

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
1.1	Link	Kenya	2008 to 2009	Out-of-school youth	Vouchers covering 73% of the cost of in-class vocational training (tuition, materials, uniforms). Information session on the returns to vocational training and different vocational training programs	Hard skills training Information	↑	—	US\$555.58 per participant
2.1	N/A	Egypt	2016 to 2018	Four-year college graduates	Soft skills-intensive training: grooming, time-management and listening skills	Soft skills training	—	—	Not reported
2.2					Technical skills-intensive training: Microsoft programs, technical English	Hard skills training	—	—	
2.3					Mixed skills training	Hard skills training Soft skills training	↑	↑	
3.1	N/A	Bangladesh	2013 to 2014	Rural youth	Job-related information session	Information	↑	—	US\$2.20 per participant
3.2					Information session and residential skill training	Hard skills training Information	↑	—	US\$109.95 per participant
3.3					Information session, residential skill training and cash stipend of 45 USD	Hard skills training Information Cash	↑	↑	US\$159.43 per participant
3.4					Information session, residential skill training, cash stipend and on-the-job training program or apprenticeship	Hard skills training Information Cash On-the-job Experience	↑	↑	US\$203.41 per participant
4	N/A	Malawi	2010 to 2011	Youth aged 15-24	Training modules in trades and work experience with master craftspeople	Hard skills training Soft skills training Cash On-the-job Experience	—	—	Not reported

- 1.1 [Hicks, Joan Hamory, Michael Kremer, Isaac Mbiti, and Edward Miguel. 2016. "Impact Evaluation Report 37 Evaluating the Impact of Vocational Education Vouchers on Out-of-School Youth in Kenya." International Initiative for Impact Evaluation, Report 37 \(August\): 1-45.](#)
- 2.1, 2.2, 2.3 [Osman, Adam, and Jamin D. Speer. "Are Soft Skills Enough? Experimental Evidence on Skill Complementary for College Graduates." Working Paper, July 2022.](#)
- 3.1, 3.2, 3.3, 3.4 [Shonchoy, Abu, Tomoki Fujii, and Selim Raihan. "Barriers to Labor Migration for the Rural Poor: Experimental Evidence from a Vocational Training Program in Bangladesh." Available at SSRN 3395229, February 2018.](#)
- 4 [Cho, Yoonyoung, Davie Kalomba, Ahmed Mushtiq Mobarak, and Victor Orozco. "Gender Differences in the Effects of Vocational Training: Constraints on Women and Drop-Out Behavior" World Bank Policy Research Working Papers, July 2013.](#)

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
5.1	Link	Rwanda	2017 to 2019	Low-income youth with less than secondary education	Huguka Dukore Program: workforce readiness preparation, individual youth entrepreneurship and microenterprise start-up and technical training for specific trades, after which trainees may be placed in apprenticeships	Hard skills training Soft skills training	Not reported	—	US\$350.75 per study household
5.2					Cash grant of four different amounts: \$317.16, \$410.65, \$502.96, \$750.30	Cash	Not reported	↑	US\$416.32 to US \$893.79 per study household
5.3					Cash grant (\$410.65) and Huguka Dukore Program	Hard skills training Soft skills training Cash	—	↑	US\$886.92 per study household
6.1	Link	Mongolia	2010 to 2012	Applicants to vocational schools with 9 years of schooling	Vocational training with certificate upon graduation	Hard skills training	—	↑	Not reported
6.2				Applicants to vocational schools with 11 years of schooling	Basic academic courses and vocational training with certificates for both upon graduation	Hard skills training Soft skills training	↑	—	
7.1	N/A	Kenya	2012	Out of school youth with no permanent jobs and with at least eight years of education	Life skills training class	Soft skills training	—	—	US\$256.30 per participant
7.2					Life skills training, sector-specific classroom based training and internship in a private firm	Hard skills training Soft skills training On-the-job experience	↑ (Female) ↑ (Male)	↑ (Female) — (Male)	US\$1,312.28 per participant
8	N/A	Peru	2009 to 2013	Low-income youth	In-classroom technical training complemented with an internship	Hard skills training On-the-job experience	—	—	US\$497.85 per participant
9	N/A	Argentina and Colombia	2018 to 2019	Young, educated, working women seeking to break into technology jobs	Training, scholarship (covered 65% of the tuition costs in Buenos Aires, 80% in Bogotá)	Hard skills training Soft skills training	↓	—	Not reported

5.1, 5.2, 5.3

McIntosh, Craig and Andrew Zeitlin. "Using Household Grants to Benchmark the Cost Effectiveness of a USAID Workforce Readiness Program." *Journal of Development Economics*, forthcoming, April 2022.

