentication and backup controls, monitoring vulnerabilities, responding to incidents and restoring access with the integrity of authoritative records intact. Universities should test recovery plans rather than assume that purchasing cloud services eliminates responsibility for resilience.

Procurement is a particularly consequential point of control because a university may outsource operations without outsourcing its duties to learners. Vendor evaluation should consider data processing, ownership and export rights, location and sub-processors where relevant, service availability, accessibility, security assurance, support response, pricing over the expected contract period, termination assistance and the educational consequences of failure. A contract that offers attractive initial functionality but prevents reliable extraction of student assessment records may create unacceptable institutional dependence. Institutions should also preserve a meaningful human review of consequential automated recommendations, including admissions screening, plagiarism allegations and grading assistance.

Generative AI introduces additional uncertainties. Staff may paste identifiable student work, unpublished manuscripts, sensitive programme records or confidential committee information into general-purpose services without clarity about storage and reuse. AI applications may produce erroneous or biased advice while presenting it with confident language. The relevant governance response is not indiscriminate prohibition or uncritical adoption. It is a differentiated framework defining authorised uses, prohibited disclosures, human accountability, staff and student competence, procurement scrutiny and periodic revision as systems and risks change. UNESCO's guidance on generative AI in education and research provides a professional reference for human-centred safeguards (UNESCO, 2023b), though institutions must determine their own current legal and regulatory duties.

A cybersecurity incident is also a test of academic continuity. Consider a hypothetical attack that renders the LMS unavailable during a high-stakes assessment window. The institution needs a verified incident escalation route, alternative communication, secure assessment contingency, preservation of submitted work, fair treatment of affected candidates, restoration protocols and a documented decision on whether deadlines or assessment conditions require change. An ICT response that restores the server but cannot establish the reliability of affected grades has not fully restored the educational service. Recovery requires cooperation between technology specialists, academic authorities, registry, quality assurance and student support.

Under Rwanda's personal data legislation, institutional data governance cannot be reduced to obtaining a general consent checkbox. The law establishes a framework for personal-data processing and specifies responsibilities that can depend on the roles and activities of controllers and processors (Republic of Rwanda, 2021). Universities should maintain a processing-activity inventory, determine lawful grounds and purposes for material uses, identify appropriate safeguards for sensitive student records, and examine processor arrangements before deploying technologies that transfer or infer personal information. The Data Protection and Privacy Office identifies the National Cyber Security Authority as the supervisory authority under the 2021 law (Data Protection and Privacy Office, n.d.). The law and competent guidance, rather than a generic international template, must control any case-specific legal conclusion.

Responsible procurement also requires evaluation of failure and exit conditions before a contract is signed. Institutions should test whether course content, assessment submissions, feedback, grade histories and authoritative student records can be exported in interoperable formats, with predictable support and secure deletion at termination. In a practical procurement exercise, a low-cost platform with weak portability may generate a greater long-term threat to learner protection than a slightly more expensive system with documented continuity arrangements. The trade-off should be assessed through full-life-cycle educational consequences, not a technology demonstration or headline subscription price. The same discipline applies to AI-powered student support, where fluent advice must not be mistaken for accurate authorised guidance on award rules, academic appeals or financial obligations.

3.10 Financial sustainability, resource allocation, partnerships, and operational scalability

Financial sustainability is often presented as the ability of an institution to balance its books. Educational sustainability requires a stricter test: whether the resources necessary to deliver existing academic commitments remain sufficient and dependable over the periods in which students are entitled to receive

them. A budget surplus can coexist with overburdened staff, deteriorating laboratories, inadequate library resources or deferred maintenance. Conversely, a temporary deficit may reflect justified investment but creates exposure if financing cannot be sustained. The proper question is how financial decisions protect educational obligations and how the institution knows that its operating model remains viable.

Programme costing should recognise the full cost of learning. Relevant components include academic staffing, preparation and assessment, supervisory time, support personnel, facilities, utilities, laboratories, consumables, library resources, platforms, data protection, disability accommodation, maintenance, insurance, professional accreditation where applicable and institutional oversight. Digital programmes may reduce some physical attendance costs while introducing substantial recurring expenditure for learning design, support, licences, connectivity and security. UNESCO's 2023 Global Education Monitoring Report cautions that technology choices should be tested for sustainability and appropriateness rather than presumed to be cost-saving (UNESCO, 2023a). A credible business case therefore shows both institutional and learner costs, including costs shifted to students.

