

Effectiveness of the Quality Assurance Scheme for University Education as a Reform and Development Model of University Teacher Training Education

TOKUNAGA, Tamotsu
(University of Tsukuba)

The quality assurance scheme in university education has developed from the national system which assures quantitative standard of resource inputs for educational conditions, and has become a component of the national system and university-led activities based on the university's discretion and responsibility. In addition, the target of these university-led activities has expanded from assurance of teaching outputs, to assurance of learning outputs, as well as assurance of learning outcomes. However, the system has not extended to teacher training education in universities.

Most recommendations in the Central Council for Education reports of recent years concerning teacher training are similar to quality assurance efforts in university education with regard to aspects and functions hence, it is suggested the quality assurance scheme of university education could be effective for the reform and development of teacher training education.

However, quality assurance efforts are based on the idea that universities are required to assure the quality of their education for their stakeholders such as students, employers, etc. as well as the recognition that quality assurance of education can be realized only through university-led activities based on its discretion and responsibility. Most recommendations similar to quality assurance efforts in aspects and functions are lacking the idea and the recognition.

Nevertheless, according to study reports, some universities have cited results in teacher training education as part of efforts towards quality assurance of the entire university. On the other hand, some results may not be listed due to factors pertaining to issues of structure of organizations which faculty members belong to, among other reasons.

Taking into account recommendations in council reports and cases in study reports, the quality assurance scheme in university education is considered to be effective in the reform and development of teacher training education.

It is desirable that people concerned turn their attention to such recognition as described so far and take action to support efforts by universities.

Keywords: Quality assurance scheme in university education, University-led activities based on its discretion and responsibility, Teacher training education, Central Council for Education reports, Quality assurance of education for stakeholders

1. Introduction

Recent years have seen considerable developments in the quality assurance scheme for university education in Japan.

The quality assurance scheme, which summarised by the author in Figures 1 and 2, originally started from the National system and has become a component of the national system together with university-led activities based on the university's discretion and responsibility. The quality assurance scheme originally focused on resource inputs for educational conditions and has become complex with its scope ranging from assurance of resource inputs to assurance of teaching and learning outputs to assurance of learning outcomes.

In contrast, the national system for certified teacher training programmes (CTTPs), the ministerial certification of programmes and regulations on the basic structures of a programme is functioning as the solo quality assurance measure for teacher training education in universities. Considerable reform has been demanded for teacher training education in Japan for long time. It is needed, in particular, to shift teacher training education to advanced professional level that is suitable for university education in the globalization era.

This paper is based on the premise that initiatives based on the quality assurance scheme for university education are effective in the reform and development of teacher training education. Some universities and faculties are working on quality assurance of their teacher training education as a part of the whole university education system. However, no significant progress has been made on these initiatives. Moreover, many universities exclude their CTTPs from their activities for quality assurance.

There must be certain factors concerned with the national system for CTTPs or programme management in universities that make university teachers unwilling to include their teacher training programmes in their activities for quality assurance, or factors may prevent initiatives based on the quality assurance scheme for university education from working for CTTPs.

This paper has been written on the basis of this awareness and for the purpose of exploring these factors.

2. Theme and composition of this paper

This paper begins by demonstrating the structure and functions of the university education quality assurance scheme through examining the history of its development. In addition, discussed are the policies and university initiatives in recent years to promote the reform of CTTPs or teacher training education and to enhance their quality assurance through contrasting the quality assurance scheme for university education and its development history. On the basis of this methodology, the purpose of this paper is to find out whether the quality assurance scheme for university education, as shown in Figures 1 and 2, would also be an effective model for the reform and development of teacher training education in universities. The outline is as follows;

Section 3 describes the development of the quality assurance scheme for university education from the 1990s to the present.

Fig. 1 Quality Assurance Scheme for University Education in Japan

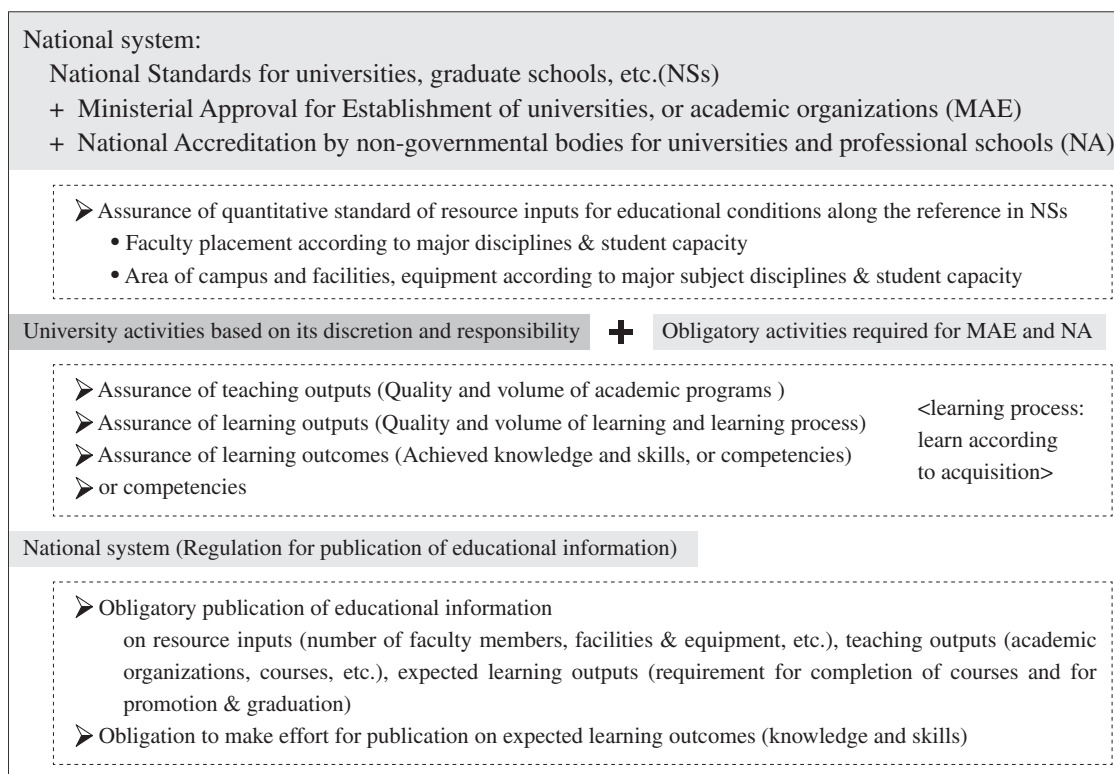
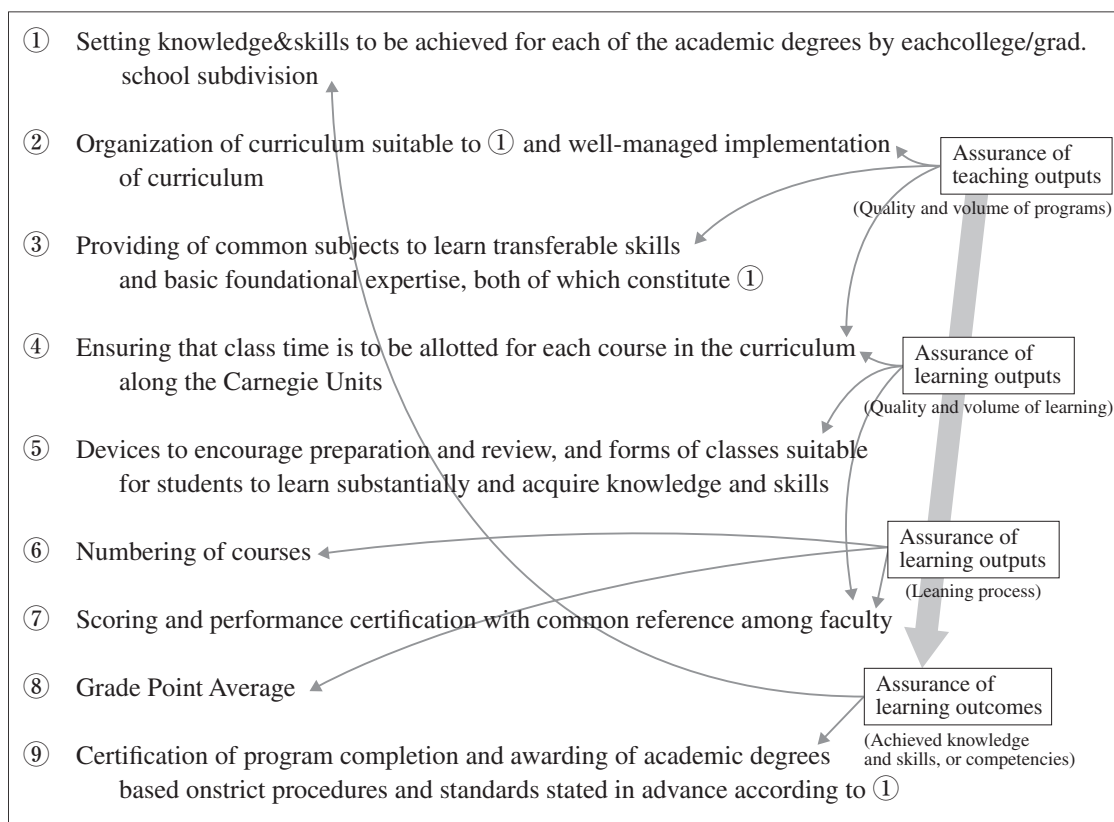


