Retrospect and Reflection of Research on Quality Assurance of Doctoral Education in Japan*

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Abstract—The quality assurance of doctoral education is becoming an educational fact that is spreading around the world and a hot topic of academic research, but scholars are more focused on research in countries such as Europe and the United States, and less on Japan. Using first-hand literature materials, from the four levels of policy, institution, practical investigation and international comparison, the research and analysis of the relevant research on the quality assurance of doctoral education in Japan can clarify the positioning of existing research and help in-depth research.

Keywords—Japan; doctoral education; quality assurance

I. INTRODUCTION

In line with the wave of “quality assurance in education” that emerged in the 1990s, the quality assurance of doctoral education is spreading into a worldwide educational fact, and it has gradually become a hot topic of academic concern. However, scholars pay more attention to the quality assurance system and measures for doctoral education in Europe and the United States, and there are few studies on the quality assurance of doctoral education in Japan. From the commonality of higher education management system and reform trends in China and Japan, the commonality of doctoral management system and academic standards, the commonality of the quality assurance model of higher education, and the typicality of quality assurance of doctoral education in Japan, it is necessary to carry out in-depth research on quality assurance of doctoral education in Japan. Based on this phenomenon, this study summarizes the relevant research on the quality assurance of doctoral education in Japan with the first-hand literature materials as an analytical tool, so that it can lay the foundation for further research.

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II. BASIC IDEAS

When reviewing the relevant research on graduate education in Japan, Arimoto Akira (2006) summarized the four aspects of policy, institution, trends and characteristics, and comparison with foreign countries. Yonezawa Akiyoshi (2006) summarized the four aspects of practical activities, theoretical research, comparative research, and international trends when reviewing the relevant research on higher education evaluation. In reviewing the relevant research on higher education evaluation, Murasawa Masataka (2014) summarized the four aspects of policy, institution, characteristics and issues. As the origin and mainstay of Japanese higher education research organizations, relying on the 21st century COE project “Construction and Quality Assurance of 21st Century Higher Education System” and the strategic research project on university reform for the 21st century “Research on Reform Strategies of University and Graduate School in the Knowledge-based Society of the 21st century”, from the two aspects of international comparison and practical investigation, Research Institute for Higher Education (RIHE) carried out a systematic study on quality assurance in higher education and graduate education. Based on the research perspectives selected by scholars, the...
research issues of concern, the academic logic of application, and the research results obtained, this study mainly studies the research on the quality assurance of doctoral education in Japan from the four levels of policy, institution, practical investigation and international comparison to grasp the current research status.

III. RESEARCH PROCESS AND CONTENT

A. Policy Level

Hanada Takashi (2005) reviewed the changes in the quality assurance policy of higher education in Japan, pointing out that “University Assessment” is the main way to guarantee the quality of higher education, and it is a rethinking on American certified evaluation and accreditation and a combination with Japan mainland. Fujimura Masashi (2013) used the “Triangle Coordination Model” proposed by Burton Clark to analyze the policy documents issued by Japan in order to realize program-based graduate school system of the essence, and proposed the graduate education evaluation framework shown in “Table I”. It reveals the contradictions and changes in the evaluation of government, academic authority and market in graduate education, and the specific ways which influence the evaluation of graduate education in the three stages of input, throughput and output.

TABLE I. GRADUATE EDUCATION EVALUATION FRAMEWORK PROPOSED BY FUJIMURA MASASHI

<table>
<thead>
<tr>
<th>Input</th>
<th>Government</th>
<th>Academic authority</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approval system of the establishment</td>
<td>Graduate entrance examination</td>
<td>University rankings</td>
<td></td>
</tr>
<tr>
<td>Admissions plan</td>
<td>Qualification judgment</td>
<td>Graduate school index</td>
<td></td>
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<tr>
<td>Qualification assessment</td>
<td></td>
<td>Folk oral communication</td>
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<tr>
<th>Throughput</th>
<th>Laboratory education</th>
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<tr>
<td>Coursework Essentialization/Institutionalization Project of graduate school</td>
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</table>