Resource allocation should reflect academic priorities and risk. An expansion proposal might be profitable under optimistic enrolment assumptions but financially fragile under realistic variations in recruitment, collection rates, exchange rates, procurement costs or attrition. Scenario planning can reveal whether minimum staffing, placement capacity and academic support remain feasible under adverse conditions. Institutions should establish threshold conditions for safe growth, such as confirmed supervisors, functioning facilities and adequate assessment support. Growth beyond those limits should be postponed or redesigned rather than justified by the possibility that future revenue will solve present capability gaps.

Partnerships can increase capability when institutions lack specialised resources. Shared library consortia, laboratory access agreements, professional placements, research collaboration and cloud infrastructure may be academically sound. However, a partner's reputation or verbal commitment does not prove that the university's students have enforceable access to the promised service. Agreements should establish permitted use, available capacity, academic responsibility, accessibility, costs, contingency arrangements and termination provisions. Partnerships in postgraduate research should also address supervision, authorship and intellectual-property responsibilities. The institution conferring the award remains responsible for demonstrating the legitimacy of its educational claims within the applicable regulatory framework.

Financial dependence introduces governance risks. A university reliant on a single donor, corporate sponsor, founder, international partner or technology provider may face pressure over academic priorities or suffer abrupt service withdrawal. Mission-aligned donations are legitimate but should not grant sponsors unreviewable influence over grades, research findings, student admissions or the integrity of awards. Transparent conflict-of-interest rules and diversification strategies can reduce exposure. Reserves and contingency plans matter not only for institutional survival but for learner protection, especially when students have already invested years in a qualification.

Operational scalability should be evaluated by function rather than enrolment count alone. Some academic activities scale through reusable resources and automation; others, such as individual feedback, clinical supervision, laboratory access and dissertation examination, remain labour-intensive. A learning platform can serve many accounts but does not automatically generate the lecturer time or professional judgement needed for credible assessment. Scalability tests should therefore specify demand drivers, service constraints, resource thresholds and the point at which educational standards would deteriorate. The appropriate operational model is one that grows only while sustaining legitimate academic commitments.

An academically defensible financial model should also separate annual operating affordability from the obligation to support every enrolled cohort until its approved educational pathway is completed or lawfully concluded. Programme approval may create commitments whose duration exceeds the current budget cycle, including supervision, placement arrangements, access to learning materials and the ability to issue trustworthy records. Institutional leaders should therefore test the adequacy of cash-flow assumptions, restricted funding, capital replacement, exchange-rate exposure, scholarships and collection risk. A formal contingency should identify how students will be protected if the institution cannot continue a programme as planned. Merely projecting growth in new enrolments to cover obligations to existing cohorts can conceal a financially and educationally unstable arrangement.

The problem is not solved by imposing a universal financial ratio. Institutions differ in capital structure, legal form, course mix, staff employment models and sources of revenue. A small specialist provider with carefully documented low fixed costs can be viable without replicating the balance sheet of a comprehensive university, while a wealthy institution can misallocate resources in ways that damage particular programmes. The appropriate test is whether financial evidence is reconciled with programme-specific teaching and research commitments and whether the institutional governing body has considered plausible adverse scenarios. A budget is strongest when linked to named service owners, operational evidence and feasible corrective choices rather than only aggregate forecasts.

3.11 Risk governance, institutional independence, strategic dependencies, and accountability

Risk is not merely the possibility of financial loss. For universities, material risks include compromised qualification integrity, student harm, failed academic continuity, unavailable laboratories, staff shortages, non-compliance, reputational deception, unsafe placements, cyber incidents and disruption to research or assessment. A risk register becomes educationally meaningful when it describes the threatened academic outcome, the plausible pathway of failure, the persons exposed and the controls that could prevent or limit harm. Generic labels such as 'technology risk' or 'staffing risk' offer little guidance unless translated into an operational consequence and an accountable response.

Risk governance requires clear appetite and threshold distinctions. Some risks can be accepted within reasonable limits because they are reversible and unlikely to affect core obligations. Others involve non-compensatory requirements: unsafe clinical practice, unauthorised award delivery, serious breaches of academic integrity and absence of essential supervision should not be balanced away by a high score on unrelated institutional indicators. An institution may choose an inexpensive LMS rather than a premium product if it meets its requirements; it should not choose a platform that cannot preserve trustworthy examinations because it offers attractive cost savings. Governance must distinguish strategic choice from impermissible erosion of minimum standards.

