

# Educational Pathways and Skills

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## 6.4 Summary of the Contributions

This thesis researched questions about how skills obtained from the educational process are related to economic growth and technological catch-up, public investment decisions, and institutional flexibility.

In brief, the primary contributions of this dissertation are as follows:

- We introduce a new dataset of three vocational secondary education variables covering as much of the globe as possible from 1950 to 2010 (Chapter 2).
- We find that years of vocational secondary schooling have a strong relationship with economic growth, but only if the economy is relatively close to the technological frontier (Chapter 3).
- We find that public investment in education has a strong relationship with adult numeracy scores. The investment allocations to primary, secondary and tertiary education interrelate and are also important for the resulting adult numeracy skills (Chapter 4).
- We find that vocational education at the tertiary level has produced a workforce with lower educational qualifications than would be required to be hired today, and a workforce that uses numeracy skills slightly less than individuals that are the product of a general education. This result seems to be dependent on the structure of the school system and the intensity of vocational education. (Chapter 5).
- A survey for higher professional education institutions intended to capture how these institutions adapt and innovate in response to changes in the labor market is reported in the second half of Chapter 5. The survey provides examples of how information about innovation in higher professional education institutions is collected in the Netherlands and New York State. All (100 percent) of respondents try to anticipate the future needs of the labor market, they do so in very different ways, and the challenges they identify are different.