

Research title	Research on Education Finances, etc. in Elementary and Lower Secondary School Education
Period	FY2011 (April 2011 – March 2012)
Objectives	To provide quantitative evidence that will form the basis for policy regarding investment of public resources in the field of elementary and secondary education and other socioeconomic factors with the fulfillment of education and the relationship between them.
Methodology	Recalculate figures found in the National Assessment of Academic Ability and Learning Situation, Ministry of Internal Affairs and Communications and local government databases, etc. to perform quantitative analysis on educational fulfillment at a variety of levels such as by individual student, school, and municipality.
Major outcomes and findings	<ol style="list-style-type: none"> <li>(1) School attendance support rates are often interpreted in relation to proxy variables, based on the general household economic aspect. However, relationships are also apparent with variables such as conscious attitude to study and society, along with basic lifestyle habits, making them actually more complex indicators.</li> <li>(2) Schools with high attendance support rates are passionate about initiatives aimed at the improvement of academic ability, such as maintenance of study rules and instruction or supplementary instruction on study methodology, and have a reasonable degree of liaison between the school and households. This kind of relationship possibly provides basic support for academic ability.</li> <li>(3) In terms of gender specific differences, the disparity in attitude to arithmetic study in elementary grade six is possibly linked to the gender gap in academic ability for mathematics by the third grade of junior high school.</li> <li>(4) A correlation is evident between several variables in school administration and the average percentage of correctly answered questions among students.</li> <li>(5) The correlation is evident between the rate of correctly answered questions and municipal socioeconomic variables, such as unemployment rates, divorce rates, rates of single mother households, taxable income per capita, and rates of university graduates, reaffirming the possibility that the home situation of a student may affect academic ability.</li> <li>(6) In addition to the possibility that determinants may vary according to the academic ability stratum, results suggest the existence of a nonlinear relationship between class size and academic ability.</li> <li>(7) In addition to a positive correlation being evident between physical fitness and achievement of academic ability, an interrelation was seen between physical fitness and a number of variables inside and outside the school.</li> </ol>
Contributions to education policy	<ol style="list-style-type: none"> <li>(1) When the fulfillment of education is considered in regard to academic ability, in addition to factors outside the school, such as household attributes, correlation was seen with variables connected to the school.</li> <li>(2) In terms of performance objectives (outcome indicators), aside from academic achievement, physical fitness was indicated. There were also indications that variables inside and outside the school may have an impact on physical fitness.</li> <li>(3) From (1) and (2), it was indicated that the distribution of public resources through policy potentially had an impact on educational fulfillment. However, further validation is required to establish the causality between academic achievement and other determinants by utilizing follow-up studies and additional surveys, etc.</li> <li>(4) Considering the prospects for girls to actively participate in the science and technology fields in the future, it is important to point out in terms of policy making that the gender gap develops from the elementary through to lower secondary school level.</li> </ol>