

Impact Opportunities 4: How to improve skills through increased Access to Education and Training?

Information on Return to Education

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Vocational Education Impacts on Youth Labor Market Outcomes: Initial Results from Kenya

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Vocational education and youth labor market outcomes

- **Youth unemployment** is a major economic and social problem in East Africa: youth account for 60% of the unemployed and 72% of adolescents live on less than \$2/day (World Bank 2009)
- In Kenya, young adults (individuals aged 15-29) account for 30% of the Kenyan population, 21% are unemployed, and a further 25% are neither in school nor working.

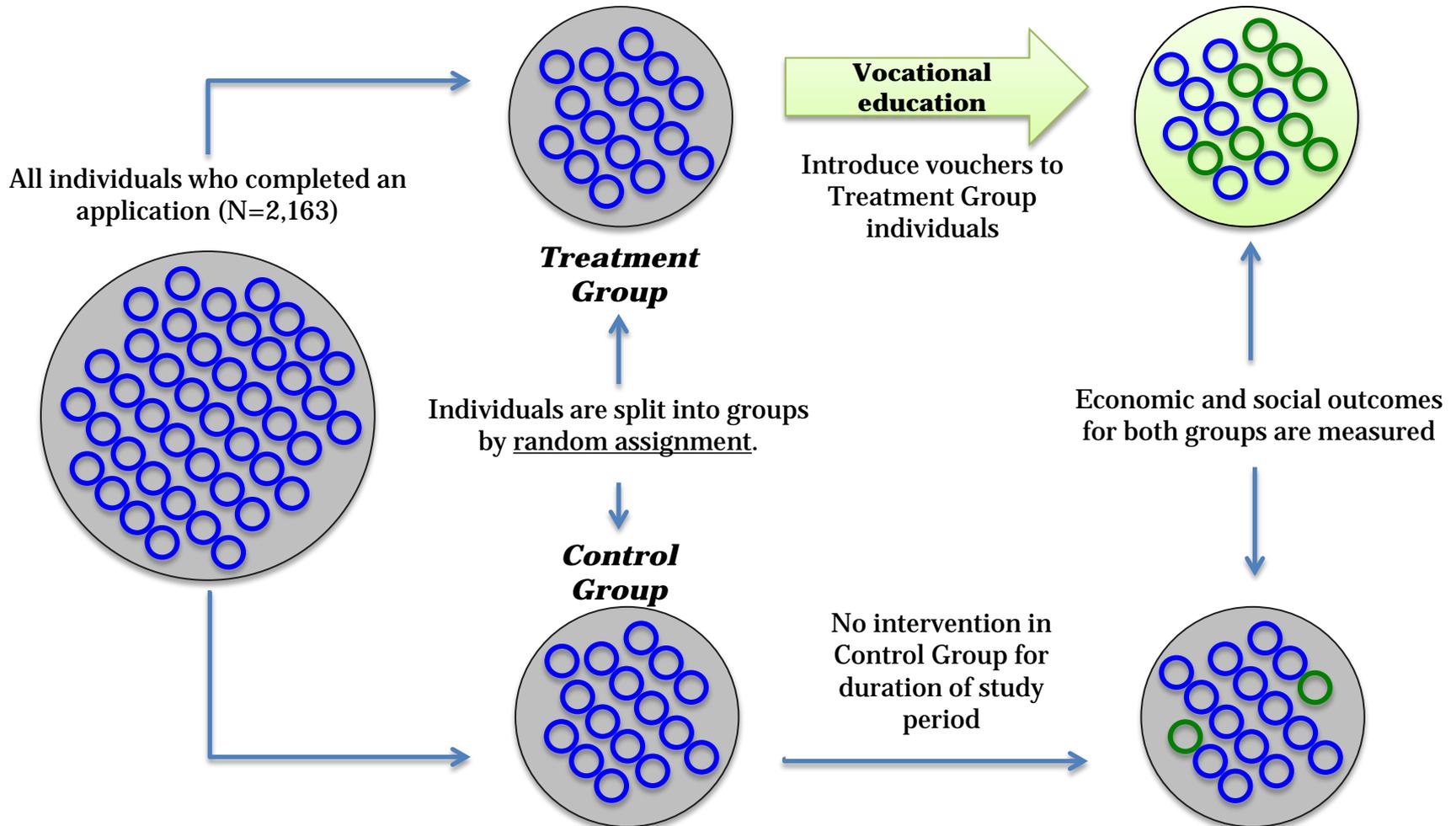
Vocational education and youth labor market outcomes

- Vocational education is a potential remedy, especially for the increasing number of primary school graduates.
- A wide range of **public options**, from village polytechnics (offering traditional trades), to town polytechnics (with more courses) to prestigious technical training institutes.
- A growing number of **private vocational training options**. Some mirror polytechnics, some are like apprenticeships, and others offer shorter, more specialized offerings tailored to current business needs, e.g., computing.

