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# STATE OF THE EVIDENCE UPDATE: WORK-BASED LEARNING IN YOUTH WORKFORCE DEVELOPMENT

## PART OF THE USAID LEARNING SERIES: YOUTH WORKFORCE DEVELOPMENT IN 2022: WHAT HAVE WE LEARNED?

After four years advancing learning through its Youth Workforce Development Learning Agenda, USAID initiated a process in 2022 to review new evidence related to the learning questions. Toward this end, the USAID Center for Education commissioned a team of researchers to conduct a desk review, from which a series of **State of the Evidence Updates** offer a short synopsis of learning around some of USAID’s current learning agenda themes.

This State of the Evidence Update focuses on the most recent evidence on the effectiveness of work-based learning as a component of workforce development. It explores the benefits of work-based learning for young people, as well as the role of the private sector and incentives for firm-level participation in work-based learning. This brief contributes to two of USAID’s Learning Agenda Questions: (1) “What are the most effective components, or combinations of components, in youth workforce development programs for improving employment, self-employment, establishment of new self-employment, or increased profits for youth’s existing businesses?” and (2) “How do employment training programs influence firms’ practices around recruiting and training of future employees, particularly of disadvantaged youth, and youth at different education levels such as secondary school graduates and university graduates?”



## INTRODUCTION

Work-based learning is an asset-building strategy that allows youth to apply their learning through career exposure and real-life work experiences such as internships,<sup>1</sup> apprenticeships,<sup>2</sup> job shadowing,<sup>3</sup> [service learning](#),<sup>4</sup> career talks,<sup>5</sup> workplace tours,<sup>6</sup> and other experiential activities. Recent longitudinal analyses of teenage career readiness in developed economies have underscored work-based learning in one’s teen years as a promising method for bridging youths’ transition between education and employment.<sup>7</sup> This brief builds on evidence from high-income countries and explores what is known about (1) the impact of work-based learning programs in low- and middle-income countries (LMICs), and (2) the interventions or approaches that are associated with successful work-based learning programs in those contexts. Because most of the literature focuses on the role of internships and apprenticeships, this brief focuses largely on this mode of work-based learning



## WHAT IS THE IMPACT OF WORK-BASED LEARNING ON YOUTH AND EMPLOYERS?

**In higher-income countries, longitudinal data shows that work-based learning is associated with higher youth earnings and employment outcomes.**

In OECD countries and European countries where work-based learning has been institutionalized as part of formal education curricula, evidence suggests that youth who gained work exposure or work experience during their studies have better employment outcomes than those who did not.<sup>8</sup> A 2020 OECD analysis of national longitudinal data on career readiness of secondary school students from eight countries found that young people who engaged in career guidance and work exposure were less likely to be unemployed, more likely to earn higher wages (roughly 5 to 10 percent more than comparable peers), and more satisfied with their jobs.<sup>9</sup> This and a 2020 OECD report<sup>10</sup> also describe how marginalized youth—including girls, young women, and students from lower economic brackets or from migrant families—tend to have less access to networks, resources, and sources of career information that would allow them to explore and plan their careers.<sup>i</sup> These findings from more developed economies further support the argument for work-based learning programs in low- and middle-income countries where marginalized youth face similar disparities.

This finding is complemented by a 2019 systematic literature review of 40 rigorous quantitative studies on the effects of university-supported work placements, which concluded that university graduates who gained internship experience in their final year found employment more quickly after graduation, were less likely to change jobs within six months of graduation and received more job advancements than those who did not have internship experience.<sup>ii</sup> Despite the employment outcomes, the study found mixed results on wage effects, indicating a need for more research.<sup>11</sup>

**Work-based learning programs in low- and middle-income countries have been associated with positive, short-term impacts on youth employment outcomes.**