Independence concerns the practical ability to preserve academic authority when external actors exert influence. Public universities may be affected by changes in government priorities or fiscal allocations; private and nonprofit institutions may face founder influence, donor dependence or commercial pressure; internationalised universities may rely on foreign awarding bodies, platform vendors or cross-border research funding. Such dependencies are not automatically illegitimate. They become governance concerns when they compromise transparent decision rights, the reliability of academic judgement or the university's ability to fulfil its obligations. Formal agreements, conflict declarations and institutional checks should therefore be examined alongside financial and operational reliance.

Risk ownership should be sufficiently specific to support action. The chief financial officer may monitor liquidity, but the academic dean must assess how a budget shortfall affects module delivery; ICT may lead technical recovery, but registry and senate must protect academic records and assessment fairness; a research office may track grants, but supervisors remain responsible for research quality. Risk governance fails when all material problems are referred to an abstract 'management' without clear escalation routes. Council-level oversight should focus on strategic exposure and adequacy of controls, while competent operational units provide evidence of implementation.

Resilience demands more than a written business-continuity plan. Universities should identify critical academic services, maximum tolerable interruptions, recovery dependencies and available alternatives. A conventional classroom programme may require alternative sites during flooding; an online institution may need geographically separated backups, communication channels and assessment continuity; a clinical programme may need alternative approved placements; a postgraduate research school may need continuity of supervision and secure data access. The effectiveness of continuity measures depends on scenario-specific tests and post-incident learning. The later dedicated resilience chapter examines pandemics, conflict, environmental hazards and systemic disruption in detail; here the central point is that preparedness must be embedded in ordinary institutional capability.

Risk assessment must also acknowledge its epistemic limits. Likelihood and impact scores are often subjective, particularly for rare and interacting events. Overly precise numerical matrices can create false

confidence. Institutions should record assumptions, uncertainty, evidence sources and plausible scenarios, using qualitative judgement transparently when quantitative probabilities are unavailable. A scenario involving concurrent power failure, connectivity loss and assessment deadlines may reveal dependencies that three independent low-risk entries conceal. Periodic challenge from independent reviewers, affected academic units and student-support representatives can improve the credibility of risk interpretations.

Three different risk responses must be distinguished. Prevention seeks to reduce the likelihood or exposure of harm before it occurs, such as verifying staff credentials before assigning specialised supervision. Preparedness establishes alternatives when a failure remains possible, such as maintaining a secure assessment contingency during a network outage. Recovery restores academic services and verifies the integrity and fairness of the recovered process after disruption. A university that has purchased backups but never restored an authoritative gradebook has evidence of a protective intention, not a verified recovery capability. Each response requires accountable roles, realistic testing and a record of any residual risk accepted by the appropriate authority.

Institutional independence also has an epistemic dimension: academic and governance bodies must retain the capacity to make findings that are unwelcome to funders, owners, political authorities or technology suppliers. This does not imply unrestricted separation from public accountability or a denial of lawful governmental oversight. It means that research conclusions, examination outcomes and accreditation-related evidence should not be manipulated for commercial or reputational convenience. Institutions should document conflict declarations, safeguards for external examiners, contractually protected access to relevant records and escalation routes when interested parties seek to override professional judgements. Trustworthy academic autonomy is demonstrated by controlled decisions under pressure, not simply by claims of independence.

3.12 Institutional capability maturity, performance evaluation, and continuous improvement

The preceding analysis supports an institution-wide model of capability whose components are distinct but operationally connected. Governance authorises and coordinates activities; staff and research expertise supply disciplinary substance; curriculum and learning design organise educational intentions; infrastructure and services make delivery possible; information systems establish an evidentiary memory; data and cybersecurity controls protect trust; finance sustains commitments; and risk governance preserves continuity under strain. Quality culture and organisational learning connect these functions through feedback and improvement. Weakness in one domain may propagate into others, meaning that an overall average conceals important dependency and threshold effects.

A useful conceptual distinction can be drawn among resources, readiness, capability and performance. Resources are assets or inputs available to the institution. Readiness is an assessment of whether specified conditions are in place for a particular activity at a particular time. Capability is the more durable organisational capacity to mobilise and renew those conditions across changing circumstances. Performance consists of what actually occurs, including the educational experience and outcomes of defined cohorts. These categories are related but not interchangeable. A university may be ready to launch a single programme using exceptional external assistance while lacking the internal processes needed to maintain quality across subsequent cohorts. Conversely, an institution with mature internal processes still needs to verify the particular staffing and facilities of each newly proposed programme.

