

**Study on the Curriculum to Nurture Competencies**  
**Report 2 of the Study on the Curriculum to Nurture Competencies**  
**Curriculum and Learning Activities of Other Countries**

**1. Purpose and summary of the research studies**

**(1) Purpose of the research studies**

The purpose of this study is to further academically refine and restructure the “Basic Research on Curriculum Organization”, which was carried out until FY2013, and to conduct a comprehensive, empirical study of the educational goals and content, learning and teaching methods and assessments, with a particular focus this year on curricula and learning activities. This report summarizes the status of the promotion and implementation of learning activities to nurture the respective competencies in other countries out of the research results of the “Study on the Curriculum to Nurture Competencies – a comprehensive study of the goals, content, teaching methods and assessments” (FY2014 - FY2016).

The purpose of the research studies is as follows.

- (i) To identify what kind of competencies are being nurtured in the curriculum of other countries, how the learning and teaching methods (or learning activities) to nurture these competencies and such assessments are described in the curriculum, and what kind of support is being provided by the national or local government to be able to implement these learning activities to nurture the competencies in schools.
- (ii) To provide examples of specific teaching practices for the learning activities to nurture competencies.

**(2) Research framework**

In the research studies, for the abovementioned purpose, the research was carried out through international research teams (in charge of the curriculum, science, and social studies) being assembled for the project’s research and a research framework composed of Institute members and external members being organized.

The international research team (in charge of the curriculum). The country given in parentheses ( ) is the country for which the member was responsible.

Akira Ninomiya, President, Hijiyama University (supervisor)

Maiko Aoki, Associate Professor, Hokkaido University (Australia)

Asahiro Arai, Professor, Josai University (United Kingdom)  
Shuichi Uehara, Associate Professor, Utsunomiya University (France)  
Takahiro Endo, University of Fukui, Associate Professor (United States)  
Hisashi Kawai, Adjunct Fellow, National Institute for Educational Policy Research  
Shinji Sakano, Professor, Tamagawa University (United Kingdom)  
Tomoko Shimomura, Associate Professor, Mie University (Canada)  
Michiyo Fukumoto, Associate Professor, Tokyo Gakugei University (New Zealand)  
Asato Matsumoto, Specialist, Overseas Education Research Unit, Lifelong Learning  
Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (South  
Korea)  
Aya Watanabe, Associate Professor, Tsuda College (Finland)  
Tomoaki Matsuo, Senior Researcher, National Institute for Educational Policy Research  
(Singapore, head of the international team)  
Mayumi Nishino, Senior Researcher, National Institute for Educational Policy Research  
(Singapore and general coordinator)

International research team (in charge of science). The country given in parentheses () is  
the country for which the member was responsible.

Tetsuo Isozaki, Professor, Hiroshima University (supervisor, UK, France)  
Susumu Nozoe, Associate Professor, University of Miyazaki (England)  
Toshihide Hirano, Professor, Aichi University of Education (United States)  
Kazumasa Takahashi, Lecturer, Hokkaido University of Education (United States)  
Mitsuhiro Terada, Professor, Gifu Shotoku Gakuen University (Germany)  
Yusuke Endo, Assistant Professor, Aichi University of Education (Germany)  
Kinya Shimizu, Professor, Hiroshima University (Canada)  
Toshinobu Hatanaka, Associate Professor, Toho University (Canada)  
Shuichi Yamashita, Professor, Chiba University (Singapore)  
Ryugo Oshima Assistant Professor, Chiba University (Singapore)  
Jiwon Lee, Research Professor, Korea National University of Education (South Korea)  
Minami Kakumu, Graduate Student, Hiroshima University (France)  
Kenichi Goto, Senior Researcher, National Institute for Educational Policy Research  
(Germany and South Korea)  
Kenji Matsubara, Senior Researcher, National Institute for Educational Policy Research  
(Australia and general coordinator)

International research team (in charge of social science). The country given in parentheses () is the country for which the member was responsible.

Akiko Utsunomiya, Associate Professor, Saga University (Germany)

Masahiro Nii, Senior Researcher, National Institute for Educational Policy Research (United Kingdom, USA and overall organization)

### **(3) Summary of the research**

The Basic Research Department of the Curriculum Research Center was chiefly responsible for conducting continuous research on the trends relating to the curriculum criteria of other countries. In the “Basic Research on Curriculum Organization” (FY 2011-2013), which was the predecessor to the current research, research was conducted on the curriculum of other countries focusing on the development of competencies (“Report 6 The Curriculum and Competencies of Other Countries,” (2013)).

Based on previous findings, the research for this project focused on the fact that a recommendation had been made by the Special Study Group on Curriculum Planning of the Central Council for Education on improving learning activities towards developing competencies, and a study was conducted focusing on ways of setting out the learning and teaching methods, and learning activities in the curriculum.

The results of this research were published in September 2015 in the form of “The Curriculum and Learning Activities of Other Countries” as project research materials. For the sake of expediency and convenience, these materials were compiled in the form of lists and country comparison tables giving the current situation of each country. This report describes and analyzes in further detail the information given in the research materials, including the situation which serves as the background to the future direction of education reform and the features of the learning activities.

