



ABSTRACT

Korean Educational Longitudinal Study (KELS2013)(I) : An Analysis of Educational Experiences and Achievements of Children in Elementary School

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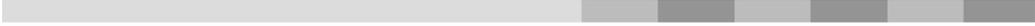
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This study analyzes the data of the 1st survey of the 『Korean Educational Longitudinal Study 2013』. Using the 1st year KELS 2013 dataset, this study provides a description of “elementary school student education experiences and educational achievements.” In addition, five issues are analyzed in-depth based on elementary school students' education experience and educational performance, namely ‘exploration of student and school variables that affect the level of academic achievement’, ‘exploration of student and school variables that affect happiness in school life’, ‘exploration of student and school variables that affect characters’, ‘exploration of student and school variables that affect career maturity’, and ‘analysis of the relation among academic achievement, character, career maturity and happiness of school life’.



Chapter II analyzes 'education experiences among elementary school students' and 'characteristics and education of elementary school students' based on the first year data of 『Korean Education Longitudinal Study 2013』. As for education experiences among elementary school students in their 5th grade, such factors as education experience and support from the family, education experience at school, school activity and time use, cognitive achievement and non-cognitive achievement were analyzed. As a result, it turned out that distinct difference was shown in parents' support for education, private education expenses, etc. depending on the father's academic background or the family's social and economic status, and in the understanding of and concentration in classes. In the basic ability test of Korean, Mathematics, and English, students whose family's social and economic status was high showed a higher level of academic achievement than those whose family's social and economic status was low. In addition, this tendency was consistent in non-cognitive areas such as self concept, community spirit, multi-cultural acceptability, rule observance, and career maturity. The level of school violence was low than average level in general, and few stated that they experienced school violence personally although there was some difference depending on the region size of which the schools are located in and the father's academic background. As for school violence, that in small or medium-sized cities or eup/myeon administrative units was more serious than in special & metropolitan cities. The awareness of school violence was relatively low among students whose father had a bachelor's degree or higher. This tendency was similar when it comes to personal experience of school violence. As the level of the father's education was low, students had negative views on teachers' support, zeal, and relationship with them. As for teachers' pressure of academic achievement, however, no difference was found. Among extra-curricular activities, 72.83% had participated in school club activity and 19.44% in voluntary work. They spent about 2 to 3 hours on average for exercise



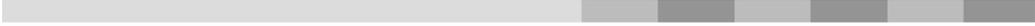
including extra-curricular activity, less than 1 hour for computer use, and 1 to 2 hours for mobile phone use, which seems moderate. As for school club activity, voluntary work, and exercise hours, the participation was more active as the region size was greater and the father's education level was higher. In contrast, the hours of using computers and mobile phones were more as the region size was smaller and the father's education level was lower.

As for elementary school characteristics and education, such factors as the school principal's school management, curriculum planning and operation, school culture, and social/psychological background were analyzed. More than 50% of the schools related to develop a upright character' as the primary objective of elementary school education. While schools in special & metropolitan cities regarded career development as an important goal, schools in eup/myeon administrative units set basic level attainment as an important goal for every student rather than career or special ability aptitude development. As a result of the survey on school management, it turned out that primary efforts were put forth into reducing teachers' duties to focus on classes. To enhance the expertise of teachers, training courses and graduate schooling were recommended, and the highest rates answered that teachers' opinions were weightier than other factors in important decisions at school. In small/medium-sized cities, however, more than in other regions answered that a major concern was to correct existing institutional arrangements and practices, and a smaller number of respondents than in other regions marked the lowest score in the item that they would actively participate in funding and research projects and emphasize good assessments, which shows the difference among regions. The level of teachers' enthusiasm and teaching efficacy was lower than in other regions, and so was the extent of cooperation in educational activity. As to directions for underachieved students, schools in metropolitan cities, small/medium-sized cities, and eup/myeon administrative units were having the homeroom teacher to utilize an



underachieved student learning history management system after schooling while those in the special city had instructors or assistant teachers specially appointed for underachieved students rather than homeroom teachers do that at higher rates than in other regions. As for the curriculum assessment methods, 42.48% of the schools adopted questionnaire-based surveys, and many schools answered that they reflected the results in the school curriculum planning of the following year. As for teaching profession cultures at school, the levels of such factors as zeal among teachers, satisfaction with teaching profession, teaching efficacy, and life guidance efficacy were all higher than the average, and so was the level of cooperation in education activity.