<table>
<thead>
<tr>
<th>Output</th>
<th>Degree review</th>
<th>Labor market globalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualification examination</td>
<td>High skill</td>
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</table>

B. Institution Level

Maeda Sanae (2004) summarized the quality assurance system of higher education in Japan as four categories such as a government approved new university, faculty and research department, university self-assessment and relevant information disclosure, university benchmark association unofficial evaluation, and non-university benchmark association members without external evaluation. He also summarized the new trends of university assessment, that is, national university evaluation carried out by National Institution for Academic Degrees and University Evaluation, 21st century COE project, special education project funding, and introduction of certified evaluation and accreditation.

RIHE (2004) divided the graduate education evaluation methods into 12 categories as following: university setting review meeting, inspection of the inspector (Ministry of Education, Culture, Sports, Science and Technology), other review by Ministry of Education (Science), official review outside the Ministry of Education (Science), assessment of subject education conducted by National Institution for Academic Degrees and University Evaluation, evaluation of affiliate schools conducted by Japan University Accreditation Association, franchise evaluation by Japan University Accreditation Association, self-assessment at the university/undergraduate level (undergraduate education assessment), self-assessment at the university/graduate level (graduate education assessment), self-assessment at the university/undergraduate level (research assessment) and other evaluations. And after the nationwide questionnaire survey, RIHE screened out the eight types of assessment methods that have practical effect.

Hanada Takashi (2005) proposed that the quality assurance system of higher education is in the higher education system, influenced by factors such as the continuation of higher education and secondary education, the structure of higher education governance, the behavior of higher education institutions, and the community culture of scholars. The education quality assurance system is divided into four categories: 1 Assessment of higher education institution level: self-assessment, certified evaluation and accreditation, professional degree graduate school certified evaluation and accreditation; 2 National University level assessment: performance evaluation conducted by the National University Corporation Evaluation Committee (education and research are evaluated by National Institution for Academic Degrees and University Evaluation), policy evaluation conducted by the Ministry of Internal Affairs and Communications, and evaluation by the Independent Administrative Corporation Evaluation Committee; 3 A guarantee method for the post-event function as the same as

7 Fujimura Masashi, “Reality and issues of graduate education seen from faculty and graduate students: input, throughput and output,” in Reform of Graduate Education, Hiroshima University Research Institute for Higher Education. Hiroshima: Takatou Print Media Co., Ltd., 2013, pp. 7-35.
the university assessment: the supervisor's inspection of the business and the accounting reviewer's review of the accounting; 4. Safeguards for the indirect influence of higher education institutions: policy evaluation of the Ministry of Education, Culture, Sports, Science and Technology in accordance with the Law on Administrative Policy Evaluation (2001.06)\textsuperscript{11}.

C. Practical Investigation Level

In 2003, relying on the project "Enhancing Quality and Building the 21st Century Higher Education System", RIHE made some related research and formed two text reports focusing on the status of doctoral education and the value of doctoral degree, the research and life status of graduate students, the papers' writing, examinations and problems encountered, and the purpose of the indemnification, maintenance and the improvement of the quality of postgraduate education and doctoral degree. The first is the "Research on Graduate Education and Degree Programs: National Survey Report" (2004), which includes all the data of the questionnaire and survey statistics. Fukudome Hideto (2004) combined survey results and official statistics, with humanities and social science doctoral degrees as the research object, discussed the number of doctoral degree grantees and doctoral awards, the evaluation of the nature of doctoral degrees and the possibility of obtaining doctoral degrees held by teachers and students, the preconditions for the award of the degree and the review system of the thesis, as well as issues and strategies for promoting the granting of doctoral programs, the academic standards of doctoral degree and quality assurance, the duration of doctoral programs, and the post-graduation of doctoral and doctoral programs after graduation\textsuperscript{12}. The second is "Research on Graduate Education and Degree Programs II" (2007), which includes a follow-up study by several researchers on graduate education and degree conferment from different perspectives. Among them, in the first chapter, Yamasaki Hirotoshi (2007) made a brief analysis of the current situation and problems of doctoral education and degree quality assurance from the perspective of doctoral dissertation review and external evaluation of graduate education\textsuperscript{13}; in the seventh chapter, according to the relevant laws and regulations and the specific regulations of colleges and universities, Yamasaki Hirotoshi (2007) reviewed the paths of obtaining a doctoral degree and the conditions and procedures for the examination of doctoral dissertation, and reflected the issues from the perspective of comparison between Japan and the United States\textsuperscript{14}.