Fig. 2 Quality Assurance Scheme in Higher Education (Otherthanassurance of resource inputs)



Section 4 describes the extent to which the basic structure of the CTTP system and the recent Central Council for Education (CCE) reports on teacher training have incorporated the elements of the quality assurance scheme shown in Figures 1 and 2.

Section 5 describes whether policy researches at the National Institute for Educational Policy Research of Japan (NIER) and university initiatives to improve CTTPs or teacher training education in recent years have been identified as targets for quality assurance in teacher training education, and whether there has been awareness of governmental policies and university initiatives relating to quality assurance for university education and how widely the elements shown in Figure 2 have been incorporated.

Section 6 finally states the findings and interpretations obtained through these considerations.

Many statements made herein are based on personal recollections and opinions of the author who used to be in charge of higher education policies and policies for teacher training as executive officer in the Ministry of Education, Science, Culture, Sports and Technologies (MEXT), performing in various capacities as Deputy-Director-General of the Higher Education Bureau (2006-2008), Director-General of the Research Promotion Bureau (2008-2010) and Director-General of the Higher Education Bureau (2010-2012). Statements from the CCE reports that complement these recollections and opinions, and from related policies by the MEXT or studies by the NIER have been cited.

The fact that developments in the quality assurance scheme for university education in Japan were mainly the results of the MEXT policies and reports from the CCE (a deliberative organisation within the MEXT) is known widely among people related to universities, while we can hardly find policy researches relating to the development of the scheme. This is also due to the recognition that issues on university teacher training education are not ones of educational activities in universities but ones of the structure or components of the CTTP system and that identification of issues and measures to improve them was formed by the CCE reports and the MEXT, and to that many studies relating to CTTPs throughout Japan were conducted by the ministry and its educational policy research institute.

3. Development of the quality assurance scheme for university education since late 1990s

(1) Section Overview

University education in Japan made up for a serious situation lacking systematic or organized activities through the efforts of pioneering educators and administrative staff to improve the situation, and subsequently some universities have started certain initiatives to ensure the quality of its education for their stakeholders. These initiatives are currently taking place at many universities in one form or another.

Linked with these initiatives was the competitive grants awarded by the MEXT for educational activities, targets of which shifted from the initial efforts for improvement of education to efforts for quality assurance of education.

As a consequence, the scheme for quality assurance of university education have been

shifted from the national system to a component of the national system and university-led activities. In addition, the characteristics and functions of the national system have changed from those that ensure resource inputs for educational conditions through prior check and restraint based on the enforcement of authority to those through the ministerial loosened prior check and accreditation by non-governmental bodies, and besides inducement for universities to take measures for quality assurance of education has been added (see Figure 1).

Furthermore, there has been a shift in the assurances provided to stakeholders from resource inputs, i.e., from educational conditions, to teaching outputs (what and how the university provides in educational programmes), and to learning outputs (what and how students learned). Currently, further shift is occurring toward the assurance of learning outcomes after completion of educational programmes.

(2) University Education before the 1990s

The state of university education before the 1990s is reflected in a report of the former University Council entitled 'Additional Improvements to Higher Education' (1997) and specifically '2) Issues with the Current State' and '3) A Direction for Further Improvements'. Of the issues listed, the sections of the report relating specifically to quality assurance of education are summarised below:

- i. 'Educational objectives ... of colleges, college subdivisions, etc.' are unclear.
- ii. 'Required knowledge and capabilities for graduation' are unclear.
- iii. 'Lack of systematic curricula' because of the previous two points.
- iv. Class content is determined from the 'perspective of the teacher' rather than the 'perspective of the student' and does not consider students' requirements and desires.
- v. There is no structure for compulsory and optional classes and no clear order for taking related courses as well as no counselling on appropriate courses. Thus, students are unable to 'select courses appropriately'.

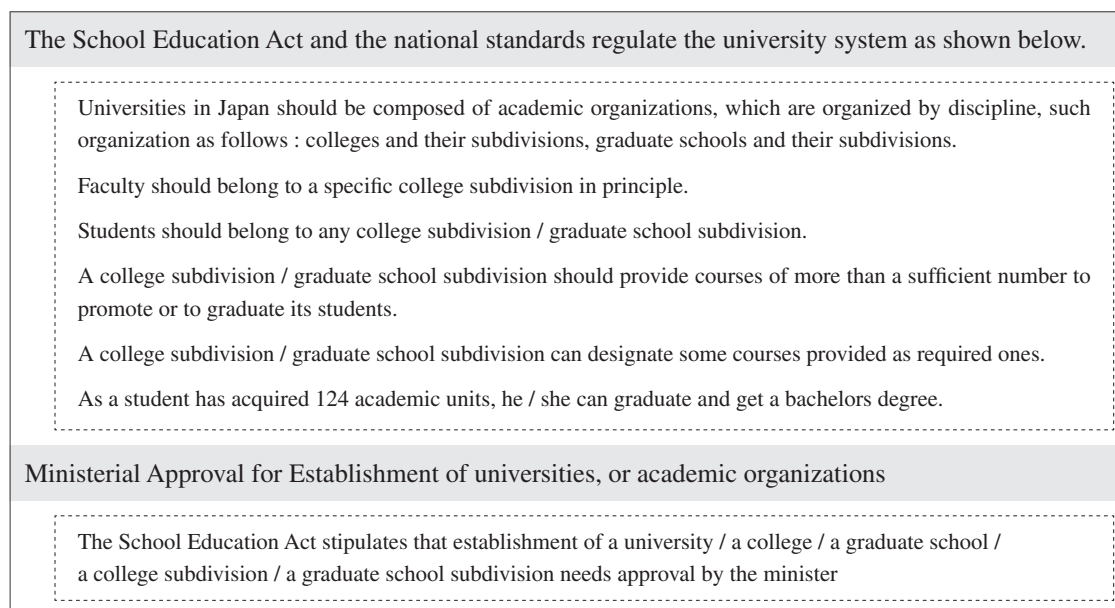
(Sections in parentheses denote direct quotes from the report)

Considering the University Council discussions in which the author participated and a report of the Business-University Forum of Japan, the above issues were a result of various interrelated circumstances, such as the characteristics of the university system in Japan, societal demands for university education, and attitudes of teachers.

The university system in Japan features a unique style of organization-based education and research as well as management. Within a university are organizations such as colleges, college subdivisions, graduate schools, and graduate school sub-divisions by disciplines, under which structure teachers and students separately belong to one of the college subdivisions or graduate school subdivisions. Students take courses taught by teachers of the subdivision to which they belong, according to the requirements set by the subdivision. However, there is no idea nor concept of programmes (see Figure 3).

Societal demands for university education used to place high premium on the strict selection of students through entrance exams rather than on university education itself. Further-

Fig. 3 Outline of the university system in Japan



There are no idea nor concept of educational programs in the regulations concerning university system in Japan.

more, companies preferred employing talented graduates and developing them through their internal corporate training programmes when securing human resources.

Teachers usually identified themselves not as teachers but as researchers with main focus on research.

(3) Improving University Education: Career Education and Good Practice Grants

A squeeze on indirect departmental expenses in companies that accompanied intensified corporate competition brought by globalisation has increased demands on university education (Business-University Forum of Japan, 1998). The recession which followed the collapse of the bubble economy exacerbated the hiring situation¹ for university graduates in the 1990s.