The Kenya Vocational Education Study Sample

- In late 2008, participants (N=2,163) were recruited from samples participating in two earlier randomized evaluations in Busia District for training in 2009-2010:
 - (i) school deworming (Miguel and Kremer 2004)
 - (ii) girls scholarship program (Kremer et al 2009)
- **25%** were awarded a “restricted” public institution only voucher, **25%** were awarded an “unrestricted” (public or private institution) voucher, and 50% control.
- The voucher amount was \$460, enough to cover all or nearly all fees even for two year programs (but not transport and boarding). Certification exam fees covered.

What are the economic and social impacts of vocational education?



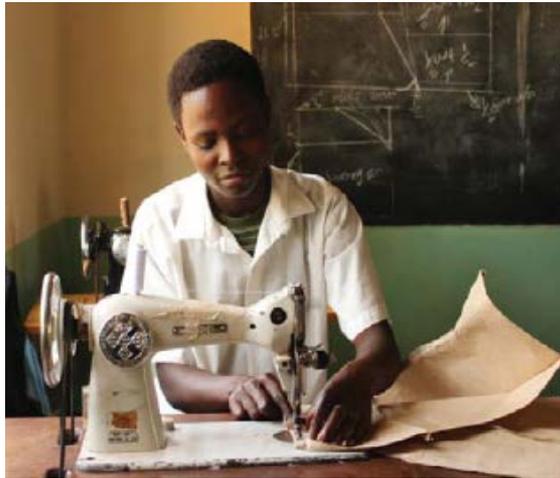
○ No improvement in economic and social outcomes

○ Improvement in economic and social outcomes

Vocational training courses and gender

- Six course categories: (i) construction and related trades; (ii) textiles and tailoring; (iii) mechanics and driving; (iv) beauty; (v) computers / secretary / business; (vi) other.
- Very **strong gender differences** in course preferences:
 - Females: Tailoring, beauty, secretarial
 - Males: Vehicle, construction (ie, masonry, carpentry)
- Greater barriers for female enrollment: women are more likely than men to report proximity to home as a primary reason for choosing a program, and childcare and pregnancy as leading factors for not enrolling.

Vocational education and youth labor market outcomes



Tracking of labor market and life outcomes

- **Kenya Life Panel Survey (2011-2014), KLPS.**
 - Follow-up survey 1 to 4 years later to assess impacts, tracking rate 87.6% in treatment, 87.3% in control.
 - Data collection integrated with a common follow-up survey for participants in the deworming program (N=7,500, 15 year follow-up) and the girls scholarship program (N=3,100, 10 year follow-up).

Tracking of labor market and life outcomes

- KLPS sample randomly divided into two representative “waves”. Wave 1 data collection completed 12/2012, and results for this first “half” of the data presented today
- Wave 2 data collection is ongoing, with expected completion in 2014.
- **Caveats:** results are new, relatively short-term, and more importantly, **only use half** of the final dataset (N=1,043).

Main research hypotheses (pre-specified)

- Three main hypotheses, as well as exploratory tests:
- (H1) **Increased earnings**, including both wage earnings and self-employed profits.
- (H2) Improves **other labor outcomes** (e.g., greater work hours and sectoral shifts out of agriculture)
- (H3) Improves **living standards**, including consumption, asset ownership, and emotional wellbeing
- (H4 - exploratory) Impacts on **other life outcomes** (cognitive test scores, political and social attitudes, risk attitudes, marriage)

Vocational education take-up and first stage

- Take-up of the vocational vouchers was very high, at 70%, indicating high demand for this training.
- By 2011-12, voucher recipients had **0.60 years (s.e. 0.10)** more vocational training relative to the control group, which had 0.42 years of vocational training on average.
- 32% of the control had some training (some pre-2009).

