

Maximizing the impact of short-term training programs

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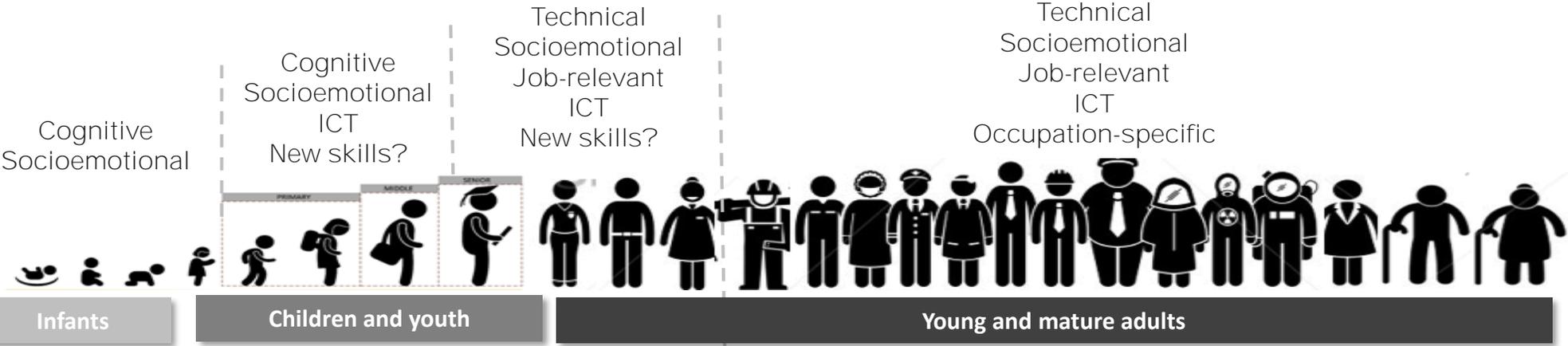
World Bank, May 2018

Skills formation is cumulative and shaped continuously along the life course

Future Workforce

Current Workforce

What Skills?



For whom?

Intervention?

Goal?

Education & Training

Short & Long Term Training

Creativity, innovation, citizenship, employment...

Employment, firm productivity, technology diffusion...

Zooming in ... short-term training programs*

Do they work?

- yes?
- no?
- maybe?



... let's look at the evidence

***defined as training programs lasting up to 12 months in duration**

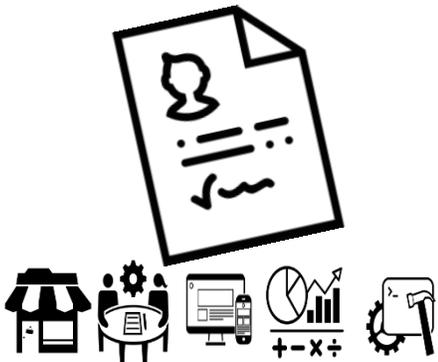
Main messages

- 1. Some programs work, for some people; but some programs do not work and/or have very widely different impacts**
- 2. Impacts appear to grow, rather than diminish, over time, so longer-term monitoring (beyond training program) important**
- 3. There are principles of effective design**

To draw lessons from the evidence, consider..

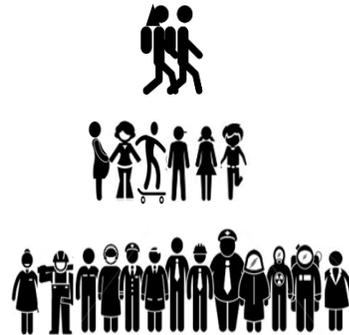
4 factors...

1 What are the outcomes targeted?



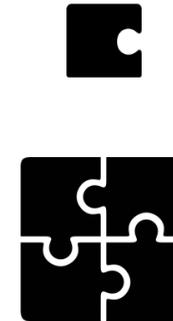
Outcomes

2 What is the profile and needs of program participants?



Target population

3 What are the program design and characteristics?



Program Characteristics

4 What is the context like?



Context

1 Outcomes

Short-term training programs typically target (measure) from a range of outcomes, but often only a small number

Employment & income



For example: formality in employment, hours worked, earnings, employer-granted benefits, income diversification, consumption, savings, welfare dependency

Enterprise Development



For example: Business start-up, business ownership, business performance, business practices, business survival, business assets, access to loans, loan repayment

Skill Development



For example: development of cognitive (basic cognitive, financial and business skills), socio-emotional and technical skills, enrollment in further education or training

Behavior



For example: health, substance abuse, family welfare, empowerment, sexual and reproduction practices, engagement in community, outlook on life

2 Target population

Training participants represent a very broad range of profiles and needs

Target Group	Education Profile	Labor market status	Desired outcome(s)
 Upper secondary and tertiary students	General secondary education students TVET Students Higher education students	Currently studying	Improving school-to-work transition Enhancing employability Reducing risky behavior
 Out-of-school youth	Unschooling Primary education graduates / drop outs General secondary education graduates/drop outs TVET graduates / dropouts Higher education drop outs	Unemployed Underemployed Inactive	Finding a first job Enhancing employability Promoting entrepreneurship Reducing risky behavior
 Adult under- or unemployed	Unschooling Primary education graduates / drop outs General secondary education graduates/drop outs TVET graduates / drop outs Higher education graduates / drop outs	Employed Unemployed Underemployed Inactive	Finding a better job Enhancing employability Increasing innovation and firm productivity Diffusing new technologies Promoting entrepreneurship

3 Program characteristics

The design and characteristics of programs also vary



Duration



Between 3 days and 1 year



Delivery



Public training providers
Private training providers
NGOs
Local artisans



Type of training



In-classroom
On-the-job



Financing



Stipends
Grants
Vouchers
Taxes
Out-of-pocket/fees



Type of content



Vocational
Life skills
Socio emotional skills
Job market
Business development
Business management



Cost per participant



Data usually unavailable.
In programs reviewed,
unit costs ranged between
\$407 and \$34,500 (2012
USD)

4 Context

Context very often mediates outcomes

Labor market

- Size of formal and informal sector
- Job creation (labor demand)
- Labor taxes
- Hiring, firing and other labor regulations (e.g, minimum wages)



Local economy

- Growing and declining sectors
- Urban/rural
- Tradeable sectors

Skills market

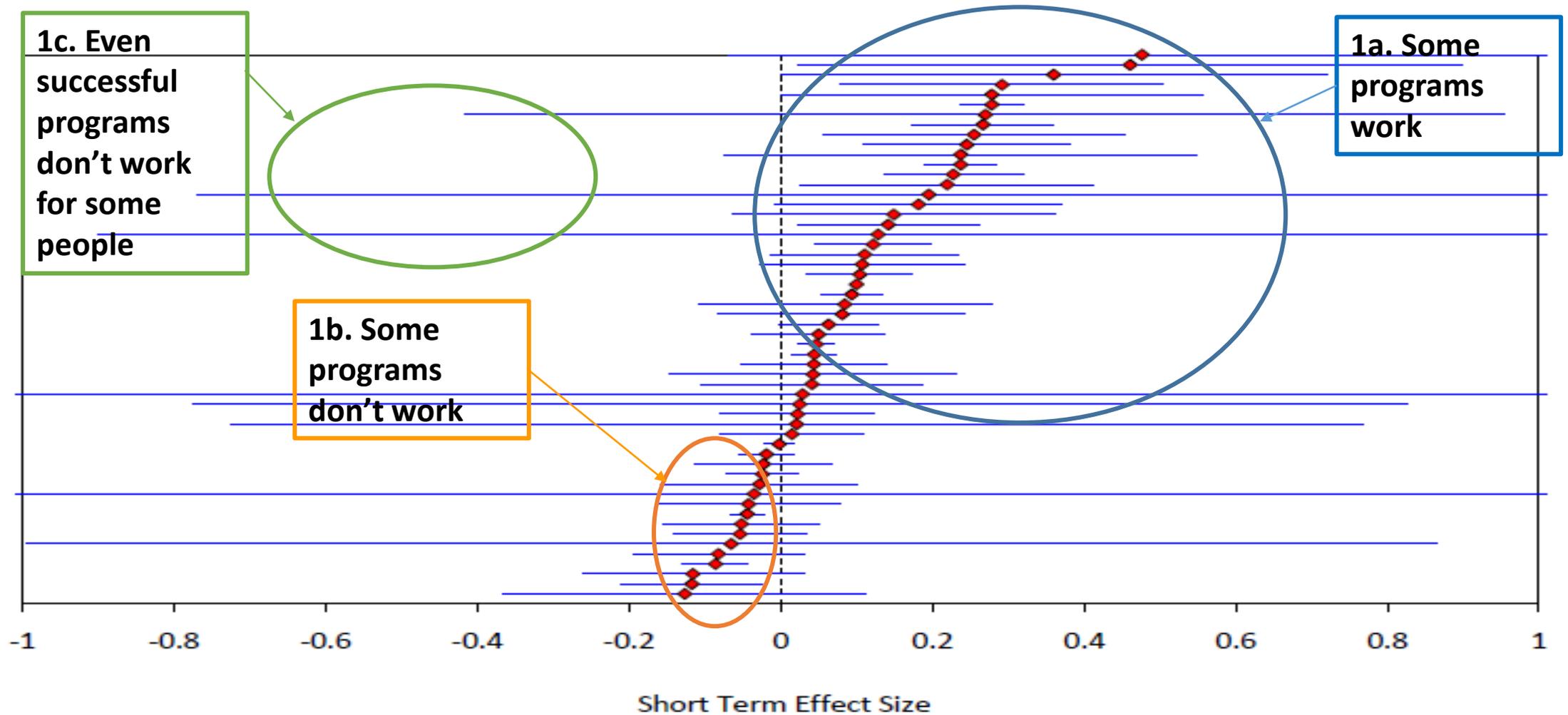
- Skills in demand
- Skills supply
- Actual and perceived training quality
- Information asymmetries (signaling of skills, quality of providers, career prospects)
- Incentives of training providers



Local norms (culture)

- Violence
- Gender discrimination
- Openness towards new endeavors
- Tolerance for failure
- Social unrest , etc.