Though LMICs present vastly different contexts, historical and recent evidence from work-based learning programs in these contexts paints a hopeful picture for both in- and out-of-school youth. A 2017 review of youth employment programs found that “Comprehensive programs, which combine training (vocational, or vocational plus life skills) with internships or other kinds of work experience showed positive effects in Colombia, the Republic of Yemen, Kenya, and Nepal, but not in Dominican Republic or Peru.”<sup>12, 13</sup> A 2021 randomized control trial (RCT) of the Philippines Department of Labor and Employment program, which supported school-break work experience for in-school youth ages 15 to 25,<sup>14</sup> found a 79 percent increase in employment within 12 months relative to a control group, with no evidence that the program pushed youth out of school. A 2018 RCT in Bangladesh<sup>15</sup> showed that, for out-of-school youth ages 14 to 18, on-the-job training led to a 59 percent increase in labor market participation and a 44 percent increase in earnings six months after completion (relative to the control group mean), accompanied by a sustained shift from casual work to wage employment. Young women in particular experienced larger employment effects. A 2019 RCT of a middle manager job-shadowing intervention for young professionals in Ethiopia<sup>16</sup> showed 8–11 percent increases in the likelihood of having a permanent job or increased hours, and in wage income one year after the intervention, as compared to the control group. Meanwhile, [a 2019 tracer study of the USAID-funded Punjab Youth Workforce Development Project](#) found that 61 percent of at-risk youth (ages 18 to 29) who participated in a short-term on-the-job training program remained with the same employers for at least three months following the intervention, and saw wage increases between 13 and 42 percent during that time,<sup>17</sup> indicating sustained mutual benefits by both participants and employers.

<sup>i</sup> The OECD report also notes that “young people with an upper secondary VET qualification who gained work experience during their studies have higher employment rates than those without workplace exposure.”

<sup>ii</sup> This systematic review included only English language studies, thus limiting the countries represented to the United States, United Kingdom, Canada, Australia, Japan, China, Switzerland, Malaysia, and Korea.

**It is likely that work-based learning programs benefit employers, but there is insufficient data to confirm this claim in low- and middle-income countries.**

There is some evidence from high-income countries of benefits for employers who participate in work-based learning programs. These programs may result in cost-savings for employers by reducing recruitment costs (e.g., job advertisements and interview costs) and salary costs, because apprentices tend to work for lower wages than skilled workers. However, this “cost-benefit balance” depends on a number of factors, including the occupation, firm size, apprenticeship duration and structure, financial incentives, and labor laws.<sup>18</sup> Employers in the United States have also found that work-based learning can help companies achieve diversity and inclusion goals by helping them expand their hiring pipeline and effectively close the “opportunity gap” faced by job-seekers who have traditionally been marginalized from the labor market.<sup>19</sup> As more companies in low- and middle-income countries begin to see [the benefits of social inclusion](#), businesses may use work-based learning to attract a more diverse workforce.<sup>20</sup>

Data from LMICs that link work-based learning to tangible firm-level benefits are limited,<sup>iii</sup> with only a few studies exploring impacts on productivity, revenues, employee engagement, retention, or other benefits.<sup>21</sup> Female garment workers in India who received on-the-job soft skills training were 20% more productive than a control group.<sup>22</sup> Meanwhile, a study on out-of-school youth apprentices in Ghana showed that apprenticeships with master craftspeople tended to “shift youth out of wage work and into self-employment,” indicating that in the informal sector, or in sectors or economies experiencing tight labor markets, some employers may not see the long-term benefits of work-based learning.<sup>23</sup>



## **WHAT INTERVENTIONS OR APPROACHES ARE ASSOCIATED WITH SUCCESSFUL WORK-BASED LEARNING PROGRAMS IN LMICs?**

**Work-based learning programs benefit from purposeful matching between youth participants and employers.**

A 2019 RCT on management internships in Ethiopia’s private sector found that when firms and youth were matched using purposeful assignment mechanisms, participants “substantially outperform random matching in generating employment and income effects.”<sup>24</sup> Similarly, successful work-based learning programs that were incorporated into formal vocational training systems in Sweden and France, and a pilot program in Latvia, relied on consultations between employers and vocational training providers to ensure the placement of appropriate participants.<sup>25, 26, 27</sup> The aforementioned Ghana study suggested that the matching of the employer representatives also mattered: it found that apprentices who trained with the most experienced or highest paid in-company trainers had higher earnings compared to youth who were matched with less experienced in-company trainers.

**For lower-skilled youth and youth in low-income settings, work-based learning is likely not a sufficient employment intervention on its own, but rather contributes to employment outcomes when paired with formal education and training.**

There is a body of evidence from LMICs that suggests combining skills training with matching services “may be important for individuals who are disadvantaged in the labor markets.”<sup>28</sup> This is supported by a recent study among disadvantaged youth in Uganda that compared on-the-job training against vocational training in an institutional setting and found both treatment groups experienced similar short-term effects. Over time, however, the vocational training graduates had twice the employment and earnings compared to those receiving only firm-level training. The study concluded that because firms tended to favor higher-ability workers in their workplace practices, vocational training institutions in low-income countries may be better equipped than employers to tailor skills training to lower-skilled individuals. It also posits that in a developing economy formal certifications offer job-seekers greater mobility, because employers may prefer candidates with recognizable certifications over those with firm-specific skills.<sup>29</sup>

<sup>iii</sup> This research also points to returns on investment in vocational training in the United States, the recouping of firm-level costs before the completion of an apprenticeship, efficiency in professional development, reduced staff turnover, and other benefits.

