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WHAT WORKS IN ENTREPRENEURSHIP EDUCATION AND TRAINING PROGRAMS FOR YOUTH?

Evidence Report

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Introduction

This report was developed under the YouthPower Implementation IDIQ, YouthPower Action Task Order to summarize the evidence for what works in youth entrepreneurship training and support interventions. The report is intended to help United States Agency for International Development (USAID) staff and implementing partners understand outcomes that can reasonably be expected from entrepreneurship programs and apply this understanding to designing and implementing future programming.

In the face of large-scale youth unemployment worldwide, entrepreneurship has grown in popularity as an intervention, particularly where few wage jobs exist. Entrepreneurship traditionally refers to starting or expanding a growth-oriented business that creates value. Entrepreneurs identify an unmet market opportunity and marshal the financial, organizational, and other resources to exploit it, usually assuming a degree of risk. In practice, however, entrepreneurship programming has been extended by the global development community to support a wide variety of youth business and self-employment efforts, many of which are focused on enhancing livelihoods of both mainstream and disadvantaged populations. This programming is directly or indirectly relevant to workforce development, livelihoods, and economic strengthening; economic growth; rural development; economic empowerment of women and girls; and outcomes for other at-risk and vulnerable populations as well as other areas of interest to USAID.

While evidence on the effectiveness of training interventions for youth is mixed and under increasing scrutiny, the majority of rigorously evaluated youth-focused efforts are entrepreneurship education and training (EE&T) initiatives. Most of these also provide complementary services such as access to finance, coaching and mentoring, networking, or business services. Another reason for this focus on EE&T is that youth are more likely to be students and to be connected to education and training systems.

In addition to the skills and services typically provided in EE&T programming, entrepreneurial success is also influenced by the supporting entrepreneurial ecosystem (or enabling environment) in which youth form businesses. Ecosystem quality varies widely, particularly in low- and middle-income countries. This ecosystem comprises the political and social context in which business formation and growth occurs and includes both "hard" factors—the legal and regulatory framework and availability of finance capital and services—and "soft" factors—a supportive, entrepreneur-friendly culture, growth-mentality of businesses, and attitudes toward risk.

This evidence report analyzes the best available evaluations and meta-analyses of 37 such entrepreneurship programs serving mostly youth to determine the training content and format and complementary services most strongly associated with achievement of positive outcomes. It reflects findings from an analysis of EE&T programs rigorously evaluated according to four main categories of outcomes: entrepreneurial status, firm performance, entrepreneurial capabilities, and entrepreneurial mindsets. The report frames the discussion by defining entrepreneurship and its typologies relevant to USAID programming.

The report presents general design recommendations for entrepreneurship programming and specific recommendations for tailoring programming to eight youth subpopulations of potential interest to USAID and implementing partners. The report also highlights where further research and experimentation is needed to clarify the impact and improve the efficacy of training-centric and other entrepreneurship programs.

Entrepreneurship and Related Programming

Entrepreneurship is the process of new business formation and growth, and entrepreneurs are the people who star t and grow businesses. In recent decades, governments, academics, and the development community have recognized the significant economic and employment benefits of entrepreneurship and incorporated this focus into economic and workforce development policies and initiatives. Since the early 2000s, numerous donors, public international organizations, and global nonprofit initiatives have focused particularly on teaching entrepreneurship and business management skills to a diversity of youth populations in developing countries and providing complementary services such as access to finance and mentoring/coaching in order to capture these gains. This occurs principally but not exclusively in a variety of education and training contexts.

Defining Entrepreneurship

Entrepreneurship refers to the formation or growth of profit-seeking business enterprises, normally based on innovation and frequently with some degree of risk to the initiator. USAID's Global Food Security Strategy Technical Guidance defines entrepreneurship as "starting or managing growth-oriented businesses (firms) that employ non-family members and focus on generating new value" (USAID 2017). According to a popular textbook, "an entrepreneur is one who creates a new business in the face of risk and uncertainty for the purpose of achieving profit and growth by identifying significant opportunities and assembling the necessary resources to capitalize on them" (Scarborough and Cornwall 2016, 21). This definition highlights three processes: opportunity identification, assembling resources, and the creation and operation of a business. Each process maps directly to a set of entrepreneurial skills or competencies in addition to the willingness to assume risk.