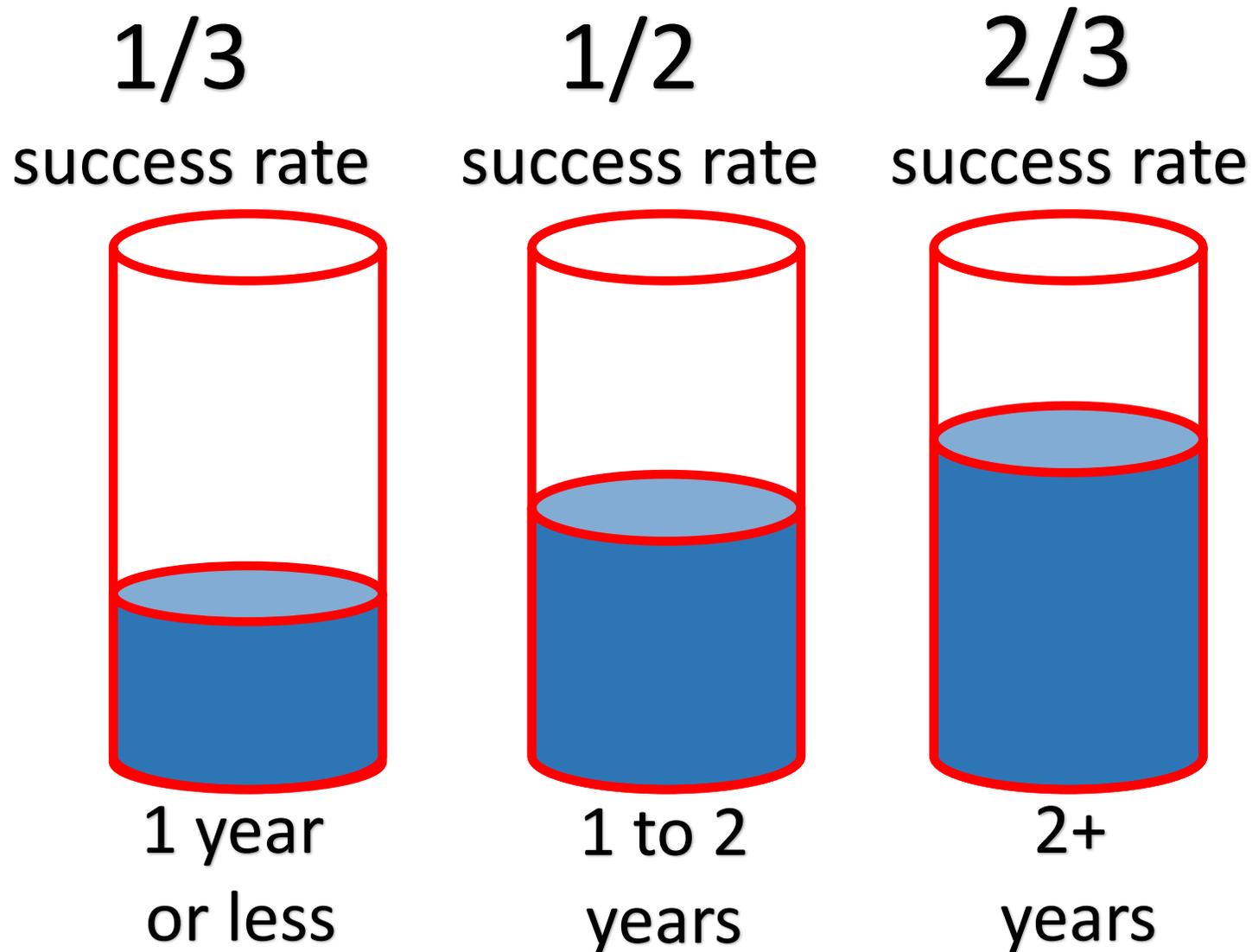
Message 1: Some programs work, for some people; but some programs do not work and/or have very widely different impacts



Impacts vary across participants and context

- **Often larger impacts for women (though not always), disadvantaged youth, and long-term unemployed**
- **Smaller impacts for older workers and very young individuals**
- **Larger impacts in low and middle income countries**
- **Larger impacts during periods of low economic growth in more developed economies, but not likely the case in developing countries where impacts tend to be larger in areas of more economic dynamism**

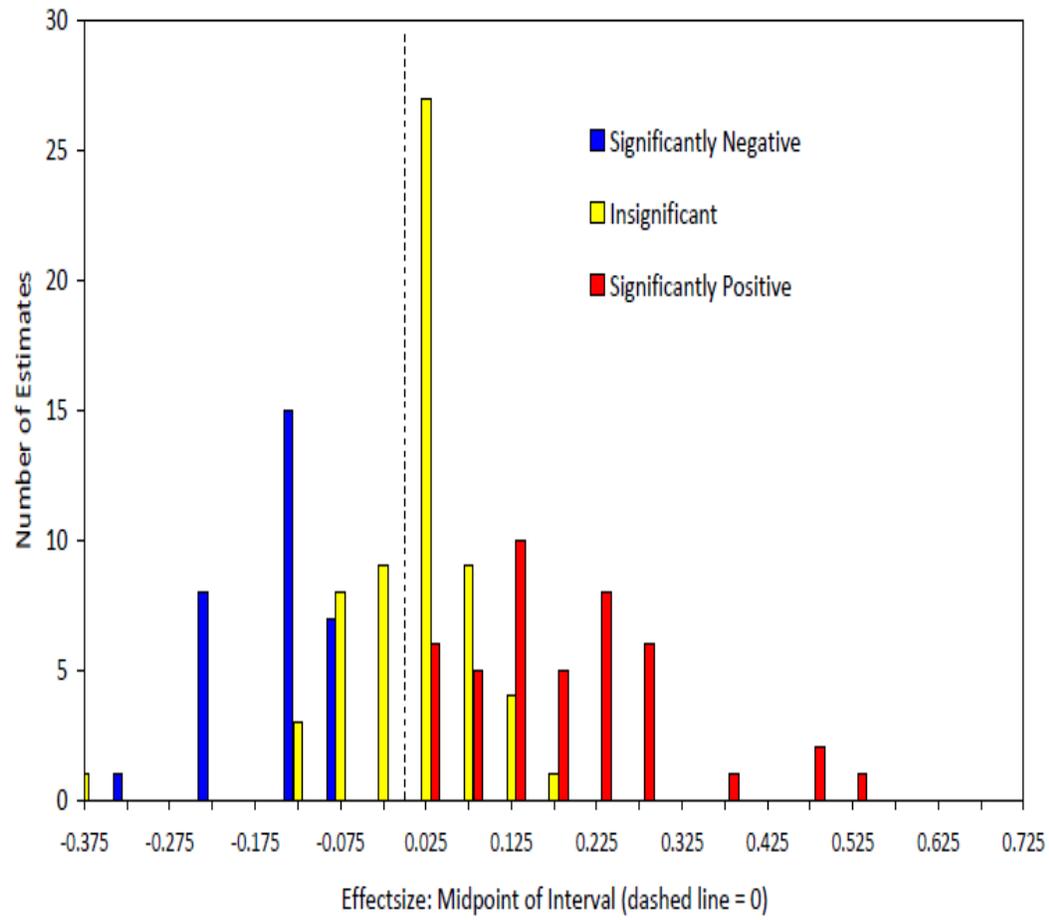
Message 2. Impacts tend to grow, rather than diminish, over time



Card, Kluge, Weber (2015),
What Works? A Meta
Analysis of Recent Active
Labor Market Program
Evaluations, IZA DP No.
9236

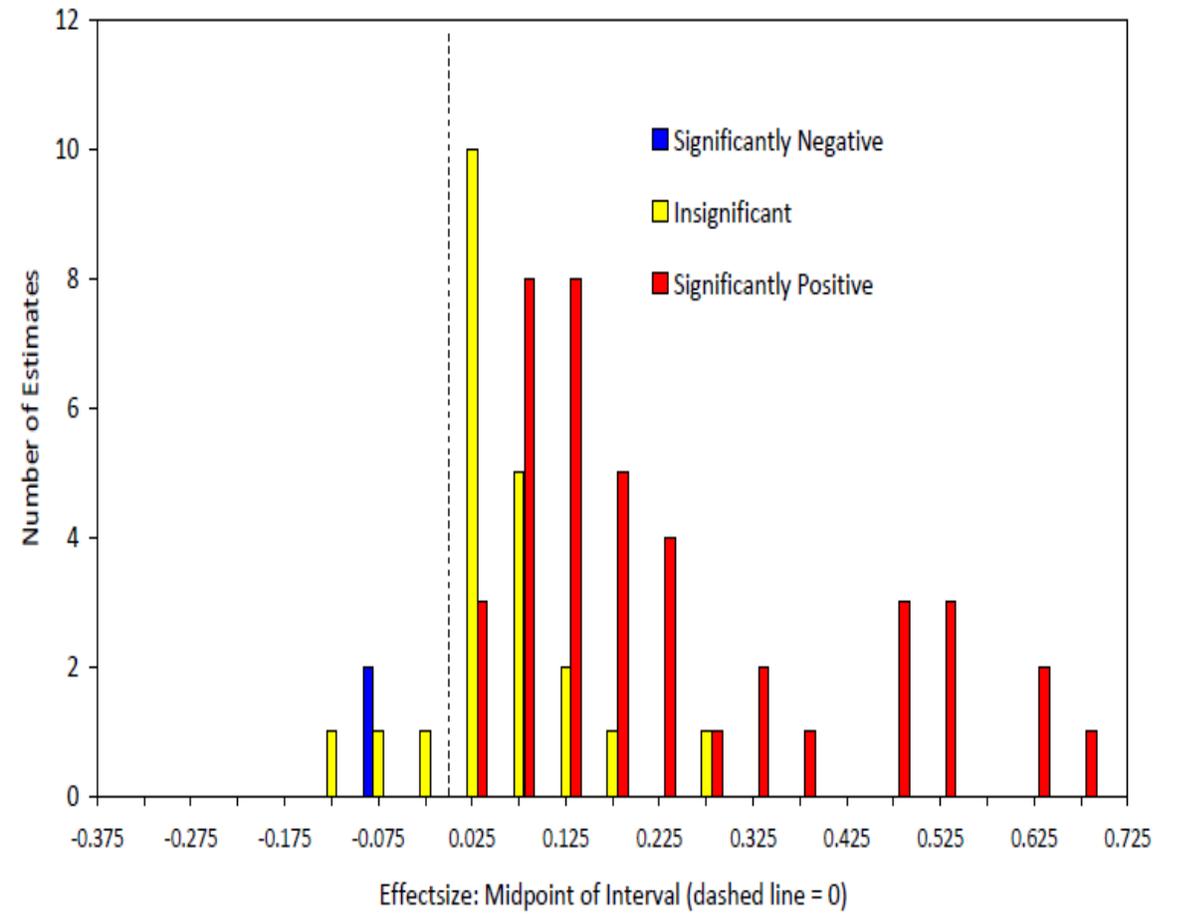
Short term effects

Appendix Figure 2a: Histogram of Short Term Effect Size Estimates



Longer term effects

Appendix Figure 2c: Histogram of Longer Term Effect Size Estimates



Message 3: Principles of effective design

There is no silver bullet, but here are some pointers:

- 1. Tailor programs based on the characteristics and needs of participants. A *one-size fits-all* will not work**
- 2. Design interventions that are comprehensive. That is, complement training with wrap-around services to support graduates to transition into jobs**
- 3. Include socioemotional skills in the job-relevant or occupation specific curricula**
- 4. Ensure programs have an on-the-job training component to acquaint trainees with the world-of-work, whether through internships or apprenticeships**
- 5. Use incentives to establish partnerships with industry, employers and associations**
- 6. Provide financial and non-financial incentives to maximize program take-up and completion**
- 7. Understand and manage the structure of incentives that training providers face since they are the entry point to improve service delivery**
- 8. Measure, monitor and publicize (widely) training outcomes**

Some examples

Youth Skills Training in Dominican Republic boosted earnings and formal employment over long term

1. Disadvantaged youth out of work, age 16-29, incomplete high school
2. **Classroom-based training** (225 hours)
 - A. **Vocational training** (150 hours) tied to needs of local employers
 - B. **Socio-emotional skills training** (75 hours): Self-esteem, communication, conflict resolution, goal-setting, time management, team work, decision making
3. **Apprenticeships in private companies** (240 hours):
 - On the Job Learning: 6 hours per day during 8 weeks
 - **Counseling** with the training provider: 4 hours per week (8 weeks)

Earlier evaluations indicate positive impacts on earnings and formal employment, arising largely from SE skills

Long-term (6-7 yrs) RCT evaluation: Ibarra et al (2015)

• Long-term impacts:

Increased Formal Employment				
All	Men	Santo Domingo	SD women	SD Men
18%	25-27%	31-39%	33-60%	35%

Higher Earnings
SD women 25-31%

Jovenes – Youth Employment training in Colombia lead more men and women to go back to education

- **Prior short-term evidence** (Attanasio, Kugler, Meghir 2011)
 - **One year after the lottery, training offer increased the probability of formal employment by 7pp and earnings by 20 percent among women.**
 - **No short term labor market effects among men.**
- **Long-term (8 years) impacts on formal employment and earnings, and boosts further education** (Kugler et al 2015)

	Enrolled in University	Enrolled in Vocational College	Enrolled in University	Enrolled in Vocational College	Enrolled in University	Enrolled in Vocational College
	Full Sample		Male		Female	
Treated	0.025** (0.011)	0.010* (0.005)	0.043** (0.017)	(0.002) (0.009)	0.011 (0.014)	0.020*** (0.007)
Control Mean	0.110	0.024	0.116	0.035	0.105	0.015

Adult literacy with monitoring program boosts literacy and numeracy among adults in Niger

- **160 villages were randomized into three groups: (i) those receiving adult education; (ii) getting adult education + monitoring cell phone calls; and (iii) control getting nothing. Five days a week, three hours per day, over four months. low-cost to replicate**
- **Monitoring calls each week during the last two months of the literacy course to: the teacher, the village chief, two randomly selected (female and male) students**
- **Impact seems to occur through increased teacher and student effort and motivation due to increased attention**

Figure 3A. Impact of Monitoring on Reading Timed Z-Scores

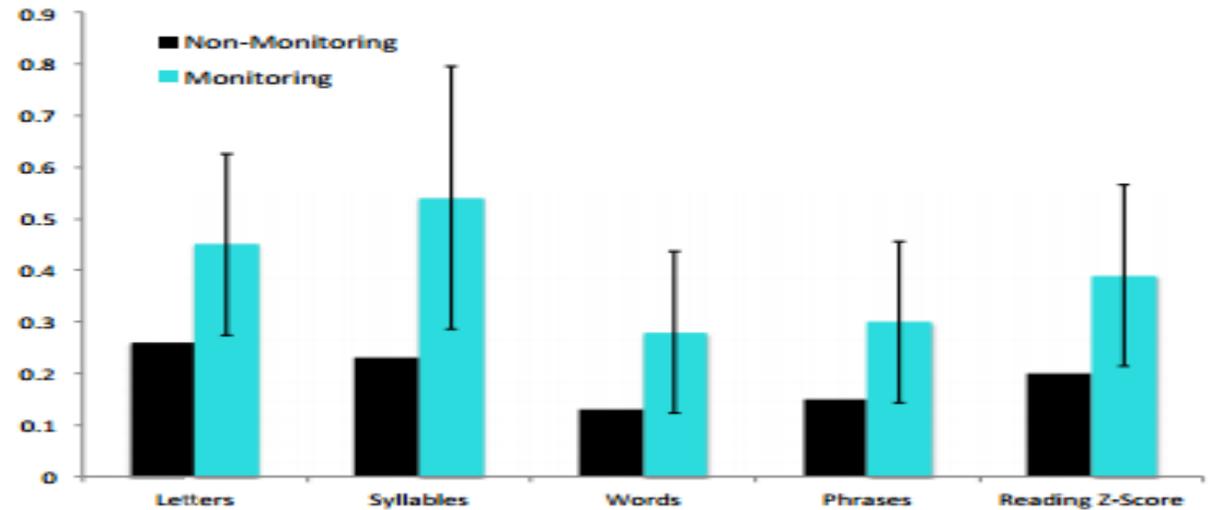
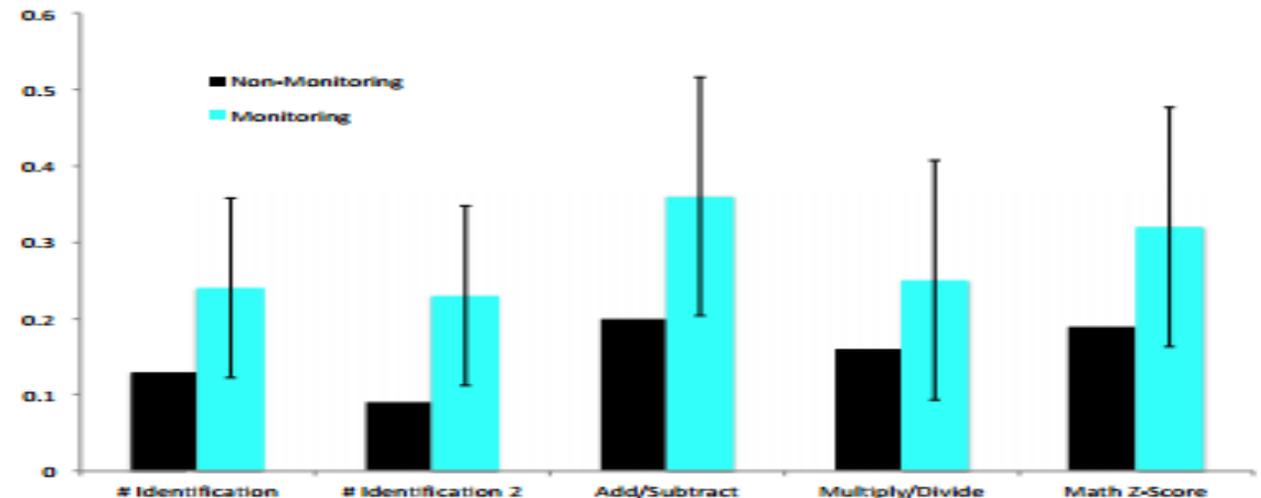


Figure 3B. Impact of Monitoring on Math Z-Scores



In India, an adult literacy program paired with parenting training improved mothers' literacy and numeracy

- Households from 480 villages in the states of Bihar and Rajasthan were assigned to receive either: (i) adult literacy (language and math) classes for non-literate mothers; (ii) training for mothers on how to enhance their children's learning at home; (iii) a combination of the latter two; and (iv) control getting nothing. Five days a week, three hours per day, over four months. low-cost to replicate
- Mother Literacy classes were delivered two hours a day, six days a week by trained volunteers. Parenting classes delivered by a paid staff member of the implementing NGO (*Pratham*) who visited each mother once a week for about 15-20 minutes.
- **Results: Mothers' literacy and numeracy rose significantly in all three treatment groups, especially among mothers in the combined intervention who attended classes more frequently and had higher take-up rate of the adult literacy classes. And treated mothers are more involved in children's learning.**
- **The scaling from NGO to government implementation has proved tricky.**

Summing up:

Designing and implementing ST training programs requires accounting for broad diversity of outcomes, participants, program design and characteristics and context....

Programs can range from having...

	... a narrow scope	... a comprehensive scope
Outcome:	Skills development	Increased income Employment Reduced dependency on welfare
Target:	Out-of-school adolescent girls	Unemployed (18-64 years old)
Characteristics:	One week In-classroom Life skills Training provided by one NGO Stipends US400 per participant	One year In-classroom and on-the-job Life, vocational and job-search skills Training provided by several public and private institutions Stipends, room and board US34,500 per participant
Context:	Rural, agriculture-based, few formal jobs, peaceful, gender discrimination	Urban, various economic sectors, available formal jobs, racial discrimination, high crime

Summing up:

Short-term skills training can be made more cost-effective if...

- **Programs are designed with the needs and incentives (monetary and intrinsic) of the target population in mind, with proper evaluations to discern impacts and implementation modalities that allow scaling up**
- **They are tailored to the realities of the relevant labor markets**
 - **Importance of informal apprenticeships in many countries**
 - **Importance of self-employment, for which, other constraints—such as lack of working capital— are also important**
- **They are delivered at lower unit costs and they beat the alternative of simply giving cash transfers (over at least one year horizon).**



Thank you.

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ANNEX: Examples from systematic literature review of short-term training programs

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Turning to the evidence....

Search strategy

- Web search to identify:
 - Existing literature on STT
 - Impact evaluations of STT focusing on life, job search, vocational, technical and entrepreneurship skills
 - Impact evaluations of active labor market policies with training components
 - Meta-analyses of ALMPs and STT programs
- WBG Internal Network search
 - Systematic assessments and impact evaluations of STT programs and ALMPs
 - Interventions using STT

Knowledge base

- 400+ papers on design, implementation and evaluation of STT programs
- 129 program evaluations on STT, socio-emotional skills and entrepreneurship training
- 5 meta-analyses of ALMPs and STT programs
- 2 systematic assessments of STT programs
- 36 interventions using STT

Final sample

After assessing our knowledge base against standards for quality, rigor and relevance, we selected:

- 47 impact evaluations
- 6 meta-analyses
- 5 systematic reviews

Presenting the evidence by target group



Upper secondary and
tertiary students

9 programs



Out-of-school
youth

20 programs



Under- or
unemployed adults

18 programs

Life cycle

Target Group: Upper secondary and tertiary students



Summary of Results: 9 programs

	ACHIEVED OUTCOMES			
	Employment & income	Enterprise development	Skill development	Behavior
1. Mato-Oput5				X
2. Becoming a Man			X	
3. Teen Outreach			X	X
4. Learn and Serve America			X	X
5. Entrepreneurial Orientation and Education		-		
6. Network for Teaching Entrepreneurship				X
7. Junior Achievement	X	X		
8. Student Training for Promoting Entrepreneurship (STEP)		X		X
9. Business Plan Thesis Competition		X	X	X
Number of programs with positive and significant results	1	3	4	6

