Abstract

Korean Education Longitudinal Study 2018

Educational Experiences and Outcomes of Korean Middle School Students (III): Comparison of Two 10-year Cycle Cohorts

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The main purpose of this research is to establish effective measures to support Korean middle school students' growth and development by comparing changes of middle school students' educational experiences and outcomes for the last ten years while the government has been implementing diverse educational policies. Also, the research overviews how influences from a family's social and economic status, one of the representative family background factors, impact a student's academic achievement and high school entrance have changed for the last ten years and analyzes what other student's personal and school factors exist. Ultimately, this study aims to seek appropriate educational policies to reduce the gap of academic achievement and gap in quality of high school entrance among middle school students according to one's family background. For this research, we extracted and utilized data from two cohort groups studies;

Korean Education Longitudinal Study 2005 Cohort 1~3rd Grade of Middle School Students(2005~2007) and 2013 Cohort 1~3rd Grade of Middle School Students (2015~2017) which have been collected for the last ten years.

In Chapter II, this study comprehensively compares and analyzes changes with regard to Korean middle school students' educational experiences and outcomes for the last ten years. The factors vary from comprehensive changes in four major sectors including educational experiences and support from one's family, school life and experiences, cognitive achievement and learning, affective characteristics and career according to father's education level which is very closely related with a family's social and economic status and other individual backgrounds such as a student's gender and size of one's residential area.

Parents' academic and emotional support among educational experiences and support at home has grown since 10 years ago. In particular, the result was higher when one's father's education level was higher than that of other students. The number of hours to take private tutoring has shortened in three major subjects - Korean, English and mathematics, meanwhile private tutoring expenses has grown compared to 10 years ago. In the past, most students in 3rd grade started to take private tutoring, however, recently, most students start private tutoring relatively earlier from the 1st grade. In comparison to the past, monthly house hold expenses for private tutoring has increased. Above all, private tutoring expense and monthly expense for education soared when a father's education level is higher. However, careful interpretation is required, because the inflation rate was not reflected in terms of conducting the research regarding expenses. Also, parents' satisfaction of their children's school life and education grew compared to the last 10 years, however, there was no differences according to a father's education level.

Student's understanding of major subjects such as Korean, English and mathematics has improved compared to the past, and they feel more positive about the climate in their class. 10 years ago, teacher's pressure on academic achievement showed a V-shaped graph as it stagnated during the 2nd grade and started to rebound from the 3rd grade. However, in the 2013 cohort, the graph was a reversed V-shape as it slightly increased during the 2nd grade and started to decrease from the 3rd grade. Students feel that their teachers' enthusiasm and knowledge in class is reducing as they advance to older grades. Also, students feel that the amount of school violence has slightly decreased while at the same time a new pattern has developed in which violence tends to increase as students grow older. Students, ten years ago, with a father who had a higher level of education answered that they feel school violence increased. However, no meaningful differences were identified in the 2013 cohort. Students' participation in club activities has largely increased and expanded for the last 10years. Students tended to more actively join activities correlating with their fathers have higher level of education, however, there was no similar patterns identified in the 2013 cohort. The quantity of monthly book reading and enjoyment was similar to the result in the past.

Extrinsic regulation motivation, prescribed regulation motivation and amotivation, the lower the better, among cognitive achievement and learning, decreased and was confirmed that regulation motivation and intrinsic regulation motivation was similar to its level 10 years ago. The differences of motivation according to one's father's education level was similar or diminished compared to the result 10 years ago. Mastery-approach was higher than the past, while performance-approach was much lower. In addition, students tend to utilize rehearsal, refinement, organization and metacognition which are parts of cognitive regulation strategies well compared to the past. Students also make good use of behavioral regulation strategies compared to the past. They can effectively manage and control their efforts, time and space and are well supported by their teachers and friends. Students also utilize more resources surrounding them for learning activities. Also, self-efficacy in major subjects - Korean, English and mathematics - has improved compared to the result 10 years ago. Current students prefer cooperative learning as opposed to competitive learning. 10 years ago, students with fathers who had a higher education level tended to prefer cooperative learning, however, it was not found in the 2013 cohort.

In comparison to 10 years ago, exam stress among affective characteristics and career has slightly reduced while self-concept such as family, society, body and learning has increased. In the meantime, most students and parents still want themselves and their children to enter 4-year university just like ten years ago. However, the ratio of students and parents who want themselves and their children to finish their education by high school or vocational college has gone up, while the ratio of finishing education by master's and doctor's degree has decreased. It was difficult to directly compare the two cohorts' plans to enter different types of high school according to each student's career path, since there are establishments of new types of high school due to Korea's high school education diversification policy. However, still, the ratio of students who want to enter general high school was the highest among many other school types and the ratio of students who want to enter vocational high school tends to get higher as they get older.

In Chapter III, the study analyzed the impacts of social and economic status of a household and what other personal or school factors have influences on middle school students' academic achievement.