Other widely discussed elements of the definition focus on entrepreneurship as problem-solving and "the pursuit of opportunity without regard to resources currently controlled," a definition attributed to Howard Stevenson of Harvard Business School. Strong opinions are held in the academic entrepreneurship community and among entrepreneurs themselves about whether innovation is central to entrepreneurship, and whether relatively humble changes to products, processes, or markets served constitute entrepreneurial innovation (Ács and Virgill 2011).

In global development practice, entrepreneurship programs serve populations in a range of economic situations. In line with USAID's technical guidance, global business schools, governments, and specialized foundations tend to focus on high growth, innovation-oriented entrepreneurs. But programming also accommodates beneficiaries ranging from at-risk and marginalized youth to secondary and tertiary education graduates with higher socioeconomic status. Many global development donors include a focus in entrepreneurship programming on all or almost all self-employed persons operating at or near subsistence (sometimes referred to as "necessity" or "survival" entrepreneurs) who are neither innovation-driven nor growth-oriented. Table 1 illustrates an inclusive typology of entrepreneurship that has emerged from vigorous debates about the relevance of entrepreneurship to different objectives (e.g., livelihoods) with diverse populations. It presents a continuum of entrepreneurship types, with attention to the typical skill and socioeconomic levels of entrepreneurs, and the relevance to USAID programming.

Table 1. An Inclusive Typology of Entrepreneurship

Type	Description	Relevance to USAID Youth Programming	Literacy & Skills Level
Opportunity-Driven (Serial/ High-Growth)	Opportunity-driven, focused on building companies, wealth creation. Often in, but not limited to, technology ventures.	Limited relevance.	HIGH
Social	Social ventures intend to affect change, create employment or serve neglected customer base, usually with social motive or marketing story.	Potential relevance to a wide range of youth engagement. May include both higher and lower SES youth, though often in different roles.	
Aspiring	Potential entrepreneur seeking first profitable business opportunity; limited entrepreneurial skill set.	Secondary and higher education graduates with higher socioeconomic status.	
Microenterprises	Are own-account (self-employed) enterprises working in nonagricultural sectors that employ at least one nonfamily worker on a continuous basis.	Most youth workforce development programming for at-risk and marginalized youth focuses on this segment for job placement opportunities.	
Household Enterprises	Motivated by the creation of sources of income, these are nonfarm enterprises operated by a single individual or with the help of family members.	Highly relevant for youth who want to use their skills and energy to create a nonfarm income source for themselves and their families.	
Survival/ Necessity	Motivated by survival or lack of other options: engages in a business activity because of limited opportunities for remunerative employment.	Most livelihoods-oriented programming for at-risk and marginalized youth focuses on this segment.	LOW

Source: Adapted from Fox and Sohnesen 2012; Macke 2005.

Not everyone agrees the heterogeneous population of youth development program beneficiaries, many of whom have limited capacity to assume financial risk, restricted access to financial resources, weak business networks, and a lack of business or work experience, should be regarded as "real" entrepreneurs. Some prominent voices in the entrepreneurship community have actively advocated excluding microenterprises and other necessity-driven businesses from the arena, arguing that the purpose of entrepreneurship support is not livelihoods but *productive transformation* of economies and societies, which microenterprises are unlikely to directly support (Schramm 2004). More recently, others have argued that global uncertainty in business and labor markets makes it wise to expand the definition further to explicitly include urban and rural developing country entrepreneurs despite the likely smaller size of resulting businesses (Hagel 2016).

However, there is evidence for the gains that youth beneficiaries in developing countries make from learning how to adopt core entrepreneurial behaviors—identifying opportunities, marshaling financial and nonfinancial resources, and implementing business models that improve on delivery of products or service. They improve their livelihoods and in some cases create growth-oriented businesses. Whether out of necessity or in pursuit of a specific opportunity, youth across the developing world have exhibited great creativity. They have created or adopted low-technology solutions in response to specific community needs ranging from battery-charging and irrigation to simple wind power. They have identified unmet low-technology needs—rubbish removal, food delivery, and fish fingerlings—and converted them into viable businesses. In rural farm families, the process of entrepreneurship may be applied in adopting new agricultural technologies (improved seeds or breeds) or capitalizing on underserved market niches (e.g., organic vegetables) leading to better-focused, more opportunity-driven businesses and higher and more stable incomes.