Target Group: Upper secondary and tertiary students

Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(1) Mato-Oput5	Northern Uganda	Cluster randomized control design	Individuals ages 9 to 18	6 schools	Behavior: Forgiving a bully (+)** Odds Ratio: 3.6 Forgiving a friend who returns a book s/he had stolen (+)** Odds Ratio: 3 Forgiving a friend who abuses one (+)** Odds Ratio: 2 Self-reporting verbally abusing others (-) ** Odds Ratio: 0.4	The two groups had similar baseline attitudes scores. After intervention, the intervention group tended to support forgiving a bully (p-value = 0.04); forgiving a friend who returns a book he/she had stolen (p-value = 0.036); and not fighting a friend who lies about one, to a higher degree than the control group. The intervention significantly contributed to these post-intervention differences (regarding bullies: OR = 3.6, p-value = 0.010; a person who abuses one: OR = 2, p-value = 0.002; and a person who returns a book he/she had stolen: OR = 3, p-value = 0.020). “Boarder-line” effects were also detected in teacher involvement in resolution of quarrels among children (OR = 1.3, p-value = 0.076) and self-reporting of verbally abusing others (OR = 0.4, p-value = 0.027)
(2) Becoming a Man	United States	RCT	Individuals in grades 9 and 10, referred by school staff	106 males in grades 9 and 10 in public schools	Skills Development: Math test cores: Treatment on treated (TOT) 0.230 (+)*** Math grades: TOT 0.581 (+) *** Non-math courses failed: TOT 0.687(-)***	Participation increased math achievement test scores by 0.19 to 0.31 standard deviations (SD), depending on how the researchers standardize, increased math grades by 0.50 SD, and reduced course failures in math by one-half in addition to reducing failures in non math courses
(3) Teen Outreach	United States	RCT	Students in grades 9 - 12	695 high school students	Skills Development: Failing courses: standardized estimate 0.24 (-)*** Academic suspension: standardized estimate 0.26(-)*** Behavior: Pregnancy rates standardized estimate 0.24(-)*	Risk of school suspension in the treatment group was less than half the size (i.e. 42%) of the risk of school suspension for members of the control group. Risk for course failure was 39% as large in treatment relative to the control group. Risk of teen pregnancy was only 41% as large as in the control group.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Upper secondary and tertiary students



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(4) Learn and Serve America	United States	Quasi-experimental	Students in grades 6 - 12	1,052 participants in grades 6 - 12	<p>Skills Development: Engagement in school (+)*** Math grades (+)** Science grades (+)* Core GPA (+)*</p> <p>Behavior: Ever pregnant or made someone pregnant (-)* Cultural diversity (+)** Service leadership (+)*** Total civic attitudes (+)*** Volunteered for a community organization or got involved in other community service in the last six months (+)*** Hours or support to community service initiatives in the last six months (+)***</p>	<p>Behavior: While the Learn and Serve programs had a positive impact on civic attitudes, the impacts were generally small, showing less than a 5% difference between participant and comparison group scores. In part, the relatively small size of the impacts reflects the fact that most young people began with a fairly well-developed sense of civic responsibility. In that regard, service learning programs might best be understood as strengthening or reinforcing students' generally positive civic attitudes rather than building a positive set of attitudes from scratch.</p> <p>Skills Development: Where gains [in terms of educational impact] are evident, they are generally incremental in nature - a 10% increase in math grades, a 6.5% increase in science, and a 4% increase in core GPA.</p>
(5) Entrepreneurial Orientation and Education	Austria	Quasi-experimental	General and vocational secondary education students	6 general sec. schools, 4 commercial academies, 3 sec. technical schools, and 1 secondary school for technical and business professionals.		<p>Commercial academy and secondary technical school graduates were more likely to start a career after graduation</p> <p>Commercial academy students had more opportunities to gain practical experience and demonstrated the strongest entrepreneurship orientation, but these conditions did not lead to higher start-up inclinations or a pronounced entrepreneurial orientation</p> <p>The development of start-up inclinations seemed to be closely linked to social influences in the microsocial environment. For example, the most important predictors of start-up inclinations included: entrepreneurs in the surroundings (0.31***); innovative orientation (0.27***); experience in leadership and organization (0.19***); and team-oriented instruction methods (0.11***).</p>
(6) Network for Teaching Entrepreneurship	United States	Quasi-experimental	High school students	268 students	<p>Behavior: Entrepreneurial Behavior (+)*** (score increase of 7.5%)</p>	

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Upper secondary and tertiary students

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(7) Junior Achievement Company Program	Sweeden	Quasi-experimental design using Propensity Score Matching (PSM)	Upper secondarylevel students	224,838 individuals	Employment and income: Income (+)** -- Expected income increase of 7% Enterprise Development: Starting a new business (+)* -- Likelihood of starting a business increase of 20%	
(8) Student Training for Promoting Entrepreneurship	Uganda	Randomized controlled field experiment	Undergraduate students in their final semester	400 students	Enterprise Development: Action planning (+)** (F = 5.53, group effect after training 0.47) Business opportunity identification (+)** (F = 7.70, group effect after training 0.42). Entrepreneurial goals (+)* (F = 2.88, group effect after training 0.31) Behavior: Entrepreneurial self-efficacy (+) *** (F = 10.44, group effect after training 0.44) Action knowledge (+)** (F = 17.65, group effect after training 0.61)	
(9) Business Plan Thesis Competition	Tunisia	Impact evaluation using a randomized assignment	Undergraduate students	1500 students	Enterprise development: Self-employment (+)**: TOT 0.07 Skills Development (example of skills measured): Business Skills (+)**: TOT 0.17 Behavior (example of behaviors measured): Optimism (+)**: TOT 0.21 Extraversion (+)** TOT: 0.18	The analysis finds that the entrepreneurship track was effective in increasing self-employment among applicants, but that the effects are small in absolute terms. In addition, the employment rate among participants remains unchanged, pointing to a partial substitution from wage employment to self-employment. The evidence shows that the program fostered business skills, expanded networks, and affected a range of behavioral skills. Participation in the entrepreneurship track also heightened graduates' optimism toward the future shortly after the Tunisian revolution.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Upper secondary and tertiary students

Program examples

		Entrepreneurship education	
		Junior Achievement Company	Business Plan Thesis Competition
Outcomes		Enterprise Development Income	Employment and income Skills Development Behavior
Program characteristics	Duration	One school year	One university year
	Type of training	In classroom, hands on	In classroom, hands on (by writing a business plan and submitting it to competition – winners became eligible for seed capital)
	Type of content	Entrepreneurship Work readiness Financial literacy	Business training (entrepreneurial behavior, business management, marketing, market research, business plan development and networking skills) Personalized coaching sessions Support to write business plan
	Delivery	High Schools Entrepreneurship education companies	Business training (Local employment offices) Personalized coaching sessions (external private sector coaches) Support to write business plan (universities)
	Financing	Fees	N/A
Context		Urban areas in Sweden (also implemented in other countries)	Tunisia (National application)
Profile of participants		High school students (grades 9-12)	Undergraduate students in last year of studies in 13 universities

Target Group: Out-of-School Youth



Summary of Results: 20 programs

	ACHIEVED OUTCOMES			
	Employment & income	Enterprise development	Skill development	Behavior
1. Procajoven	X			
2. Jóvenes en acción	X			
3. Juventud y Empleo	X			X
4. Galpão Aplauso	X			
5. Apprenticeship Training for Vulnerable Youth	X		X	X
6. Ninaweza	X		X	X
7. Jordan New Opportunities for Women	X			X
8. Entra 21	X			
9. Economic Empowerment of Adolescent Girls and Young Women (EPAG) program	X	X		X
10. Questscope Non-Formal Education program				X

Target Group: Out-of-School Youth



Summary of Results: 20 programs

	ACHIEVED OUTCOME			
	Employment & income	Enterprise development	Skill development	Behavior
11. Job Corps	X		X	X
12. Empowerment and Livelihood for Adolescents	X	X	X	X
13. National Guard Youth ChalleNGe Program	X		X	X
14. Year Up	X			
15. Program H				X
16. Involucrando hombres Jóvenes en el Fin de la Violencia de Género				X
17. Jóven Noble				X
18. Youth Opportunities Program	X	X	X	X
19. Entrepreneurship Development Center	X	X		
20. Apprenticeship program	X			
Number of programs with positive and significant results	16	4	6	13

Target Group: Out-of-School Youth



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(1) Procajoven	Panama	Quasi-experiment	Youth (18-29), low-income, unemployed, first-time job seekers with complete secondary education	766 individuals	Employment and income: Probability of employment for women in Panama City (+)** (55.8% treatment, 40.8% control); Number of weekly hours worked by females (+)** (16.9 treatment, 10.7 control) in Panama (+)* (20.25 treatment, 16.9 control), and by females in provinces outside Panama City (+)* (17.7 treatment, 14.35 control); labor earnings in the month of the survey for the insertion modality by females (+)* (\$131 treatment, \$92 control) in Panama (+)** (\$212 treatment, \$137 control)	For the general population, the results show that although there is five-percentage point difference between treatments and controls, the differences are not statistically significant. However, when we disaggregate the results by gender and region we find significant effects. The insertion modality has a marginally significant impact on the employment rate of women (47% for the treated and 35% for the controls) and a significant impact for the residents of Panama City (56% against 41%), while the transition modality has a large and significant impact for the women (42% against 26%).
(2) Jóvenes en acción	Colombia	RCT	Youth (18 - 25), low income	4,350 individuals	Employment and income: Probability of employment for women (+)** (6.1%); number of weekly hours worked by women (+)** (3.41); labor income for women (+)** (\$20); formal contracts for both genders (+)** (0.079); formal wages for both genders (+)** (\$15)	The program raises earnings and employment for women. Women offered training earn 19.6 percent more and have a 0.068 higher probability of paid employment than those not offered training, mainly in formal-sector jobs. Cost-benefit analysis of these results suggests that the program generates much larger net gains than those found in developed countries.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(3) Juventud y Empleo	Dominican Republic	RCT	Youth (16-29), high school dropouts	10,309 individuals	<p>Employment and income: Monthly earnings for women and for those residing in Santo Domingo (+)** ITT 913.95 (23 USD in 2011); employment with health insurance for men (+)* ITT 0.0802</p> <p>Behavior: Teenage pregnancy (-)* ITT 0.0492; considers having very good health (+)** ITT 0.0386; Youth expectations regarding: a) having a better educational level for women ages 16 to 24 (-)* ITT 0.1021; b) living in a better neighborhood for women (+)** 0.1077; c) owning a business for women (+)** ITT 0.0968 at ages 16 to 19 (+)** ITT 0.1699 ; d) completing professional aspirations for women (+)** ITT 0.0911 at ages 16 to 19 (+)** ITT 0.1543; e) having a better life in 20 years for women (+)* ITT 0.0590 at ages 16 to 19 (+)** ITT 0.1811; f) having children with a better life for women ages 16 to 19 (+)** ITT 0.1224; g) wealth position in 10 years for all (+)** ITT 0.0677 and women (+)** ITT 0.1057, particularly women older than age 24 (+)** ITT 0.1742; leadership skills for men (+)** ITT 0.1425; self-esteem for men (+)** ITT 0.1265; self-organization for all (+)** ITT 0.0966; persistency of effort for women (+)** ITT 0.1019</p>	In terms of labor market outcomes, the program has a positive impact on job formality for men of about 17 percent and there is also a seven percent increase in monthly earnings among those employed. However, there are no overall impacts on employment rates. The program reduces teenage pregnancy by five percentage points in the treatment group (about 45 percent), which is consistent with an overall increase in youth expectations about the future. The program also has a positive impact on non-cognitive skills as measured by three different scales. Scores improve between 0.08 and 0.16 standard deviations with the program.
(4) Galpão Aplauso	Brazil	RCT	Youth (younger than 29), low income, not involved in drugs or gang activity	380 individuals	<p>Employment and income: Employment during previous week after four to five months (+)** SD OLS: 0.152** Employment in salaried job during previous week (+)** DD OLS: 0.252 Monthly labor income (+)** DD OLS: 302.984 (77 USD in 2015)</p>	In the short term (2-5 months after the end of the program), the impact on employment probability is 7.4 percentage points and on monthly earnings \$15, but these are not statistically significant. The estimated impacts increase to 14.6 percentage points and \$28.9, between 11 and 13 months after program completion, these changes are statistically significant.

