

Summary of Report 5

Study on assessment toward a comprehensive approach to nurturing competencies

1. Purpose and summary of the study

(1) Purpose of the research study

The purpose of this research study (“Study on the Curriculum to Nurture 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 curriculum policies. Specifically, the research aimed to refine and structure the desired competencies and to conduct an integrated study on the educational goals, content, methods and assessments necessary to nurture them, based on the finding gained from the “Basic Research on Curriculum Organization” project conducted up until FY 2015.

(2) Summary of the research

This report provides materials and insight to aid in clarifying the issues and tasks pertinent to the enrichment of curriculum development to nurture competencies, with a focus on enhancing the assessment of learning. For this purpose, we analyze trends in designing competency assessments both in this country and overseas, and evaluate the outcomes of some specific examples in forward-looking schools in Japan.

[Study period: FY 2014–FY 2016,

Principal Investigator: UMEZAWA Atsushi (Director, Curriculum Research Center)]

2. Summary of the Research Results

(1) Historical overview of learning assessment and future direction in Japan

Chapter 2 provides an overview of historical changes in the learning assessment framework laid out in the national curriculum standards and the revision of the form of “the cumulative guidance records”. It also reviews the concept of “unification of teaching and learning” and the implementation of “criterion-referenced assessment” in Japanese educational policy as a basis for the investigation of methods of assessment for nurturing competencies. Based on the historical materials, it is clarified that i) “assessment for learning” (formative assessment) has been emphasized historically in learning assessment in Japan; ii)

this important yet deficient part of learning assessment is required to be enhanced under the current revision of the Course of Study; and, therefore, 3) the enforcement of “assessment for learning” for both teachers and children continues to be a major task for the improvement of learning assessment.

(2) Domestic efforts

Chapter 3 focuses on various domestic approaches for learning assessment.

1) A research project on criterion-referenced assessment

This first section of chapter 3 reviews the empirical studies conducted under the “Comprehensive Community Project for the Improvement of Learning Assessment” by the Curriculum Research Center at NIER from FY2010 to FY2013. In this project, schools and educational organizations such as the board of education and the center for educational research in each of five communities collaborated to enhance criterion-referenced assessment. The community reports indicate that improvement of assessment is fostered by discussion among teachers on how best to evaluate children’s learning activities observed in the classroom. By reviewing their assessment methods, teachers may be able to clarify and share the reasons for their assessment practices and at the same time increase awareness of the importance of paying close attention to children’s learning process.

2) A survey of schools attached to national universities

In section 2 we analyze trends and issues related to research practices and the current state of assessment practices in schools attached to national universities, based on the findings of questionnaires. Section 3 provides a brief introduction to some characteristic assessment approaches in schools that have carried out research on curriculum development for nurturing competencies.

The survey of schools attached to national universities reveals that each school has undertaken multidimensional assessment involving not only written tests but also methods such as performance assessment, portfolio assessment, and self-assessment activities. In particular, many schools carry out research on how to externalize (visualize) the process of thinking in order to ensure the validity and reliability of assessment of “the abilities to think, make decisions and express oneself.” These practices lead to the suggestion that formative assessment plays a key role in improving teaching and learning.

On the other hand, it should be pointed out that compared to the research on educational objectives, learning content and teaching methods, there remain many questions in the field of assessment research upon which there has been little work done.

The survey results yield the following tasks that need to be done to enhance learning assessment to nurture competencies: i) establishing a concept of assessment suited to nurturing

competencies, ii) ensuring validity and reliability of assessment, iii) combining assessment for everyday practice and long-span assessment, iv) assessment of affective domains, such as social and emotional competencies, and v) sharing understanding of the concept of assessment and the criteria of the assessment.

3) Assessment in International Baccalaureate (IB) schools.

Section 4 introduces the concept and methods of assessment of competencies used in the International Baccalaureate (IB). One of the distinctive features of curriculum development in International Baccalaureate is that it has been designed to foster not only cognitive development but also the social, emotional, and physical well-being of students. In conjunction with a holistic curriculum, IB promotes a constructivist approach in teaching and learning, which values the interplay between asking (inquiry), doing (action), and thinking (reflection). The aim of assessment in the MYP (Middle Years Programme) is clearly defined as supporting and encouraging student learning; teachers employ various assessment strategies to gather and analyze information on students' performance in order to provide feedback to students on their learning process. School-based assessment in MYP uses a "best-fit" approach in which teachers work together to establish common standards against which they evaluate each student's achievement holistically (International Baccalaureate, 2014, p.78). The key features of MYP assessment are i) student-centeredness, ii) a criterion-related approach, iii) enhancement of formative assessment, iv) support and encouragement of student peer and self-evaluation and v) combined usage of internal (school-based) and external assessment.