We suggest setting aside the question of "who is a real entrepreneur?" and focusing on where entrepreneurship programs can deliver value to specific beneficiary groups. In practice, livelihood-related outcomes (income, survival, security, stability) are pursued through holistic interventions that include financial literacy and savings, microfinance, value chain development, and enterprise development, among other tools. EE&T may be one method of supporting the achievement of livelihood objectives and longer-term employability goals for specific youth populations as well as supporting economic growth, rural development, and women's economic empowerment. Nonetheless, we acknowledge that the promotion of entrepreneurship is better established as a method of achieving transformative economic growth (firm growth, productivity, innovation). Programs targeting youth should ensure that the approaches and outcomes are geared to realistic development objectives, that entrepreneurship is not viewed as a panacea to solve all livelihood challenges, and that partners are selected who understand how to adapt (entrepreneurship) programs to the local context.

Entrepreneurship Skills?

A relatively strong central thread in academic entrepreneurship literature is focused on three clusters of competencies that can be taught or improved through entrepreneurship: focused education, training, or workforce development programs.

Core Entrepreneurial Skills

- Opportunity identification
- Ability to capitalize on opportunities through resource mobilization
- Business model execution

Drawing on several influential strands of research in academic and empirical research on both youth and adult entrepreneurship, a comprehensive literature review commissioned by the Department of Business Innovation and Skills of the U.K. (2015) noted "that in general there is consensus that high levels of entrepreneurship skills are associated with competence in the process of opportunity identification (and/or creation), the ability to capitalize on identified opportunities, and a range of skills associated with developing and implementing business plans [models] to enable such opportunities to be realized…The various contributions to the debate vary mainly in terms of the level of detail provided." This three-part definition also tracks closely with the textbook definition of entrepreneurship.

Figure 1. European Union EntreComp: Entrepreneurship Competence Framework (FN)

Adapted from Bacigalupo 2016

Both soft skills and, to a lesser extent, personality traits, may play a role in each of these skill clusters (Chell 2013). The European Commission's (EC) Joint Research Centre also defines entrepreneurial competencies in three parallel areas (ideas and opportunities, resources, and into action) further defining the 15 mostly soft skills that comprise the cluster as a whole (Figure 1) on the left (Bacigalupo 2016).

In each of these formulations, entrepreneurial skills (or skill clusters) draw substantially upon the specific soft skills related to communication, social skills, higher order thinking, self-control, and positive self-concept, which were identified in previous research activity under USAID's Workforce Connection project as well as others (Lippman et al. 2015).