These events spurred voluntary initiatives to improve university education by pioneering university teachers, and many of these initiatives were on career education in particular (Tokunaga & Momii, 2011). In addition, the MEXT annual survey on improvement trends of university education has inspired efforts in other areas than career education such as creating a common syllabus. However, most of these initiatives were voluntary contributions of certain professors (Ministry of Education, Science and Culture, 1998).

Good Practice Grants, such as the 'Programme to Support Distinctive University Education' began in 2003 have changed the situation and contributions by a small number of professors were shifted to university and/or faculty-led organized efforts, and consequently many universities started to provide organized career education and lead to positive results (see Figure 4).

¹ The ratio (those employed directly after graduation): (graduates - those opting to earn advanced degrees) listed in the Report on School Basic Survey of 1990–2000 declined from 0.87 in 1990 to 0.63 in 2000.

Fig. 4 Progress of career education from the late 1990s to the early 2000s

Spread and expansion of internship in universities (from around 1997) (1998: 8% → 2006 : 32%)
 “Study group to consider career education in universities” (among national university teachers) (2004)
 “Survey report on student job hunting” (The Japan Association of National Universities) (2004)
 Offering professional development courses (in two-thirds of Japanese universities in 2005)

(4) A Move from Focusing on Improving University Education toward Quality Assurance for University Education: International Trends

Until the 1990s, the MEXT and faculty and officials of universities believed that improvements for university education and the national system to ensure educational conditions were different in purpose. In addition, the chain of administrative action was not referred to as a ‘quality assurance system for university education’, chain which comprised the setting of national standards (NSs) such as the National Standards for Universities, the National Standards for Graduate Schools and the National Standards for Short-term Colleges, inspections for the Ministerial Approval for Establishment (MAE) for universities or academic organizations such as colleges, and post-approval monitoring on the fulfillment of applications.

However, emerging international trends completely altered this understanding.

One of these trends was the integration of cross-border education service markets, in addition to hiring and labour markets, due to globalisation. This change provoked international competition among universities over students and corporate funding. Universities were asked to guarantee the quality of their education beyond their national borders (Tokunaga, 2015).

In addition, the US proposed the liberalisation of education services in other countries for universities accredited by the home country in the World Trade Organisation (2000). Though the US proposal was virtually denied when a joint panel of the UNESCO and the OECD, established in response to the liberalisation proposal, adopted a guideline entitled ‘Quality Provision in Cross-Border Higher Education’ in 2005, which provided a mutual respect for the official quality assurance systems within each country, two kinds of international competition among universities and among national quality assurance systems for university education have intensified. These are partly due to the increase of the international flow of students and overseas campuses of leading universities in the US and other Western countries, and also partly due to European initiatives such as the Bologna Process since 1999, the ERASMUS Mundus since 2004 and the ‘tuning’ movement by faculty members.

Moreover, an international university ranking business appeared in 2004.

These events demonstrated that international demand for quality assurance in university education should not be limited to educational conditions but must extend to the entirety of university education, including teaching outputs and learning outcomes. In addition, it clarified that the efficacy of the national quality assurance system was limited domestically, and that quality assurance was ensured independently by each university to be accepted across borders.

(5) A Move from Improving University Education to Quality Assurance for University Education: Formation of the Principles at the CCE

The integration of education service markets and employment and labour markets created international competition both among university systems and among official quality assurance systems of each country.

The MEXT considered these kinds of competition when it held discussions over rebuilding the whole national system related to quality assurance for university education in the CCE's University Subcommittee in 2008. Through discussions, the subcommittee revealed an awareness that setting NSs, inspections for the MAE, post-approval monitoring and accreditation are integral components of the national system of quality assurance for university education in Japan, and finally proposed additions and modifications in laws and regulations concerned with improving inter-relationships throughout these processes².

In addition, discussions within the CCE's University Subcommittee solidified and clearly indicated that the essence of quality assurance for university education lies in a particular university providing a guarantee the quality of its education to its students and those covering tuition fees, as well as to companies that employ its graduates.

Regarding the introduction of the accreditation system, which is conducted not by the government but by non-governmental bodies certified by the MEXT, there was an awareness of the importance of autonomous quality assurance efforts by those involved/concerned in university education, including the certification business of JABEE—a Japanese engineering training and certification organisation—and setting of undergraduate competence libraries by the Science Council of Japan. Promoting and recommending these initiatives were considered to be an important administrative task.

(6) From the National System to a Component of the National System and University-led Quality Assurance: Assurance of Teaching Outputs and Learning Outputs

The CCE submitted a report titled 'Graduate School Education for a New Era' in September 2005, in which it proposed identifying educational targets and developing a systematic curriculum to be implemented based on faculty teamwork, aside from the introduction of coursework. The aim was to realize quality assurance of teaching outputs and learning outputs for graduate school education as led by the university based on its discretion and responsibility.

MEXT amended the National Standards for Graduate Schools in 2006 based on the report (including the setting of developmental objectives for each major, the creation of syllabi and obligatory full disclosure). Furthermore, it started a fiscal support programme called 'Graduate School Education Initiative program' for universities working on the proposals in that year. Figure 5 indicates the outcomes of these actions.

² 'Dai 5 Ki Chuou Kyouiku Shingikai Daigaku Bunkakai no kore made no Shingi ni Okeru Ronten Seiri' [A Summary of Discussion Points from the CCE's University Subcommittee], November 2011.

Fig. 5 Survey results for the deliberations of the Central Council for Education (2009)

- 90% of graduate schools have set their own educational goals, and have developed curriculum suitable for the goal for each major, and provided course work
- 60% of graduate schools provided postgraduate common subjects and special opportunities to develop generic skills of students

(7) From the National System to a Component of the National System and University-led Quality Assurance: A Proposal for the whole Quality Assurance Scheme including Assurance of Learning Outcomes

A report entitled ‘Reconstruction of Undergraduate Programmes’ (hereafter ‘2008 Undergraduate Programme Report’) was submitted from the CCE in December 2008. The report departed from the conventional format of an advisory report to the MEXT, adopting a style of speaking directly to universities and those concerned with universities and proposing university initiatives in addition to administrative policies and measures. Furthermore, it was remarkable that the main points of the interim and the final reports differed.

The interim report, entitled ‘Discussion Summary’ (March 2008), proposed to set up undergraduate competence libraries and also presented a direction for the assurance of learning outcomes. Subsequently the Council requested the Science Council of Japan to deliberate on setting undergraduate competence libraries. The framework, aiming for the assurance of learning outcomes and the setting of competence libraries, resembled Europe’s tuning movement from 2000 that was being pushed by university educators, competing with the Bologna Process from 1998 (Gonzalez et al., 2012). However, the interim report was short on specific descriptions relating to how a university could ensure learning outcomes as well as to policies and measures for promoting assurance of learning outcomes other than requesting for deliberation by the Science Council of Japan, and thus has not led to any specific results other than the competence libraries by the Science Council of Japan.

Except for items 1 and 9 in Figure 2, which are related to the assurance of learning outcomes, the final report noted that items 2 through 8 in Figure 2 are integral factors to the quality assurance scheme for university education and proposed that universities and university faculty and staff work on initiatives for assurance of teaching outputs and assurance of learning outputs.

The MEXT subsequently shifted the targets of competitive grants for educational activities from initiatives for improvement of education to initiatives for quality assurance of education and also made necessary revisions to the National Standards for Universities.

(8) Incorporating Quality Assurance Initiatives by Universities into the National Systems through the Mandatory Disclosure of Educational Information

The initiatives that constitute quality assurance measures, as shown in items 1–9 of Figure 2, are to be realised by a university based on its discretion and responsibility; traditionally, it was considered to be appropriate to distinguish them from the national quality assurance system that was originally meant to ensure the preparation of educational conditions through

the exercise of public authority.

However, quality assurance of university education has greatly been transformed by globalisation. The essence of quality assurance in a global society lies in universities guaranteeing the quality of education to their students, corporations and other stakeholders, both domestic and foreign, regardless of where that education is delivered. In addition, the scope and content of quality assurance do not end with resource inputs (preparation of educational conditions); rather, it covers university education in its entirety, including teaching outputs, learning outputs and learning outcomes, and relies on the continuous efforts of universities rather than the exercise of public power.

