

TEACHER TRAINING TO GUARANTEE POSITIVE QUALITY:

A MODEL CURRICULUM AND QUALIFIED CRITERIA

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Introduction

After World War II, the Japanese teacher training system was largely changed. In 1949, the normal schools were upgraded to national universities or colleges. Meanwhile, private universities and colleges which were certified by the Ministry of Education, Culture, Sports and Technology (MEXT) began teacher training.

In the year 2000, the total employment rate for teachers upon graduating from National University was 39%. This rate represents graduates who gained permanent employment and does not include substituted or part-time teachers. Breaking down this figure, the employment rate was 60% for elementary schools, 38% in junior high schools (lower secondary schools), 15 % in high schools (upper secondary) and 44 % in special needs schools.

From this situation, we think that national universities for teacher training cannot play their roles. Moreover, we hear reports that new graduating teachers lack practical abilities in the classroom. For example, they can't give good school lessons. In 2001, the central education council advised that national and private universities have to change the curriculum for teacher training. They added that the content of lectures may not be appropriate for teacher training. National universities in particular seem to be the target of this criticism.

There are two main problems with teacher training:

- 1) Insufficient consensus among the professors regarding the curriculum,
- 2) Conflict between academism content and practical teaching ability.

Practical teaching ability refers to skill and knowledge about the teaching profession. Academism refers to the studying academic content in students' respective fields. In English, for example, this might refer to studying American literature or Shakespeare. Academism is the depth of knowledge in a particular field. Students acquire the subject matter and are not taught how to present it as teachers. Moreover, with respect to teacher training, there is no axis that unifies curricula and consciousness of professors (Yokosuka, 2006). Therefore, some problems remain. We have to work on these problems in order to improve Japanese teacher training in universities.

Let's look at science professors within teacher education colleges in Japan as an example. There are two groups of professors:

1. Those with a background in a specific discipline (physics, chemistry, biology and earth sciences) who were subsequently recruited to teach in a college of education
2. Those whose background is in general education, specializing in science.

The former usually give lectures which are the same as those given in science departments at other universities unrelated to teacher education. The later prepare lectures on how to teach science. Students then have difficulty unifying the things which they learn and they cannot develop practical abilities as teachers.

Some universities have started to change their curriculum, also started to reconstruct the teacher training system. In Naruto University of Education, the core curriculum for teacher training and the standard for evaluation of teaching ability; lesson planning, practice and assessment, have been developed. We are now trying to implement our curriculum as a model for Japanese teacher training with the support of the government.

Core Curriculum

The core curriculum is shown in Fig. 1. Practical Subjects, Cultural Subjects, Teaching Subjects and Subjects are determined with respect to the core. Practical subjects consist of two parts; the Core Subject and Teaching Practice. Also, the core subject is separated into two parts; Core I and Core II. In Core I, students learn about children's understanding, classroom management, student guidance, the significance

of the teaching profession and children's learning. In Core II, students learn about childhood learning and development based on textbook contents.

Core II classes are conducted in conjunction with teacher education speciality professors, academic content speciality professors, and in-service teachers with our attached elementary school and junior high school. There is no such teaching style in the other universities in Japan. These core subjects are very important and unique.

