

ABSTRACT

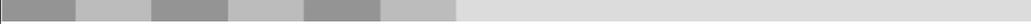
2014 KEDI Student Competency Index Survey

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This study aims to collect objective information on educational quality through the identification of Korean students' key competency levels across year groups, gender, and regions. The key competency measures in this study consist of four parts, namely cognitive, social, autonomous, and health competencies. The survey was conducted for 6 year groups, from the 6th grade (year 6 of elementary school) to 11th grade (year 2 of high school), with the sample amounting to 0.75% of the student population (171 elementary schools, 146 middle schools, and 151 high schools participating in the survey).

Firstly, cognitive competency consisted of language, numerical, ICT, and problem-solving skills, but this year's survey excluded any measurement of numerical competency.

Language competency was measured using a sample of 9th to 11th grades (year 3 of middle school and years 1 and 2 of high school), and attainment levels were divided into excellent, ordinary, and basic. For the 9th grade, 29.72% attained basic level, 54.37% ordinary and 15.92% excellent. For the 10th grade, the corresponding numbers were 19.13%, 54.86% and 26.02% respectively, and for the



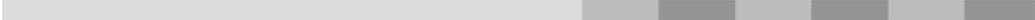
11th grade, respective numbers were 18.96%, 50.33%, and 30.71%. While there was a marked difference between the 9th and 10th grades, the difference was less apparent between 10th and 11th grades. In all three year groups, competency levels of females strongly dominated their male peers.

ICT surveys were carried out using middle and high school students. As the students' year group increased, ICT skill scores improved, and the ICT skills of high school students were markedly higher than middle school students. In all year groups, male students' scores were higher than their female peers, but the gender gap narrowed in the higher year groups.

Problem-solving skills consisted of problem identification, information collection, strategy collection, and the ability to propose alternatives. The survey was carried out using middle and high school students. While there was little difference across year groups and gender, students living in large cities performed marginally better than students living in other area in all year groups.

Secondly, social competency consisted of five sub-levels, namely empathy, communication, citizenship, morality, and social participation. Social competency fell for every year group between 6th to 9th grades. It rose marginally in the 10th grade and fell again in the 11th grade. In particular, the fall in social competency was particularly evident between 6th and 7th grades. As the middle school students moved up the year group, their competency score decreased every year, indicating that the middle school years were the most vulnerable in terms of social competency developments. As for the gender differences, male scores were lower than female scores for all year groups, and this gender gap widened as the students moved up the year group. As for the regional differences, competency scores were highest in large cities, followed in order by small cities and rural areas. However, the regional score gap narrowed in the higher year groups.

Thirdly, autonomous competency consisted of self-identity, self-directed



learning, and career planning. This competency score also fell as the students' year group increased, with the 6th grade exhibiting the highest levels and 11th grade the lowest. In all year groups, female scores were higher than male scores, and the gender gap marginally widened as the students' year group increased. In general, autonomous competency score of students in large cities were marginally higher than their peers in other areas, but the regional score gap narrowed as the students' year group increased.

Finally, health competency consisted of physical health and mental health. Physical health was measured using BMI scores. In 6th grade, 48.5% of students were clinically underweight, compared to 39.3% in the normal range, but the proportion of normal range students rose as the students' year group increased. However, this was also accompanied by a higher proportion of level 1 and level 2 obesities and clinically at risk of obesity. This proportion amounted to 20% for 11th grade students. While the proportion of clinically normal students increased for both males and females, males were more at risk of obesity as they moved up the school year group, while female students were more at risk of clinical underweight.

Mental health consists of depression, anger, self-esteem, and stress. 6th grade exhibited highest mental health, while the opposite was true for 11th grade students, as the scores dropped for every year group. In particular, there was a big fall in scores between 6th and 7th grade students, and this pattern continued until 9th grade. There was a marginal bounce back in the 10th grade, but it fell again, indicating the poor overall state of secondary school students' mental health in general.

On reflecting these results, it appears that, while the Korean students improve upon cognitive competency as they move up the year group, social, autonomous and health competency scores all deteriorate. In particular, in all core competency scores, female students perform markedly better than their male



peers, and moreover, this gender gap widens as the students reach higher year groups. In traditional view, a ‘gender gap’ has been a story of female disadvantages and weaknesses, but the primary gender problem now appears to be the underachievement of male students. Given these findings, it appears vital to analyze the male students’ developmental characteristics and learning patterns. This would enable requisite educational measures that would encourage their study efficiency and all-round developmental competency.

□ **Keywords:** key competency, competency index, bookmark, holistic development