Given the state of quality assurance for university education at the international stage, the MEXT decided to expand the concept of quality assurance and to restructure the quality assurance scheme, thereby attempting to increase global competitiveness of the university system in Japan, and consequently incorporated university-led initiatives relating to items 1–9 of Figure 2 into the national system through both amendments of NSs that required universities to take appropriate measures relating to items 2-5 and 7 of Figure 2 and the amendment of the Enforcement Regulations for School Education Act, which introduced a system of obligatory publication of educational information in 2010.

This system obliges universities to announce educational information relating to quality assurance of their education with scope ranging from resource inputs for educational conditions to teaching outputs (names of academic organizations, courses of each academic organization, curriculums of each course, etc.) to expected learning outputs (requirements for completion of courses, requirement for promotion and graduation, performance criteria, etc.) However, information on knowledge and skills expected to be acquired for earning an academic degree (item 1 in Figure 2) was exempted from the obligatory announcement and universities need only to make best efforts to accomplish.

(9) A Proposal for Conversion to a Degree Programme System and Progress in Quality Assurance Scheme after 2008

In 2008, the MEXT requested the CCE to discuss on a new theme, ‘A University System That Responds to the Diverse Needs of Society and Students’, with a specific agenda namely ‘Re-configuration of the university system and university education focusing on the introduction of degree programme system’. It was virtually a proposal to convert the Japanese organization-oriented university system into that in common with the US and other advanced countries.

This was due to awareness of the limitations in assuring quality for university education under the university system in Japan, which was centred on academic organizations, such as colleges, college subdivisions, graduate schools, and graduate school subdivisions, but was lacking in any idea or concept of educational programmes, and because a shift to education based on degree programmes that integrated activities relating to items 1–9 of Figure 2 was considered necessary for securing international competitiveness and thus, the reputation of Japan’s university education in the future.

However, this proposal never led to a fruitful discussion, and the MEXT adopted the policy of moving forward with the practical introduction of the degree programme system

through the obligatory publication of educational information and through competitive grants of awarding large amounts for programme-based educational activities.

Later, the August 2012 CCE report entitled ‘Towards a Qualitative Shift for University Education to Create a New Future’ (hereafter ‘2012 Qualitative Shift Report’) proposed the introduction of the concept of educational programmes into the university system in Japan and the implementation of principles for educational programmes from the perspective of promoting quality assurance of university education in addition to re-emphasising items that were proposed in the 2008 Undergraduate Programme Report.

The quality assurance schemes for university education shown in Figures 1 and 2, which had been formed mainly through the processes described in Sections 2 through 9, was accepted and firmly recognized by university educators and administrators through the 2012 Qualitative Shift Report. In particular, the use of specific practises relating to items 1–9 in Figure 2 in the reference materials of the report had a large favourable impact. These good practices provided examples to many universities that they were capable of imitating or following, which allowed for the further creation of models for development.

Concerning the introduction of the concept of educational programmes to the university system in Japan, the International Cooperative Programme System that has been enforced in 2015 was designed on the basis of the concept of degree programmes and adopting their principles (for example, the management of a programme is based on the curriculum, a curriculum does not need a certain number of teachers who are in charge of the curriculum alone), while it had inherited parts of the traditional system (for example, a programme requires to establish a new college subdivision that offers the programme) It is predicted that there will be a gradual shift of university education to that based on degree programmes in response to globalisation in the future (Elena Silva et al., 2015; Mori, 2015; Fukabori, 2015).

4. The CTTTP system and the Recent CCE Reports on Teacher Training Education in Comparison to the Quality Assurance Scheme for University Education

(1) The Basic Structure of the CTTTP system in comparison to the Quality Assurance Scheme for University Education

Situations that were originally assumed in designing a system or in enacting a law often differ from real ones after the system was executed or the law was enforced. This is also true in the case of CTTTPs.

Thus, provisions to the Enforcement Regulations for the School Teacher’s Licence Act (ERTLA) are referred to for system design assumptions, and descriptions relating to the issues and problems of CTTTPs in the 2006 CCE report titled ‘Regarding the Ideal State of Systems for Teacher Training and Teacher Licence in the Future’ (hereinafter, ‘2006 Report’) are referred to for circumstances surrounding system implementation.

(Assumptions in system design)

An original structure of the quality assurance scheme for CTTTPs is shown in Figure 6-1.

Even when compared with the national quality assurance system for university education (setting NSs and inspections for MAE) up to the 1990s, the CTTP scheme has more substantial functions in assuring teaching outputs (educational contents to be provided, etc.) and learning outputs.

With regards to the national quality assurance system for university education, there were some mechanisms assuring teaching outputs and learning outputs as described below.

- i. The National Standards for Universities stipulated the distinction between specialised subjects and general education subjects as well as the minimum credit requirements of both categories of courses until 1991.
- ii. Fields of courses were constrained according to the internal rules of the University Establishment Council, until the deregulation policy of the Koizumi Cabinet made the procedure and requirement transparent with the internal rules abolished at the beginning of the 2000s.
- iii. With regards to college subdivisions having the objective to become qualified for specific career licenses or national examinations, requirements for qualifications were respected in inspections of MAE and hence the provision of specialised subjects corresponding to requirements for qualifications were confirmed through inspections.

However, point i. above depends on the judgment by universities on whether courses will be general or specialised. For point ii, it is sufficient to provide one or more courses in such areas as economic theory and economic history in the field of economics; for example, universities could determine which courses would be required for graduation. Furthermore, universi-

Fig. 6-1 Quality assurance scheme of the Teacher-Training Course (TTC) (original structure)

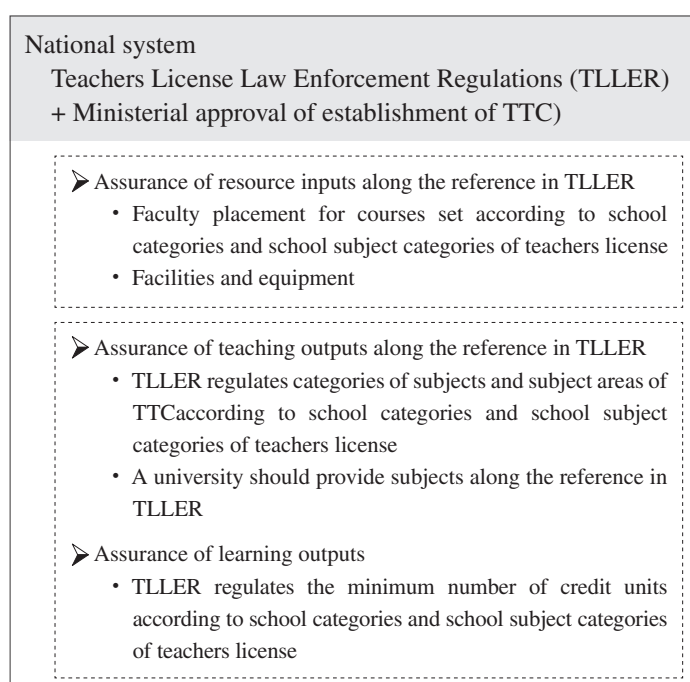
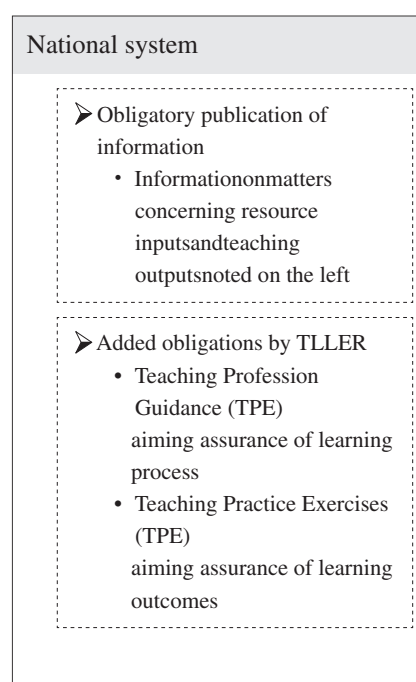


Fig.6-2 Quality assurance scheme of TTC (added components)



ties could modify course offerings, even after the initial enrollees had graduated.