Note:
Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(5) Apprenticeship Training for Vulnerable Youth	Malawi	RCT	Youth (younger than 24), HIV/AIDS-vulnerable (poor, orphans, or school dropouts)	1,900 individuals	<p>Employment and income: Only limited impact was found on new business activities and increased earnings</p> <p>Skills development: Knowledge of trades (+)*** TOT men 5.061, TOT women 4.553; knowledge of how to calculate profits of a business (+)*** TOT men 2.963, TOT women 2.970; knowledge of how to start a business (+)*** TOT men 0.448, TOT women 0.443; time spent on learning and training (+)*** TOT: 772.875</p> <p>Behavior: Happy and satisfied with life (+)*** TOT 0.132; perception that life has improved during the past year (+)*** TOT 0.218; perception that the individual is able to earn money outside farming (+)*** TOT 0.172</p>	Training (ITT estimate) increases self-assessed skill score in a specific area of expertise by 2.6 points on a 10-point scale. The mean value for this variable is 2.6 in the control group, so the effect of training represents a substantial increase. Training increases the subjective business-profit-calculation ability by 37% of control group mean (or 14% with district dummies and baseline controls). Training also increases the likelihood that a respondent knows how to start a business by 24 percentage points (or 9 percentage points with controls, representing a 20 percent increase from the mean in the control group). Training participation increases hours spent on skill development (through school, or other job training) by 6 hours (ITT) or 14-24 hours one month after the training. Training had strong positive effects on subjective measures of well-being. It increases the share of respondents happy and satisfied with life and agreeing that life has improved during the last year by 5 and 7 percentage points respectively (22 and 29 percentage point effect in the – TOT specification). These are sizeable increases relative to the control group means. Trainees report being more confident in their ability to switch away from agriculture and earn money in other sectors.
(6) Ninaweza	Kenya	RCT	Unemployed young women living in informal settlements around Nairobi	1,510 individuals	<p>Employment and income: Probability of obtaining a job for those with treatment 1 (+)**; weekly income (+)***</p> <p>Skills development: Knowledge of ICT (+)***; knowledge of life skills for treatment 1 (+)***</p> <p>Behavior: Confidence levels of those who previously were not confident (+)***</p>	Those in treatment 1 were 14% more likely to obtain jobs than those in the control. The gains in weekly income were 445 KES (\$4.4) higher for those in treatment 1 than control and 506 KES (\$5) higher for those in treatment 2 than in the control. The knowledge gain in the ICT test was 17.3%-points higher for treatment 1 than control and 15.8%-points greater for treatment 2 than control. Those in treatment 1 showed greater knowledge gain than those in treatment 2 and control on the life skills test (7.3%-points and 6.8%-points respectively). Among those that were not confident in their qualification at the beginning of the program, those in treatment 1 and 2 were 1.4 times more likely to be confident at the end than those in the control

Note:
Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(7) Jordan New Opportunities for Women	Jordan	RCT	Women graduating from eight public community colleges	1,347 students	<p>Employment and income: For job voucher group: employment(+)^{***} 0.395; employed and registered for social security (+)^{**}0.045; ever employed (+)^{***}0.357; months employed since graduation (+)^{***} 1.538; work income (+)^{***}23.730 (333 USD in 2011); hours worked in past week (+)^{***} 13.416</p> <p>Behavior: For group with voucher or both, life ladder (+)^{***} 0.577; mobility index (-)^{***} 0.526; life ladder for the future for those assigned to training (+)^{**} 0.266</p>	There is a large and strongly significant impact of the job vouchers on employment: he 39.5 percentage point increase in employment more than triples the employment rate of 17.8 percent in the control group. However, this impact does not persist once the voucher period has expired. Voucher recipients are 27 percentage points more likely to have ever worked than the control group at endline, and have accumulated an average of 2.4 months more job experience. he job voucher group earns 64 JD (\$90) more per month than the control group at midline, which has the effect of more than tripling the 25 JD (\$35) per month the control group earns. However, by the endline the difference has fallen to only 6 JD (\$8.5)per month and is not statistically significant. The control group mean (s.d.) is 5.0 (2.4) on a scale from 0 to 11, and being assigned to the job voucher intervention results in a significant 0.58 unit increase, while training has an insignificant 0.28 increase. Overall the graduates show a high degree of optimism, when assigned to training they think they will be 0.27 steps higher than what the control group thinks. In contrast, there is a negative and insignificant impact of the job voucher on this measure.
(8) Entra 21	Argentina	RCT	Youth (18-30), unemployed, completed high school, low income	407 individuals	<p>Employment and income: Formal employment for men (+)^{***} (ITT 0.23) and younger participants [18–24] (+)^{**} (ITT 0.101); Earnings (+)^{**} (280 ARS, \$57); Credit in good standing for men (+)^{***} (ITT 0.12) and younger participants [18–24] (+)^{**} (ITT0.07); Welfare dependency for women ages 18–24 (-)^{**} (ITT 0.05)</p>	

Note:
Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(9) Economic Empowerment of Adolescent Girls and Young Women (EPAG) program	Liberia	RCT	Young women (16 to 27), with basic literacy and numeracy skills, out-of-school, and living target communities in and around Monrovia, Liberia.	2,042 young women	<p>Employment and income: Participation in income-generating activities (+)** OLS 0.190 for Job Skills -JS trainees (+)** OLS 0.101; wage employment for JS trainees (+)** OLS 0.145; intensive employment - conditional (+)** OLS 0.251; savings (+)** OLS 0.471</p> <p>Enterprise Development: Participation in income-generating activities for Business Development Services - BDS trainees (+)** OLS 0.226; self-employment for BDS trainees (+)** OLS 0.204; earnings (+)** especially for BDS trainees OLS 768.0</p> <p>Behavior: Self-confidence (+)** Probit 0.308; anxiety about circumstances and the future (-)** 0.150; gender norms (+)** OLS 0.207; access to money (+)** OLS 0.068</p>	<p>The EPAG program increased employment by 47 percent and earnings by 80 percent. The program was more successful in enhancing self-employment than wage employment. At baseline, about 5% of the Job Skills participants were engaged in wage labor; at midline, this increased by 15 percentage points. At baseline, about 37% of Business Development Services participants were engaged in own businesses; at midline, this increased by 20 percentage points. The treatment group was nearly 50 percentage points more likely to have savings than the control group, and they were saving on average LD 2500 (nearly US\$35) more than the control group. EPAG graduates were also twice as likely as the control group to have outstanding loans (6% vs. 3%), and have loans from formal lenders (5% vs. 2%), although the overall rate of obtaining credit remains extremely low. In addition, the impact evaluation documents positive effects on a variety of empowerment measures, including access to money, self-confidence, and anxiety about circumstances and the future. For example, the impacts on control over resources were marked by an increase of 7 percentage points, a small yet statistically significant change. The evaluation finds no net impact on fertility or sexual behavior. At the household level, there is evidence of improved food security and shifting attitudes toward gender norms, although there is no evidence that these shifting norms have affected the division of labor in practice.</p>
(10) Questscope Non-Formal Education program	Jordan	RCT	Youth (13-18 males, 13-21 females), out-of-school, low-income, Jordanians and Iraqi refugees.	127 individuals	<p>Behavior: Conduct problems (-)**</p>	<p>ANCOVA comparing groups at posttest showed no significant intervention effects on the primary outcome, self-efficacy, nor for most other measures, including social skills, family and friends social supports, and overall difficulties. A significant, positive intervention effect was found for one SDQ subscale: conduct problems. Univariate analysis on transformed posttest data demonstrated a significant positive intervention effect of medium effect size on conduct problems after adjusting for baseline scores, $F(1, 124)=5.21$, $p=0.02$, $\text{partial } \eta^2=0.04$.</p>

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(11) Job Corps	United States	RCT	Youth (16-24), low income, living in a disrupted environment, in need of additional education, training, or job skills, free of serious behavioral problems (including substance abuse)	81,000 individuals	<p>Employment and income: Percentage employed in previous three months (+)* diff 2.4; hourly wage (+)* diff 0.22; paid vacation (+)* diff 2.2; retirement or pension benefits (+)*** diff 4.6</p> <p>Skills Development: Percentage ever enrolled in an education or training program during the 48 months after random assignment (+)*** TOT 28.9; average hours ever in education or training (+)*** TOT 8.7; GED certificate (+)*** TOT 20.9; high school diploma (-)*** 3.1; vocational, technical, or trade certificate (+)*** TOT 30.9</p> <p>Behavior: Health insurance (+)** diff 3.0, Arrests and conviction rates (-)*** TOT 5.2</p>	<p>During the four-year survey period, Job Corps increased the education and job training that participants received both inside and outside the program by about 1,000 hours (about the hours of instruction received in a regular 10-month school year). Job Corps also substantially increased the receipt of GED and vocational certificates by more than 20 percentage points each. Statistically significant earnings gains were found in years 3 and 4 after random assignment. In year 4, the gain in earnings per participant was about \$1,150, or 12%. Earnings gains were found across broad groups of students. According to administrative records data, the estimated impacts on earnings in years 5-10 for the full sample are all near zero and none are statistically significant. However, earning gains persist for those 20-24 years old at program application after 5 years of program completion. The arrest rate was reduced by 16% (about 5 percentage points), and similar reductions were found for conviction and incarceration rates. The program had small beneficial impacts on receipt of public assistance and on self-assessed health status, but no impacts on illegal drug use or fertility. Job Corps also had small positive impacts on the percentage married or living with a partner and on the percentage living on their own.</p>