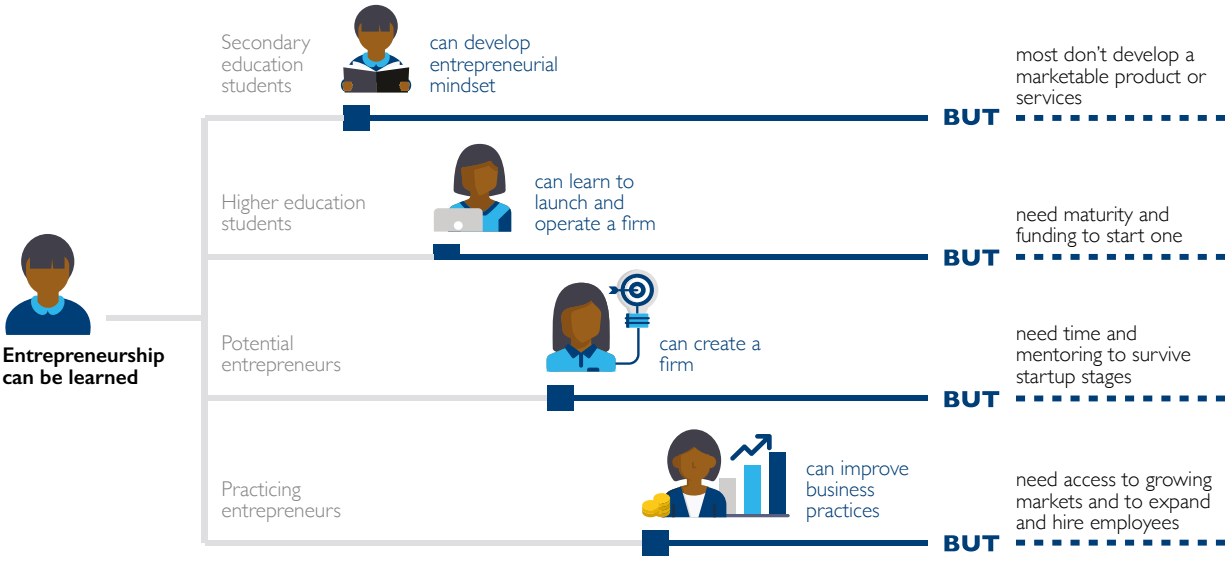
These skills are related to but distinct from fundamental business management skills. Business management and operations, financial literacy, marketing, and sales are important skills for executing a business model, but they do not substitute for the core competencies of *opportunity identification* and *resource mobilization*, which are sometimes captured by the term "entrepreneurial mindset." This is an important distinction because small business assistance or enterprise development programs focusing on basic managerial and business skills may be re-packaged as entrepreneurship programs without sufficiently incorporating the competencies that comprise the core of the entrepreneurial process. One goal of this report is to inform which types of skills are most effective in generating positive entrepreneurial outcomes for specific populations.

Are Entrepreneurs Born or Made?

Our definition also raises related questions about whether the entrepreneurial mindset and related core competencies can be taught or whether they are, in fact, features of the entrepreneurial personality. One major debate is the extent to which core entrepreneurial competencies—opportunity identification and resource marshalling in particular—are competencies or personality traits. The question whether entrepreneurs are "born" or "made" (and therefore appropriately supported by training-focused interventions) remains an active one in some areas of the entrepreneurship field.

As important is recognizing that "learning entrepreneurship" also does not necessarily guarantee significant permanent improvements in economic status. Valerio et. al. (2014) emphasize that while advancement is possible, young entrepreneurs face different opportunities and challenges based on their skills and resources, as depicted in Figure 2.

Figure 2. Realistic Objectives for Youth Entrepreneurship Programming



Source: Modified by FHI 360 based on Valerio, 2014.

Consistent with this model, other research has found that for many participants in business and entrepreneurship training, particularly the poorest, incomes may rise immediately after program completion, but these gains are likely to be short-lived (Blattman and Ralston 2015).

These are complex issues, the resolution of which is beyond the scope of this guidance document. However, when planning interventions, selecting beneficiaries, and setting realistic program targets, program designers should keep in mind the possibilities that not all youth are equally capable of or inclined toward becoming an entrepreneur or of sustaining economic gains resulting from entrepreneurship interventions.

How does the enabling environment (ecosystem) impact youth entrepreneurs?

The entrepreneurship enabling environment, or ecosystem, comprises the political and social context in which business formation and growth occurs and includes the legal and regulatory framework; availability of finance capital and services; the degree to which the culture is supportive of entrepreneurs and risk-taking; and the growth orientation of businesses (see Auerswald 2015; Isenberg 2011). According to a 2014 Organisation for Economic Co-operation and Development (OECD) report, these factors "formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment" (Mason and Brown 2014).

The Global Entrepreneurship Monitor (GEM), launched in 1999, is a collaborative initiative of a consortium of notable business schools to standardize and track entrepreneurial activity and ecosystem quality, currently reporting on 65 countries worldwide. Key measures presented annually include total entrepreneurial activity (TEA) reported in aggregate and by age group, differential reporting on "necessity" (survival) and "opportunity-driven" entrepreneurship; sufficiency of school-stage and postschool entrepreneurship education, and several dimensions of government policy. These data provide important clues about the quality of the entrepreneurial ecosystem.