In contrast, ERTLA constrains the framework and details of a CTPP; that is, categories and sub-categories of courses, fields of courses to be provided in each category and outlines of knowledge and skills to be taught, as well as minimum credit requirements of each course category. The CTPP framework is designed to automatically arrange a curriculum according to the type of teacher's license (e.g., for primary school, for mathematics in junior high schools/high schools, for language in junior high schools/high schools) and mechanically set knowledge and skills expected to be acquired after the completion of a CTPP. Thus, the scheme incorporated into a CTPP had a more substantial function to ensure teaching outputs and learning outputs than the national quality assurance system for university education until the 1990s.

In addition, based on the CCE report to be discussed later in this paper, a system for obligatory publication of educational information was introduced, and the Teaching Profession Guidance (TPG) has been made mandatory, thereby the quality assurance scheme relating to CTPPs has incorporated university-led activities based on its discretion and responsibility and increased its functions (see Figure 6-2).

(Actual Situations with CTPP)

The 2006 Report lists the following problems with CTPPs and teacher training education in universities.

- i. 'Some universities are not seeking or have not established clear principles relating to teacher training'.
- ii. 'There is insufficient understanding of the minimum competencies that students should acquire through completion of a CTPP'.
- iii. 'When setting up courses, college subdivisions certified to open a CTPP often fail to assemble sufficient teaching staff', due to 'poor understanding of the purpose of specialised courses relating to school subjects and specialised courses relating to teaching, which are both categories of CTPP courses'.
- iv. In many cases, 'syllabi are not sufficiently made or offered to students'.
- v. 'There is little consistency and continuity among courses...curricula are not always arranged well'.
- vi. Teachers are 'liable to set specific themes or knowledge of their research areas as contents of courses' such that what are taught and discussed in classes 'do not sufficiently correspond with the actual issues of schools'.
- vii. 'Lectures are the main method of instruction. There are not enough exercises, experiments or practical training'.

(Items in quotation marks are direct quotes from the report)

The description of these items traced the issues of university education up until the 1990s, as presented in the 'Additional Improvements to Higher Education' (1997) report quoted in Section 3(2).

Compared with the former national system to ensure quality of university education in

place until the 1990s, the quality assurance system incorporated within a CTPP would be more effective in assuring education quality, particularly in assuring teaching outputs and learning outputs. So, why were these problems flagged? There are, no doubt, various reasons, which are discussed in Section 6.

(2) Descriptions on Quality Assurance of Teacher Training Education among the Proposals of the 2006 Report

Of the 2006 report proposals, descriptions relating to quality assurance of teacher training education are shown in Figures 7-1 and 7-2. Note that the proposals for the introduction of a new professional school system for teacher education, are not listed.

(The Basic Character of the 2006 Report: Similarities and Differences with the Quality Assurance Scheme for University Education)

In comparing items listed in Figures 7-1 and 7-2 with the activities that make up the quality assurance scheme other than assurance of resource inputs shown in Figure 2, there appears to be many similarities.

Points A and B are shown as parts of in the ‘Basic Goals of the Reform’ and seem to represent the principle that completion of a CTPP should ensure learning outcomes and that a teacher’s license should certify the minimum competencies necessary to start up a teaching profession have been met. However, proposed ‘specific reform measures’ and their supplementary explanations lack both descriptions that back up the principles and measures to embody them, except for the introduction of a compulsory set of classes and seminars called Teaching

Fig. 7-1 Descriptions related to the quality assurance of teacher training education in the 2006 Council Report(1)

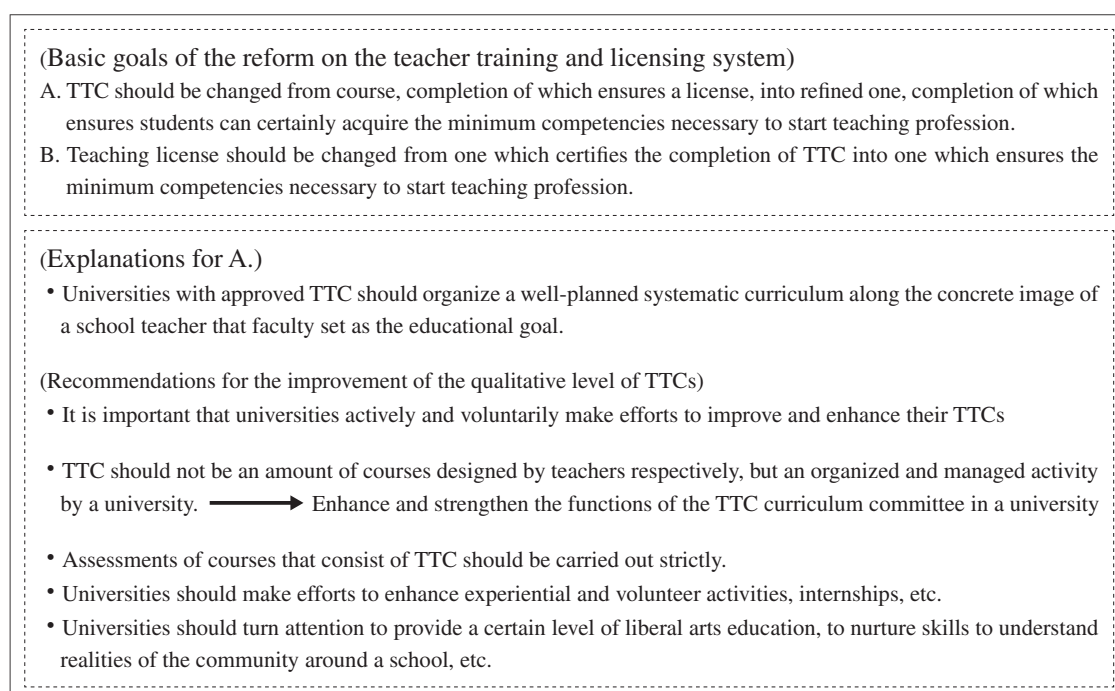


Fig. 7-2 Descriptions related to the quality assurance of teacher training education in the 2006 Council reports (2)

<p>(Introduction of the obligatory Teaching Practice Exercises (TPE))</p> <ul style="list-style-type: none"> • In order to develop students minimum competencies necessary to start teaching profession through TTC and to ensure whether students have acquired them, TPE should be introduced as a compulsory subject. • TPE should be set at an appropriate time in TTC period when students have completed / are expected to complete all other subjects. • Universities should introduce such suitable teaching methods for TPE as role-playing, group discussions, case studies, field surveys, practices in mock classrooms. <p>(Enhancement of the Teaching Profession Guidance (TPG))</p> <ul style="list-style-type: none"> • In order that students can actively and voluntarily develop minimum competencies necessary to start teaching profession, TPG should be enhanced as a legal obligation . • Through TPG, teachers should guide students to understand the educational goals and learning outcome targets and to make a plan for completion of TTC courses through showing the structure of curriculum and relative positioning of the subjects. <p>(Enhancement of post-approval review function and examination for approval of TTC)</p> <ul style="list-style-type: none"> • A mechanism should be established, which enables to make a legal corrective recommendation and to cancel the approval based on post-approval review or accreditation.
--

Practice Exercises (TPE). Thus, the 2006 Report cannot be considered to be aiming toward developing a quality assurance scheme for teacher training education focusing on assurance of learning outcomes.

In addition, the first item of ‘specific reform measures’ in the 2006 Report is a recommendation which states that ‘it is important that a university makes efforts to improve and enhance its CTTPs based on its discretion and responsibility’ in relation to ‘recommendations for the improvement of the qualitative level of CTTPs’. The description and location of the recommendation seems to propose a drastic shift in teacher training policies in response to the move in the quality assurance scheme for university education from the national system to a component of the national system and university-led activities based on its discretion and responsibility. However, teacher training policies have not changed according to suggested modifications by the ministry in relation to licensing requirements or programme certification requirements, following which no measures nor competitive grants to support university-led initiatives have been implemented based on the 2006 Report.

Moreover, TPE was introduced as a way of ensuring learning outcomes; however, it was not accompanied with proposals for university initiatives necessary for TPE to function substantially, such as setting the knowledge and skills as educational targets to be achieved, grade point average (GPA) and performance certification with common reference among faculty prior to confirming learning outcomes, etc. In addition, TPE was positioned as a course in a programme, which made it more difficult to confirm whole learning outcomes of the programme through the TPE alone. Considering that TPE appeared to be less effective in assuring learning outcomes as described above, the 2006 Report could not be considered as certainly aiming to create a quality assurance scheme centred on TPE.