The capability concept resonates with dynamic capabilities scholarship, which explains how organisations sense changes, mobilise resources and reconfigure practices under shifting conditions (Teece et al., 1997; Teece, 2007). Its application to higher education must be cautious: universities pursue scholarly and public purposes that cannot be collapsed into private-firm competitiveness. An institution may be highly effective at marketing programmes or reducing unit cost without delivering academically credible education. Dynamic capability is therefore normatively incomplete unless anchored in educational purpose, qualification standards, learner protection and legitimate governance. Critical realism adds a further caution: observed processes and performance indicators provide fallible evidence of underlying organisational mechanisms, not unmediated access to causation (Sayer, 2000).

Maturity models offer a practical language for distinguishing aspirational arrangements from repeatable and evidence-supported practice. Yet maturity should not be confused with age, technological complexity or size. A newly established specialist university may demonstrate robust controls in a limited portfolio; a long-established university may retain fragmented records and depend on personal arrangements. The proposed model uses five maturity levels within each domain, subject to evidence requirements and critical-failure overrides. It does not claim that the levels have been statistically calibrated or that movement from one level to another will cause a quantified improvement in learning. The descriptors are professional evaluation aids requiring adaptation and field testing.

Table 3.1. Proposed five-level institutional capability maturity descriptors

Level	Descriptor	Evidence character	Primary concern
0	Absent or materially unsafe	No credible arrangement, or verified critical failure	Protect learners and restore minimum requirements
1	Stated or ad hoc	Plans, policies, isolated appointments and informal practices	Establish ownership, basic controls and feasible resources
2	Established	Approved procedures, allocated resources and some deployment records	Demonstrate repeatable implementation across units
3	Consistently enacted	Corroborated implementation, review records and working escalation	Test outcomes, variations and unresolved risks
4	Evaluated and adaptive	Verified improvements, controlled revisions, continuity exercises and cross-cycle evidence	Sustain improvement and examine unanticipated effects

Note. Original proposed descriptors for institutional self-evaluation. Level 0 includes critical substantive failure and is not automatically a statement about institutional licensing. Levels are ordinal professional judgements, not psychometrically validated interval scores.

Table 3.1 specifies an evidence progression rather than a technology acquisition path. At Level 1, a policy and designated responsible officer may establish an intention to provide a service; at Level 2, records should show that resources and procedures have been deployed; at Level 3, evidence should demonstrate consistent operation in relevant programmes and cohorts; and at Level 4, the institution should show that systematic review has led to verified improvements and that routines can be adjusted under change. An institution should not receive a high maturity judgement merely because it has submitted more documents. The relevant question is whether available evidence supports the strongest claim implied by the assigned level.

A practical assessment needs both domain coverage and a threshold rule. The twelve domain questions set out below are designed to support a discussion between academic leaders, internal QA professionals and responsible service owners. The institution should score each domain only after reviewing representative evidence from the relevant delivery contexts, not simply from headquarters or the strongest faculty. Where evidence is contradictory, incomplete or outdated, the judgement should be qualified. Critical breaches of legality, academic integrity, student safety or essential programme provision should trigger separate escalation and should not be hidden within a weighted total.

Table 3.2. Institutional Capability Self-Assessment Instrument: core domains and evidence tests

Domain	Core assessment question	Representative evidence	Indicative failure signal
Governance and decision rights	Do authorised bodies make, record and follow through on material academic decisions?	Statutes, delegated authority, senate/council decisions, change logs	Decisions lack accountable approval or implementation
Quality culture and learning	Do identified deficiencies produce verified institutional changes?	QA policy, programme reviews, completed action records, follow-up evidence	Reports recur without problem closure
Academic staffing	Is competent teaching and supervision available at sustainable workloads?	Verified credentials, contracts, deployment, workload and succession registers	Named but unavailable specialists; excessive supervision
Curriculum and learning	Can coherent programmes be	Programme baselines, maps,	Conflicting specifications or

