

Two essays on the determinants of educational outcomes
in Reunion Island - Observational analysis and
experimentation

Daniel Rakotomalala

1 Ages and educational performance in primary school in Reunion Island - Cross-sectional analysis

From a single school entry cutoff date added with a minimum entry age results age differentials within the first grade due to different the dates of birth of the children. These differences can reach one year and for children (in early developmental stages of life), one year of difference in age is likely to be very important (for example in a maturity point of view, among other points of view). These differentials are known to cause, *ceteris paribus*, educational outcomes differentials. Moreover, these age effects appears to be more pronounced at early ages and fade over time. The objective of this part of the work is to measure as precise as the data permit it the effect of age on educational performances of fifth graders in Reunion Island. This is of interest because as far as the knowledge of the author, this is the first empirical study to adress this specific issue in Reunion Island. Another importance of measuring such effects is to inform policy makers of the existence of substantial differentials of educational outcomes solely due to the children's month of birth (hence this is unfair in the children point of view) and to help them making decisions about.

2 The effect of amelioration in written french on academic performances in Reunion Island - An experiment

One of the several determinants of educational success that is likely to be relevant is the level in french of the students. In order to contribute to the knowledge of determinants of educational success and then help decision makers, an experimentation has been performed at Reunion Island University to attempt to capture the causal effect of the amelioration in french (from a french training plateforme, named *Projet Voltaire*) on the grades obtained at the end of the second year of higher education (the subjects are students in Letters and Human Sciences). Given that the use of the *Projet Voltaire* plateforme is not a random phenomenon, an encouragement design (instrumental variable strategy based on a random assignation of incitations) is implemented. The incitation consists of strongly encouraging the treatment group to use the plateforme, while there is no such action that is done for the control group. This part of the work is currently in progression.