

## Study on the Curriculum to Development Competencies

### Summary of Report 1

### Study on the Curriculum to Development Competencies – Nurturing Competencies for the 21<sup>st</sup> Century

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

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

The purpose of the research studies (“Study on the Curriculum to Development Competencies”) was to take a comprehensive look at the curriculum to nurture competencies for the research period of FY 2014 to FY 2016, and to provide knowledge which will contribute to the planning of policies on the curriculum. Specifically, the research aimed to refine and structure the desired competencies and to conduct an integrated, empirical study on the educational goals, content, methods and assessments necessary to nurture the competencies, based on the knowledge gained from the “Basic Research on Curriculum Organization” conducted up until FY 2015. Working groups were established, and they conducted the research with the cooperation of the related departments of the Ministry of Education, Culture, Sports, Science and Technology.

On November 20, 2014, the Central Council for Education was consulted about “The Criteria for the Curriculum in Elementary and Secondary Education”, and a recommendation was made that, “from the viewpoint of securely nurturing the desirable competencies to be encouraged in children, it is necessary to examine the learning and teaching methods required to nurture such competencies as well as the learning outcomes, and to retain the perspective of enhancing the learning assessments in order to improve the teaching. One major point in the upcoming revision will be the direction of the curriculum for nurturing competencies in order to clearly define the ability to think, the ability to make decisions and the ability to express oneself directed at nurturing a zest for living outlined in the current Courses of Study. In the project up until FY 2013, the Central Council for Education was able to contribute to the policy studies through giving two presentations at the “Study Group on Assessment of the Educational Goals and Content Reflecting the Desired Competencies” of the Ministry of Education, Culture, Sports, Science and Technology. The discussions of the next meeting of the Central Council for Education will examine improvements “looking at the educational goals and content, the methods of learning and teaching and assessments in an integral manner” in the context of “Courses of Study Appropriate for a New Era”. In the discussions, weight needs to be given to the perspective of improving, in particular, the

learning and teaching methods and learning assessments, but the study will be integrating all of the components.

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

From the start, the project set out to conduct comprehensive research on the curriculum to nurture competencies, and to conduct an integrated, empirical study of the educational goals, content, methods of learning and teaching, and assessments. This report gives the background to organizing the competencies required in the 21<sup>st</sup> century and summarizes their content, and provides materials to aid in integrated thinking of the educational goals and content, methods of learning and teaching, and assessments. Meanwhile, so as to contribute to the future discussions of the Central Council for Education, it is necessary to focus the research particularly on learning and teaching methods and assessments. Therefore, in proceeding with the project's research plan, the research structure relating to "teaching methods and assessments" had to be improved, and deeper research conducted.

## **2. Summary of the Research Results**

- Report 1 focused, in particular, on the competency goals and education towards achieving these goals and compiled scientific findings on the basis of practical educational research based on the results of the "Basic Research on Curriculum Organization" conducted by the Institute up until FY 2013 and the ongoing research for the "Study on the Curriculum to Development Competencies". At this point in time, the findings are still limited but the following two recommendation have been made.
- The first is that what is required "as competencies to survive in the 21<sup>st</sup> century" is that cognitive skills such as the thinking competency are put at the core; direction is given to ways of using both the basic skills such as literacy, which play a supporting role; and the practical competencies to act is developed through connections with society leading to the discovery and resolution of practical problems.
- Second, in order to foster the "competencies to survive in the 21<sup>st</sup> century", education which connects subject content to the competencies through learning activities as shown in the diagram will be effective. Namely, if we were to focus solely on the content of the subjects given in the left side of the diagram and deliver knowledge transmission and input lessons, the competencies given in the right side would not develop. On the other hand, even acknowledging the importance of the competencies, if we were to repeatedly practice problem-solving, it would be difficult to foster the ability to solve problems to live and work. In this meaningful context, this problem-solving ability is first developed through organizing learning activities which attempt to solve problems worth posing using as clues the concepts

which stand at the core of the subject content. In addition, by repeating these kinds of lessons, the content of the subjects and the competencies come together, which in turn, is believed to lead to the development of a “zest for living”.

- It may also be possible to review the “proactive and cooperative learning towards the discovery and resolution of problems (in other words, ‘active learning’)” referred to in the abovementioned discussions so as not to simply introduce new teaching skills, but to use the active learning as a device to more closely connect the educational goals (right side of the diagram) with the educational content (left side of the diagram), and with the assessments.

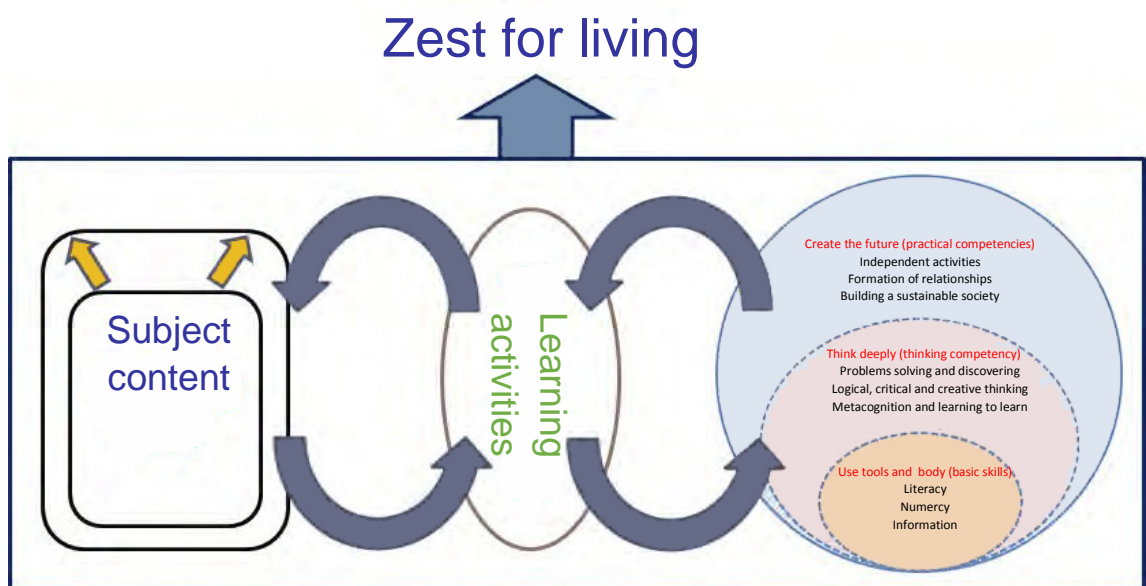


Diagram Learning cycle connecting learning activities to competencies

### **3. Future prospects**

In the future, with regard to how to best keep the learning cycle turning, a collection of diverse practices will be compiled and an integrated study will be conducted on the educational goals, content, and teaching and learning methods, including methods of assessing the competencies, and moreover, it will be necessary to conduct this study in the schools, and to improve the strategies for curriculum management so that each and every teacher will be able to select and revise the learning and teaching methods on well-founded grounds, and so that the goals, content and methods for each school will be integrated. To achieve this, we plan to compile practical scientific findings.