

Korean Education Longitudinal Study (KELS2013)(III) : An Analysis of Educational Experiences and Achievements for Elementary School Students(II)

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The purpose of this study was to address “educational experiences and achievements for elementary school students (II).” Using dataset of the 1st and 2nd year surveys of the 『KELS (Korean Education Longitudinal Study 2013』, this study conduct in-depth research for four topics that includes ‘educational experience and growth for elementary school students,’ ‘characteristics and education for elementary school,’ ‘factors on educational achievement growth and differential effects for elementary school students,’ and ‘factors on character change for elementary school students.’

Chapter II addressed ‘educational experiences and growth for elementary school students,’ that focused on educational experience and support from family; educational experiences at school; student activities and time management; and cognitive and non-cognitive achievements. Firstly, compared to the previous year, educational support from parents decreased in the 2nd year survey but slightly higher than the

medium level on average. The average educational expenditure during a month in the 2nd year survey increased, so 82.91% among the 6th grade students has experienced of private education. Among the students, 53.41%, 86.63%, and 82.89% were experienced to have private education for Korean/writing, English, and Math, respectively. Total time in attending private education decreased, indicating each 5 hours for English and Math; and 3 hours for Korean/writing. Another interesting finding is that if area size is larger and father's educational background is higher, the level of parent's educational support shows a tendency to be stronger. However, there was no significant difference between male and female students for the most of elements. Secondly, instructional understanding and concentrating levels on Korean, English, and Math in the 2nd year survey tend to decrease compared to the last year survey. Overall, students have responded to the midium level for classroom atmosphere; teachers' pressure for academic achievements; teaching and learning; instructional interaction; and the relationship with teachers and friends. Awareness for school violence was low, and students responded rare experience to be exposed to school violence. For these elements, there was a significant difference between male and female students: if area size is larger and father's educational background is higher, educational experiences at school was recognized as a higher level. Thirdly, 74.32% of total students was a member for school club activities, and students' awareness on volunteering has tendency to decrease this year to the medium level. Compared to the last year survey, while studying time per day on average was 1.64 hours but decreased this year, time using a mobile-phone per day increased to 2.10 hours. In addition, average of exercise time per day was 2.67 hours, which was not so different from the last year result. If father's educational background is high, student's awareness on volunteering increase positively. On the other hand, if father's educational background is low, student's time to use a mobile-phone is high while studying and exercise time decreases. Fourthly, the average scores of Korean, English, and Math assessments were 201.73, 209.91, and 203.12, respectively. Compared to the last year, the achievement scores increased; in particular, English increased distinctively. Intrinsic motivation, control expectation, learning centered purpose, subject efficacy, intelligence improvement perspective, cognitive-adjusted strategy, behavior-adjusted strategy, creativeness, and student's learning pattern

preference(collaboration preference vs competition preference) showed scores of medium level or above. In this category, if father's educational background is high, student's awareness on student's achievement, subject efficacy, creativeness, and strategy tend to be high. Lastly, students responded test stress, physical/learning self-concepts, the sense of attendance level, regarding of others, and career planning to the medium levels. Students have a tendency to positively recognize multi-cultural neighborhoods and friends, accepting adoption of foreign cultures. Further, the average scores of students' social and family self-concepts, following rules, and self-understanding were likely to be high. While 70.36% among the 6th grade students are expected to attain college level education or higher, 21.70% among the 6th grade students responded 'undecided.' Yet, the rate of 'undecided' decreased in this year. Parents also responded their children to attain college level education or higher as their most preference.

Chapter III addressed 'characteristics and education for elementary school,' which focused on principal's school management, educational curriculum, school climate, and social/psychological environments. Firstly, most school emphasized developing positive characters of education and self-directed learning abilities as main goals of schooling. Regarding important school management strategies, teachers responded reducing teachers' administrative tasks, developing teacher profession, democratic decision making, innovative and transformative wills, booster business, and evaluations. While public schools recognized that principals' support on teaching and learning somewhat decreased in the 2nd year survey, the support of private school increased. Secondly, to coach under-achieved students, 78.13% among total teachers responded to teach them in their classroom after school hours. Next, teachers used learning records of under-achieved students in school system, operated an extra class for the under-achieved students, recruited an excursive instructor, assigned a helping teacher in a regular class for the under-achieved students, etc. Most schools evaluated school managements and curriculums through teachers' professional workshops and discussion among head teachers, constituting evaluation committee members. Principals used the results of students' evaluation to make a better curriculum planning, a long-term planning of school management, etc. Thirdly, teachers felt that school climate and

social/psychological environments only reached to the medium level. Principals recognized that government restriction was the major reason on the hinderance factors of school developing. This was similar to the last year survey result. The principals also felt that inferior family/environmental background, limited external support, parents' indifference, teachers' repulsion on innovation, parents' pressure on test score, and teachers' limited competency are additional hinderance factors.