6.1, 6.2

Field, Erica M., Leigh L. Linden, Ofer Malamud, Daniel Rubenson, and Shing-Yi Wang. "Does Vocational Education Work? Evidence from a Randomized Experiment in Mongolia." *NBER Working Paper #26092*, July 2019.

7.1, 7.2

Honorati, Maddalena. "The Impact of Private Sector Internship and Training on Urban Youth in Kenya." *Policy Research Working Papers*, August 2015.

8

Diaz, Juan Jose, and David Rosas. "Impact evaluation of the job youth training program Projovent." *IDB Working Paper No. IDB-WP-693*. Inter-American Development Bank, April 2016.

9

Aramburu, Julian, Ana Goicoechea, and Ahmed Mushfiq Mobarak. "Coding Bootcamps for Female Digital Employment: Evidence from an RCT in Argentina and Colombia." *Policy Research Working Paper; No. 9721*. World Bank, June 2021.

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
10.1	Link	Kenya	2016 to 2020	Low-income high school graduates proficient in English	Artificial Intelligence classroom-based training program	Hard skills training	—	—	Not reported
10.2					Artificial Intelligence training program + referral to a tech job	Hard skills training Job placement support	↑	↑	
11.1	N/A	Colombia	2017 to 2019	Low-income individuals	Vocational training with an emphasis on social skills	Soft skills training Cash	↑	—	US\$185.79 per participant
11.2					Vocational training with an emphasis on technical skills	Hard skills training Cash	↑	↑	
12.1	N/A	United States	2011 to 2013	Unemployed and low-wage workers	Training first (Information technology sector)	Hard skills training Soft skills training Information Job Placement Support Career counseling	—	↑	US\$7,671.26 per provider on average
12.2					Training first (Environmental remediation sector)	Hard skills training Soft skills training Information	—	↑	US\$8,542.99 per provider on average
12.3					Training and placement initially (transportation and manufacturing sectors)	Hard skills training Soft skills training Information Job placement support Career counseling	—	↑	US\$7,671.26 per provider on average
12.4					Training and placement initially (healthcare and manufacturing sectors)	Hard skills training Soft skills training Information Job placement support Career counseling	—	—	US\$7,671.26 per provider on average

10.1, 10.2

Atkin, David, Antoinette Schoar, and Kiara Wahnschafft. "Evaluating Sama's Training and Job Programs in Nairobi, Kenya". Working Paper, May 2021.

11.1, 11.2

Barrera-Osorio, Felipe, Adriana D Kugler, and Mikko I Silliman. "Hard and Soft skills in Vocational Training: Experimental Evidence from Colombia," Technical report, National Bureau of Economic Research, July 2020.

12.1, 12.2, 12.3, 12.4

Schaberg, Kelsey. "Can Sector Strategies Promote Longer-Term Effects? Three-Year Impacts from the WorkAdvance Demonstration." MDRC, September 2017.