The social and economic status of a household and its influences (cohort×SES) on Korean language subject has grown compared to the result 10 years ago. There were differences between the past and the present in terms of the social and

economic status of a household and its influences (cohort×SES) on English and mathematics, however, it is likely that the result might have been over estimated due to characteristics of some students who were not included in the models. The differences between the two cohorts in terms of the growth rate of achievement in Korean, English and mathematics were not found in this research. Also, the growth rate of achievement in mathematics (year×SES) went down as a household's social and economic status improved. It means that the social and economic status of a household and its impact on mathematics is diminishing as a student is getting older compared to the influences on Korean and English.

Parents' expectations for students and school factors provides a positive impact on the students' achievement in Korean, English and mathematics. Students' academic achievement was also found to vary according to the regions where

their school is located; the students' achievement in English in metropolitan cities was relatively higher than that of Eup or Myeon (small town). If a student transfers from Eup or Myeon to a metropolitan or small-and-medium-sized city, their achievement in Korean diminished. Students at private middle school consistently have shown higher achievement in Korean, English and mathematics than students at national or public middle schools. Also, a student who transfers from a co-education school to an all girl's school resulted in higher academic achievement in Korean. If the number of students per one teacher increase due to transfer or other reasons, students' achievement in English and mathematics diminished. On the other hand, students' achievement in Korean improved where the number of students per one teacher increases.

Student's self-conception among students and academic procedure factors provides a positive effect to the achievement in Korean. Also, exam stress and reading enjoyment give positive influences to English, mathematics and Korean, respectively. The more time spent on self-directed learning, the more positive a student's achievement in mathematics. In other words, it means that students' achievement particularly in mathematics can be improved by self-directed learning compared to other subjects such as Korean and English. Students' understanding and teacher's enthusiasm in class all provide positive impacts to improve achievements in Korean, English and mathematics. However, teacher's academic achievement pressure on students provides a negative effect on a student's achievement in Korean.

In Chapter IV, this study analyzed how influences from social and economic status of a household on students' entering different types of high school has changed and what other factors exist other than these factors.

For the last ten years, students from higher social and economic status are more likely to enter special purpose high schools than general high schools. On the other hand, students from relatively lower social and economic households tends to enter more vocational high schools than general high schools. This tendency has continued for the last ten years.

In this study, a middle school student's preliminary plan to enter a specific high school is verified as a decisive factor to influence on their real result of entering a different type of school. In other words, a student who firmly plans and decides to enter a vocational or special purpose high school are more highly likely to enter those schools than general high schools. It is interpreted that direct factors such as social and economic status of a household and parents' expectations are combined with a student's plan or decision to enter a specific school type and decisively impacts one's final high school choice.

Also, parents' expectations on their children's education, achievement and understanding in English, studying hours and effective time management except social and economic status of a household and one's plan to enter a specific high school provide a positive influence to a student's entering of a special purpose high school compared to a general high school. However, private education, parents' expectations, academic achievement, self-esteem and studying hours give negative impact to a student's entering a vocational high school as compared to a general high school. In particular, private education does not make a meaningful impact on a student's entering a special purpose high school as compared to a general high school, while it reduces the probability of entering a vocational high school as compared to a general high school.

Among school characteristics, no meaningful variable was found to influence entering a special purpose high school as compared to a general high school was found, while teacher's enthusiasm and his/her guidance for students' career and entering high school provides a significant impact to students' choice to enter a vocational high school as compared to general high school. It is interpreted that teacher's enthusiasm and appropriate guidance for entering high school and choosing a career can reduce discriminative influences generated from one's family background and can secure students' equal rights to choose school. This research, which was conducted on a limited scale, also analyzed school finance at the 2nd grade of middle school in the 2013 cohort. As a result, the study found out that an improvement in a school's finances was a critical variable to increase their students' entering a special purpose high school as compared to a general high school. In addition, according to an additional analysis of 2013 cohort's entering high school pattern, the influence of a household's social and economic status on autonomous private highschool to general high school Is much larger than its influences on special purpose high school to general high school.

In Chapter V, the research proposed effective policy measures that can support proper growth and development of Korean middle school students and reduce the gap in academic achievement and types of high schools entered among students.

First, the government needs to enlarge more cooperative school education, establish public education policies by taking advantages from private education systems and improve education welfare by eradicating blind spots and build up strong policies to prevent school violence.

Second, education policies need to reduce the gap in students' academic achievement that are different from each family background and encourage students to put more interest in Mathematics. Also, it needs to increase more administrative and financial support for the teaching community and raise teachers' status and roles as important educational supplementation for families as well as enforcing supportive systems in terms of providing follow-up services for transfer students. In addition, more effective research about care from home and school is necessary and studies about different school types and purpose are needed.

Third, education policies are required to secure each students' right to choose school by reducing the gap of quality in high school entrance that are generated from one's family background and to modify school admissions processes to reduce the gap according to one's family backgrounds and give appropriate guidance to students for choosing different types of high school. In conclusion, the education system in Korea needs to foster fair competition for entering high school by respecting each student's unique situation and to encourage students to continuously seek their goals and career aspirations in their everyday school lives and supplement systems to reduce the gap. Also, each school needs to utilize their own strengths to encourage their students to do more self-directed learning and decide their own career and high school. More research and studies that combine diverse factors from longitudinal and financial data also needs to be conducted.

Key words: Korean Education Longitudinal Study 2005, Korean Education Longitudinal Study 2013, comparison between cohorts, educational gap, academic achievement, entering high school