(Specific Reform Measures in the 2006 Report: Similarities and Differences with Elements of the Quality Assurance Scheme for University Education)

As noted above, the 2006 Report did not aim for the creation of a quality assurance scheme for teacher training education. Rather, the report strived to improve curricula aiming for the ideal teacher training education for educational administration officials via national and local governments as well as the council committee members.

However, the proposed 'specific reform measures' share many similarities with the elements of a quality assurance scheme for university education regarding its content and functions to be realised. Let us, therefore, compare the specific proposals of the 2006 Report in regard to teacher training, as shown in 7-1 and 7-2, with elements of the quality assurance scheme for university education shown in Figure 2.

First, the phrase, 'a college subdivision with a CTTP should organize a well-planned systematic curriculum along the specific image of school teachers which the faculty had set as the educational goal' in the explanatory section for the 'Basic Goals' and the proposal to 'enhance and strengthen the functions of a CTTP management committee in a university' for that 'a CTTP should be an organized and managed programme' in '(1) recommendations for the improvement of the qualitative level of CTTPs' of the 'Specific Reform Measures' are equivalent to '(2) organization of curriculum suitable to the knowledge & skills set to be achieved and well-managed implementation of curriculum' in Figure 2.

Next, the proposal to 'enhance experiential activities' in '(1) recommendations' and another one to 'introduce such suitable teaching methods' in '(2) introduction of TPE' the explanatory section have the same intent as '(5) forms of classes suitable for students to learn substantially and acquire knowledge and skills' in Figure 2. In addition, 'to provide a certain level of liberal arts education' is equivalent to (3) 'providing of common subjects to learn transferable skills and basic foundational expertise' in Figure 2.

Moreover, the gist of the proposal relating to 'enhancement of teaching profession guidance (TPG) and phrases 'guide students to understand the educational goals and learning outcome targets' and 'through showing the structure of curriculum and relative positioning of the courses' in the explanatory section indicate the same intent to ensure leaning outputs, or learned contents and learning process as built into the quality assurance scheme for university education.

(3) A Description of Quality Assurance for Teacher Training Education in the 2012 Report Proposals

The CCE submitted a report in 2012 entitled 'Measures for Comprehensive Improvement of Qualifications and Capabilities through an Overall Educator Lifestyle' (hereafter, '2012 Report'). Figure 8 shows descriptions relating to the quality assurance of teacher training education, as listed in the report.

In the section 'III Interim measures', the 2012 Report recommends that 'universities should develop student competencies to the expected level through enhancing reforms on quality assurance for teacher training education and other measures. The explanatory section contains

the item titled ‘quality assurance of CTTPs’ and describes specific measures for promoting quality assurance in teacher training education (see Figure 8). In addition, the explanation of (3) ‘quality assurance of CTTPs’ begins by saying ‘as seen in recent years of university education reforms’ and emphasises on the development of the quality assurance scheme for university education.

These recommendations, descriptions and using the term of ‘quality assurance’ as a section title seem to indicate the 2012 Report’s stance of advancing quality assurance of CTTPs as to follow the development of the quality assurance scheme for university education. In the context of this paper, these seem to indicate the common recognition in the committee at the national stage that the principles and scheme for quality assurance of university education are useful and effective as principles and methods to realise quality assurance for teacher training education, which would support the author’s opinion on how teacher training education should be reformed as noted in ‘the introduction’ of this paper.

However, there is little description of the specific initiatives for universities to work to achieve quality assurance. In addition to the scant recommendations of ‘setting up a university-wide system’ and ‘thorough development of competencies centred on TPE’, the report certainly contains numerous items, most of those were, however, already proposed in the 2006 Report.

In its recommendations of specific measures, the 2012 Report focuses on the national system rather than on university-led initiatives. It recommends to introduce an obligatory publication system for educational information concerning CTTPs as well as the implementation

Fig. 8 Descriptions related to the quality assurance of teacher training education in the 2012 Council Report

III Interimmeasures –improvement through cooperation among educational boards, schools and universities

1 Basic concepts

- Universities with approved teacher training courses should deepen collaborations between educational boards and schools

2 Enhancement of teacher training education in the undergraduate level

- Universities should ... develop student qualities to the expected level ... by linking teaching-related courses and courses concerning school subjects, by setting university-wide organization to manage TTC, and by enhancing reform on quality assurance

①Improvement of TTC curriculum

- TTC curriculum should be improved so that it can develop student’s competencies to the expected level focusing on TPE.

③Quality assurance of TTC

- As seen in recent years of university education reforms, as well as in TTC, there is need to clarify the knowledge and skills students should master. The focus should be not on “what to teach”, but rather “what can be done”.
- The examination for approval of TTC should be done strictly, through ensuring whether curriculum is organized systematically and whether students can take courses on timely basis.
- The ministry should consider introduction of obligatory publication of information by universities with TTC on philosophy of teacher training, concrete image of educational goal, management system, faculty, curriculum, etc.
- The ministry should improve review activities after approval, and should consider the introduction of accreditation system based on such peer review and others.

of a mutual assessment system for the posterior assessment of CTTs. Of these, a publication system for educational information has been achieved.

5. Policy Research and Positioning of Quality Assurance for Education within University Initiatives

(1) The Positioning of Quality Assurance for Education in Policy Research within the NIER The NIER began work in earnest on policy research relating to teacher training education in 2011 and conducted a ‘Policy Research on Improving of Teacher Training’ as a 2011–12 research project. ‘Surveys and Studies for the Improvement of School Teacher Training’ was the title of its 2013–14 research project.

The former project focused on three topics: improvement to teacher training system, development of core curricula according to school subjects for teacher training education and development of an on/off-the-job training programme for university teachers responsible for teacher training education. Of these, a report on the improvement to the teacher training education system was published in March 2013, and other topics were discussed in the 2013–14 research project.

Regarding the purpose of core curriculum development, though CTTs have no difference in required credits as well as various surveys appeared to show no disparity in the time necessary for developing required knowledge and skills caused by characteristics of each school subject, it is considered necessary to adopt the concept of teacher training curricula in response to the characteristics and requirements of school subjects as well as to introduce different credits or completion years accordingly. Thus, the research above was conducted for developing a core curricula for science teachers, gymnastic teachers, and primary school teachers respectively, with no regard for the current framework of CTTs.

(Research on Improving Teacher Training System)

In the 2011-2012 research project called ‘Research on Improving Teacher Training System’, discussed results of survey questionnaire distributed to teachers responsible for or involved in CTTs in college subdivisions or universities, as well as site visits to universities (Kudo, 2013).

The author examined the descriptions relating to the quality assurance of teacher training education as reflected in the results of survey questionnaires and site visits.

First, descriptions in the ‘Overview of the Survey and Survey Results’ contained a section relating to quality assurance, such as a) ‘questionnaire’, setting questions on ideal teachers as an educational target and curricula; b) ‘directions of solving problems’, showing directions derived from the survey, such as a retreat from excessive dependence on ERTLA, sharing of objectives among teachers involved in a CTT, and continuous efforts for improving syllabi; c) ‘noteworthy initiatives’, describing improvement policies seen in efforts by universities, such as ‘establishment of a managing organization for CTTs’, ‘clarification of the ideal teacher as an educational target’ and ‘improvements in curriculum’. However, the phrase ‘quality assurance of education’ was not found in any of the above sections.

Following the analytical overview of the survey questionnaire and results, a detailed report with policy recommendations was provided, outlining the following:

- i. Contributions of Good Practice grants for university education and Teacher Training Good Practice grants as well as the influence of the 2006 Report.
- ii. The necessity to reconstruct the organisations of teachers concerned with CTTPs for teacher collaboration beyond categories of CTTP courses, such as the courses relating to school subjects and the courses relating to teaching, courses relating to a school subject and courses relating to other school subjects.
- iii. The necessity to introduce a cross-referencing category bridging the divide between courses relating to school subjects and those relating to teaching, as well as a course crosslinking theory and practice.

Among these, the phrase ‘quality assurance of education’ was found in relation to improvements in curricula for teacher training in a section that describes a shift in the axes of quality assurance. This shift (in university education) was from ‘what kind of education to provide’ to ‘what kind of knowledge and skills acquired’, thus similar reforms in teacher training courses are to be expected. However, the perspective of quality assurance along the line described above was rarely found in the analysis and assessment from each university as well as in the assessment of policies based on the survey. When mentioned, it was vague.