The major points of the survey in the research are as follows.

1. The direction of education reform
2. Characteristics and recent trends in the curriculum
3. Connections between the competencies and the learning content
4. Descriptions of the learning and teaching methods, and learning activities
5. The expansion of learning activities to nurture competencies
6. Assessments of learning
7. Organization, assessments and improvements of the curriculum

Based on the abovementioned survey, the efforts of each country thought to be particularly interesting when compared to Japan were listed for ease of reference under

## “8. Distinctive features”.

Ten countries were selected for the survey from the perspective of fully utilizing the accumulated research and for the purpose of continuity. Specifically there were four European countries: the United Kingdom (England), Finland, France and Germany; two North American countries: Canada and the United States; two countries in the Oceania region: Australia and New Zealand; and two Asian countries: Singapore and South Korea.

In addition, in the country comparison table which was provided beforehand as part of the research materials, along with the characteristics of the curriculum in general, actual lesson examples were attached so as to be able to provide a concrete image of the learning activities to nurture competencies, which are being developed based on the curriculum. The collection and analysis of the lesson samples were limited to the areas of science and social education where existing data was available owing to time and budget constraints. (Where it was difficult to obtain materials on the lesson, only the curriculum was indicated). Moreover, with regard to the science curriculum and learning activities, the details of the content shown in the table of this report were indicated in the form of “Report 3 The Curriculum and Learning Activities of Other Countries (Science Edition)” (March 2016).

The characteristic feature of this study is that it carried out a comparative study of the curricula focusing on the learning activities themselves. Conventionally, the focus of the studies of other countries tends to be mainly on introducing curriculum trends, innovative learning and teaching methods, and teaching practices, but this study conducts a comparative analysis focusing on descriptions of learning and teaching methods in the curriculum, and the measures for the dissemination and promotion of the learning activities being implemented by the national and local governments. The results of the study are expected to be used in the future as reference material when considering in the Japanese curriculum how to proceed with improving the learning activities to nurture competencies in schools.

## **2. Summary of the research results**

The research results of the curriculum and learning activities of other countries up until the end of FY2015 are as indicated below.

### (1) The direction of education reform

The direction indicated by all of the surveyed countries was to develop a curriculum to nurture the competencies by incorporating the desired competencies in the educational goals, and by indicating cross-curricular competencies. Meanwhile, the United Kingdom,

which has thus far been proactively implementing a curriculum to nurture skills and competencies, identified the basic knowledge that should be taught, in particular, in the areas of English, mathematics and science.

## (2) Characteristics of the curriculum and recent trends

- In the surveyed countries, there were countries and states that set out the curriculum criteria in the form of the National Curriculum or the Courses of Study.
- The desired competencies were mainly classified into 5 to 7 groups as key competencies, or general capabilities. Although the language used differed, competencies relating to numeracy (mathematical skills) and language skills were included and emphasized as desired competencies by many of the countries.
- Other than Australia (each state) and New Zealand which had in the past indicated curriculum criteria focusing on competencies, France, Finland, Singapore, and South Korea had carried out revisions from the perspective of ways to externalize the competencies indicated in the educational goals and cross-curricular competencies in the subjects, and studying what competencies needed to be nurtured independently in each subject.

## (3) Connections between the competencies and learning content

The association between the competencies or skills and learning content of the respective subjects saw independent ingenuity in each of the countries. The United Kingdom, France, Finland, Australia, New Zealand and Singapore described how the desired competencies should be nurtured in each subject (in some countries, at each grade level), and indicated by subject what competencies should be nurtured.

## (4) Methods of describing learning and teaching methods, and learning activities

- The United Kingdom, United States and Canada do not give illustrations of learning activities through national or state criteria. In Germany, the handling differs depending on the state. In other countries (or states), illustrations were given of the learning activities or recommended learning activities were indicated.
- Of the countries which did not give examples of learning activities in the curriculum criteria, as far as the United Kingdom is concerned, the organization administering the GCSE exams taken at the age of 16, provided examples of learning activities corresponding to the exams for each subject on the Internet. In Canada, the provincial Departments of Education provide examples of learning activities online.
- As school support, there are some countries which have enhanced the training provided

by the country or the state and there are some countries which leave this to universities or private organizations. In many countries, information was provided through websites.

(5) Expansion of learning activities to nurture competencies

- Most of the countries had in common a tendency towards emphasizing proactive inquiry-based learning and collaborative learning.
- Active learning and proactive learning by learners was encouraged and recommended through participation-based and inquiry-based learning.

(6) Assessments of learning

- In each country, the country (or state) indicated a framework for assessments and criteria which needed to be met.
- For assessments of competencies, each country utilizes various methods such as formative assessments and performance assessments.

(7) Organization, assessment and improvement of the curriculum

- The status of implementation of measures for organization, assessment and improvement of the curriculum in each school differed by the country or local government.
- The countries promoting curriculum development led by the schools required reports on the status of implementation, self-evaluations by the schools, and carried out assessments of the report and self-evaluations.
- As seen in the United Kingdom, there are some countries where an independent agency implements the school assessments.