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Diploma Supplements in Japanese Higher Education -Findings from a Nationwide Survey of Undergraduate Education-

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Abstract

Over the last decade, the diploma supplement (DS), a document providing detailed information on degrees' qualifications, has been introduced into Japanese higher education (HE) as part of a broader reform of its quality assurance system. Scholars argue that the Japanese DS focuses on individual student learning but not on articulation and student mobility, as observed in the European Higher Education Area. However, little is known about DS use in Japan. As such, this study aims to investigate DS implementation in Japanese HE. An online questionnaire was developed to examine the implementation rate and information type included in the DS. The survey targeted all 787 national, public, and private universities offering bachelor's degrees in Japan. The study obtained a total of 240 responses, resulting in a response rate of 30.5%. Subsequent analysis revealed that 29.6% of the universities had implemented the DS, with higher rates in national and private universities than prefectural and municipal universities. The main reason for DS implementation was to "visualize student learning outcomes" (93.0%), and the most popular information type included in the DS was "indicators of attainment based on diploma policy learning outcomes" (73.2%). This study supports the argument that DS use in Japanese HE is related to student learning outcomes.

Keywords: Diploma supplement, Japanese higher education, student learning

1 Introduction

1.1 Learning Outcome Focus in Japanese Higher Education (HE)

Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) has promoted HE policies that focus on student learning in recent years. The University Subcommittee of the Central Council for Education of Japan released a policy paper, the "Grand Design for Higher Education toward 2040," in 2018 to strengthen quality assurance and enhance student learning outcomes. Japanese institutions in HE must establish three policies: admission (a student admission process), curriculum (a curriculum strategy to attain learning outcomes), and diploma (a specification of the required learning outcomes for graduation) [1]. They must manage teaching

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and learning to ensure that students achieve the learning outcomes stated in the diploma policy. The Central Council for Education Subcommittee on Universities published the "Guidelines for Management of Teaching and Learning" in 2020, which provides a framework for strengthening the management of teaching and learning based on educational data [2]. As a consequence, clarifying learning outcomes in degree-level diploma policies, collecting related educational data, and improving student learning based on evidence at degree level have become important tasks. A DS was subsequently introduced within the framework, focused on student learning outcomes.

1.2 Diploma Supplements (DSs) in Japanese Higher Education (HE)

A DS is defined as "a supplementary document appended by HE institutions to diplomas and other documents certifying the successful completion of a program of higher education" [3]. DSs, as the word "supplement" suggests, are designed to provide information that adds to academic qualifications. A government-funded educational development project, the Acceleration Program for University Education Rebuilding Theme V project, provided impetus to the introduction of DS in Japanese HE [4]. Initiated in 2018, the Theme V project required the participating universities, based on the three policies mentioned in the previous section, to develop mechanisms for objectively evaluating the learning outcomes acquired by students at graduation. The universities also had to create an effective method for visibly presenting student achievements to society. The question-and-answer document that accompanied the Theme V project application document prepared by the MEXT indicated "the use of DS (materials that supplement the degree certificate) as being a method for objectively presenting learning outcomes at the time of graduation." It also suggested developing a system to show how each student has achieved the learning outcomes specified in the diploma policy. This undertaking might have shaped the focus of DS on student learning in Japanese HE today [5].

The wider use of DS is promoted through the MEXT's performance-based funding for national and private universities. Japanese universities broadly operate in three settings: national, public (prefectural or municipal), and private. A national university, which used to be operated by the national government, runs on its own as a national institution but receives funding from the government for its operations. Public universities are mainly operated by prefecture or city governments. Unlike national and public universities, private universities depend more on student tuition fees for their operations. Although university settings depend on different revenues to varying degrees, DS implementation is incorporated into performance-based funding by the Japanese government. For instance, the DS is used as a performance indicator in the National University Corporation's operating expense grant distribution, and the Comprehensive Reform Support Project for Private Universities includes a section on DS. Despite this incentive, only 17.4% of Japanese universities offering bachelor's degrees have issued DSs as of the 2022 academic year, as per a MEXT survey [6] – a low number given the government's incentives.

1.3 Diploma Supplements in Europe

The Japanese DS follows its European counterparts. According to the European Higher Education Area (EHEA), the DS is "designed as an aid to support the recognition of academic qualifications [7]." This document is issued to graduates in the EHEA to provide a detailed description of their academic qualifications and associated learning outcomes. The DS used in the European Union (EU) has eight sections [7]:

1. Qualification holder (including name and date of birth).

- 2. Qualification type and its originating institution (including name of degree and majors).
- 3. Qualification level (including number of credits completed and its duration).
- 4. Course content and results (including offer type and program-level learning outcomes).
- 5. Function of qualification (including place of further education).
- 6. Certification of the supplement (any additional information, including extracurricular activities, study-abroad experiences, and internships).
- 7. Information on the national HE system (provided by the National Academic Recognition Information Centres).
- 8. Other relevant information.

