

KEDI Survey Research on Student Competencies: The Development and Validation of Instruments

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Recently, many countries around the world put policy efforts to raise competent individuals in various aspects for having national competitiveness in coming future societies. Meeting this global trend, Korean government made an official announcement of 2015 National Reformed Curriculum this year which is based on student competencies. Now, instead of measuring academic achievement-oriented outcomes, there is a need for a plan to be drawn to measure competency-oriented outcomes which are necessary to survive in the future societies. In accordance with such need, the purpose of this research is 1) to develop theoretical frameworks about concept and indicator system of student competencies and 2) to develop research instruments to measure competency level of elementary, middle, and highschool students as well as to collect all sorts of factors that influence their competency level. The developed questionnaires from the basic study of this year will be used for the KEDI student competency research that is scheduled from 2016 to 2020. The obtained results are expected to be utilized on the basic studies and policy researches for improving the education of Korea.

In chapter II and III, through the literature review, the concept of student competency is defined and indicator system is designed. The student competency to be

measured in this research is defined as 'competencies needed to be built through K-12 education for successfully solving personal and societal tasks which are confronted throughout one's lifetime', and is composed of 'self-directed person, creative person, cultured person, social person' as the core competencies which 2015 National Reformed Curriculum aims. To construct specific domains of core competencies, the indicator systems were classified under the categories of four ideal characters of the educated, which 2015 National Reformed Curriculum aims. The domains were constructed through an extensive review of related researches conducted in Korea and abroad, as well as the core competency factors and the meaning of the four ideal characters of the educated stated in 2015 National Reformed Curriculum. The final student competency indicator system consists of 4 categories(the ideal characters of the educated), 12 sub-categories, and 33 indicators.

In chapter IV and V, related research instruments are developed based on the conceptual model of KEDI survey research on student competencies. First, we developed the research instrument for measuring student competencies that can be utilized in all levels of school. Since the educational goals stated in the national educational curriculum are gradually intensified according to the level of elementary, middle and high school, the instrument was also designed in consideration of this. Second, we found that the educational environment around students such as family and school affects students' educational activities which ultimately influences in forming students' competencies. Therefore, we also developed the research instrument for measuring factors related to student competencies, in expectation to utilize it as a preliminary data for development of policies or future studies to improve students' competencies effectively.

The instrument for measuring student competencies includes both direct assessment and indirect self-administered questionnaire. It consists a total of 163 items among which 36 items examine 'self-directed person', 69 items on 'creative person' (40 items are on verbal and mathematical skills), 21 items on 'cultured person and 37 items on 'social person', as all items present proper validity and reliability in general. Along with this, the items regarding input and output factors on student and school level are

developed for measuring competency-related factors, which also present proper validity and reliability in general.

In chapter VI, the results of the study are discussed and recommendations for policy are presented. The indicator systems and research instruments developed by this research is linked with the ideal characters of the educated and core competencies that 2015 National Reformed Curriculum pursuits. Thus this research may be used to evaluate the 2015 National Reformed Curriculum in aspect of educational policies. Furthermore, through periodical investigation on student capacities, it is capable to understand how the standard abilities and capacities that have to be raised from primary and secondary education are changing. The development of indicator systems and research instrument on student competency-related factors is significant as it can be utilized to make plans for improving student competencies and maximizing the effect of competency-oriented educational policies.

For utilizing these results as clues for educational policies on student competencies, the applications and supports from the level of National Research and Development Institutes have to be preceded first. Specifically, they should construct the database based on periodical investigation of Korean students' competencies, and provide foundation for political use by conducting basic and policy studies on improving student competencies. These database and researches can help nation, cities and provinces, and school to build their plans for building up student competencies and raise the school performance. In this point of view, the recommendations are proposed in the level of national research and development institutes, nation, cities and provinces, and school.

keywords : Competencies, Student Competencies, Research of Student Competencies, Student Competency Indicators, Student Competency Indices, Student Competency Influencing Factors