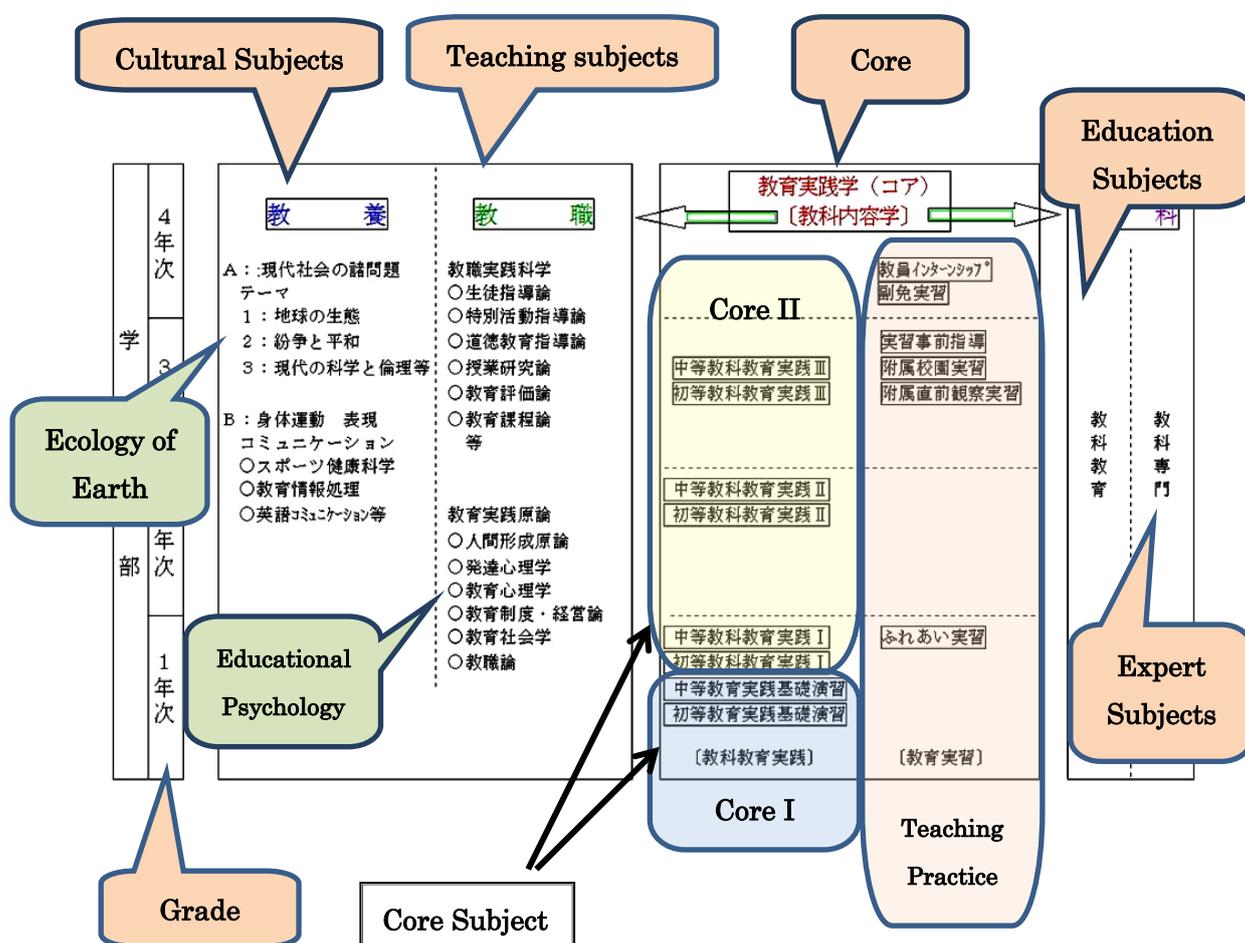


Fig. 1 Outline of Core Curriculum in Naruto University of Education

This system is designed to facilitate integration, especially integration between subject content and teaching practice. The making of this curriculum started in 2002, and has been implemented since 2005.

Evaluation Standard of Practical Teaching Skill

Regarding teaching ability, we considered “Practical teaching skills”, “interpersonal skills”, “ability to understand children”, “classroom management” and “significance of the teaching profession”. We have developed Evaluation Standards for Practical Teaching Skill (Fig. 2).

Stage 1 is during students’ third year of university, just before their teaching practicum. Stage 2 is during students’ fourth year of University, upon graduation. Stage 3 is at the ten year mark in their teaching career.

Practical teaching skill consists of three abilities; Lesson planning ability, Lesson execution and Evaluation ability of teaching. This evaluation standard is in the trial phase at the moment.

Point \ Stage	Stage 1	Stage 2	Stage 3
A. Lesson planning ability			
1. Understanding of Learner			
1) Actual condition of Learner	I grasp an attitude toward learning of the learner as the whole class.	I teach students grasping the actual situation (learning will, interest, knowledge and understanding degrees) of the individual learner.	
2) Rulemaking of Learning			
2. Objective Setting			
3. Lesson Structure			
1) Configuration of the learning content			
2) Configuration and Selection of Teaching Materials			

Abbreviation

Fig. 2 Evaluation Standard of Practical Teaching Skill

This sample is a part of the evaluation standard of science. The part of standard of “Lesson planning ability” is shown.