Domain	Core assessment question	Representative evidence	Indicative failure signal
design	designed, validated, versioned and improved?	assessment plans, review comments	unsupported modality
Physical and digital infrastructure	Can intended learning and assessment activities operate safely and reliably?	Facility tests, lab logs, LMS transaction tests, support reports	Equipment unserviceable; assessment system fails
Research and postgraduate capability	Are inquiry, integrity and supervision appropriate to awards and mission?	Research governance, supervision matrix, examination records, scholarship	Admitted doctoral topics have no viable supervision
Evidence and information systems	Are records reliable, retrievable and traceable to decisions?	Data dictionary, register controls, reconciliations, audit trails	Inconsistent programme or student records
Privacy, cybersecurity and procurement	Are information and vendor risks governed with educational consequences in view?	Processing register, contracts, access controls, incident tests	Uncontrolled confidential data or no recovery route
Financial sustainability	Can commitments be met over their whole educational lifecycle?	Full-cost plans, audited reports, scenarios, renewal budgets	Growth depends on unconfirmed future finance
Partnerships and dependencies	Are external services contractually credible, controlled and replaceable?	Agreements, capacity evidence, exit plans, service records	Essential service relies on revocable informal promise
Risk, continuity and independence	Are threats to academic delivery identified, owned and tested?	Risk register, conflict rules, continuity exercises, responses	Critical function has no accountable contingency
Evaluation and adaptation	Can leadership establish whether interventions changed practice and outcomes?	Indicator definitions, evaluation reports, review cycles	Indicator reporting without causal scrutiny or action

Note. Original author-developed instrument. Indicators are illustrative, must be adapted to mission and programme risk, and do not represent HEC's officially approved criteria. Each domain should be assessed against the applicable national requirements and the precise scope of provision.

The proposed instrument should begin with a scope statement: institution, campus or site, programme portfolio, delivery modes, learner characteristics, period reviewed and applicable regulatory regime. Reviewers then identify the domain's material claims, minimum requirements, evidence sources, observations and uncertainties. Evidence should be assessed for authenticity, relevance, currency, sufficiency and whether it describes intention, deployment, enactment or outcome. Representatives of the relevant units should be able to correct factual errors, while the review panel preserves the independence of its judgement. Scores without evidence identifiers or explanations should be treated as preliminary prompts, not definitive findings.

A useful maturity assessment also needs an improvement rule. The institution should first identify any non-negotiable deficiency requiring immediate protection or regulatory action. It should then map interdependencies, because correcting an upstream problem may resolve several downstream failures. For example, poor feedback turnaround may appear to be a teaching issue but have roots in enrolment modelling, understaffing, assessment design or LMS configuration. Priority should be informed by educational materiality, number and vulnerability of affected learners, immediacy, reversibility, feasibility and uncertainty. Urgent learner-protection concerns should not be deferred merely because an easier and more visible initiative promises a higher maturity score.

Table 3.3. Evidence-anchored institutional improvement register: proposed fields and decision rules

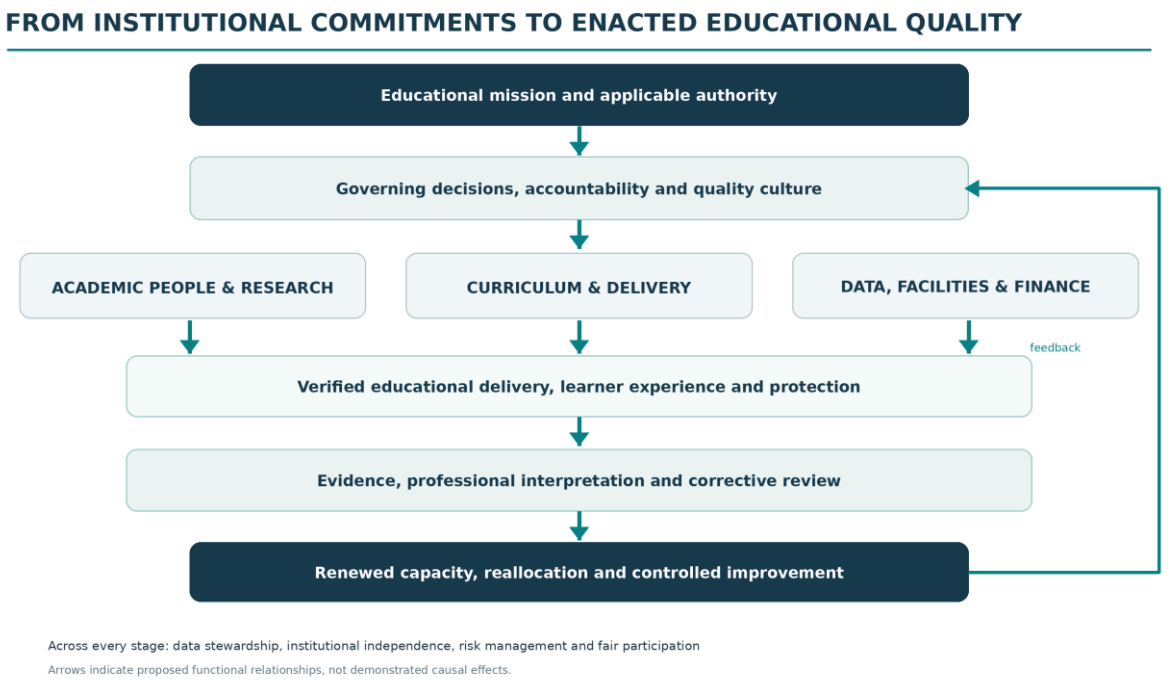
Field	Required entry	Decision discipline
Finding and affected academic function	Specific deficiency, programme/cohort and academic consequence	Avoid generic labels and unsupported institutional generalisation
Normative or policy basis	Applicable requirement, internal commitment or professional benchmark	State category and verify version before alleging non-compliance