Chapter III examines student and school variables that would affect the level of academic achievement. Specifically, it investigates various factors that affect academic achievement and improvement of academic achievement level among elementary school students in their 5th grade. In addition to that, political implications for schools and governmental agencies to improve academic achievement level among students are extracted. As a result, it turned out that as for regarding achievements of each subject, the ratio of school variance among total variance was 10.78% in the case of Korean, 19.83% English, and 13.82% Mathematics in the order. With other factors of school education activity such as personal/family background, school background and condition, student process variables and school educational activities, under control, the academic achievement of female students was higher than that of male students in Korean and English subjects. In addition, the former turned out to have higher possibility in terms of improvement of academic achievement level. Among family background factors, social and economic backgrounds turned out to cause the significant effect on academic achievement, especially in reaching a higher level from the basic level in every subject. While the power of influence of the parents'

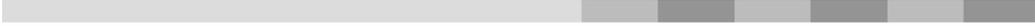


expectations and values of education were different depending on subjects, it turned out that generally, their expectations would affect the possibility for students to reach the proficient and advanced levels. As for school backgrounds and conditions, a school's social and economic status would be the most influential to academic achievement and improvement of academic achievement level. In particular, this factor turned out to affect the possibility of reaching the basic level although there might be difference depending on the subjects. The size of regions would cause little effect on the academic achievement but the affect on the improvement of academic achievement level looks at some other differences between regions, and so would the type of foundation and number of students per teacher. The extent of reading enjoyment would affect the possibility of reaching the proficient or advanced level as well as the academic achievement while stress of tests and extrinsic motivation were in negative relation to the academic achievement and the improvement of academic achievement level in Korean and Mathematics subjects. Creative thinking ability was in positive relation to the achievements of the three subjects. It enhanced the possibility of reaching the proficient or advanced level of academic achievement in each subject. Achievement in mathematics was in positive relation with the time of studying for oneself, and it increased the possibility of reaching a advanced level, but it was in negative relation in Korean and English subjects. Attitudes toward classes were in positive relation to the achievements in Korean, English, and mathematics subjects, and they enhanced the possibility of reaching the proficient or advanced improvement of academic achievement level. Maintaining good relationships with classmates or complying well with rules did not always lead to a higher improvement of academic achievement level, but it turned out to be helpful for below–basic level students in certain subjects. The pre–private tutoring for English classes was in positive relation to academic achievement and improvement of academic achievement level, while having



private tutoring was in positive relation to the achievement of English and mathematics subjects as well as improvement of academic achievement level. Participation in after school program showed negative relation in the subject of mathematics. To sum up, it turned out that school education activities examined in this study including class atmosphere, pressure of achievement, teacher's enthusiasm, interaction with students in classes, and extent of school violence did not affect academic achievement while they affected improvement of academic achievement level in English and mathematics subjects in a different level.

Chapter IV examines student and school variables that may affect school life happiness. Specifically, this section investigates factors that would affect a sense of happiness in school life among elementary school students with the aim to find ways for a school to enhance students' level of happiness in the level of family and school. In addition, possible political implications that can enhance school life happiness among elementary school students are suggested. As a result of the analysis, it turned out that as students' feeling of happiness would be affected by both student and school characteristics, difference in the happiness among students resulted mainly from student characteristics (89.53%) and additionally from school characteristics (10.47%). In the model that included family variables only, a family's social/economic status, the number of siblings, and parents' support for education were in significant relation to students' happiness, but after student characteristics were included, parents' academic support only showed significant effect on students' happiness at school. Such factors as basic ability test scores, which are related to students' academic performance, creative thinking ability, self-management ability to plan studies effectively, and reading enjoyment, which is one key variable linked to academic achievement, turned out to be in significant relation to happiness. Besides, students' satisfaction with their appearances, motor nerves, etc. and happiness

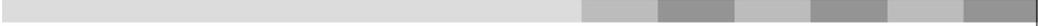


from good relationships with families also affected the level of happiness at school. Variables related to relationships with others such as community spirit, social self-concept, relation with teachers, and relation with classmates turned out to have positive effects on students' happiness. Students at schools in Seoul rather than in eup/myeon administrative units, and those at private schools rather than at public schools showed a higher level of happiness. At schools whose average SES was high and school violence rates were low, the level of happiness among the students was relatively high. Students who maintained good attitudes and concentration during the classes and were less affected by stress of tests turned out to feel a higher level of happiness. When the general atmosphere of classes at school was better and teachers showed a higher level of zeal toward education, the students felt happier than others. When classes at school were arranged individually and career development and guidance programs were actively conducted, the students felt happier. Attending after school programs or participating in student union activities as class representatives, etc., brought about positive effects on students' happiness.