Questionnaire for graduates to gage the effectiveness if the core curriculum
(at elevating the practical teaching skills)

Firstly, we investigated the effectiveness of our core curriculum for graduates before and after core curriculum implementation. The questionnaire assesses the following areas;

1. The quantity and quality of educational contents (2 questions)
2. The level of training and the practical contents (3 questions)
3. Student impressions of the teaching practice (3 questions)
4. Student impressions of the core subjects (1 question)
5. The result of having learned in this university (16 questions)

The questionnaire employed a five point Likert scale, where 5 was “strongly agree” and 1 was “strongly disagree”. Secondly, we investigated the effectiveness of the core curriculum by questionnaire on Naruto University of Education graduates who became teachers in Tokushima Prefecture. Finally, we investigated the effectiveness on our graduates working in Tokushima prefectures by interviewing them and the principals of their schools directly.

From the investigation of our graduates before and after the core curriculum was implemented, there was statistically significant improvement in “Understanding of lecture content”, “Understanding of training and practice content”, and “Leadership and executive ability”.

Also, in second phase of this research, the same tendency was observed. However, there was no significant improvement in “Classroom management skills” or “Ability for student instruction”. We have to improve our core curriculum considering these problems.

Finally, in the interview research, the graduates gave a high evaluation concerning the quality and quantity of education contents, teaching practice and the core subject. Also their principals gave a high evaluation especially for the core subject. The effectiveness of the core subject on educational practice has become clear. Though we still have to improve the core curriculum, this might be better than the old one. Now

we are trying to make a model curriculum for teacher training in Japan based on our core curriculum.

Model Curriculum for the Teacher Training

In order to guarantee high quality graduating students, we have roughly produced a model curriculum for teacher training based on our core curriculum. Now we are trying to make a more general one through our current project. This project is supported by the Ministry of Education, Culture, Sports, Science and Technology. We want to demonstrate a model curriculum for teacher training that can be used in education faculties around Japan. The model curriculum consists of two parts. One is the “Curriculum Map”, the other is the “Guideline”. We will explain them below.

Curriculum Map

In order to clarify the relationship between the various subjects and qualities or abilities required for teachers, we propose the curriculum map (Fig. 3). In the map, each subject is aligned longitudinally, while the qualities and abilities required for teachers appear horizontally.

If the goal of a specific subject on the vertical column relates directly to some specific ability for teachers, then the goal is written in the corresponding cell. When we check the map, we can easily understand not only the relationship between each subject and the required abilities of teachers, but also the whole structure of the university curriculum. Besides providing a quick summary of the curriculum structure, this map seems to have various functions. The map allows us to check the balance of subjects with respect to the various abilities required for teachers and it allows us to reconstruct the curriculum. Furthermore, students can understand the required abilities for teachers, and see the relationship between each subject and the required abilities. Therefore, they can choose their subjects according to their abilities. Each individual faculty member has completed the curriculum map for the subjects which they teach.

What qualities or abilities are required for teachers? We propose the following qualities or abilities; Teacher Literacy, Cooperation, Student

Leadership, Teaching Competence and Reflection Power. Each quality or ability is then subdivided into subcategories, beside Reflection Power.

Relationships among the qualities and abilities required for teachers

The qualities and abilities required for teachers consist of 5 big categories. Figure 4 illustrates our concept of their relationship. Students possess innate reflection power, even if that power is very small. The four teaching qualities and abilities are developed through lectures that are closely concerned to them. As these four are developed, reflection power also becomes bigger. As reflection power increases, motivation for lectures increases so that in turn, the 4 qualities and abilities develop further. Thus student motivation, the ability to reflect, and teaching competence are mutually dependent and improve in a cyclical way. By the time students graduate, hopefully they are ready to join the workforce as teachers. Of course, these qualities and abilities are expected to develop further after teacher life starts.

