

## Summary of Research Results

### on Approaches to Student Achievement Assessment (2019-2021)

#### Abstract

This study explores the integration of student achievement assessment (outcome-based evaluation) into internal quality assurance systems (process-based evaluation). Using a nationwide survey of Japanese universities, remote interviews, and a review of international literature, the study explores how universities assess student outcomes and the role of accreditation agencies.

The survey, which received responses from 399 universities, reveals trends such as the impact of university type and size on assessment practices, and challenges in defining and utilizing learning outcomes, particularly at the graduate level. Overall, national universities tend to adopt more comprehensive assessment approaches compared to private and public universities.

The study emphasizes the need to define learning outcomes in degree award policies, communicate them clearly to students, publicize them with evidence on the university's website, and strengthen internal quality assurance, all based on each university's original narrative starting from the learning outcomes outlined in the degree award policy.

#### 1.Members of the Research Committee

Position	Name	*Affiliation
Chairperson	Yukimasa Hayata	Chuo University
Deputy Chair	Jun Kudo	Japan University Accreditation Association
Research Fellow	Saeko Urushibara	The University of Kitakyusyu
Research Fellow	Kazuo Kuroda	Waseda University
Research Fellow	Hideki Shimamoto	Osaka University
Research Fellow	Eiichi Takada	Kobe University
Research Fellow	Tomotugu Takamori	Fukushima University
Research Fellow	Tomoko Torii	Ritsumeikan University

Research Fellow	Yusuke Horii	Kanazawa University
Research Fellow	Sanae Maeda	Chiba University
Research Fellow	Reiko Yamada	Doshisha University
Research Fellow	Keiichi Yoshimoto	Graduate School of Health Care Sciences, Jikei Institute
Research Fellow	Mamoru Tashiro	Japan University Accreditation Association

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## 2.Objective

This study aims to propose a novel approach to evaluation by combining student achievement assessment with internal quality assurance systems focused on their functional effectiveness. Specifically, the study seeks to:

- Explore ways to incorporate student achievement assessment within evaluations focusing on internal quality assurance system effectiveness, with the goal of making proposals to universities.
- Identify specific indicators for student achievement assessment and examine their significance.
- Propose future directions for university accreditation in Japan based on findings, potentially making recommendations to relevant quality assurance agencies.

This research investigates the systems, educational methods, and evaluation indicators necessary to appropriately assess the effectiveness of university educational activities from the perspective of student achievement.

## 3.Methodology

The study employed a nationwide survey of Japanese universities, remote interviews with selected universities, and a supplementary review of international literature (the US, Denmark, Malaysia, Vietnam, and Indonesia). A questionnaire was sent to the presidents of 786 universities across Japan, with responses received from 399 universities, achieving a response rate of 50.8% (Table 1). The survey was conducted from June 19 to July 31, 2020. Among the universities that responded, 42 were national, 54 were public, and 303 were private (Table 2). Six universities, including one graduate school, were selected for interviews (Table 3).

Table 1. Survey Target and Responses

Category	Number
Universities surveyed	786
Responses received	399
Response rate	50.8%

Table 2. University Surveyed

Type of University	Number of Universities surveyed	Rate of Universities surveyed
National Universities	42	10.5%
Public Universities	54	13.5%
Private Universities	303	76.0%

Table 3. List of Universities Selected for Interviews

University Name	Type
Kansai University	Private University
Fukuoka Institute of Technology	Private University
Kochi University of Technology	Private University
Hosei University	Private University
Yamagata University	National University
Graduate School of Management, GLOBIS University	Private Graduate School

#### 4.Scope and Study Items

This study targeted both undergraduate and graduate programs, focusing on the current state of learning outcome assessment. The questionnaire gathered demographic information such as the university name, institution type, number of faculties and graduate schools, number of enrolled students, number of full-time faculty, the accreditation agencies the university has been accredited by, the year of the last accreditation, academic field of the established departments, and the fields of study of the established graduate schools. The study also covered several key aspects related to the establishment, assessment, and utilization of learning outcomes, including:

- The inclusion and specification of learning outcomes in degree award policies, including how they are written and what types of learning outcomes are defined.
- The establishment of methods, indicators, and criteria for measuring and assessing learning outcomes.
- The development of organizations, systems, and implementation procedures for assessing learning outcomes.
- The substantiality of learning outcome assessment based on established procedures.
- The verification and utilization of assessment results to ensure continuous improvement and enhance the effectiveness of internal quality assurance systems.

Additionally, the study inquired about how institutions have responded to COVID-19.

## **5. Analysis**

The data were aggregated by:

1. Type of institution (national, public, private),
2. Departments offered by the university (humanities only, sciences only, health sciences only, others, a combination of humanities and sciences, or a combination of humanities, sciences, and health sciences),
3. Number of faculties and number of graduate schools
4. Ratio of international students (by national, public, and private institutions),
5. Ratio of working adult students (for graduate schools only),
6. Accreditation agency from which the university is accredited.

## **6. Key Findings**

### **[Status of Setting Educational Objectives and Goals to be Achieved]**

- Most universities set degree award policies at the department or program level, with larger universities tending to set them at the program level more often than smaller universities.