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
13	Link	Uganda	2008 to 2012	Girls aged 14–20	Bundle intervention with a life skills training enhancing self-confidence, an entrepreneur technical training (vegetable cropping, poultry rearing, tailoring, etc), and ability to graduate into microfinance once the training is completed	N/A (measure intention to participate in training, not training itself)	Not reported	Not reported	Not reported
14.1	Link	Egypt	2015 and 2017	Unemployed youth	Training: soft skills training program and matching with private firms providing technical on-the-job vocational training	Hard skills training Soft skills training Job placement support Cash	↑	↑	US\$233.95 to US\$212.68 per participant
14.2					Training + one-on-one career counseling/goal setting sessions	Hard skills training Soft skills training Career counseling Cash	↑	↑	US\$264.32 to US\$249.14 per participant
15.1	N/A	Sierra Leone	2013 to 2015	Youth with some secondary education	Technical skills training, on-the-job training, stipend	Hard skills training On-the-job experience Cash	—	—	US\$671.12 per participant
15.2					Business skills training, stipend	Soft skills training Cash	↑	—	US\$447.41 per participant
15.3					Technical skills training, on-the-job training, business skills training, stipend	Hard skills training Soft skills training On-the-job experience Cash	↑	—	US\$671.12 per participant
16.1	N/A	Dominican Republic	2009 to 2013	Unemployed youth that could face long-term unemployment	Vocational training, soft skills training, internship	Hard skills training Soft skills training On-the-job experience	—	—	US\$379.32 per participant
16.2					Soft skills training, internship	Soft skills training On-the-job experience	—	—	US\$189.66 per participant

- 13 [Bandiera, Oriana, Markus Goldstein, Imran Rasul, Robin Burgess, Selim Gulesci, and Munshi Sulaiman. "Intentions to participate in adolescent training programs: Evidence from Uganda." Journal of European Economic Association 8, no. 2-3. \(January 2011\): 548-560.](#)
- 14.1, 14.2 [Elsayed, Ahmed, Kevin Hempel and Adam Osman. "'Overcoming Youth Unemployment in Egypt: Randomized Evaluations Showcase the Promise of Active Labor Market Programs.'" Working Paper, October 2018.](#)
- 15.1, 15.2, 15.3 [Rosas, Nina, Maria Cecilia Acevedo, and Samantha Zaldivar. They got mad skills: the effects of training on youth employability and resilience to the Ebola shock. The World Bank, Policy Research Working Paper, April 2017.](#)
- 16.1, 16.2 [Acevedo, Paloma, Guillermo Cruces, Paul Gertler, and Sebastián Martínez. "Living Up to Expectations: How Vocational Education Made Females Better Off but Left Males Behind." Working Paper, March 2018.](#)

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
17.1	Link	Uganda	2012 to 2017	Low-income youth and firms	Vocationally trained	Hard skills training	↑	↑	US\$535.39 per participant
17.2					Vocationally trained + matched	Hard skills training Job placement support	↑	↑	US\$535.39 per participant
17.3					Untrained + matched	Job placement support	Not reported	Not reported	Not reported
17.4					Firm trained (wage subsidy + matched)	Hard skills training On-the-job experience Job placement support	↑	—	US\$56.96 per firm for six months
18	N/A	Brazil	2012 to 2013	Low-income youth who are high-performing on tests and interviews	Vocational, academic and life skills training, delivered utilizing arts and dance	Hard skills training Soft skills training	↑	↑	US\$2,534.57 per participant
19	N/A	United States	1994 to 2000	Low-income youth	Vocational training, academic instruction, work experience, residential living (including health) services	Hard skills training Soft skills training On-the-job experience Career counseling	↑	↑	US\$26,737.35 per participant
20	N/A	India	2010 to 2012	Low-income women with some schooling	Vocational education	Hard skills training	↑	↑	US\$34.13 per participant
21	N/A	Argentina	2010 to 2015	Low-income youth with some high school education	Life-skills training, vocational training, internships	Hard skills training Soft skills training On-the-job experience	↑	—	US\$2,026.45 per participant
22	Link	Colombia	2005 to 2006	Low-income youth	Training, internship (small stipend included)	Hard skills training On-the-job experience	↑ (Female) — (Male)	↑ (Female) — (Male)	US\$986.79 per participant
23	Link	Colombia	2005 to 2006; records collected 2008 to 2014	Low-income youth	Training, internship (small stipend included)	Hard skills training On-the-job experience	↑	↑	US\$1,068.37 per participant

17 Alfonsi, Livia, Oriana Bandiera, Vittorio Bassi, Robin Burgess, Imran Rasul, Munshi Sulaiman, and Anna Vitali. 2020. "Tackling Youth Unemployment: Evidence from a Labor Market Experiment in Uganda." *Food Security* 8, no. 4 (June): 74.