The qualities and abilities required for teachers

Literacy of Teacher

- ①Sense of duty, ②Sense of ethics, ③Enthusiasm for education,
- ④The spirit of inquiry, ⑤Culture

Cooperation

- ①Interpersonal skills, ②Harmony, ③Sociability

Student Leadership

- ①Fundamental attitude, ②Personal leadership, ③Group leadership

Teaching Competence

- ①Understanding of subject content, ②Conceptual ability,
- ③Deployment, ④Evaluation

Reflection Power

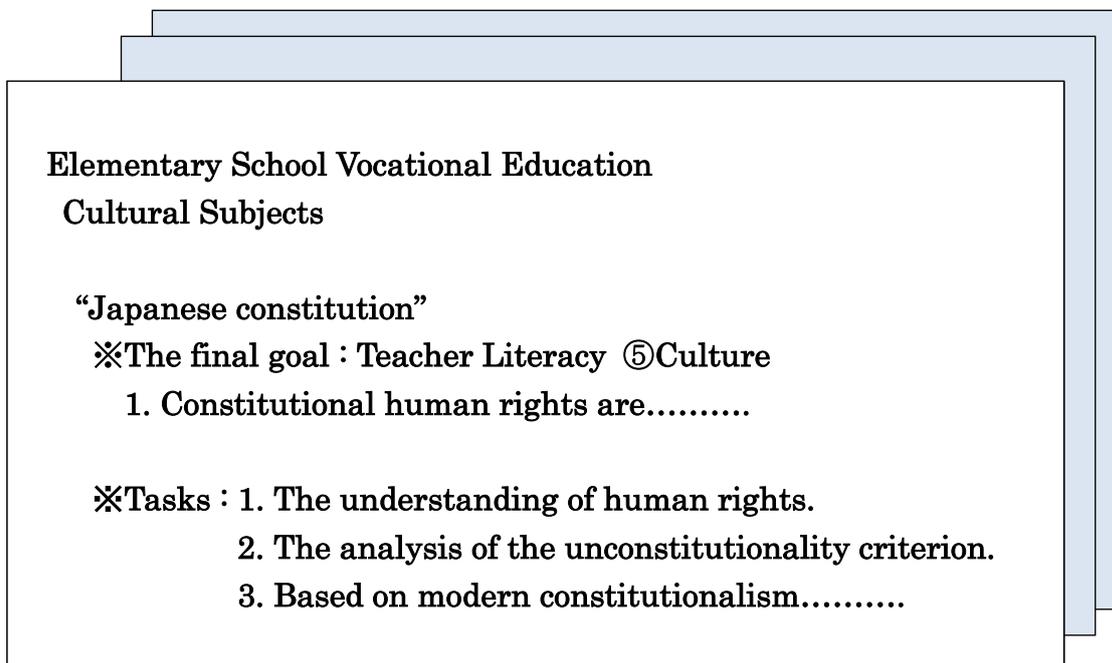


Fig. 5 A sample of Guidelines for teacher training
In this part, the final goal and tasks of the subject “Japanese constitution” are shown.

Guideline for teacher training

The guideline in Figure 5 indicates the final goal and tasks of each subject to the students. The final goal is the same as that written in the curriculum map. If there is more than one final goal, the guideline corresponds. The tasks are conducted to obtain the goal. Each professor evaluates how well the students perform the tasks.

Characteristics in the relationships between subjects and the qualities and abilities required for teachers

If we put our curriculum in the curriculum map, we can understand the characteristic of our curriculum. Cultural Subjects are closely concerned with teacher literacy, especially the spirit of inquiry and culture. Core subjects are concerned with teaching competence, while teaching practice relates to all of the abilities. Education subjects and expert subjects relate to teaching competence, especially the understanding of subject contents.

Assessment of the practical function in curriculum

Even if the curriculum is appropriate, students cannot always develop the abilities required of teachers. We have to check how well they have acquired these abilities. We are now investigating criteria to assess this. As one tool for assessment, we are using the “Career Note” in which each student records their actions in each subject as well as additional action such as volunteer work over the course of their college career. In Core II subjects, we are trying to design criterion checklists to check the practical abilities of students. Because these Core II subjects are concerned with all qualities and abilities required for teachers, these subjects seem to be very useful.