4) A survey of educational organizations

Section 4 discusses community initiatives to support schools and teachers to enhance learning assessment based on a questionnaire to educational organizations (including research centers for education and boards of education in communities). These organizations provide teachers of all ages with training on assessment, including unification of teaching and assessment, methods of assessment in each subject, and so on. Questionnaire answers from supervisors who play a leading role in teacher training in local governments indicate that, as the main concerns of teachers and schools are teaching methods and improvement of lesson, they are less interested in learning assessment; as this implies, many teachers and school administrators still assume that learning assessment simply refers to testing and grading. The following challenges were identified to be tackled in future: i) developing awareness of the importance of learning assessment for improving teaching and learning, ii) promoting and entrenching the concept of the unification of teaching and assessment, iii) enhancing the understanding of criterion-referenced assessment in schools, and iv) broadening the understanding and usage of various methods of assessment.

Section 5 introduces various initiatives for promoting learning assessment in schools, developed by research centers for education and boards of education in local governments. In some joint research conducted in cooperation with pilot schools, assessment is approached as an aspect of curriculum management, which includes setting target competencies, teaching and assessing the process, and reviewing and improving the practices.

With the coming introduction of the revised Course of Study, opportunities for workshops and publication of materials related to implementing the revised assessment system should increase. To exploit these opportunities, voices from centers for education and boards of education should push for explanatory materials and examples useful to teachers and schools.

(3) Trends outside Japan

Chapter 4 briefly describes trends in educational reform and frameworks for assessment in ten foreign countries, with specific attention to assessment of competencies. It becomes clear that each of these countries has been promoting evidence-based teaching and curriculum design. The United Kingdom, Australia, and New Zealand, each of which has a rich historical background of incorporating consideration of competencies in curriculum, have built assessment systems by clarifying and sharing a vision of assessment to improve the learning of children. In addition, these countries have developed various tools and means for evidence-based assessment.

(4) Future challenges

Based on the results of our research, we have identified the following tasks and issues for further research on learning assessment for the enhancement of curriculum for nurturing competencies.

1) Support for the unification of teaching and assessment

It is shown by the results of our surveys of schools and educational organizations that teachers and schools have less interest in learning assessment than in teaching methods or improvement of teaching, a tendency that seems to be intensified by the dissociation of assessment from teaching methods. It is important to develop theoretical and empirical research that advocates incorporation of learning assessment in teaching plans and practice, so that learning assessment becomes an integrated part of the process of unit planning and classroom design.

2) Effective utilization of multidimensional assessment

The focus of assessment research in schools attached to universities is to get to the heart of children's learning in multidimensional ways, by utilizing various assessment methods to complement one another. On the other hand, some of these schools points out the cost and

burden of conducting these assessment as a challenge. In addition, the survey of educational organization shows that it is difficult to get criterion-referenced assessment entrenched in schools even when they understand the concept.

Collaborative group moderation among teachers, as in the projects conducted by the Curriculum Research Center at NIER, has been promoted in some schools attached to universities in Japan and in foreign countries such as New Zealand as well; it is deemed effective both for developing teachers' abilities required for assessment and upholding the validity of assessments. This approach is also expected to strengthen collaboration between schools and other education-related organizations for the construction of a framework to tackle the matter of advancing multidimensional assessment.

3) From the self-assessment of children to the learning assessment of teachers

Various efforts identified in our research put emphasis on self-assessment by children (which, in the Japanese curriculum, is not categorized as assessment but as a learning activity). In New Zealand, where the principle of student assessment is "the student is at the centre of assessment," self-assessment is seen to be important for the improvement of both teaching and learning, and efforts have been made to develop children's capabilities for self-assessment. It is important to establish these opportunities, such as reflecting and reviewing the learning process and assessing the progress they are making, in students' education. At the same time, efforts should be made to support community-based, practical research in both schools and other institutions related to education in order to establishing frameworks for teacher training and classroom design to foster formative assessment for the improvement of teaching and learning.

3. Prospects

This report focuses on learning assessment. First, it confirms the current situation and future direction of learning assessment; then, it collects and analyzes various forward-looking efforts to enhance learning assessment in schools and educational institutions, in order to clarify issues and tasks related to the development of school-based curriculum to nurture competencies for living in the society of the future. We will incorporate the outcomes of the research in to future work tackling the above-mentioned issues in collaboration with practical research in schools.

References

International Baccalaureate (2014). MYP: From principles into practice.