In general, expectations of youth entrepreneurs should be calibrated with a realistic appraisal of the entrepreneurial ecosystem in mind, recognizing that entrepreneurial skills and capabilities are not the only determinants of success. Where available, GEM data (and other ecosystem assessments) can inform USAID decision-makers about how successful programs might be in light of the local conditions supporting or impeding entrepreneurship. USAID and implementing partners should also consider these factors both in interpreting research and in decisions about programming. In a development environment with a weak or overtly hostile ecosystem, implementers are advised not to expect large or immediate improvements in entrepreneurial performance from program investments in youth entrepreneurship since youth are least likely to have the networks, resources, experience, and power to overcome limits of the ecosystem. Numerous programs reviewed for this report contain elements designed to help youth overcome these barriers. However, in the worst entrepreneurial ecosystems, related outcomes such as entrepreneurial mindset, entrepreneurial competencies, or participant socioeconomic and employment status may be better independent measures of program effectiveness.

What Does Research Tell Us about Youth Entrepreneurship and Related Programming?

"Youth-focused research into entrepreneurship is still in its infancy and as a result very limited" according to Ellis and Wiliams (2011) and others including Blattman and Ralston (2015), though an increasing emphasis on program design for evaluation is beginning to generate better evidence (YBI, 2011). Impact evaluation literature on youth microenterprise is underdeveloped, and, "although the household production sector is where most youth will find employment opportunities, the impact evaluation literature does not yield a clear conclusion on what works, perhaps because the sector is so heterogeneous" (Fox and Kaul 2017, 32). At the same time, emerging experimental literature is urging greater emphasis on nontraining elements of youth self-employment and livelihoods support, particularly cash transfers and other forms of potential financial support (Blattman and Ralston 2015; Blattman, Fiala, and Martinez 2014). In this section we draw on limited empirical research, meta-analyses, expert consensus, and practice-based research to present what is known specifically about youth entrepreneurship.

Research Findings on the Context for Youth Entrepreneurship

Youth generally report similar barriers to entrepreneurship across country income groups including those related to skills, business experience, market access, access to capital, business networks, and the enabling environment. These are generally consistent across low-, middle-, and high-income contexts (ILO 2010; Fatoki 2011; Chigunta et al. 2005). There is some evidence that youth tend to overestimate access to capital as a constraint to starting businesses relative to other constraints less obvious to them as beginning entrepreneurs (YBI 2013; UN 2011). Other frequently mentioned challenges include lacking awareness of available services, age stereotypes, and lack of family and/or community support (Kew et al. 2015).

Youth in Africa and Latin America are more likely to be "necessity-driven" entrepreneurs (e.g., lacking the option of wage employment) rather than "opportunity-driven" and are more likely to "sell undifferentiated products in over-traded markets," reducing the long-term viability of their businesses (Kew et al. 2015; OECD 2017, 206). In Africa, analysis of GEM data also shows that youth with more education tend to have higher growth expectations (e.g., more opportunity focused) (Kew et al. 2015). This conclusion is consistent with a large body of research attributing entrepreneurial success to a combination of education and business experience (Iversen et al. 2016).

Young women entrepreneurs face locally specific barriers related to both legal frameworks and customs, amplifying challenges. The generally lower performance of women's entrepreneurial ventures across numerous outcome measures reflects a wide range of locally specific factors (Kew et al. 2015; OECD 2017, 206; Cho and Honorati 2013).

Research to date offers limited guidance on how to adapt youth entrepreneurship programs to address contextual factors. Youth-supporting organizations like Youth Business International highlight the importance of adapting entrepreneurship programming for youth to their contexts. Key factors are the economy's stage of development and resulting types of business opportunities available, the stability context (conflict, post-conflict, or peaceful), and urban versus rural environments (YBI 2013). However, to date, very limited empirical research has been done on whether programs tailored to the context according to these recommendations perform better than others.

Adolescents and young adults may have unique advantages and challenges in entrepreneurship stemming from their age-specific relationships to risk. Due to developmental stages and brain development, adolescents and young adults may be more prone to risk taking, be unprepared to analyze and manage risks, and have weaker planning, logical reasoning skills, and impulse control, which could affect their ability to make sound and rational decisions. On the other hand, a positive aspect of this developmental phase is that they may be more likely to take appropriate risks in business than adults and have higher levels of creativity and out-of-the-box thinking that can contribute to innovation.