This DS is an official document produced by HE institutions based on the standards agreed upon by the Commission, Council of Europe, and the United Nations Educational, Scientific, and Cultural Organization (UNESCO). As part of the Europass framework transparency tools, the DS can facilitate the mobility of students by enhancing the recognition of the academic qualifications they obtained across the EU.

1.4 Discussions on the DS in Japanese Higher Education and Our Study

Compared to the DS, originally introduced and developed in Europe, the Japanese DS mainly focuses on the presentation of individual student learning and not on articulation and student mobility [5]. The use of DSs to present individual student learning has yielded mixed opinions. One concern is that the Japanese DS plays a role in assuring individual students [8], whereas another study suggests the potential benefits of using the DS for students' self-understanding and growth [9]. Little is known about actual DS implementation because the previously mentioned MEXT survey has only one item: simply inquiring whether universities had issued DSs or something similar. Further empirical studies are required to better understand the evolution of DSs in Japan. The current study therefore aimed to reveal the DS implementation status in Japanese HE, and to examine the information included in the DS to identify their characteristics. It also investigates whether the Japanese DS indeed focuses on presenting student learning, as discussed by Japanese scholars. The research questions are as follows:

- (1) Does performance-based funding influence the implementation of DS?
- (2) Does the DS in Japanese HE focus on learning outcomes?
- (3) What are some of the issues in implementing the DS?

2 Method

2.1 Design and Procedure

This study utilized the results of a larger cross-sectional study to examine the state of student assessment in Japanese HE. The goal of the larger study was to inventory student assessment content and its plan and usage at the national level, and to explore the use of DS within Japanese HE institutions. The larger study had adopted a survey method using a questionnaire which comprised 27 closed-response, free-response, and demographic questions. The study targeted all 787 Japanese national, public, and private universities offering bachelor's degrees during the 2022–2023 academic year. An online survey was disseminated among the academic affairs vice presidents of the 787 universities offering bachelor's degrees in Japan during November 2022–

February 2023 to solicit responses on an institutional basis. Participants responded via the website specified in the survey request form between November 18, 2022 and February 17, 2023. The questionnaires were administered using the SurveyMonkey system. This study was reviewed and approved by the Kansai University of International Studies Human Subjects Institutional Review Board. A total of 240 responses were collected, resulting in a response rate of 30.5%. Responses from the national, municipal and prefectural, and private universities roughly aligned with the national ratio.

3 Results

3.1 Usage Rate of DS by University

The results indicate that 29.6% of the surveyed institutions had implemented the DS (Table 1). Additionally, the DS implementation rates were higher in national universities (44.1%) and private universities (30.8%) than in public (prefectural/municipal) universities (8.8%).

		1				
	Imple	emented	Not Implemented		Total	
University Category	n	%	n	%	n	%
National	15	44.1%	19	55.9%	34	100.0%
Prefectural/Municipal	3	8.8%	31	91.2%	34	100.0%
Private	53	30.8%	119	69.2%	172	100.0%
Total	71	29.6%	169	70.4%	240	100.0%

Table 1: DS Implementation Rates

3.2 Reasons for DS Implementation and Types of Information Included in the DS

The reasons for DS implementation are summarized in Table 2. Most universities indicated they used DS to "visualize student learning outcomes" (93.0%) and as "reflection/review of students' learning situations" (62.0%). About half of the institutions reported using the DS as "a certification document for academic work completed at graduation" (49.3%). The DSs were also used for "advising student learning or when meeting with advisees" (36.6%).

Reasons for implementing DS (Multiple responses allowed)	%
Visualize Student Learning Outcomes	93.0%
Reflection/Review of Students' Learning Situation	62.0%
Certification Document for Academic Work Completed at Graduation	49.3%
Use for Advising Student Learning or When Meeting with Advisees	36.6%
Use for Job Search Efforts	33.8%
Use as Part of Job Search Application Process	29.6%
Total	

Table 2: Reasons for DS Implementation

Table 3 shows the information included in the DS. The most popular type of information included in DS was "indicators of attainment based on diploma policy learning outcomes" (73.2%), followed by "grade point average" (62.0%), "academic grades and credits acquired" (52.1%), and "indicators of generic competencies" (46.5%). Information other than regular ac-

ademic records was also included: "record of external qualifications and licenses attained" (39.4%), "record of extracurricular activities" (35.2%), and "record of awards/honors" (25.4%).