**Emerging evidence from LMICs suggests virtual and youth-led work-based learning may be effective for building youth’s skills and career awareness, but additional research is needed to understand the implications for social inclusion and impacts on employment outcomes.**

[Virtual work-based learning opportunities have arisen out of the COVID-19 pandemic](#) as schools have used online platforms to offer career talks, coaching and mentoring in blended virtual formats, online work placements, and virtual internships.<sup>30</sup> Emerging research from Kenya on virtual gig work suggests that it offers young people an opportunity to develop their skills, explore different career paths, and build networks while also earning an income. Indeed, gig work—or digital freelancing—is emerging as a new form of work-based learning, especially when support for both job seekers and employers are put in place, as suggested in a case study of higher education students in India during the COVID-19 pandemic.<sup>31, 32</sup> Research suggests young people find value in initiating their own work-based learning opportunities through family and friends, or in setting up peer-based networks—through social media, savings groups, youth associations, or alumni networks—that help them connect to observational visits and internships.<sup>33, 34</sup> However, additional research is needed to understand how virtual and youth-led work-based learning may impact employment outcomes, and possible challenges related to virtual opportunities due to inequitable access to digital platforms and devices.

**Employers may value structured, longer-term work-based learning programs over short-term work-based learning experiences.**

Evidence from the Philippines, Poland, and Brazil indicates that while short-term work-based learning experiences (e.g., sponsoring job shadowing or short-term internships/externships) can help employers fulfill immediate tasks, employers tend to value structured, long-term programs as they allow youth to better develop both firm- and occupation-specific skills that make them more productive over time. Structured opportunities usually combine on-the-job and classroom-based learning, and include a contract between the learner and the firm.<sup>35, 36, 37, 38</sup> The OECD notes, for example, that more formal 3–4 year apprenticeships tend to involve more complex, technical occupations that are valued by the employer, especially when participants increase their productivity over time.<sup>39</sup> Smaller firms may not have the capacity for such arrangements, so alternative structures may include the formation of training consortia or training associations, and/or government support for a training provider to help teach the employers how to train students.<sup>40, 41, 42</sup> More evidence is needed from low-income countries to determine whether the same private sector preferences would appear within the informal economy, among micro- and small-sized enterprises, and from informal and non-formal skills development programs.<sup>43</sup> Further research is also needed to clarify whether these solutions would be responsive to young people’s needs in such contexts.<sup>44</sup>

**While in some contexts employers may require financial incentives to participate in work-based learning, subsidies should be approached with caution, due to the limited evidence regarding such financial incentives, as well as the potential market distortions they may cause.**

In situations where employers may not immediately see the value of work-based learning, financial incentives may be appropriate. These range from wage subsidies to cover a portion of learner costs for an agreed-upon duration,<sup>45</sup> to reductions in social security contributions from cooperating government agencies,<sup>46</sup> to flat payments to employers whose learners pass a vocational exam at the end of their work-based learning commitment.<sup>47</sup> Similarly, the ILO notes that governments may use financial incentives (subsidies, tax incentives, subsidized loans) to incentivize employers to invest in education and training, as has been done in Australia, Canada, and the United States. In a recent example from Côte d’Ivoire, a study on subsidized dual apprenticeships showed that in places where there is underinvestment in training, subsidized formal apprenticeships led to higher earnings; more improved skills and productivity; more involvement in complex, non-routine tasks; and increases in training certifications than unpaid informal apprenticeships.<sup>48</sup> Nevertheless, the evidence is limited and the OECD urges publicly funded programs to be cautious and avoid distorting the job market by only using subsidies to adjust for specific market failures.<sup>49</sup> The different financing considerations for work-based learning are detailed in Chapter 9 of the European Training Foundation’s 2014 *Work-Based Learning* handbook.<sup>50</sup>



## IMPLICATIONS

### Implications for Programming

Emerging evidence indicates that work-based learning programs, when paired with education and training, have a positive impact on youth employment outcomes. These components may be especially important for disadvantaged groups, who often have fewer skills and less access to the financial and social capital needed to gain employment. Therefore, YWFD programs targeting marginalized groups should consider including a work-based learning component alongside education and training.