Field	Required entry	Decision discipline
Evidence and confidence	Record identifiers, dates, sources and counter-evidence	Distinguish missing evidence from verified failure
Root-cause hypothesis	Plausible organisational mechanism and alternative explanations	Do not equate correlation with causation
Risk and priority	Severity, exposure, likelihood, reversibility and time sensitivity	Override average scores for critical safeguards
Accountable owner and resources	Named office, competent decision-maker, budget and dependencies	Avoid unfunded or ownerless recommendations
Corrective action and completion criterion	Specific intervention and verifiable performance criterion	Closure cannot rest solely on issuing a new policy
Verification and review	Independent check, evidence date, residual uncertainty and next review	Reopen when the intervention fails or context changes

Note. Original proposed management instrument. Formal enforcement, accreditation conditions and legally consequential decisions remain with the competent authorities under applicable rules.

The assessment should not culminate in a single 'institutional quality percentage'. Where a summary is useful for leadership, it should report a domain profile, critical thresholds, confidence levels and material dependencies rather than burying them in a composite index. A profile can show that a university is strong in governance and financial control yet vulnerable in postgraduate supervision and cybersecurity. Such an interpretation is more actionable than an overall grade that implies false comparability between domains. Repeated assessment should preserve scoring criteria and versions, while openly recording why definitions change when law or technology changes.

Figure 3.1. Institutional capability as an interdependent quality-governance architecture



Note. Author-developed conceptual synthesis. The five main stages are connected through feedback; data stewardship, quality culture, institutional independence and risk governance are cross-cutting conditions. Arrows indicate interpretive functional relationships, not empirically established causal effects. The figure is intended to explain institutional capability within the proposed IETQG architecture.

The architecture is intentionally not a linear checklist. Educational mission and law establish the purposes and thresholds against which performance is judged. Governance coordinates choices and authorises commitments. Personnel, curricular systems, infrastructure and financial resources make implementation feasible. Enacted delivery generates evidence, including evidence of outcomes, limitations and failures.

Review then informs changes to capabilities and programme decisions. Data protection, risk governance and quality culture operate throughout the cycle. In the book's larger Integrated Evidence-Traceable Quality Governance (IETQG) framework, institutional capability is therefore the enabling organisational level, while programme quality assurance and evidence-traceable accreditation judgement test different, related claims (Sangwa, 2026). Neither the diagram nor the maturity instrument has been subjected here to prospective institutional validation.

The crosswalk in Table 3.4 identifies where several proposed capability domains correspond to subject areas named in HEC's 2021 IQA guidelines. It is deliberately functional rather than legalistic: an alignment of topics is not evidence that a university has satisfied an operative criterion, and a dimension absent from the selected crosswalk is not outside regulatory oversight. The reviewer must still consult the authoritative provision, confirm its applicability, examine implementation evidence and record any qualification in the resulting judgement.

Table 3.4. Indicative alignment of the proposed capability domains with Rwanda's 2021 IQA standards

Capability concern	Illustrative HEC IQA reference	Institutional evidence that merits examination
Leadership and decision rights	Standard 3: Governance and management	Delegations, academic decisions, accountability and student participation
Culture and quality improvement	Standards 5 and 18: QA policy; periodic review	Review findings, corrective-action closure and subsequent evaluation
Staff and staff development	Standard 6: Human resource	Verified deployment, workloads, continuing development and succession
Curriculum and design control	Standards 4 and 9: Academic programmes; design and review	Authorised curricula, validation records, revision and implementation
Infrastructure and student access	Standards 8 and 12: Infrastructure; learning resources and support	Facility/learning-platform tests, accessibility and service availability
Student support and protection	Standard 10: Recruitment, admission, certification and support	Case-response pathways, accessible services and protected complaint records
Research and postgraduate capacity	Standard 13: Research and innovation	Research support, supervisor assignments, ethics and examination systems
Knowledge exchange and service	Standard 14: Community engagement	Documented service activities, community partnerships and review
Information and educational evidence	Standards 15 and 16: Information; public communication	Defined records, reconciliations, reliable disclosures and audit trail
Financial sustainability	Standard 7: Financial resource management	Full-cost forecasts, budgets and cohort-completion contingencies
Partnerships and mobility	Standard 17: Collaboration and mobility	Written agreements, delivery capacity, exit and accountability
Risk, continuity and technology	Cross-cutting interpretation; consult current modality and data law	Risk ownership, recovery tests, lawful data processing and supplier exit