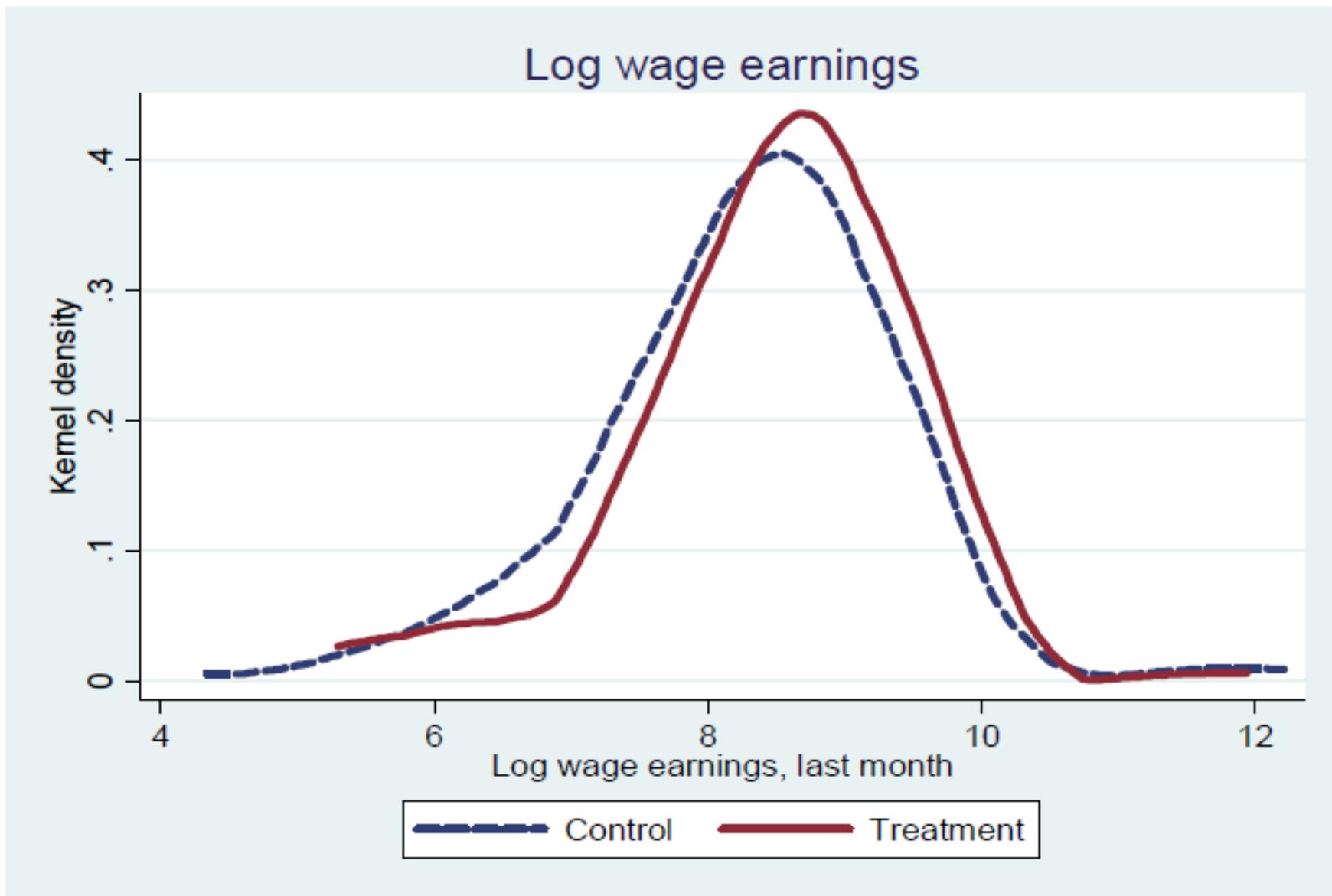
Vocational education human capital impacts

- Significant increases of assignment to vocational education on test performance (in the KLPS survey)
 - Reading gains: 0.139 in std. dev. units (s.e. 0.053)
 - Math gains: 0.075 (s.e. 0.055)
- Average across both tests: **0.107 (s.e. 0.050)**

Vocational education labor market impacts

- In the reduced form, assignment to a vocational education voucher did **not** significantly increase total earnings across all economic activities 1 to 2 years later.
- Surprisingly, **no increase** in hours worked in self-employment or in wage employment.
- No impacts on measured **consumption** (meals, expenditures), asset ownership, migration to urban areas
- But evidence of increased earnings for those working for wages, 26 percent (s.e. 11 percent), see next figure

Figure 1: Distribution of log wage earnings, voucher treatment versus control



Discussion

- Preliminary: vocational education boosted test scores and productivity among wage earners, not total earnings.
- Caveats, explanations and questions:
 - (1) Why didn't more voucher winners leave agriculture, and/or migrate to cities for work?
 - (2) Has the control group benefited from more work "experience" and does this narrow the gap?
 - (3) Positive spillovers to the control group from program funding for local institutions?
 - (4) Relatively **short-run follow-up**, partly remedied in Wave 2 (2013-14) with twice the sample size

Next steps for policymakers

- Vocational education alone may not lead to higher earnings → vocational institutions may need to do more to improve youth labor market outcomes, e.g., connections to employers or internships, more business training, different types of skills.
- Possible explanation: are both human capital **and** financial capital necessary for small business success?
 - Ongoing project: provide small grants to a random half of the voucher treatment and control groups. Follow-up surveys in 2015-16 to assess impacts.
 - Does this lead to larger impacts on earnings?