Research Findings on Youth Entrepreneurship Programming

Evaluation research does provide some encouragement regarding the usefulness of supporting youth entrepreneurship through a "training-plus" approach.

Education and training play a central role in youth entrepreneurship programming. Because youth are more likely to be connected to education and training systems, entrepreneurship can be nurtured throughout the education pipeline, building valuable skills both for future entrepreneurs and employees (Mowgli Foundation 2016; YBI 2016; AYESG 2008, 15).

Education and training are (even) more effective when combined with complementary services, especially access to finance. For the *Transforming Lives through Entrepreneurship in Kenya* program, evaluators found that the start-up rate for young entrepreneurs who received training plus a loan was higher than for those who only accessed training. They also saw more associated benefits, such as increased household incomes compared to a "training only" group (Lewins 2014). Blattman and Ralston (2015) also report that training combined with capital injections may be more effective than training alone in promoting entrepreneurial outcomes in fragile and poor country settings, while calling for further research. Valerio et. al. (2016) noted greater effectiveness of a combination of training, grants, mentoring, and internships in evaluated programs for potential entrepreneurs. Other research suggests that cash and in-kind transfers combined with training yield larger impacts than microcredit (alone or combined with training) (Cho and Honorati 2013, 26).

Entrepreneurship programming is more effective for youth than for non-youth beneficiaries. In a meta-regression analysis, World Bank researchers found that youth derived significantly higher benefits from entrepreneurship programming compared with non-youth beneficiaries. The effects were significantly higher both for labor market and business performance outcomes (Cho and Honorati 2013).

Skill development is required for youth to overcome disadvantages in business opportunity identification. The African Development Bank's Chief Economist's Office surveyed 640 youth and adult entrepreneurs in Swaziland and found that "with their lack of work and entrepreneurial experience, weak links to professional networks, and limited start-up capital and access to credit, young entrepreneurs face higher cost than adults when searching for opportunities and turning them into businesses." They concluded that "shortages of entrepreneurial skills have lowered [business opportunity] search effectiveness of potential young entrepreneurs and the rate of youth start-ups…for young entrepreneurs facing high cost of searching for business opportunities, support for training is more effective in stimulating productive start-ups than subsidies" (Brixiova et al. 2014).

Both training and mentoring influence young entrepreneurs' access to finance. In an evaluation of two youth entrepreneurship support programs in Uganda, the majority of youth who had received training were able to secure a loan compared to only half of those who did not participate in training (Montrose, 2016). YBI also contends that training on entrepreneurial skills contributes to lowering the risk of lending to young entrepreneurs, in some cases substituting for collateral and loan guarantees (YBI 2011).

Training delivery modes influence the success of youth entrepreneurship interventions. Research from an expert group on youth entrepreneurship convened by OECD's Local Economic and Employment Development (LEED) program indicates that "the success of interventions relies on appropriately targeted programmes and methods of delivery," which in turn requires a "fine-grain level of segmentation within the youth population" (Potter and Halabisky 2014).

Higher-intensity, longer-duration, and more expensive interventions have yielded higher return on investment. YBI reports that more expensive, longer-term youth entrepreneurship support can yield higher return on investment. In one comparison, longer-term interventions generated 52 percent higher sales volumes than short-term training and benefits greater than nine times the (higher) cost (YBI 2016, citing Montrose 2016). Some evidence suggests this may not apply to household-sector businesses (Fox and Kaul 2017).

Limitations of Current Research

A number of questions simply have not been answered sufficiently by research or have not been raised regarding what nuanced research needs to be conducted. For example, we do not know how much difference there is between programs that are effective for youth in comparison to those for adults, the specific differences in optimal delivery methods, which contextual factors influence optimal training and complementary services packages, and how much influence contextual factors exert. We also caution that the evidence base is drawn from heterogeneous programs that most agree are not perfectly comparable (Cho and Honorati 2014). Evaluations conducted in different programming contexts often generate contradictory or inconsistent findings, leading to confusion about what conclusions can be drawn and how confident we can be about what works.