Chapter V examines student and school variables that would affect characters. Specifically, factors that would promote characters in social dimensions (rule observance, awareness of volunteer work, community spirit, and multi-cultural acceptability) among students' experiences at school are analyzed with the aim to find ways for schools and governmental agencies to provide appropriate supports. As a result, it turned out that difference in characters among students depended mainly on individual students rather than schools. As for the initial variance rates in the level of students, rule observance accounted for 89.35%, awareness of volunteer work 94.40%, community spirit 91.34%, and multi-cultural acceptability 94.38% respectively. In the rates of 89.49% regarding total characters, school elements accounted for 10 to 5% only. Among input factors in the level of students, female students showed a higher level of rule observance, awareness of



volunteer work, and multicultural acceptability among the sub factors of characters than male students. Whether community spirit would cause difference was not verified. Parents' social/economic status brought about positive effects on rule observance and community spirit while its effect on the awareness of volunteer work and multicultural acceptability was statistically insignificant. Basic academic abilities caused positive effect on the three sub factors except the awareness of volunteer work. Schools' average SES, an input factor in the level of school, was found to be statistically insignificant regarding characters and the three sub factors except rule observance. Teacher's age caused positive effect on the 4 character factors as well as rule observance. Process variables in the level of students based on experiences at school turned out to play an important role in students' character development in general. Such factors as relation with teachers, relation with classmates, experience as a class representative, school club activity, and hours of exercise were found to cause positive effect on students' characters while pressure of schooling/tests caused negative effect. Process variables in the level of schools – teacher's enthusiasm, teacher's pressure of achievement, and school violence – were in relation to students' characters, but the sub factors showed no statistical significance. A teacher's enthusiasm was measured based on enthusiasm in teaching and aspects worth imitating. This factor was found to contribute to students' rule observance and awareness of volunteer work as well as characters while community spirit was statistically significant in the 10% significance level. Teachers' pressure of achievement brought about positive effect on students' character and community spirit, which is a sub factor, and showed statistical significance on rule observance and multi-cultural receptivity in the 10% significance level. The extent of school violence turned out to bring about negative effect on students' character, rule observance, community spirit, and multi-cultural receptivity except for the awareness of volunteer work. The severity degree of school



disciplines that teachers recognized showed statistical significance on neither sub factors nor characters. The regression coefficient was of negative values, which indicates that punishment-centered school policies have limitations.

Chapter VI examines student and school variables that may affect career maturity. Specifically analyzed are aspects and factors that should be the focus in the areas of parents (family), students, and schools regarding students' career maturity (self-understanding and decision-making for one's career). The analysis results show that the variance rates of career maturity in the level of school were about 5%. Difference in career maturity resulted mainly from student factors. However, career maturity may be an indicator of how much a student is awareness of his career, which depends largely on one's activities at school and his recognition of them rather than the school itself. With process factors under control, background factors were found to be little significant, which indicates that process factors were the major elements of influence. Among process factors, the explanation power of variables related to students' personal aspects was dominant. The influence of parents and schools was also statistically significant. In particular, among parents' process factors and school process factors, the explanation power of the latter turned out to be greater. Among parents' process factors, academic support, interaction with children, autonomous attitude toward child-rearing turned out to have positive effects on career maturity. The effect of parents' expectation of education was found to be insignificant. Students' process factors were all found to be in positively significant relation to career maturity. These factors include a student's plan for education, creativity, self concept, community spirit, rule observance, self-management, reading enjoyment, hours of studying, hours of exercise, and relationship with classmates. When such student process factors are enhanced, students' career maturity is likely to be improved. Among school process factors,



those found to be significant in the final model include club activity, awareness of voluntary work, and awareness of teachers' enthusiasm. While teachers' efficacy had negative effect in some aspects, it was also found to be in significant positive correlation to cooperation among teachers, school principals' support for teaching/learning, frequency of consultations with students, and students' satisfaction with character education at school. Schools' process factors were found to be as influential as parents' process factors.

Chapter VII focuses on the relation among factors such as academic achievement, character, career maturity, and happiness in school life. Specifically analyzed are how academic achievement, character, and current state of career maturity are correlated to each other and with happiness in school life, their influence and implications in domestic education system. The analysis result based on the multi-level model on happiness in school life shows that the regression coefficient of character was high in the levels of students and schools, and the result of the structural equation model analysis shows that academic achievement had both direct effects and indirect effects with career maturity and character as media for the latter. The indirect effect with character as the medium accounted for 55.2% of all, which is quite significant. The level of academic achievement showed a low correlation with happiness in school life, career maturity, and character, which indicates that among elementary school students, attempts to enhance academic achievement were in little relation with those to enhance happiness in school life, career maturity, and character. The multi-level model analysis result shows that the students' individual academic achievement and the average of schools' academic achievement had little effect on happiness in school life. The structural equation model too did not show direct effect much. In other words, academic achievement among elementary school students had little effect directly on happiness in school life. Character and career maturity showed a high



level of correlation and covariance, which indicates that as character develops along with career maturity, the degree of happiness in school life also increased.