Thus, as noted later on in this paper, some of the university initiatives are worth focusing on from the perspective of quality assurance for education that is being moved forward, including those relating to the assurance of teaching outputs or learning outputs. However, it is unclear whether the report has determined whether these initiatives are related to quality assurance for education. Furthermore, it is unclear whether these initiatives are only for CTTPs or are part of or influenced by initiatives in advancement toward quality assurance of university-wide education.

(Surveys and Studies for the Improvement of School Teacher Training)

The ‘Surveys and Studies for the Improvement of School Teacher Training’ (2013–14) summarises the research results and policy recommendations relating to the following based specifically on the results of core curriculum development: summarisation of knowledge and skills required to start up as primary school teachers, science teachers and gymnastic teachers as educational targets; reconstruction of the CTTP curricula corresponding to those targets; development of new teacher training education programmes, including new class forms and learning methods in response to those already introduced into schools as well as based on new findings in cognitive science or learning science; furthermore, the development of training programmes for university teachers (Ohsugi, 2015).

Selection and definition of competence as educational targets of teacher training education, and development of core curricula as well as the modernisation of teacher training education programmes all form the basis of initiatives for quality assurance of teacher training education. However, there is no clear stance taking the position of research results in terms of relevance to quality assurance for teacher training education nor reflecting these results in

university initiatives.

(2) Initiatives in Universities

(Cited in survey results of research projects conducted by the NIER)

The NIER's 'Research on Improving Teacher Training System' lists the following university situations and initiatives as a result of site visits and questionnaires.

- i. Contributions of Good Practice grants for university education and Teacher Training and the influence of the 2006 Report.
- ii. The necessity to reconstruct the organisations of teachers concerned with CTTP for teacher collaboration beyond categories of CTTP courses, such as courses relating to school subjects and those relating to teaching, those relating to a school subject and those relating to other school subjects.
- iii. Creation of courses bridging the divide between two categories of CTTP subjects, courses relating to school subjects and courses relating to teaching, as well as, courses crosslinking theory and practice.
- iv. Creation of general courses for developing transferable skills and career views that transcend school level (primary or junior high) and school subjects
- v. Introduction of various class forms such as diverse activities and interactive classes
- vi. Introduction of devices such as self-checking mechanism for learning outputs and achieving of educational targets, and classes to confirm the acquiring of knowledge and skills

It is noteworthy that initiatives shown in point iii–vi above correspond to the elements of the quality assurance scheme for university education shown in Figure 2, though their effects and outcomes are unclear. Given that the universities surveyed are known for making the effort to improve and reform teacher training education, the quality assurance scheme for university education could potentially function as reform and development models for teacher training education.

In addition, the records detailing the site visits regarding point ii are particularly notable. Clearly, some universities have discussed problems relating to teacher organizations of CTTPs while some universities made no response at all, indicating a genuine issue and a serious situation. In addition to the report, the author confirmed with researchers concerned during the site visits that several circumstances could not be included in the survey results. Three of these were (1) the lack of consensus to introduce a GPA system or methods to certify performance according to common standards and to create a common format for syllabi among teacher organisations by school level (primary or junior high) and school subjects; (2) teachers responsible for courses relating to school subjects and for the other subject categories of a CTTP were not collaboratively working on improvements; and (3) those situations could not be recorded as survey results.

(Other Surveys)

The NIER in cooperation with the Kyodo Publishing Inc. conducted a survey of initiatives for teacher training education in non-teacher training universities and colleges. In many cases, the author accompanied the researchers on visits and in interviews of university presidents, vice presidents and senior faculty.

One of these interviews was with University A—a large private comprehensive university where a university vice president is responsible for teacher training education and inspects the syllabi, just as with other education fields. Students there including those registered with CTTPs of the university are required to select an area for vocational preparation and acquisition of transferable knowledge and skills suitable for an expected career path through career education that commences in the first year. In addition, students are required to choose courses of study that correspond to their selected area. The interview revealed that based on this system, the number of students enrolling in first-year courses in the CTTPs is approximately the same as the number of students in the second and third years, while in other universities the number of students in CTTPs generally drops down to 1/2 or 1/3 as they progresses to the higher years. Furthermore, the university has a system to record for every students what he/she has learned and to check what he /she has achieved in the selected area for vocational preparation. All of the teachers there are also able to download training videos for interactive lessons and other innovative classroom activities. Similar initiatives are being undertaken at other private universities (Fuchigami and Komatsu, 2012).

Common to these universities are the initiatives within CTTPs that are being led by the head administrative office for promoting quality assurance of education across the entire university or career education as well.

This inherently leads to the conclusion that the quality assurance scheme for university education are useful and effective for the reform and development of teacher training education.

6. Summary and conclusions

Several questions came up as this paper was written. Below is a summary of these questions followed by the authors view:

Question A

Though the quality assurance function built in the CTTP system should be effective in assuring teaching and learning inputs compared with those for university education established through the 1990s, why is it that the CTTP system have not been working well in regard to quality assurance of education? Conversely, while university education has successfully developed its quality assurance scheme since late 1990s, why has teacher training education failed to develop its own quality assurance scheme?

Question B

Is it true that the quality assurance scheme for university education is useful and effective as a reform and development model for teacher training education?

Question C

If the quality assurance scheme for university education is useful and effective as a reform and development model for teacher training education, why has teacher training education in universities been excluded from university education reform? Why have we not found yet a nation-wide movement to introduce the university education quality assurance scheme for teacher training education?

(1) Factors that prevent the CTTP system from working well in regard to quality assurance of education

Why is it that a quality assurance scheme for teacher training education has not developed still persist, thus resulting many problems as noted in the 2006 Report? It was found that there are some factors limiting or restricting the quality assurance function of the CTTP system and the development of quality assurance schemes for teacher training education.

(Over dependence on the CTTP system)

One such factor is that universities and teachers depend too much on the well-built structure of CTTPs as pointed out by researchers who were responsible for the NIER surveys.

While the positioning of CTTPs through undergraduate and graduate programmes, number of years and amount of study in a CTTP, and composition of courses in a CTTP may not sufficiently match current circumstances of university education, issues of school education, and/or demands of teachers from local community, parents and society at large, not a few universities and teachers seem to be busy in conducting activities along to the requirements of the CTTP system than advancing reforms or improvements on their teacher training education.

(Discord among organizations of teacher concerned with a CTTP)

Moreover, as discussed in the results of the NIER surveys and the proposal submitted to the CCE (Takaoka, 2012), there are major issues stemming from teacher organisations.

In the Japanese university system, a college generally has some college subdivisions organized by disciplines, and teachers and students belong to a subdivision.

Contrary to that, in general, a college specialised for teacher training has a few subdivisions organized by school level (primary or junior high) to which students belong, and it also has more subdivisions organized by the course categories and sub categories of CTTPs, subdivisions which teachers belong to. With regard to colleges not specialised for teacher training, in general, teachers concerned with a CTTP and in charge of courses relating to school subjects belong to his/her own subdivision organized by the discipline, while teachers concerned with a CTTP and in charge of courses relating to teaching belong to a special subdivision attached to the college or another with a CTTP, or to a special independent academic organization in the university or one attached to the administrative office. In addition, courses relating to teaching are taught by part-time teachers.

Consequently there is lack of consensus and collaboration among teacher organizations for

almost any initiative to reform their CTTP as outlined and detailed in the NIER survey report.

This situation is considered to have hindered integral initiatives in CTTPs (Takaoka, 2012).

(Neglect to support university-led initiatives)

In addition to the above-mentioned points, the author has another perspectives. Even if a public social system were perfectly well designed, the system cannot exert the expected function without the efforts of those who are involved in the system. This is also true in the case of CTTPs. The author strongly believes that quality assurance of education is not sufficient if only official systems are working and that official systems are able to fulfill their functions effectively only when they are accompanied by university-led initiatives.

However, whenever problems have been pointed out, administrative authorities on teacher training have been persistent in modifying certification requirements for CTTPs as well as licensing requirements for teachers provided in the School Teacher's License Act and its enforcement regulations. However, they have not really delved into how teacher training education is actually conducted in universities, and hence neglected to take measures to support university-led initiatives for the improvement of CTTPs or teacher training education. This allows problems to persist and even worsen (Tokunaga, 2013).