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(12) Empowerment and Livelihood for Adolescents	Uganda	RCT	Adolescent girls (14-20)	4,800 adolescent girls	<p>Emploment and income: Monthly consumption expenditure (+)*** ITT 4361UGX (1.55 USD in 2013)</p> <p>Enterprise development: Entrepreneurial ability (+)*** ITT 5.75; engagement in income-generating activity (+)*** ITT 0.335; self-employed (+)*** ITT 0.56</p> <p>Skills development: Plan to start/return to school for girls who dropped out (+)* ITT 0.076; number of hours spent on going to and attending school, homework, or study per week, for enrolled girls (+)* ITT 1.59</p> <p>Behavior: Teenage pregnancy (-)** ITT 0.029; adolescent girls reporting having sex unwillingly (-)** ITT 0.028; knowledge about pregnancy (+)** ITT 0.048, and HIV (+)*** ITT 0.471; if sexually active, use of condom (+)*** ITT 0.132; Gender empowerment index (+)*** ITT 0.129; early entry into marriage/cohabitation (-)*** ITT 0.075; self-reported anxieties about finding a good job in adulthood (-)*** ITT 0.072; perception of suitable ages for marriage (+)*** ITT 0.777; preferred number of children (-)*** ITT 0.282; perception of suitable age for pregnancy (+)*** ITT 0.620; girls' expectations about their own daughters' age at marriage (+)*** ITT 0.719</p>	Relative to adolescents in control communities, after two years the intervention raises the likelihood that girls engage in income generating activities by 72% (driven by increased self-employment), and raises their expenditure on private consumption goods by 38%. Teen pregnancy falls by 26%, and early entry into marriage/cohabitation falls by 58%. Strikingly, the share of girls reporting sex against their will drops from 14% to almost half that level and aspired ages at marriage and childbearing both move forward.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(13) National Guard Youth ChalleNGe Program	United States	RCT	Youth (16-18), school drop-outs, unemployed, drug-free, and not heavily involved with the justice system	1,173 individuals	<p>Employment and income: Employment in the past 12 months (+)* impact 3.9; earnings in the past 12 months (+)** impact USD 2,266; number of months employed in the past 12 months (+)** impact 0.9; living at parents' home (-)* impact 5.7; living at own home or apartment (+)** impact 5.1</p> <p>Skills development: Earned GED certificate (+)** impact 16.2; earned college credits (+)** impact 16.1; vocational training after 21 and 36 months(+)** impact 7.0; currently taking college courses (+)** impact 3.6;</p> <p>Behavior: Overweight (+)** impact 6.1; always uses birth control (-)** impact 8.0; ever used other illegal drugs (+)** impact 5.0.</p>	ChalleNGe had a large impact in educational achievement: 72% of the treatment group had earned a GED or a high school diploma, compared with 55% of the control group (16 percentage point impact). Beyond high school completion, the program group was more likely to have received vocational training (40% treatment group compared with 33% of control group). 80% of those who reported receiving some training, did so was outside of ChalleNGe. Also, the program group was nearly twice as likely as the control group to have completed at least one college course for credit (not offered through ChalleNGe). Even with the recession at its peak, program group members were more likely to be employed than control group members (58% compared with 51%). Almost 25% of the program group reported an hourly wage of \$10 or more, while less than 20% of the control group was receiving a similar wage, suggesting that ChalleNGe helped some people obtain higher-paying jobs. Average weekly earnings at the time of the survey were \$240 for the program group and \$210 for the control group. The program group appeared to be doing less well than the control group on some health and lifestyle outcomes. There are a few statistically significant differences between groups in measures of health, sexual activity, and substance abuse, which do not reflect well on ChalleNGe, were not seen in earlier surveys, and for which there is no clear explanation.
(14) Year Up	United States	RCT	Youth (18-24), low-income	164 individuals	<p>Employment and income: Earnings (+)*; full-time employment (+);* working in targeted fields (+)</p>	The annual earnings of Year Up participants were \$3,461, or 30% greater, on average, than those of control group members (\$15,082 versus \$11,621, respectively). The differences in earnings during the second year were not due to Year Up participants working more, but rather the fact that they obtained higher-paying jobs. Year Up participants and control group members were equally likely to be employed during the second year (86% versus 83%). Both groups worked an average of eight months and about 1,200 hours during the year. However, at their current or most recent job, Year Up participants earned an average of \$2.26 more per hour than did control group members. Year Up participants' current or most recent jobs were also more likely to be full-time (35 hours or more per week) than control group members' jobs. Year Up participants were significantly more likely than control group members to obtain jobs in the targeted fields.

Note:
Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(15) Program H	Brazil	Quasi-experiment	Young men (14-25), low-income	780 young men	Behavior: Sexually transmitted infection symptoms (-) ***, support of inequitable norms (-) **	At baseline, about half of the young men were categorized as “highly” equitable, and the other half was distributed across the “moderate” and “low” categories. At six-month follow-up, the proportion of young men from the intervention groups who were deemed highly equitable significantly increased (from 55% to 68% in Bangu; from 48% to 64% in Maré), and the proportion of young men deemed low or not equitable decreased. Significant change was not seen in the control group. Reported STI symptoms over the prior three months decreased (from 23% to 14% in Bangu and from 30% to 25% in Maré). Positive changes were greater at one-year follow-up.
(16) Involucrando hombres Jóvenes en el Fin de la Violencia de Género	Chile	Quasi-experiment	Young men (15-19)	303 young men	Behavior: Attitudes about gender equality (+)*** t=2,312; violence toward partner index (-)*** 0.128; stalking others index (-)** 0.117	
(17) Jóven Noble	United States	Quasi-experiment	Young men (10-24), hispanic	683 adolescent and young men	Behavior: Sexual activity (+)**; alcohol or drug consumption before sexual intercourse (-)***; report on having sex for money, drugs, or other things (-)***; HIV risk knowledge (+)***; attitudes toward abstinence (+)***; perceived risk (+)***; Children and Adolescent Prevention Scale (CAPS) talk (+)***; CAPS cool sex (+)***; cultural esteem (-)***	Results revealed that youth exposed to the 10-week curriculum had significant increases in knowledge and decrease in behavior related to high risk sexual behaviors. Four of the five key questions examining actual risky sexual behavior were significant at the p< 0.05 level. For example, the number of youth who reported they were not drinking or using drugs before sexual intercourse increased by 20%. Also, by posttest the number of youth who had reported having sex for money, drugs, or another reason decreased by 40%. This program had a highly significant effect on youths’ risky attitudes and behaviors. Out of eight measures seven yielded a significant paired t-test result. For six of those seven, the two-tailed significance level was p<0.001. The only measure that did not yield a significance t test was CAP: Comfort Talk with a significance of 0.572. In particular, findings indicate that there were significant differences in ATA with a t5 6.83 (p< 0.000). Other risk related scores were also significant. Perceived Risk, with a t5 5.82 (p<0.000) showed that there had been an increase in perceived risk by youth. The intervention showed it could also increase HIV Knowledge, with a t5 9.45 (p<0.000). The change in behavior was also significant for CAPS: Increase Talk and CAPS: Cool Sex. Additionally, the intervention aided youth in their understanding of how a Hombre Jovenes Con Palabras should behave and think (t5 6.36; p< 0.000).

Note:
Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(18) Youth Opportunities Program	Uganda	RCT	Youth (16-35), low income, underemployed, Uganda's north	805 groups (11,288 individuals)	<p>Employment and income: Average employment hours per week (+)*** ITT 4.1, Nonagricultural (+)*** ITT 5.3, Skilled trades (+)*** ITT 4.7; Works \$ 30 hours a week in a skilled trade (+)*** ITT 0.054; Monthly cash earnings (+)*** ITT 14.61 (7.43 USD in 2008)</p> <p>Enterprise Development: Business assets (+)*** ITT 377,000 UGX (191 USD in 2008); Maintains formal records (+)*** ITT 0.114; Enterprise is formally registered (+)*** ITT 0.051; Pays business taxes (+)*** ITT 0.077</p> <p>Skills Development: Enrolled in vocational training (+)*** ITT 0.532; hours of vocational training received (+)*** ITT 340</p> <p>Behavior: Has changed parish since baseline (+)* ITT 0.045</p>	The treatment group invested most of the grant in skills and business assets, and after four years, they were 65% more likely to practice the skilled trade; earnings were 49% greater than the control group and 41% greater after four years; the treatment group was more likely to engage in business practices such as keeping records, registering, and paying taxes; there was a shift in occupational choice toward skilled work, where the treatment group was around 38% higher than the control, and it was larger for women; labor supply increased in response to the increase in capital for both men and women; earnings were larger for the treatment group and for both genders, but there was a catchup by the control group after four years, primarily among men; the wealth index was 0.2 standard deviation greater for the treated than for the control; and there was limited and weak evidence of a positive social impact after two years and none after four.
(19) Entrepreneurship Development Center	Bosnia and Herzegovina	RCT	Youth (18–25), microcredit clients, Tuzla (urban)	265 active business loan clients	<p>Enterprise Development: Uses private account for business (-)*** 0.278; Invests savings in business (+)** 0.106; implemented new production processes in past year (+) *** 1.65; number of loan installments (+)* 4.939; refinanced or restructured loans (+)* 0.034</p> <p>Skills Development: Business and financial knowledge (+)* 0.239</p>	The training program did not influence the business survival. It improved business and financial knowledge on average (after the training, the total score of the exit test had increased from a baseline of 2.6 to 2.9). At follow-up, the average treatment effect of the training on business and financial knowledge was positive, but not statistically significant. The strongest effects of the training were on improvements in business practices and investments: the treatment group was 17% more likely to implement new production processes than the control group, and 11% more likely to inject new investment into the business. No impact was found on loan amounts, but there were significant impacts on loan restructuring. The treatment group was 3.4% more likely than the control group to refinance its loans. This effect was large, indicating that the treatment almost doubled the likelihood of refinancing loans.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(20) Apprenticeship program	Brazil	Observational study	Program targets youth (17-23), study focuses on 17-18 year olds.	44,855 youth (out of which 11,483 participated in the program)	Employment and income: Probability of obtaining a formal job within 2-3 years of program completion (+)** parametric IV 0.0501; probability of having a non-temporary job within 2-3 years of program completion (+)** parametric IV 0.0486; wage variation 2-3 years after program completion (+)** parametric IV 1.1694	Our results indicate that, compared to other temporary workers, apprentices have a higher probability of getting a formal job in the years after the program and a higher probability of getting a non-temporary contract. On the other hand, our estimates suggest that treated workers get jobs with lower tenure than other temporary workers. We also find positive (and significant) effects on wages but very small in magnitude.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Out-of-School Youth