18 Calero, Carla & Gonzalez Diez, Veronica & Soares, Yuri S.D. & Kluve, Jochen & Corseuil, and Carlos Henrique. 2017. "Can arts-based interventions enhance labor market outcomes among youth? Evidence from a randomized trial in Rio de Janeiro," *Labour Economics*, 45 no. C (May): 131-142.

19 Schochet, Peter Z., John Burghardt, and Sheena McConnell. 2001. "Does job corps work? Impact findings from the national job corps study." *American Economic Review* 98, no. 5 (June): 1864-86.

20 Maitra, Pushkar, and Subha Mani. 2017. "Learning and Earning: Evidence from a Randomized Evaluation in India." *Labour Economics* 45 (August): 116-30.

21 Alzúa, María Laura, Guillermo Cruces, and Carolina Lopez. 2016. "Long-Run Effects of Youth Training Programs: Experimental Evidence from Argentina." *Economic Inquiry* 54, no. 4 (April): 1839-59.

22 Attanasio, Orazio, Arlen Guarín, Carlos Medina, and Costas Meghir. "Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial." *American Economic Journal: Applied Economics*, 3, no. 3, (July 2011): 188-220.

23 Attanasio, Orazio, Arlen Guarín, Carlos Medina, and Costas Meghir. 2017. "Vocational Training for Disadvantaged Youth in Colombia: A Long-Term Follow-Up." *American Economic Journal: Applied Economics* 9, no. 2 (2017):131-43.

Study #	J-PAL evaluation summary	Country	Study timeline	Eligibility	Intervention groups	Program components by intervention groups	Impact on probability of working	Impact on earnings	Standardized cost (2021 USD, cost per participant, household, or firm)
24	N/A	Turkey	2010 to 2012	Unemployed with at least primary education	Vocational training	Hard skills training Cash	—	—	US\$1,905.24 to US\$2,112.36 per participant
25	Link	Ghana	2012 to 2018	Youth	Apprenticeship training with a microenterprise	Hard skills training On-the-job experience	↓	↓	Not reported
26	N/A	India	2018 to 2020	Unemployed, low-income rural youth with some secondary education	Residential program with classroom and on-the-job training, placements, two information sessions about placement jobs	Hard skills training Soft skills training Information Job placement support	—	Not reported	Not reported
27	Link	Côte d'Ivoire	Not reported	Youth (18-24 years old)	Apprenticeship training with a master craftsman, 30,000 FCFA (USD 54) monthly stipend, about 180 hours per year of "theoretical" training	On-the-job experience Soft skills training Cash	↑	— (2 years) ↑ (4 years)	Up to US\$2,248.46 per participant
28.1	N/A	Uganda	2012 to 2018	Low-income youth	Vocational training with certification	Hard skills training	↑	↑	US\$535.39 per participant
28.2					Vocational training with certification, matching	Hard skills training Job placement support	↑	↑	US\$535.39 per participant
28.3					Matching	Job placement support	↑	—	Not reported

24 [Hirshleifer, Sarojini, David McKenzie, Rita Almeida, and Cristobal Ridao-Cano. 2014. "The Impact of Vocational Training for the Unemployed: Experimental Evidence from Turkey." Economic Journal 126, no. 597\(March\): 2115–46.](#)

25 [Hardy, Morgan L., Isaac Mulangu Mbiti, Jamie Lee Mccasland, and Isabelle Salcher. "The Apprenticeship-to-Work Transition: Experimental Evidence from Ghana." World Bank Policy Research Working Paper, May 2019.](#)

26 [Chakravorty, Bhaskar, Wiji Arulampalan, Clement Imbert, Apurav Y. Bhatiya and Roland Rathelot. "Can Information about Jobs Improve Effectiveness of Vocational Training? Experimental Evidence from India." IZA DP No. 14427, May 2021.](#)

27 [Crépon, Bruno and Patrick Prémard. "Direct and Indirect Effects of Subsidized Dual Apprenticeships." Working Paper, June 2021.](#)

28.1, 28.2, 28.3 [Bandiera, Oriana, Vittorio Bassi, Robin Burgess, Irman Rasul, Munshi Sulaiman, and Anna Vitali. "The Search for Good Jobs: Evidence from a Six-year Field Experiment in Uganda." Working Paper, December 2021.](#)