Table 3: Types of Information Included in DS

Information included in DS (Multiple responses allowed)		%
Indicators of Attainment Based on Diploma Policy Learning Outcomes	52	73.2%
Grade Point Average (GPA)	44	62.0%
Academic Grades and Credits Acquired	37	52.1%
Indicators of Generic Competencies	33	46.5%
Record of External Qualifications and Licenses Attained	28	39.4%
Record of Extracurricular Activities (Clubs etc. Included)	25	35.2%
Record of Awards/Honors	18	25.4%
Indicators of Foreign Language Fluency such as TOEIC	14	19.7%
Record of Experiential Learning such as Internships	11	15.5%
Total	71	

3.3 Issues in Implementing the DS

Eleven respondents expressed opinions on DS implementation. Five of these identified the lack of recognition by society and lack of utility in job search as main issues. One respondent explained, "Social awareness and necessity (of DS) have not increased." Others indicated the difficulty in using the DS to improve student learning: "There are differences among faculty members in how often they use it as feedback to students," and "We believe that communication between advisors and students during the process of creating DSs is important."

4 Discussion

The DS might have been developed in Japanese HE in a unique way. However, few studies have empirically investigated the status of DSs. The current study thus provides important evidence for further discussion on the evolution of DSs in Japan.

Regarding the first research question, 29.6% of the participating institutions had implemented DS, indicating its relatively limited use even with the performance-based funding to encourage their implementation. In addition, our findings provide evidence that university categories might influence DS implementation rates, with some universities implementing the DS because of the funding system. Further discussions on the utility of DSs are necessary. Otherwise, an increasing number of universities would implement the DS for the funding, leading to a DS system that does not benefit students and stakeholders.

As regards the second research question, our results indicate that the major reasons for implementing the DS was to "visualize student learning outcomes," followed by "reflection/review of students' learning situations." Additionally, "indicators of attainment based on diploma policy learning outcomes" was the most frequently included element in DS. Overall, our results support the argument that the Japanese version of DS focuses on student learning.

On the third research question, one respondent stated, "The European diploma supplement based on the Bologna Process and the one in Japan are completely different. It is necessary to consider indicators for quality assurance based on the framework of vocational qualifications in the future." The assessment focus of DSs in Japan is partly because of the lack of a common

qualifications framework [5]. Without such a framework, one cannot ensure similar learning outcomes for students from different universities. This condition necessitates the DS to include individual student learning outcomes for the assurance. The Japanese version of the HE qualification is under development [10], and its introduction will likely change the form of DSs. Regardless of the DS content, its benefits to students, faculty members, and stakeholders should be guaranteed. Limitations of this study include self-reported data and a potential sampling bias, given the relatively low response rate. Additionally, the questionnaire did not include an item to examine the universities' attitudes toward performance-based funding. Even with these limitations, this study sheds light on the status of DS implementation in Japanese HE.

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References

- [1] The University Subcommittee of the Central Council for Education of Japan, "Grand Design for Higher Education toward 2040," 2018; https://www.mext.go.jp/content/20200312-mxt_koutou01-100006282_1.pdf (in Japanese; accessed Oct. 14th, 2023).
- [2] The University Subcommittee of the Central Council for Education of Japan, "Guidelines for the Management of Teaching and Learning," 2020; https://www.mext.go.jp/content/202002 06-mxt_daigakuc03-000004749_002.pdf (in Japanese; accessed Oct. 14th, 2023).
- [3] National Institution for Academic Degrees and Quality Enhancement of Higher Education, "Glossary of Quality Assurance in Japanese Higher Education," Aug. 2021; https://niadqe.jp/glossary/5349/.
- [4] The Ministry of Education, Culture, Sports, Science and Technology (MEXT) of Japan, "Regarding public recruitment for the FY2016 the Acceleration Program for University Education Rebuilding (AP) "High School and University Connection Reform Promotion Project," 2016; https://www.mext.go.jp/a menu/koutou/kaikaku/ap/1369002.htm.
- [5] S. Fukahori, "The Japanese Higher Education Quality Assurance System's Challenge Revealed through the Japanese Diploma Supplement," Journal of Japanese Society for Engineering Education, vol. 67-1, pp. 22-27, 2019.
- [6] The Ministry of Education, Culture, Sports, Science and Technology, "Regarding the State of Reforms in Educational Contents at Universities in 2021," 2023; https://www.mext.go.jp/content/20230908-mxt_daigakuc01-000031526_1.pdf (in Japanese; accessed Oct. 4th, 2023).
- [7] European Commission, "Diploma Supplement," https://education.ec.europa.eu/education-le vels/higher-education/inclusive-and-connected-higher-education/diploma-supplement.
- [8] K. Suzuki, "The Origin of Quality Assurance in the Hokkaido University of Science," Journal of Japanese Society for Engineering Education, vol. 67-4, pp. 36, 2019.

- [9] M. Yumoto and A. Sumida, "Design of Diploma Supplement for Finding Students Themselves and for Improving their Academic Outcomes," Journal of Japanese Society for Engineering Education, vol. 67-1, pp. 28-33, 2019.
- [10] A. Noda, "Exploring the possibilities and challenges in developing the Japanese qualifications framework," Higher Education Evaluation and Development, vol. 17-1, 2023; doi.org/10.1108/HEED-05-2022-0019.