Program examples

		Apprenticeships	Training + Internship	Entrepreneurship Training	Training in Rural Areas
		Apprenticeship Program	Jóvenes en Acción	Year-Up	AGI – Liberia
Outcomes		Employment and Income	Employment and Income	Employment and Income	Employment and income Behavior
Program characteristics	Duration	Variable - 2 years (max)	6 months	1 year	1 year
	Type of training	In classroom (formal secondary school, Sistema S or NGOs) and on-the-job	In classroom (3 months) On-the-job (3 months)	Technical skills training focused on information technology and investment operations (6 months) On-the-job (6 months)	In classroom with mentoring following training
	Type of content	Basic skills Technical skills Job-relevant skills	Diverse occupations. The three most common: sales, secretarial work, and marketing.	Basic software use, hardware installation and repair, business writing, portfolio management, professional (life) skills	Life-skills training Technical training Business development and management training
	Delivery	Firms and public education/training institutions	Private training institutions (43 for profit and 57 non-for-profit) and legally registered companies	Private training institution (year up) and legally registered companies	Four NGOs selected by the government
	Financing	Firms (with government tax exemptions)	Government	Private foundations and corporations, fees, government, and contributions from internship partners	Government
Context		Urban areas in Brazil	Seven largest cities in Colombia	Urban areas in the United States	Liberia
Profile of participants		Youth (14-24 years old) In and out-of-school	Youth (18-25 years old) Unemployed and low income	Youth (18-24) Low-income	Women (16-27 years old) Out of school with basic cognitive skills

Target Group: **Under- or unemployed adults**



Summary of Results: **18 programs**

	ACHIEVED OUTCOMES			
	Employment & income	Enterprise development	Skill development	Behavior
1. Atención a crisis	X	X		
2. Growing America Through Entrepreneurship Project		X		
3. Women's Income Generating Support Program	X	X		X
4. Micro-Emprendimientos Productivos	X			
5. FINCA Entrepreneurship Program	X	X		
6. Ghana National Association of Garages		X		
7. Millennium Development Authority, Farm-Based Organization Training		X		
8. National Rural Support Program		X	X	X
9. Production and Business Services		X		
10. PRIDE Microfinance			X	

Target Group: Under- or unemployed adults



Summary of Results: 18 programs

	ACHIEVED OUTCOMES			
	Employment & income	Enterprise development	Skill development	Behavior
11. Rules of Thumb		X		
12. Start and Improve your Business Training Program		X		
13. Urban Land Titling Program		X	X	
14. Women Entrepreneurship Program		X	X	
15. Endeavor		X		
16. Farmer and Training Development Assistance Program		X		
17. TechnoServe		X		
18. JOBS Program	X			X
Number of programs with positive and significant results	[5]	[15]	[4]	[3]

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(1) Atención a crisis	Nicaragua	RCT	Agricultural households vulnerable to weather shocks. Primary target were women	3,002 households	<p>Employment and income: Total food consumption (+)* OLS 0.519, impact on consumption of low intensity shocks (+)*0.0507</p> <p>Enterprise development: Non-agriculture self-employment (+)* 0.0383, impact of shocks on profits of non-agricultural business (-)*296.9 Cordobas (\$13 USD in 2012)</p>	The results in this paper show that, two years after the end of the intervention, beneficiaries of complementary interventions (CCT+ training scholarship, or CCT + productive grant) were better protected against the negative impact of droughts. For total and food consumption, as well as for income, the negative impact of shocks is completely offset. Both interventions increase consumption by at least 9% as shock intensity increases by one standard deviation. There is no significant impact of the vocational training package on consumption at average level of shocks. Similarly, training does not lead to higher average income, but does lead to less variable income. The interaction term of shocks with training is significant and large for nonagricultural wage employment, which suggests that the training might help smooth consumption and income by allowing households to obtain a wage income when shocks are particularly strong.
(2) Growing America Through Entrepreneurship Project	United States	RCT	Potential entrepreneurs	4,197 individuals	<p>Enterprise development: Wrote a business plan (+) treat-control, covariates 0.1276 (6 months after training), 0.1296 (18 months after training), and 0.1108 (60 months after training); business owner (+) treat-control, covariates 0.1337 (6 months after training), 0.0691 (18 months after training), 0.0105 (60 months after training).</p>	Using a large randomized evaluation in the United States, we find no strong or lasting effects of entrepreneurship training. We do find a short-run effect on business ownership for those unemployed at baseline, but this dissipates at longer horizons. The average impact of entrepreneurship training on business ownership at 6-month follow-up is large and significant: 13.4 percentage points on a base (control group mean) of 35.9%. At the 18-month follow-up, the treatment effect point estimate remains positive, but the difference is smaller (6.9 percentage points on a base of 40.9%) and no longer statistically significant. 60 months after random assignment, the treatment and control groups have nearly identical levels of business ownership. Treated individuals were 13 percentage points more likely to have written a business plan and this difference persists over time. We do not find effects on business sales, earnings, or employees.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(3) Women's Income Generating Support Program	Uganda	RCT	Low income individuals in 120 villages (86% women)	1,800 individuals	<p>Employment and income: Monthly cash earnings (+)*** OLS 23,390 UGX (USD 9.14 in 2013), monthly nondurable consumption (+)*** OLS 33,439 UGX (USD 13.06 in 2013), times went hungry during past week (-)** OLS 0.084, usual number of meals per day (+)** OLS 0.078</p> <p>Enterprise development: Non-farm self-employment (+)*** OLS 0.409, started enterprise (+)*** OLS 0.485, average work hours per week (+)*** 9.877</p> <p>Behavior: Group engagement (member of a community group) (+)***0.245, times you meet group per month (+)*** 0.954</p>	Extremely poor, war-affected women in northern Uganda have high returns to a package of \$150 cash, five days of business skills training, and ongoing supervision. Sixteen months after grants, participants doubled their microenterprise ownership and incomes, mainly from petty trading. We also show these ultrapoor have too little social capital, but that group bonds, informal insurance, and cooperative activities could be induced and had positive returns. When the control group received cash and training 20 months later, we varied supervision, which represented half of the program costs. A year later, supervision increased business survival but not consumption.
(4) Micro-Emprendimientos Productivos	Argentina	Quasi-experimental	Unemployed heads of households	5,401 heads of households	<p>Employment and income: Differences-in-differences estimates: Individual employment (-)**0.159, individual total hours of work (+)*** 13.79, individual total income (+)* 33.396 (USD 10.88 in 2006)</p>	Using nonexperimental methods we show that participation in the program affects labor supply of participants by reducing the probability of having an outside job (especially for males) and increasing the total number of hours worked (increase of total weekly hours worked by 14 to 18 hours). The program fails to produce on average income gains to participants in the short run. Females are less likely to substitute away from other sources of employment, and are therefore more likely to combine self-employment with other jobs. Beneficiaries engaged in textile activities have lower income gains than those engaged in services or industrial activities. Although income gains are not significant for the average participant they are concentrated in specific groups, possibly initially better positioned to take advantage of the program. In particular, individual income gains are larger (and significant) for those with more education, between 30-40 years old, and for whom MEP activities were related to an ongoing activity.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(5) FINCA Entrepreneurship Program	Peru	RCT	Low income women already participating in micro-finance intervention	240 groups of women (groups were of approx. 20 women)	<p>Enterprise development: With covariates: Loan repayment (+)*0.03, dropout (-)* 0.05, keeping record of sales (+)* 0.04, profit used for business growth (+)** 0.04, sales (+)** 0.16, sales in normal month (+)* 0.1, sales in bad month (+)*** 0.27</p> <p>Skills development: Business knowledge index (+)* 0.1 (without covariates)</p>	The treatment led to improved business knowledge, practices and revenues. The program also improved repayment and client retention rates for the microfinance institution. Repayment among treatment groups is three percentage points higher than among control groups (i.e. clients in treatment groups were more likely to maintain a clean repayment record in the cycles between the baseline and follow-up surveys). Training participants demonstrated greater business knowledge, answering more questions correctly (10 percentage points, 0.07 standard deviations). Greater knowledge translated into better business practices, though only in limited areas. The training increased the likelihood that individuals reinvested profits in their business by four percentage points (0.08 standard deviations), maintained sales records for their business by between three percentage points (0.07 standard deviations), and maintained withdrawal records from their business by seven percentage points (0.17 standard deviations). Sales in the month prior to the surveys were 16% higher in general, with variations that suggest that the training has helped clients identify strategies to reduce the fluctuations in their sales.
(6) Ghana National Association of Garages	Ghana	RCT	Metalwork Entrepreneurs in the city of Kumasi	167 metalwork entrepreneurs	<p>Enterprise development: Adoption of business practices: visiting costumers (+)** 0.22; record keeping (+)*** 0.593; record analysis (+)***0.481. Sales revenue (+)** 25340 (2010 USD), value added (+)**18050 (2010 USD), gross profit (+)** 15050 (2010 USD)</p>	Basic level management training improves business practices and performance, although the extent of improvement varies considerably among entrepreneurs. After the training, the percentage of firms in the control group keeping records increased by only 6 percentage points whereas the increase was 36 points in the treatment group. Similarly, the adoption rates of the other two practices (i.e., keeping and analyzing records) increased much more in the treatment group than in the control group.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(7) Millennium Development Authority, Farm-Based Organization Training	Ghana	Randomized phase-in approach	Farm-based organizations	1,200 farm-based organizations	Enterprise development: Loan amounts received (+)** 531.06 (USD 354.6 in 2010), access to formal sources for loans (+)*** 0.08, value of chemicals used (+)* 0.191, value of seeds used (+)* 0.174	There was no evidence of intervention impact on crop yields and crop incomes overall, but there were significant zonal differences with crop incomes (the program impacted positively on crop incomes in the Northern Agricultural Zone – it increased by about 77.8%–; for the Southern Horticultural Belt crop incomes decreased by about 76.6% as a result of the intervention). Training positively impacted the loan amounts that households received. Training increased farmers’ use of more formal sources for loans (the likelihood of a farmer obtaining a non-MiDA loan from a formal source increases by about 8% with the training). The intervention led to an increase in the use of improved seeds and fertilizers by farmers, but that was mainly driven by the starter pack that participants received.
(8) National Rural Support Program	Pakistan	RCT	Borrower groups of a microfinance institution in rural areas	747 groups of borrowers	Enterprise development: Business practices (+)** 0.114, expenditures and assets (+)*** 0.079 Skills development: Business knowledge (+)** 0.066 Behavior: Outlook on life (+)*** 0.100, cooperation within group (+)*** 0.90	The study finds that business training increased business knowledge, reduced business failure, improved business practices and increased household expenditures by about \$40 per year. It also improved financial and labor allocation decisions. These effects are concentrated among male clients. Women improve business knowledge but show no improvements in other outcomes.