Work-based learning is often beneficial for employers, although that may vary depending on the sector, the size of the firm, and the economic and labor market contexts. To capitalize on the value of work-based learning to employers, YWFD programs should engage the private sector early and frequently in design, implementation, and monitoring and evaluation. In this manner, work-based learning programs should continually adapt to align the needs and interests of both youth and employers, to make the experience successful for both parties.

Exhibit I offers some promising approaches to consider in the design and implementation of work-based learning programs.

#### Exhibit I. Promising Approaches: Work-Based Learning

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### PROMISING PRACTICES IN WORK-BASED LEARNING FOR YOUTH WORKFORCE DEVELOPMENT

- ✓ Pair work-based learning programs with education and training, especially when working with disadvantaged youth who have been traditionally excluded from the labor market.
  - ✓ Use purposeful matching between youth participants and employers for internships.
  - ✓ Monitor the impact of work-based learning programs to ensure they respond to the needs of both youth and employers and adapt to the changing demands of the market and the local context.
  - ✓ Build partnerships with employers to facilitate structured, longer-term work-based learning programs, when feasible.
  - ✓ Be intentional in the use of financial incentives (such as stipends or wage subsidies) as a temporary means to correct a specific market failure that is limiting private sector investment in work-based learning.
  - ✓ Explore and capture data on work-based learning initiated by youth, including virtual and youth-led work-based learning.
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### Implications for Future Research

Most of the rigorous evidence on work-based learning focuses on the experiences of internship participants in middle- and high-income countries. Emerging evidence suggests that work-based learning is similarly important in low-income countries, and particularly for extending employment opportunities to groups that have traditionally been excluded from the labor market and from society as a whole. However, more research is needed on the impacts of work-based learning in LMICs. First, research should isolate the effects of work-based learning when evaluating the impact of integrated, multi-component workforce development programs. Studies should also compare the cost-effectiveness of different kinds of work-based learning opportunities (e.g., internships, workplace exposure visits, job fairs, guest speaker workshops, service learning), including those that can be right-sized for youth of different socioeconomic circumstances or age bands. The experiences of youth-led work-based learning programs suggest that peer networking mechanisms may be a powerful, low-cost way to connect young people to employers and markets. More attention should be paid to these youth-led solutions.

Setting aside financial incentives, programs will benefit from understanding the major benefits and constraints experienced by employers that participate in work-based learning programs; how these differ based on firm size, sector, and job function; and the type and duration of work-based learning that may be most beneficial to a firm. Moreover, as governments in LMICs are beginning to institutionalize work-based learning into formal education, they will face challenges in scaling their partnerships with employers. In economies with a relatively weak private sector and a limited



number of wage jobs, and where the capacity of education and training institutions is stretched thin, it is ever more important to explore the effectiveness of alternative mechanisms for work-based learning—those that go beyond traditional internship placement programs and are feasible and scalable across different formal and non-formal education settings.

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<sup>2</sup> International Labour Organization (ILO), *Skills and Employability Branch Employment Policy Department ILO Toolkit for Quality Apprenticeships Volume I: Guide for Policy Makers* (Geneva: ILO, 2017).

<sup>3</sup> Organisation for Economic Cooperation and Development (OECD), “Job Shadowing: A Guide to Delivering an Effective Career Development Activity,” OECD Education Policy Perspectives No. 62, OECD Publishing, Paris, 2022.

<sup>4</sup> USAID, [EQ Review: Educational Quality in the Developing World](#) 6, no. 1 (2008).

<sup>5</sup> Elnaz T. Kashefpakdel and Christian Percy, “Career Education that Works: An Economic Analysis Using the British Cohort Study,” *Journal of Education and Work* 30, no. 3 (2017): 217–234.

<sup>6</sup> Lisa Johnson, Robin White, Ivan Charner, James Cole, and Gail Promboin, *Work-Based Learning Manual* (Washington, D.C.: FHI 360, 2018).

<sup>7</sup> Catalina Covacevich, Anthony Mann, Cristina Santos, and Jonah Champaud, “Indicators of Teenage Career Readiness: An Analysis of Longitudinal Data from Eight Countries,” OECD Education Working Papers No. 258, OECD Publishing, Paris, 2021.