Ogawa Yoshikazu’s study (2008) is concerned with the general phenomenon that "who has not received a doctoral degree but has left a graduate school for more than three years", "what are the problems that students still face in the relaxed degree-granting system?", "how to shorten the time for students to get a Ph.D.?". For the study of the problem, he interviewed 54 Korean and Chinese students who have obtained doctoral degrees from the Graduate School of Engineering in Japan and the United States around the subject of the topic of the doctoral dissertation, the daily research activities, the level of the doctoral dissertation, the preconditions for submitting the doctoral dissertation, and the time for obtaining a doctoral degree. By analyzing and comparing the interview results, he revealed the problems and reasons in the process of granting doctoral degrees in Japan, and pointed out that it is necessary to explore how to improve the efficiency of Japanese doctoral degrees from the perspectives of educational courses and guiding methods\textsuperscript{15}.

D. International Comparison Level

RIHE’s International Comparative Study of Quality Assurance in Higher Education (2005) examines higher education systems and quality assurance issues in Asia, continental Europe, and Anglo-Saxon representative countries at the organizational level, reveals the international development trend of quality assurance in higher education, and puts forward the consideration of constructing multiple higher education quality assurance frameworks such as super-state-state-institutions\textsuperscript{16}.

Fukudome Hideto (2011) integrated the research outcomes of scholars, compared the development trend of postgraduate education in Britain, Germany, France, China, Korea, and the United States, and used the results of the 2007 International Survey of Faculty Development to analyze some problems such as writing Ph.D. thesis, doctoral education curriculum system, research guidance, selection of research questions, participation in joint research, scholarships, scholarship funds, and the conclusion of employment contracts related to educational research. He especially made a comparison between Japan and the United States about the postgraduate education curriculum and design, the laboratory system and the status of graduate students, the employment status after doctoral education, the status of doctoral degree, the number of the year to get doctoral degrees, and the doctoral course study rate to clarify the status quo and existing problems of Japanese doctoral


\textsuperscript{13} Yamasaki Hirotoshi, “Graduate education and degree programs: Comparison between university types,” in Research on Graduate Education and Degree Programs II, Hiroshima University Research Institute for Higher Education. Hiroshima: Nishiki Printing Co., Ltd., 2007, pp. 1-12.


education, and put forward the key point to think about the quality assurance of doctoral education in Japan.

IV. CONCLUSION

From the perspective of research content, scholars have conducted different levels of discussion or research on the quality assurance of doctoral education from the four levels of policy, institution, practical investigation and international comparison, providing a reference for understanding and grasping the history, current situation and trends of quality assurance of doctoral education. However, the systematic research results directly related to the quality assurance of doctoral education are few, and they are scattered in the research results of graduate education or quality assurance of higher education.

From the perspective of research methods, researchers mostly use policy text analysis, field surveys, comparative studies and other methods to interpret relevant policy content, verify the implementation effect of the policy, grasp the current status of doctoral education quality, and introduce the quality assurance of higher education in foreign countries. However, few researchers use case studies to conduct micro-in-depth research on a project or a class of subjects.

From the perspective of the research subject, the researchers showed an organizational tendency. In particular, RIHE occupies almost half of this research, which is related to the leading position of RIHE in Japanese higher education research, and also related to the government’s focus on quality assurance and increased financial support. It has also proved that the quality assurance of doctoral education has become an increasingly important proposition of the times.

REFERENCES
