Youth bulges in developing countries present employment challenges for economies.

Kenya experienced a large influx of pupils not previously enrolled in school after the introduction of free primary education in 2003. Kenya will experience unprecedented numbers of graduates competing for limited seats in secondary schools.

One possible tool for accommodating the many Kenyan youths not accepted into secondary school is that of vocational education, thus helping students learn a trade and acquire the skills needed to take advantage of employment opportunities or to start a small business.

There is little empirical evidence regarding the impacts of vocational education on employment, salary or consumption of individuals. This study seeks to address this by examining the case study of Kenya. Half of the out-of-school youths who applied to the program were given a voucher for vocational training. Half of these were chosen to receive a voucher for government institutions only, whilst the other half could choose between public and private institutions.

Key policy implications:

- Cost of and proximity to training institutions matter in individual enrollment decisions. Females often cited maternity, pregnancy and childcare as a constraint.
- Public and private institutions are different, and facilitating access to both can lead to higher enrollment and boost the effectiveness of training.
- Individuals are overly optimistic about the returns to vocational training and are misinformed about which trades have the largest returns.
Policy Motivation, Impact and Audience

Youth underemployment, especially among less educated populations, has the potential to create significant social unrest and perpetuate poverty. However, little is known about how best to help youth find jobs and smooth the school-to-work transition, particularly in less developed countries. One possible tool for expanding labor market opportunities in these settings is vocational education, which could help students learn a trade and acquire the skills needed to take advantage of employment opportunities or create successful small businesses. However, credible research on economic returns, social benefits, and how best to deliver such programs in poor countries remains scarce.

The introduction of free primary education in Kenya in 2003 prompted a large influx of pupils previously not enrolled in school. As these pupils complete their primary schooling, Kenya will face unprecedented numbers of primary school graduates competing for limited seats in traditional secondary schools. Vocational education is one promising avenue for Kenyan youths who are not accepted into or cannot afford to attend secondary school, as well as for youths who dropped out of primary school prior to 2003. Vocational education has the potential to help address unemployment issues by providing students with the skills needed for employment, even without obtaining a secondary school diploma. However, there is little empirical evidence on the impacts of vocational education on employment, salary, or consumption for individuals with different characteristics and backgrounds, for instance, by gender, family background, or individual cognitive ability.

A policy dialogue is currently ongoing between the Kenyan Ministry of Higher Education, Science and Technology and the World Bank on the topic of vocational training as well as youth labor market skills development more broadly. These policies need to be designed based on rigorous impact evaluation evidence and labor market studies. The research discussed here can, we hope, play a useful role in informing policymakers. In particular, this program – the first of its kind in Africa, to our knowledge – aims to understand the mechanisms through which vocational education can address the widespread problem of youth underemployment in Kenya, using rigorous, scientific evaluation methods.

Implications

**Cost of and proximity to training institutions matter in individual enrollment decisions**

Voucher winners were much more likely to enroll in vocational training than non-winners (74% versus 4%), indicating that the cost of training is an important factor in individual enrollment decisions. However, tuition is not on the only constraint to enrollment. Among voucher winners, out-of-school costs not covered by the voucher such as transport and room and board were often cited as an impediment to enrollment, as well as distance from home. Maternity, pregnancy and childcare issues were also frequently cited as a constraint, particularly by females in the study. This suggests that integrating childcare programs and further reducing the financial constraints could have large impacts on the demand for vocational training.
Public and private training institutions differ in important ways, and facilitating access to both types of institutions can lead to higher enrollment and boost the effectiveness of training through a better student-training match

Winners of vouchers that allowed access to both public and private training institutions were significantly more likely to enroll in training than winners of public-only vouchers (79% versus 69%), and also more likely to complete their program once enrolled. This could be due to the greater choice available to individuals with an unrestricted voucher, as public and private institutions offer different advantages. More specifically, public institutions tend to focus on training in traditional fields such as skilled construction, automobile mechanics and tailoring, while course offerings at private institutions are usually narrower in scope but allow students to specialize in specific skills – for example, a particular computer software package. Furthermore, public institutions spend more time on average on practical work while private institutions spend more time on theory. Also, public institutions are more likely to require on-the-job training in the form of an internship, while formal and urban private institutions are more likely to offer job placement assistance. Allowing individuals the opportunity to select the course that best fits their needs, whether public or private, may further boost the effectiveness of vocational training by leading to more efficient student-course matches.

Individuals are overly optimistic about the returns to vocational training, and misinformed about which trades have the largest returns

Participants cited returns to vocational training on the order of 61% prior to the start of the program, while actual returns are closer to 37%. Providing individuals with information on actual returns to particular courses increased female enrollment in traditionally male-dominated (and higher paying) trades. This suggests that the provision of information can greatly alter individual decision making in the context of educational investment decisions.