<sup>8</sup> OECD, *Engaging Employers in Vocational Education and Training in Brazil: Learning from International Practices* (Paris: OECD Publishing, 2022).

<sup>9</sup> Anthony Mann, Vanessa Denis, Chris Percy, “Career Ready? How Schools Can Better Prepare Young People for Working Life in the Era of COVID-19,” OECD Education Working Papers No. 241, p. 10, OECD Publishing, Paris, 2020.

<sup>10</sup> Chapter 3 of *Engaging Employers in Vocational Education and Training in Brazil* in OECD’s *Education at a Glance 2020*.

<sup>11</sup> Ilke Inceoglu, Eva Selenko, Almuth McDowall, Svenja Schlachter, “(How) Do Work Placements Work? Scrutinizing the Quantitative Evidence for a Theory-Driven Future Research Agenda,” *Journal of Vocational Behavior* 110 part B (2019): 317–337.

<sup>12</sup> Louise Fox and Upasna Kaul, *The Evidence Is In: How Should Youth Employment Programs in Low-Income Countries Be Designed?* (Washington, D.C.: USAID, 2017); see also: D. McKenzie, N. Assaf, and A.P. Cusolito, “The Demand for, and Impact of, Youth Internships: Evidence from a Randomized Experiment in Yemen. *IZA Journal of Labor & Development* 5 no. 1 (2016).

<sup>13</sup> See also Namita Datta, Angela Elzir Assy, Johanne Buba, Sara Johansson De Silva, and Samantha Maria Watson, “Integrated Youth Employment Programs: A Stocktake of Evidence on What Works in Youth Employment Programs,” Jobs Working Paper no. 24, World Bank Group, Washington, D.C., 2018.

<sup>14</sup> Emily Beam, and Stella Quimbo, “The Impact of Short-Term Employment for Low-Income Youth: Experimental Evidence from the Philippines,” IZA Discussion Paper No. 14661, IZA Institute of Labor Economics, Bonn, 2021.

<sup>15</sup> Narayan Das, “Training the Disadvantaged Youth and Labor Market Outcomes: Evidence from Bangladesh,” *Journal of Development Economics* 149, no. 102585 (2021).

<sup>16</sup> Girum Abebe, Marcel Fafchamps, Michael Koelle, and Simon Quinn, “Learning Management through Matching: A Field Experiment Using Mechanism Design,” IZA Discussion Paper No. 12572, IZA Institute of Labor Economics, Bonn, 2019.

<sup>17</sup> USAID, [Punjab Youth Workforce Development Project: Tracer Report](#) (Washington, D.C.: USAID, 2019).

<sup>18</sup> Viktoria Kis, “Work-Based Learning for Youth at Risk: Getting Employers on Board,” Paris: OECD, 2016.

<sup>19</sup> Martha Ross, Richard Kazis, Nicole Bateman, and Laura Stateler *Work-Based Learning Can Advance Equity and Opportunity for America’s Young People* (Washington, D.C.: Brookings, 2020).

<sup>20</sup> USAID, *The Return on Investment of Social Inclusion—An Evidence Gap Analysis from Developing Countries* (Washington, D.C.: USAID, 2021).

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<sup>22</sup> Achyuta Adhvaryu, Namrata Kala, and Anant Nyshadham “The Skills to Pay the Bills: Returns to On-the-Job Soft Skills Training,” NBER Working Papers 24313, National Bureau of Economic Research, Cambridge, MA, 2018.

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<sup>24</sup> Abebe et al., “Learning Management through Matching.”

<sup>25</sup> Małgorzata Kuczera et Shinyoung Jeon, *Vocational Education and Training in Sweden*, OECD Reviews of Vocational Education and Training (Paris: OECD, 2019); OECD *Engaging Employers in Vocational Education and Training in Brazil*.

<sup>26</sup> Anke Bahl, and Agnes Dietzen, (Eds.), *Work-Based Learning as a Pathway to Competence-Based Education*, A UNEVOC Network Contribution (Bonn: Federal Institute for Vocational Education and Training, 2019).

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- <sup>35</sup> Emily A. Beam and Stella Quimbo, “The Impact of Short-Term Employment for Low-Income Youth: Experimental Evidence from the Philippines,” *The Review of Economics and Statistics* (2021): 1–45.
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