Based on the findings above, the following policies for education programs are suggested: With regard to the academic achievement and improvement of academic achievement level, differentiated support and consideration for each subject and achievement level are required in order to reduce the gap among students and schools. The details are as follows: First, academic achievement improvement programs for disadvantaged class needs to be managed continuously. Second, it is necessary to develop teacher training courses and related programs aiming at enhancing students' reading and creative thinking abilities and to provide them to schools. Third, it is necessary to develop motivation programs so that students cultivate internal motives and get less stressed by tests. Fourth, training and supporting programs are necessary regarding how to study for oneself. Above all, the importance of studying oneself needs to be made known. Fifth, in consideration of the context effect, that is, the school mean effect of the social and economic background on the academic achievement and improvement of academic achievement level, policies need to be provided accordingly. Sixth, schools' education power needs to be strengthened in order to improve the level of academic achievement. Seventh, to grasp the level of academic achievement among elementary school students, governmental supports are necessary in such ways as nationwide sample test of academic achievement, diagnostic evaluation of subjects by city and province education boards. Eighth, researches on longitudinal development of academic achievement need to be executed

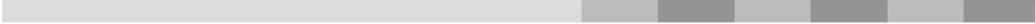
Suggestions for improvement of students' happiness in school life are as follows: First, efforts need to be consistently put forth into reducing the difference in educational conditions due to region size, type of foundation, and average SES of schools. Second, efforts also need to put into making school



conditions school–violence free, safe, and happy. Third, it is also necessary to support learning activities among students and to create desirable school cultures accordingly. Fourth, teaching staff management policies need to be changed in order to secure teachers with zeal for education as well as expertise. Fifth, education for career development needs to be strengthened for elementary school students. Sixth, a variety of extracurricular activities need to be provided for students in addition to regular classes. Seventh, parents education programs need to be conducted at each school in order to help students a positive self–image and form happy family relations. Eighth, guidances are necessary for students to maintain good relationships with teachers and friends at school.

Based on the findings of the analysis on student character, the following policies are suggested: First, as the effect of a student's family on his character is great and efforts on the school's part only are limited without the family's cooperation, education programs to inspire recognition among parents need to be conducted from various angles. Second, character is developed not by oneself only but in interaction with others. Thus, opportunities of mature group experience need to be created. Third, it is recommended to apply a model to promote group experience in teaching/learning processes such as classes. Fourth, providing students with opportunities to take responsibilities as class representatives, etc. helps develop character. Thus such opportunities need to be actively taken advantage of. Fifth, it is vital to establish a social foundation where students who continue to engage in activities useful not only for learning but also for society are awarded so that they can live a balanced life. Sixth, there should be a foundation where students can intervene as an active subject, not a mere onlook, in preventing school violence.

With regard to career maturity, factors that would affect career maturity (self–understanding, career planning) among elementary school students in their 5th grade were analyzed to grasp major elements of career awareness development.



Based on the findings, directions for career education at elementary school are suggested as follows: First, the importance of career education for elementary school students, which has been neglected so far, needs to be emphasized. Second, comprehensive career education needs to be conducted over general curriculums. Third, career education needs to be based on sound character development. Fourth, education and support need to be provided in order to strengthen the capabilities of career education among elementary school teachers and preliminary teachers. Fifth, career education for disadvantaged classes needs to be strengthened. Lastly, evidence-based decision making is required in career education policies.

This study, in addition, presents the following specific ways to cultivate character among elementary school students:

First, nighttime character education programs for parents need to be provided to strengthen the inter-family and family-school relations. Second, everyone joins a school club and participates in group activities. Third, education programs for class model development are to be provided to promote interactions among students and model cases are to be found and made known. Fourth, such provisions as appointment of monthly class representatives need to be introduced. Fifth, traceability systems need to be introduced to promote contribution to society. Sixth, public interest disclosure and student protective systems need to be established.

Key words: Korean Educational Longitudinal Study 2013, academic achievement, happiness in school life, character, career maturity, cognitive development, non-cognitive development