- Fewer graduate programs explicitly define learning outcomes in their degree policies.
- Commonly set learning outcomes include specialized knowledge, communication skills, and problem-solving abilities, with less common outcomes being quantitative skills and critical thinking.
- National universities tend to set more comprehensive learning outcomes compared to public and private universities.
- Generic skills, such as communication skills and information literacy, are more frequently set in universities with a combination of humanities, sciences, and health sciences.
- Most universities published their learning outcomes on their websites.

#### **[Approaches to Achieve Educational Objectives and Goals]**

- At the undergraduate level, universities widely implement initiatives such as Faculty Development (FD), first-year education, active learning, syllabus-related activities, the CAP system, internships, GPA-related programs, and career support.
- National universities tend to implement a wider range of initiatives compared to public and private universities.
- At the graduate level, fewer initiatives are implemented university-wide, with lower overall implementation compared to undergraduate programs.

#### **[Status of Verification of Educational Objectives and Goals]**

- Verification at the educational program or university level is common but low (45%), and even lower at the course level (32.5%).
- National universities led in verification efforts, followed by private and public universities.
- Direct assessment methods, such as exams, assignments, graduation research evaluations, and alumni surveys, are widely used, while indirect methods like student awareness surveys are also common.
- External exams, student interviews, rubrics, learning portfolios, and employer surveys are rarely used.

- Graduate schools show weaker awareness of assessment, with verification more common at the program level and less at the course level.
- National and private universities tend to have university leadership set the assessment indicators, while public universities rely more on departmental input. This may be because most national universities are large and larger universities require stronger leadership from the administration, with a greater emphasis on collaboration, faculty development, and institutional research (IR).

#### **[Utilization of Verification Results]**

- At the undergraduate level, verification results were primarily used for improving course content and teaching methods.
- National universities and universities with departments of sciences and health sciences demonstrate higher levels of utilization.
- Graduate-level utilization was less advanced.

#### **[Improvement Strategies for Learning Outcome Assessment Systems]**

- Over 70% of institutions emphasized the importance of strengthening academic management, internal quality assurance systems, awareness reform, data collection, and FD activities to improve systems for assessing learning outcomes, while few universities focus on reviewing class sizes or student numbers.
- External evaluations were not widely prioritized, despite being considered essential for ensuring objectivity and fairness.
- National universities placed the highest emphasis on improvement strategies, while public universities placed the lowest.
- Universities with only humanities departments showed less positive attitudes toward improvement strategies compared to other types of universities with departments in sciences, health sciences, or both humanities and sciences.

#### **[Expectations for Accreditation Reviews]**

- **Positive opinions:** Accreditation contributed to university development, heightened awareness, and promoted initiatives.

- **Negative opinions:** Accreditation led to standardization and uniformity, limiting institutional distinctiveness and increasing administrative burdens.
- **Constructive opinions:** Some emphasized the need for accreditation reform to better support institutional uniqueness.
- Concerns about accreditations focusing on learning outcome assessment included systemic and procedural challenges, difficulties in capturing comprehensive learning outcomes, and calls for more flexible evaluation criteria tailored to institutional and disciplinary characteristics.

#### **[Response to COVID-19]**

- Remote learning (on-demand and real-time interactive classes) was widely adopted.
- National and large universities implemented remote learning more effectively due to better infrastructure.
- Graduate programs, requiring interactive learning, relied more on real-time interactive classes.
- Universities took various measures to support students facing learning challenges during the pandemic, with initiatives primarily led by the instructors in charge of the classes, especially in graduate schools. However, in larger universities, the proportion of those emphasizing instructor-centered responses tended to decrease.

#### **[Influence on International Student Enrollment Ratio]**

- National universities with higher international student ratios were more proactive in learning outcome-based quality assurance.
- Private universities showed the opposite trend.

#### **[Influence on the Ratio of Working Professional Students in Graduate Schools]**

- Programs with high ratios of working professionals were less likely to set and publicly disclose learning outcomes in their diploma policies.
- In those programs, learning outcomes were often communicated via brochures rather than university-wide platforms.

- Research ability was emphasized, but foreign language proficiency was not prioritized.

#### **[Trends by Accreditation Agency]**

- Significant differences in the approach to learning outcome assessment were observed depending on the accreditation agency a university was accredited by; however, no direct causal relationships were identified. It was considered that differences were primarily attributed to the characteristics of universities under each agency, such as the high proportion of national universities under NIAD-QE.

### **7.Conclusion**

This study highlights the important role that the assessment of student learning outcomes plays within the internal quality assurance systems of Japanese universities. The findings reveal clear differences in the approaches to learning outcome assessment based on the type of university (humanities, sciences, or interdisciplinary) and university size, with national universities demonstrating more comprehensive practices compared to public and private universities. Additionally, it was found that graduate schools tend to have less developed internal quality assurance systems that are focused on learning outcomes.

This study emphasizes the need for universities to clearly define learning outcomes through degree award policies and communicate them transparently to students. It also calls for the adoption of more flexible and adaptive assessment approaches tailored to the characteristics of academic fields and universities.

Regarding responses to COVID-19, differences in approaches were observed based on university size. Graduate programs, which are more reliant on real-time interactive learning, saw instructors playing a central role in supporting students facing learning challenges. On the other hand, at the undergraduate level in large universities, non-faculty roles were more emphasized.

Ultimately, this study suggests that the future direction of Japanese accreditation should focus on enhancing the relevance and flexibility of learning outcome assessments, supporting institutional uniqueness, and addressing the challenges of capturing and utilizing comprehensive learning outcomes effectively.