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(9) Production and Business Services (PBS)	El Salvador	Randomized rollout design	Low income farmers, organizations and SMEs that benefit poor inhabitants of the Northern Zone	1,736 individuals	Enterprise development: Employment generated by participants of PBS in the handicrafts chain (+)*** 0.13; net annual productive income in the dairy chain (+)*** USD 1,849 (2011)	Analyzing all impact results, we find two particularly promising findings. First, the offer of PBS services had a statistically significant and positive impact on employment generation for the handicrafts value chain. In particular, the treatment-on-the-treated estimate of 0.19 full-time equivalent jobs is a promising and substantive finding, as it provides evidence that artisans who participated in training and technical assistance made a substantial investment in additional labor related to handicraft production. The second noteworthy finding is that PBS assistance to dairy producers significantly raised these individuals' productive income. This finding suggests that interventions of this type, particularly in the dairy chain, can generate significant effects on income within a relatively short time period of one year. The concentration of positive impacts in the dairy value chain underscores the importance of sector-specific factors—including market conditions and technical assistance packages—in influencing participants' productive and economic outcomes.
(10) PRIDE Microfinance	Tanzania	RCT	Clients of PRIDE microfinance in the capital	211 individuals	Skills development: Business knowledge (+)** ITT 0.59	Our results show that there is a positive average treatment effect on business knowledge. It also appears that training has a stronger effect on the entrepreneurs with less formal education. Paradoxically, these entrepreneurs are also less consistent in their participation in the training program.
(11) Rules of Thumb	Dominican Republic	RCT	Clients of micro-finance institution in the capital	1,193 individuals	Enterprise development: Aggregate business practices among rules of thumb training beneficiaries (+)*** TOT 0.15, sales in bad weeks (+)* TOT 967DOP (USD 26.5 in 2010)	Assignment to the rule-of-thumb training substantially increases the likelihood that individuals report separating business and personal cash and accounts, keep accounting records, and calculate revenues formally. Each of these measures increases by 6% to 12% relative to the control group, which did not receive training (all estimates are significant at the 5%-level or better). In contrast, we find no statistically significant effects on the business practices of those assigned to the Accounting treatment. Individuals assigned to the Rule-of-Thumb treatment report a substantial increase in revenues during bad weeks. This increase of RD\$967 is economically large, 25% of mean end line reports and nearly 60% of the median.

Note:
 Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(12) Start and Improve your Business Training Program	Sri Lanka	RCT	Women Low income Self-employed Unemployed	628 women	<p>Enterprise development: Business practices of current owners assigned to training only (TOT): marketing (+)***0.574, stock control (+)** 0.167, record keeping (+)*** 0.645, financial planning (+)*** 0.711</p>	<p>The intervention works with two groups of women: women operating subsistence enterprises and women who are out of the labor force but interested in starting a business. It tracks the impacts of two treatments—training only and training plus a cash grant—over two years. The short and medium-term impacts of the intervention differ. For women already in business, training alone leads to some changes in business practices but has no impact on business profits, sales or capital stock. In contrast, the combination of training and a grant leads to large and significant improvements in business profitability in the first eight months, but this impact dissipates in the second year. For women interested in starting enterprises, business training speeds up entry but leads to no increase in net business ownership by the final survey round. Both profitability and business practices of the new entrants are increased by training, suggesting training may be more effective for new owners than for existing businesses.</p>
(13) Urban Land Titling Program	Peru	RCT	Women Entrepreneurs Beneficiaries of land titling program in the capital	1,983 women	<p>Enterprise development: Two treatments: GT (General training), GT+TA (Technical assistance) (ITT). <u>GT participants</u>: approved loans from NGOs (+)* 0.008 <u>GT+TA participants</u>: sales last week (+)* 0.176, keeping records of sales (+)* 0.038, participation in business-related associations (+)*** 0.057, approved loans from informal sources (+)* 0.042</p> <p>Skills development: <u>GT+TA participants</u>: use of own time to study (+)* 0.498, use of male adult time to study (+) 1.380</p>	<p>Women assigned to treatment made adjustments in their business practices according to the training, although they differ depending on the type of treatment received. Those that received only regular training were more prone to close losing businesses. In turn, those that also received TA, were more prone to plan and execute innovations, as well as to increase their association with business peers and its use of informal credit sources. Furthermore, such innovations led to an increase in sales of at least 18%.</p>

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults

Program details



Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(14) Women Entrepreneurship Program	South Africa	RCT	Women Entrepreneurs (who own a business or are interested in starting one)	180 women	<p>Enterprise development: Entrepreneurial characteristics (+) ** t—stat 2.99, entrepreneurial orientation (+)** t-stat 2.18, annual sales (+)** chi-square 98.90, value of capital assets (+)** chi-square 52.60, success of business (+)** chi-square 22.73, profitability of the business (+)** chi-square 29.86</p> <p>Skills development: Business knowledge (+)** t-stat 5.39, entrepreneurial and business skills (+)** t-stat 19.14</p>	WEP delegates gained new skills and knowledge relevant to running a business; increased their confidence in their entrepreneurial abilities, and improved their number of employees, turnover, productivity and profit. Furthermore it should be emphasized that it was statistically proven that the WEP, as a training intervention, is effective in training women entrepreneurs in South Africa.
(15) Endeavor	South Africa	Quasi experimental	SMEs	52 SMEs	<p>Enterprise development: Differences in total sales (million Rand): 0.37 in 2004 and 5.55 in 2005</p>	The program had positive effects on sales growth; on average, sales for treated SMEs increased by approximately US\$193,000–290,000 more than non-treated SMEs. The effect on the percentage of export sales was not statistically significant. The most used services were the mentoring, training course, and networking opportunities, but not all the services were used, showing that achieving all program objectives required some additional effort.
(16) Farmer Training and Development Assistance Program	Honduras	Quasi experimental	Smallholder farmers	Baseline survey with 4,526 respondents, follow up survey with 2,736	<p>Enterprise development: Income of horticultural crops (+)* 16,773 lempiras (USD 931 in 2011)</p>	The program had a positive impact on activities related to horticultural crops. A broader positive impact on household income and expenditures was not detected. The net income change from other crops was on average 11,360 lempiras (US\$601) higher for program participants than for nonparticipants.
(17) TechnoServe	Central America	Quasi experimental (regression discontinuity)	Entrepreneurs who own a business or are interested in starting one	655 entrepreneurs	<p>Enterprise development</p>	Receiving business training significantly increased the probability of business start-ups and expanded existing business. The training program led to an effect of a higher probability—9 to 11 percentage points—of opening a business (for individuals without a business before the start of the program) and a 23–26 percentage point higher probability of expanding a business (for individuals with an existing business before the program).

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program details

Program	Location	Type of evaluation	Beneficiaries	Sample	IMPACT	
					Outcomes and significance	Explained effect sizes
(18) JOBS Program	United States	RCT	Unemployed individuals (for up to 13 weeks)	1,801 individuals	<p>Employment and income: Reemployment (+)** 0.44; hours working per week (+)** 0.08; months working more than 35 hours (+)* 0.06; monthly income (+) ** 0.07</p> <p>Behavior: Role and emotional functioning (+)* 0.06</p>	Two years after the JOBS workshop, the experimental group had significantly higher levels of reemployment and monthly income, lower levels of depressive symptoms, lower likelihood of experiencing a major depressive episode in the last year, and better role and emotional functioning compared with the control group

Note:

Statistically significant at 10% (*), 5% (**), 1% (***)

Target Group: Under- or unemployed adults



Program examples

		Under- or Unemployed Adults		Workers
		Atencion a Crisis	Women's Income Generating Support Program	
Outcomes		Income (increase, diversification) Consumption Participation in and returns to non-agro activities	Income and employment Business development Behavior	<p><i>Companies, rather than development institutions or governments, are the most active in offering programs to update the skills of their workforce. There are abundant examples of these efforts, but a systematic review entails covering a field (with specific stakeholders and practices) that falls beyond the scope of this presentation.</i></p>
Program characteristics	Duration	6 months	6 months	
	Type of training	In classroom	In classroom (8 days) and hands on with support (6 months)	
	Type of content	Occupational skills	Business planning, sales, marketing, record-keeping, and budgeting (5 days) Leader selection, group decision making, communication and listening skills, and conflict resolution methods (3 days)	
	Delivery	Public training providers	Humanitarian organization	
	Financing	Government (by providing training vouchers and income subsidies to beneficiaries)	Government	
Context		Rural areas in northwest Nicaragua	Northern Uganda	
Profile of participants		Women Agriculture workers	Women (14-30 years old)	

Summing up:

47 programs achieving multiple outcomes

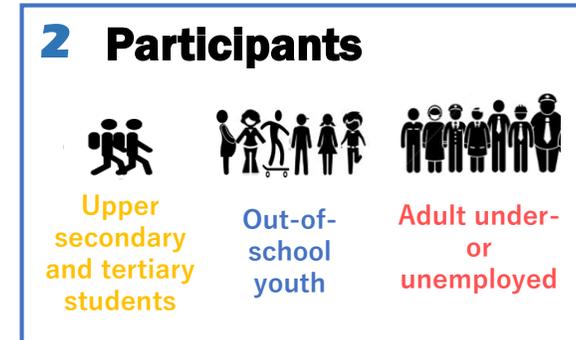
	Upper secondary and tertiary students 	Out-of-school youth 	Under- or unemployed adults 	TOTAL
Employment & income	1	16	5	22
Enterprise development	3	4	15	22
Skill development	4	6	4	14
Behavior	6	13	3	22

Summing up:

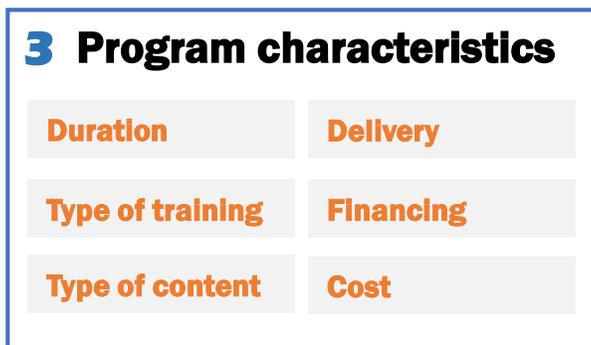
There is great heterogeneity among short term training programs



Even after grouping outcomes into categories, these vary greatly across interventions and, thus, evaluations of impact. Such variation makes it difficult to make general statements about the impact of short term training programs



The characteristics of training participants mark stark differences in their needs which, in turn, should be reflected in the design of programs as well as the expected and achieved outcomes.



As the design of programs takes into account the specific needs of their target populations -as they should do-, few programs have identical characteristics.



Even in cases where program participants and characteristics are similar, the context in which programs are implemented can be determine to great extent program success or failure.

Guiding principles to keep in mind when making training investment decisions



Developing skills is a life-long endeavor



It is best to get it right early on



Access to quality basic (primary and secondary) education is a must



Successful education and training interventions adapt seamlessly to changes in job skill requirements

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