Brief Summary of Research

Implementation of this project began in 2008 with the recruitment of 2,163 out-of-school youths (ranging in age from roughly 18 to 30). Study participants were drawn from the Kenya Life Panel Survey, an unusual on-going multi-round dataset of detailed educational, health, and cognitive information for over 10,000 adolescents in western Kenya. Of the 2,163 youths that applied to the program, half were chosen by lottery to receive a voucher for vocational training. Of the voucher winners, half were chosen by lottery to receive a voucher that could only be used in public (government) institutions, while the other half received a voucher that could be used in either private or public institutions. Vouchers were worth approximately US$460, an amount sufficient to fully (or almost fully) cover tuition costs for public and private training institutions. The program also included an information intervention, which exposed a randomly selected half of all voucher winners and non-winners to information about the actual returns to vocational education. One noteworthy component of the information intervention highlighted the large discrepancy between expected earnings for graduates of traditionally male-
dominated trades (e.g., mechanic) versus traditionally female-dominated trades (e.g., seamstress) and used this information, as well as more subjective methods—including presentation of a video about successful female car mechanics in Kenya—to encourage young women to enroll in more lucrative male-dominated trades.

Thus far data has been collected and analyzed on participant enrollment, course selection, attendance, and short-term impacts on labor market, migration, fertility, and other life outcomes. In addition, information has been collected and analyzed on training center and teacher characteristics. Data collection for longer-term individual life outcomes is currently underway. Future research will examine the effects of vocational education on formal sector employment and labor market earnings, participation in the informal and agricultural sectors, entrepreneurship decisions, migration, remittances, fertility decisions and other major life outcomes. The design of the program will further allow for an estimation of how these effects vary by quality and type (e.g., public versus private) of institution attended.

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**Implementation**

A key issue in assessing the external validity of this study is the representativeness of the sample compared to other African settings. According to recent Kenyan government survey and census data, Busia District is close to the national mean along a variety of economic and social measures. This provides some confidence that results from Busia are relevant in other rural and peri-urban Kenyan and African settings. Moreover, over 15% of voucher participants enrolled in institutions outside of Busia and its surrounding districts, adding to the regional diversity of the sample and potentially strengthening the external validity.

While our results suggest that vouchers, especially the unrestricted vouchers, are a promising policy tool to increase educational access and promote school choice, it should be noted that the impacts of large-scale or nation-wide voucher programs could potentially lead to some less desirable outcomes. The greatest concern with large-scale voucher programs is that they may lead to greater stratification and sorting, where the higher ability (or higher income) students benefit at the expense of lower ability students. Other practical concerns include ensuring individuals have enough information to make informed decisions about which institution and course to choose. As the present research shows, there is a great deal of misinformation relating to the returns to training, and which courses offer the largest returns.

The vetting of private schools is an additional challenge to voucher implementation, which was particularly salient to this project given the large variance in the size and scope of private institutions in Kenya. A national voucher scheme would need to set minimum standards and requirements for private schools to adhere to. These can range from simple enrollment and attrition thresholds up to complete inspection and supervision under the purview of the Ministry of Education. While there is no theoretical or empirical consensus on the best way to vet private schools, it is clear that the regulations need to balance the need to ensure education standards versus the autonomy of private schools.
Further Readings

About the authors

Joan Hamory Hicks is a Research Fellow at the Center for Effective Global Action at the University of California. She completed a Ph.D. in Economics at UC Berkeley and joined CEGA as a postdoctoral fellow in 2009.

Jonas Hjort joined Columbia Business School in 2012. Professor Hjort has degrees from the LSE, Yale and a Ph.D. Economics from UC Berkeley. His research spans issues in development, labor and behavioral economics, with a particular focus on topics in their intersection.

Michael Kremer is the Gates Professor of Developing Societies in the Department of Economics at Harvard University and Senior Fellow at the Brookings Institution. Kremer’s recent research examines education and health in developing countries, immigration, and globalization.

Isaac Mbiti is an Assistant Professor in the Department of Economics of Southern Methodist University. His research interests are in economic development, labour economics and demography.

Jamie McCasland is a PhD candidate in the Department of Economics at UC Berkeley. Her research is in development economics, with a focus on labor markets and firms.

Edward Miguel has degrees from MIT, and a Ph.D. in Economics from Harvard University, where he was a National Science Foundation Fellow, and has been a visiting professor at Princeton University and Stanford University.
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International Growth Centre, London School of Economic and Political Science, Houghton Street, London WC2A 2AE