Chapter IV analysed factors on educational achievement growth and differential effects for elementary school students who were differentiated by the student proficiency levels. Firstly, the average scores of Korean, English, and Math assessments increased in the 2nd year survey. Parents' social and economic status (SES) was positively associated with achievement growth as well as scale scores. Students per teacher affected negatively to English and Math achievements and growth significantly, so students per teacher were proved to be an important factor on their academic achievements. While there was no significant difference between eup/myeon areal units (i.e., fringe of rural area) and the other areal units (i.e. fringe of urban, suburban, and city) on achievement scale scores and growth, there was a significant difference on the interaction effect of *basic level* students for Korean and *medium level* students for English/Math. Private schools made a higher English scale score, in particular, for *proficiency level* and *advanced level* students than public schools. However, students who achieved *below level* of basic standard in private schools were lower than that of public school students. Secondly, reading a preference attitude affected positively to achievement scale scores and growth, so it was important to develop preferences of reading, library, and book-discussion. As there was significant differential effects for the low level of English achievement and the high level of Math achievement, internal motivation was an important factor on academic achievement. In contrast, external motivation was negatively associated with academic achievements. Relationship with friends who are negatively affected by the Korean and Math achievements scale score, in particular, a high level of students to the Math achievement was made a negative inter-relational effect. While adopting a rule and attitude variables made significant positive effects on English achievement, in particular, a high level of students to the English achievements scale score was made a significant inter-relational

effect. Studying time was negatively associated with achievement growth for the *below basic level* students for Korean and *proficiency level* students for Math. While subject to understandings were positively associated with the 6th grade Korean, English, and Math assessments scale score, it was negatively associated with Korean and English achievement growth. After-school programs of Korean, English, and Math made negative effects on academic achievements and growth. While Korean private education made a negative effect on the 6th grade the Korean assessment scale score when the 5th grade Korean achievement scale score was controlled, private education in English made a positive effect on achievement growth for the *below basic level* of students. Thirdly, while instructional interaction factor made a positive effect on *proficiency level* students for English, the factor made negative effects for every levels of student except *basic level* student for Korean. The effects made, therefore, inconsistent results by subjects and achievement levels. Teacher's enthusiasm made strong positive effects on achievement growth as well as scale scores. In particular, the teacher's enthusiasm strongly affected Korean achievement scale score, growth, and differential effects of achievement levels, and further, the effect made the biggest association for *below basic level* students. Meanwhile, teachers' achievement pressure was positively associated with the Korean achievement growth for the *below basic level* of students.

Chapter V explored factors on character changes for the elementary school students. This study examined effects of the student and school level on student character changes that focused on school cultures and students' self-concept. Firstly, the self-concept was strong to character changes, so if students felt a high level on the self-concept, community sense, adopting rules, sense of volunteering, and multi-cultural acceptability were also high. Except for community sense, there is a significant difference between female and male students. Parent-child interaction made significant effects on the sense of volunteering and multi-cultural acceptability. Among variables associated with student process variables, relationship with teachers was made consistent and strong effect, and relationship with friend was significant correlation with community sense; adopting rules; and multi-cultural acceptability. School club, volunteering, or student council activities were positively associated with student's character change. Although

there was no consistent results on teacher's enthusiasm, principal's leadership, teacher's task, and school violence variables made significant effects on character changes. Secondly, according to panel analysis results, self-concepts and relationship with teachers and friends were consistently affecting students' character changes positively. Among experiences of students' educational activities, change of sense of volunteering was only significantly affected by volunteering activity and exercise time. Level of school violence made a strong effect on character change. Thirdly, this study suggested that schools with a high level of school culture have a possibility to offset a negative effect from family background. Schools with a low level of school culture tended to negatively affect school violence on volunteering. We conclude the educational effects of school character education and coaching depended on school contextual environments.

Based on the findings above, policy implications are provided. First, suggestions for factors on educational achievement growth and differential effects are as follows. It is necessary to educational and financial supports including academic achievement improvement program for disadvantaged groups. The supports must be responsible by national-, province-, and local-levels, and further, the supports must be monitored continuously. Teacher professional development program that improves instructional environments (e.g., enhancing students' reading preference, improving class-understanding, etc.) needs for teachers, and it would be encouraged schools to use the program in educational settings. It is necessary to provide actual plan to cultivate student internal motivation and get less external motivation, and also, to improve students' confidence. Schools need to recognize the importance of students' self-directed learning for which can be practically applied. The application must be considered with schools having relatively low SES groups and supported under national- and school district-levels accountability. In consideration of the private school effects, further study would be necessary to explore the private school program in-depth. Further, school educational process need to be intensified. It is necessary to implicate nationwide diagnostic assessments to diagnose under-achieved students, with which the efficient support at the national- and school district levels need. In addition, it needs to develop educational datasets that connect various sources of assessment and survey data. The newly launched datasets significantly

contribute to providing meaningful information for educational professions and practitioners effectively. Further, the datasets will be one way to imply the governmental 3.0 policy in educational settings. It is also necessary to encourage student motivation for the future 『KELS2013』 survey.

Secondly, suggestions for actors on character changes are as follows. schools need to develop students' self-concepts positive, and pay attention to the students who have a low level of self-concepts. As character change was more affected by family than school environments, schools need efforts to offset the family effect if there is a negative factor from their students' family background. Schools need to develop students' autonomous activity and positive friendship. Further, it needs to activate school-community partnership in order to educate students' characters through experience-based education in schools. Colleges need to share effective information of successful cases and suggest visions and planning for the students' character education.

Key Words: Korean Education Longitudinal Study 2013, educational experience and growth, educational achievement growth, character change, elementary school students