Note. Original author-developed functional crosswalk informed by Higher Education Council (2021), not a reproduction of the HEC self-assessment form. HEC's eighteen standards remain distinct; this table identifies selected connections, not legal equivalence or exhaustive compliance. Current requirements, including later instruments, must be checked for each programme and institution.

Worked institutional illustration: rapid digital expansion

Consider a hypothetical private university that plans to double admissions to a blended business programme within two years. Management identifies unused LMS capacity and a favourable forecast for tuition income. On an asset inventory, the proposal appears inexpensive: existing classrooms, a valid platform subscription and a roster of highly qualified adjunct lecturers. Yet a capability review reveals that enrolment growth would double marking and advising loads; library licences restrict simultaneous use; no service-level agreement guarantees weekend technical support; assessment moderation relies on one academic administrator; and there is no tested export of student records if the platform becomes unavailable. The apparent readiness of one technical component conceals a system-wide constraint.

A responsible institutional decision would first establish the approved programme and delivery configuration, test actual cohort demand, model staff and support workloads, negotiate adequate library access and verify the platform's critical workflows. Finance would cost the recurrent commitments and test downside scenarios. Academic leadership would establish minimum staffing and feedback thresholds. ICT would conduct continuity tests, while quality assurance would define a limited pilot and measurable review conditions. Only once the key dependencies were credibly addressed would the university authorise expansion within its lawful remit. The lesson is not that growth is inherently dangerous; it is that capacity claims must survive examination of the full educational service rather than merely its most visible asset.

Worked institutional illustration: postgraduate research expansion

Consider a hypothetical university proposing two new research doctorates in fields where most senior lecturers are already supervising several students and carrying significant undergraduate teaching. Its submission contains a research strategy, a list of professors and a library-access statement. A closer capability review finds that proposed supervisors have not confirmed topic-specific availability, doctoral examination arrangements remain informal, candidates would depend on one external specialist, and no recurrent funding covers essential research access. These findings do not establish that the proposed academic fields are unsuitable. They expose a gap between the attractiveness of the awards and the arrangements required to sustain research quality over several years.

An appropriate response would require the academic authority to map proposed topics to available expertise, verify supervision and examination arrangements, forecast candidates' cumulative workloads and reconcile research-resource commitments with the institution's longer-term budget. Where external supervisors are involved, agreements should define responsibility, availability, confidentiality, conflicts and replacement arrangements. The quality unit should distinguish an unmet current requirement from an unresolved evidence question, then establish verifiable gates before admission or expansion. This illustration shows why institution-level research capability cannot be inferred from publication records and why programme-specific doctoral approval remains a separate regulatory matter (Higher Education Council, 2026).

Implementation sequence and governance responsibilities

An institution applying the proposed instrument can begin with an evidence-provenance review rather than commissioning a new strategic-plan document. The council or equivalent governing authority establishes oversight and the purpose of assessment; senate or the authorised academic organ identifies non-negotiable academic requirements; the executive appoints cross-functional domain owners; the internal QA unit coordinates evidence collection and independent challenge; and finance and risk functions check resource and dependency assumptions. Students and academic staff should have opportunities to provide relevant experience evidence through fair and privacy-conscious processes. Where external expertise is required, terms of reference should specify independence, confidentiality and limits of authority.

The first cycle should prioritise critical gaps, not pursue the highest possible numerical maturity rating in every domain. Its outputs should include a domain profile, a carefully bounded claim-evidence register, verified immediate safeguards, an authorised improvement plan and a calendar for follow-up testing. Subsequent cycles should examine whether interventions improved practice and whether risks shifted elsewhere. Institutional differences justify flexible implementation pathways, but not acceptance of unsafe or unauthorised provision. This is the essential distinction between proportionate professional judgement and arbitrary relaxation of academic standards.

