

<p>20. Study on Comprehensive Strategies for Raising Learner Motivation Leader: SHIMODA Yoshiyuki, Senior Researcher, Department for Elementary and Secondary Education Research</p>
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(1) Purpose and Aim of Study

Improvement of academic ability is being strongly advocated at present. Before such improvement can proceed, however, the issue of motivating schoolchildren to learn must be addressed. This is because academic ability will not ultimately take root unless the learners themselves want it to. This underlines the growing importance of developing teaching methods and materials that stimulate schoolchildren's motivation to study. Recently, the Central Council for Education's Educational Courses Section proposed the concept of "acquisitive, applied and exploratory education" in the course of its *Report on Proceedings in the Third Session of the Educational Courses Section*. The presentation of this new approach to education, however, has not yet been given any concrete substance. The aim of this study, therefore, was to develop a framework for development of materials for use in "applied, exploratory education" that could stimulate schoolchildren's motivation to study, and to verify the effectiveness thereof through practical use in school classrooms.

(2) Outline of Research Results

- Surveys of academic ability and stimulating motivation to study—current insights from academic ability surveys

The 2003 Programme for International Student Assessment (PISA) provided glimpses of a serious problem in Japan beyond the simple international ranking of academic ability, namely, that Japanese schoolchildren are not aware of what role their current studies will play in their future lives and are not confident in their learning.

- OECD "key competencies" and "ability to use knowledge and skills to meet real-life challenges"—what kinds of academic abilities are needed in today's world?

The challenge for school education today is to achieve a shift in perceptions of the concept of academic ability, away from the traditional focus on imparting knowledge and skills and towards developing the capacity to apply

those knowledge and skills in real life. The development of teaching methods and materials will become an urgent priority.

- Frameworks for development of teaching materials focused on the capacity to apply knowledge—what is called for in teaching practice today?

Frameworks for development of teaching materials focused on the capacity to apply knowledge can be located in the context of “applied education.” One approach here is to develop materials that link curricular content to the real world, occupations (products, technologies), and human existence. By gaining an understanding of how curricular content is applied in the real world, in occupational contexts (products, technologies) and in connecting individuals, schoolchildren will be come to appreciate the meaning of what they are studying. This will in turn arouse their motivation to learn. A second method is that of constructing real-life circumstances in class. This involves transforming class spaces, which can easily become forums for mere “play-acting,” into actual present-day social situations. The class itself is devised to enable the content studied to be applied directly within the class environment.

- Frameworks for development of teaching materials to enhance PISA reading comprehension skills of “reflection and evaluation”—a trial to produce holistically structured teaching materials

The PISA approach to literacy can be used as a demonstration of the concept of “applied education” espoused by the Central Council for Education’s Educational Courses Section. The 2003 PISA study revealed that Japanese schoolchildren’s skills of “reflection and evaluation” are particularly poor. In response to this finding, our research project has developed a framework for development of teaching materials to enhance reflection and evaluation skills. Because these skills are more in the area of “expression” than “understanding,” we have proposed teaching materials that link these two areas. Linguistic activity itself does not treat expression and understanding separately: they are two sides of the same coin. It is also crucial to understand reflection and evaluation not simply as a process of critical reading, but rather as the structural understanding of a text from a detached, bird’s-eye perspective. We thus determined to provide a sub-text in addition to the main text and instigate a cognitive process of “comparison.” This

method enables students to contrast the theme of the text with their own personal value outlooks and thereby to develop a capacity to engage in genuine “reflection and evaluation.”

- “Exploratory education” and the cultivation of information literacy—centered on the development of frameworks for inquiry-based learning

In concrete terms, the concept of “exploratory education” proposed by the Central Council for Education’s Educational Courses Section entails the development of information literacy. Information literacy can be developed in the classroom through inquiry-based learning. At present, however, teachers themselves are not equipped with a sufficient understanding of inquiry-based learning. In regard to theme-setting, the reality is that no teachers understand the importance of adequately refining themes. From now on, schools will need to become pro-active in imparting know-how in inquiry-based learning to their students. With this in mind, our study investigated the topic of “‘exploratory education’ and the cultivation of information literacy—centered on the development of frameworks for inquiry-based learning.”