It should be noted that the Teacher Training Good Practice grants, which are the first and last subsidy program focussing on teachers training education in the last 60 years, was conducted not by the administrative section in charge of teacher training and teacher's license but by the other section in charge of technical education in universities from 2005 to 2008. In this context, there are administrative circumstances; through the reorganization of the former Ministry of Education in 1984, wherein an administrative division in charge of the CTTP system has moved from the Bureau of Higher Education to the Bureau of Elementary and Secondary Education, which was accustomed to national government budgetary shares to local governments, and not with university matters and competitive grants.

(2) Effectiveness of the quality assurance scheme for university education as a reform and development model in teacher training education

(University initiatives at its core)

The current quality assurance scheme for university education has university-led initiatives at its core. This is the primary reason that the scheme is considered to be useful and effective as a reform and development model for teacher training education.

Teacher training education is conducted as part of university education, and hence universities have responsibility for and autonomous authority over that education. In addition, quality assurance of education is not sufficient if official systems alone are working and that official systems are able to fulfill their functions effectively only when they are accompanied by university-led initiatives as noted in section (1).

(Results across almost all academic fields)

A secondary reason is that initiatives based on the quality assurance scheme for university education have generated favourable results across all academic fields and disciplines, including teaching training education even though the good results were only in a small number of universities. This indicates that the quality assurance scheme for university education does not have internal factors that interfere with its functioning in specific areas.

(The CCE reports and the NIER surveys)

Another reason is that related reports of the CCE proposed measures to improve CTTPs that are similar to the purpose and function of the elements of the quality assurance scheme for university education. In addition, the results of the NIER surveys indicate that several universities have exceeded the proposals of the CCE in advancing initiatives relating to quality assurance centred on the assurance of learning outputs, and hence have obtained the desired results.

Furthermore, the author could not find any description to indicate that the CTTP system has internal factors built in the system to impede the application of the higher education quality assurance scheme to education in CTTPs.

(3) Reasons why no significant progress has been made on initiatives to reform teacher training education based on the quality assurance scheme for university education.

While the quality assurance scheme for university education is considered to be useful and effective as a reform and development model for teacher training education, teacher training education in universities has been excluded from university education reform, i.e. quality assurance for university education has not extended to CTTPs in universities. In addition, there has never been a nation-wide movement to apply the higher education quality assurance scheme to education in CTTPs nor is there a wide-range initiative for universities to reform teacher training education based on the quality assurance scheme for university education.

If there are not internal factors for this situation with the CTTP system as noted in the previous section, what then are the external factors surrounding the CTTP system that have impeded university initiatives for applying the quality assurance scheme or reforms based on it? Why do teachers and senior officers in universities intend to extend their quality assurance initiatives to their teacher training education?

The answers to these questions are, considered by the author, almost the same to those in the first section.

The example of the private university given in 5(2) is a powerful supporting evidence. When the head office of a university is completely focusing on university-wide education reform and quality assurance for education, initiatives based on the quality assurance scheme for university education can progress and generate results, even within teacher training education.

Issues relating to teachers organizations seem to be an internal impeding factor built in the CTTP system, however, modifications to teacher organisations is within the purview of

universities. It should be noted that the public CCE draft report in December 2015 entitled ‘Improving the Competencies of Teachers Responsible for Future School Education’ proposes substantial changes in these areas, e.g. abolishment of the course categories of the CTTP system. Even if the proposals contained in the draft report are not realised or are slow to materialise, the impeding factor caused by teacher organizations can be resolved through the efforts of universities.

Universities in Japan will be expected to divide their functions according to their own strategies in the future, towards which the author had proposed to adopt a new policy and promote by administrative measures which are being conducted now. Therefore, universities which have decided to focus on teacher development are strongly recommended to invest resources to improve their CTTP education following after university initiatives in the quality assurance scheme for university education. Universities that do not prioritise such initiatives may be forced to withdraw from teacher training education.

References

Business-University Forum of Japan, Research Group on Industry-Academia Collaboration in Education Report, “Daikyouso Jidai no Hitozukuri Senryaku to Sangaku Kyoudou” [Human Resource Development Strategies and Industry-Academia Collaboration in the Age of Massive Competition], 1998, pp.40-50.

Tokunaga Tamotsu and Momii Keiko, “Global Jinzai Ikusei no tame no Daigaku Hyouka Shihyou: Daigaku ha Global Tenkai Kigyuu no Yousei ni Kotaerareru ka” [University Metrics for Global Human Resource Development: Can Universities Meet the Demands of Globally-operating Companies?], 2011, Kyodo Shuppan, Tokyo, pp.42-44.

THE MEXT, “Daigaku ni Okeru Curriculum Tou no Kaikaku Joukyou ni tsuite” [Curriculum Reform in Universities], 1998.

Tokunaga Tamotsu, “Global Jinzai no Ikusei” [Global Human Resource Development], 2015, Kyodo Shuppan, Tokyo, pp.21-35.

Julia González, Robert Wagenaar (authors/editors), translated by Fukabori Satoko, Takenaka Toru, “Oshuu Kyouiku Seido no Tuning: Bologna Process e no Daigaku no Kouken” [Tuning Educational Structures in Europe: Universities’ Contribution to the Bologna Process, An Introduction], 2012, Akashi Shoten, Tokyo, pp.18-37.

Mori Rie, “America ni okeru Gakushuu Seika Juushi Seisaku Giron no Impact: Hikitsuzoku Giron no naka de” [The Impact of Policy Discussions Focusing on Learning Outcomes in the US: Continuing Discussions], 2015, as found in Fukabori Satoko (author/editor), “Outcome ni Motozoku Daigaku Kyouiku no Shitsu Hoshou: Tuning to Assessment ni miru Sekai no Doukou” [Quality Assurance of University Education based on Outcomes: Global Trends as Seen Through Tuning and Assessments], Toshindo, Tokyo, pp.236-248.

Fukabori Satoko, “Outcome Juushi no Shitsu Hoshou Approach no Tenkai: Sanshou Kijun toshite no Competence Wakugumi ni Motozoku Gakushuu Seika Assessment” [Development of a Quality Assurance Approach Focused on Outcomes: Learning Outcome Assessments

Based on a Competence Framework as a Reference Standard], 2015, as found in Fukabori Satoko (author/editor), “Outcome ni Motozuku Daigaku Kyouiku no Shitsu Hoshou: Tuning to Assessment ni miru Sekai no Doukou” [Quality Assurance of University Education based on Outcomes: Global Trends as Seen Through Tuning and Assessments], Toshindo, Tokyo, pp.291-304.

Kudo Bunzo (principal investigator), “Kyouin Yousei no Kaizen ni kansuru Chousa Kekka: Kyouin Yousei tou no Arikata ni kansuru Chousa Kenkyuu (Kyouin Yousei Kaizenhan)” [‘Research on Improving of Teacher Training’] (Teacher Training Improvement Group)], 2013 National Institute for Educational Policy Research, pp.5-6, 10-14, 16-17, 21-23, 27-28, 31-33, 41-55, 71-204.

Ohsugi Akihide (principal investigator), “Kyouin Yousei tou no Kaizen ni kansuru Chousa Kenkyuu (Zentaiban) Houkokusho” [‘Surveys and studies for the improvement of school teacher training’ (Complete Version)], 2015, National Institute for Educational Policy Research, pp.32-34, 37-41, 65-72.

Fuchigami Takashi and Komatsu Akiko, “Kaihousei Menkyo Seido ni okeru Kyouin Yousei Kyouiku no Torikumi Jirei” [Case Studies of Teacher Training Education Initiatives in an Open Certification System], 2012, National Institute for Educational Policy Research, pp.3-13.

Takaoka Shin’ya, “Kokuritsu Kyouiku Seisaku Kenkyuujo Chousa kara mietekita Kyoushoku Katei Kaizen no Joukyou / Kongo Torikumubeki Kadai” [The Status of Improvements to CTPP as Seen Through a National Institute for Educational Policy Research Survey / Issues to Be Tackled in the Future], 2012, report material by CCE Special Committee to Improve Qualifications and Capabilities of Teachers, Basic Systems Working Group (held on March 16, 2012).

Tokunaga Tamotsu, “Kongo no Gakushuu Shidou ni Motomerareru Kyouin no Nouryoku to sono Keisei ni Hitsuyouna Housaku ni tsuite” [Capabilities of Teachers necessary for Future Educational Instruction and Required Measures for their Formation], 2013, *Sangyou to Kyouiku* (monthly publication), April 2013, Sangyo Kyoiku Shinko Chuokai (Public Interest Incorporated Foundation), pp.2-7.