For a first application, the institution should document a bounded scope and assemble a small multidisciplinary assessment group with direct knowledge of academic operations and a member able to challenge institutional self-description. Each of the twelve domains should have a responsible evidence owner, a narrative claim, the applicable normative source, record identifiers and dates, verification observations, an ordinal maturity judgement and a confidence qualifier. The assessor should visit or otherwise inspect a sample of actual academic workflows rather than merely request a document pack. Where operating arrangements vary substantially by campus, degree level or modality, separate profiles should be retained rather than forcing an institution-wide consensus rating.

A defensible prioritisation protocol then examines critical thresholds first, followed by educational exposure, learner vulnerability, duration of harm, dependencies and reversibility. Consider an institution with a robust strategic plan but unreliable student-result backups: a low-cost communication campaign to improve its maturity profile should not displace restoration testing needed to protect existing awards. Similarly, an incomplete report should not automatically be labelled a substantive regulatory violation where the actual status is uncertain. The institutional improvement register should preserve the distinction among established failure, inadequate evidence, residual risk and developmental opportunity. Independent follow-up should test operational improvement and close the action only when the defined verification criterion has been met.

The instrument has four important limitations. First, its maturity descriptors are conceptually derived and have not been psychometrically validated or calibrated against independent reviewer ratings. Second, documentary evidence can be inaccurate or selectively presented; credible application needs targeted verification and triangulation. Third, cross-institutional comparison requires careful consideration of mission, discipline, student composition and regulatory differences. Fourth, the model's proposed functional relationships are hypotheses for subsequent evaluation, not established causal estimates. Useful research would test feasibility, inter-rater consistency, association with educational outcomes, institutional burden and possible unintended incentives in varied Rwandan and African universities.

The theoretical architecture has a further consequence for institutional comparison. Capability is domain-specific and relational: a university can possess well-established financial controls while remaining weak in research-supervision succession, or maintain an effective LMS while lacking reliable assessment moderation. A claim of maturity should therefore name the precise function, cohort, programme portfolio and period to which it applies. An institution-wide descriptor that depends exclusively on the strongest department is not defensible. Neither can a university legitimately infer consistent capability from a recently completed pilot without showing how that performance will be reproduced under ordinary operating conditions. The proposed instrument is consequently intended to generate a multidimensional profile with explicit uncertainties, not a league table.

The maturity descriptors should be applied conservatively. An assessor should begin at the lowest level supported by corroborated evidence and move upward only when the corresponding conditions are demonstrated in representative settings. A missing record does not always prove that a service never operated, but it limits what the reviewer can establish; a verified safety or legality failure is different from incomplete documentation and must be recorded separately. Conflicting accounts should prompt a bounded verification request and a qualified conclusion, not automatic averaging. For high-consequence decisions, independent moderation and an opportunity for the institution to correct factual errors are preferable to unreviewed scoring by one assessor.

3.13 Conclusion: Institutional capability as the condition of credible educational promises

The argument of this chapter is that institutional quality cannot be purchased as a technology package, certified through a collection of policies or guaranteed by the credentials of a few distinguished lecturers. It must be built and continually renewed through governance arrangements that make legitimate decisions, academic staffing that matches programme obligations, functioning educational services, trustworthy records, financially feasible commitments and routines that transform evidence into improvement. Institutional capability is durable only when these arrangements continue to work through ordinary teaching cycles, leadership transitions, enrolment changes and foreseeable disruptions. Readiness remains indispensable for particular decisions, but it is a bounded judgement rather than proof of enduring institutional strength.

The twelve-domain Institutional Capability Self-Assessment Instrument translates this account into a usable, evidence-anchored professional process. Its purpose is diagnostic rather than promotional: to reveal what is enacted, what remains aspirational, where evidence is weak, which dependencies threaten delivery and how improvement should be verified. Its maturity levels cannot replace the applicable statutory and regulatory requirements, and no aggregated score can excuse material failures of legality, academic integrity, safety or essential learner support. The proposed instrument extends the original doctoral distinction between

resources, readiness, capability and verified implementation without claiming independent validation of its effectiveness (Sangwa, 2026).

The implications are substantial for councils, senates, institutional leaders, HEC evaluators and academic departments. Decisions should be supported by records that connect promises with staffing, budgets, curriculum processes, facilities, digital services and learner experience. Governing bodies should protect the academic consequences of resource choices; internal QA units should test enactment instead of merely collecting documentation; and evaluators should distinguish credible operational capacity from institutional self-description. Once this organisational foundation is understood, attention can turn to the next level of the quality undertaking: designing the curriculum itself so that qualifications, graduate capabilities, learning activities, assessment and available institutional resources form one coherent educational programme.

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