One factor clearly contributing to this confusion is the use of widely varied definitions of entrepreneurship programs across donors, populations, and implementation contexts. For example, the results of self-employment, entrepreneurship, vocational training, and other skills-focused programs are often conflated. This raises several questions. For example, if entrepreneurship skills are meaningfully distinct from general business skills, will the evaluations of traditional business training programs meaningfully inform entrepreneurship programming? Can those that do not focus centrally on entrepreneurship skills accurately reflect the performance of entrepreneurship programs? Should all vocational training interventions that contemplate self-employment pathways be treated as entrepreneurship programs? Clearer definitions and more consistency regarding what constitutes entrepreneurship programming—intended outcomes of this document—are important steps in developing a more comparable and reliable evidence base.

Programming Guidance

This section presents programming guidance based on a review of where EE&T and complementary services have contributed to positive outcomes for program beneficiaries. It contains programming guidance for general youth populations and for six subpopulations.

Background on Programming Guidance

Where Does this Guidance Come From?

This guidance was developed by reviewing a broad base of literature on evaluated entrepreneurship programs. Elements (features) of a program associated with positive outcomes were identified in four domains related to entrepreneurship and related measures of economic well-being.

1 / We identified every relevant element of each program and coded these for quantitative analysis, allowing us to calculate the probability that a particular feature was present in programs that were successful in achieving outcomes.

2 / We then created a measure of the "strength of recommendation," which combines the probability of a feature/element appearing in successful programs with an index value representing the strength of the evidence base.

3 / We generated recommendations for programming for the top two outcome domains in which the strongest or most consistent impacts on outcomes were observed for each subgroup analyzed.

The result is a set of standard program recommendations based on the total sample of programs that were rigorously evaluated and their likely impacts on outcomes for eight subgroups of beneficiaries/program participants. Highlights are provided in Box 1, while a complete description of the research methodology appears in Annex 2.

Which Subgroups/Populations were Analyzed?

Programs serving eight subgroups of beneficiaries/participants were analyzed separately to better understand which program features are most effective in generating outcomes for each specific population. The groups for which recommendations are presented are:

- All participant groups combined
- Practicing entrepreneurs (currently engaged in business activities)
- Potential entrepreneurs (not currently engaged in business activities)
- Rural youth engaged in agriculture
- Rural youth not engaged in agriculture
- Female-only participant groups
- Mixed-gender participant groups
- At-risk populations
- Not at-risk populations (excluding all at-risk youth)

In some cases, these subgroups track closely to USAID programming objectives (women's and girls' economic empowerment, rural agricultural and nonagricultural development, and at-risk populations), while in other cases they encompass populations that might be served in a variety of programming contexts.

Box 1. Highlights of Entrepreneurship Programs Analysis

As the basis for this report, YouthPower Action performed a quantitative analysis of the effectiveness of entrepreneurs hip programs in achieving a variety of outcomes. The purpose was to discover more about the programs that are effective in achieving outcomes for specific target populations or programming contexts of interest to USAID.

We based our analysis on the most comprehensive review of evaluations, meta-analyses, and systematic reviews currently available from three key sources—Valerio et al. (2014), Kluve et al. (2016), and several evaluations from the USAID Development Experience Clearinghouse (DEC)—and outreach to key stakeholders. A full list of evaluations reviewed can be found in Annex 4. We chose to use these data sets because much of the content had been validated by the research community, they contain comparable data screened from hundreds of programs, and each program included had a rigorous, publicly available evaluation that had been coded by skilled researchers. FHI 360 re-analyzed this data and further coded each program to reflect which of 29 program features it contained; which specific populations are addressed (e.g., urban and rural, girls and young women, at-risk youth); and whether curricula included elements directly related to entrepreneurship skills as distinct from more general business skills.

Our analysis was intended to detect patterns in these programs based on specific USAID target populations and programming contexts. One limitation of this approach was that only a few program evaluations existed for some subpopulations. This meant (linear/multiple) regression analysis of factors correlating with success was not as powerful as it would have been with a larger data set. As a result, we conducted a very simple statistical analysis on each program feature in each programming context to determine which program elements are "associated" with programs that generated positive outcomes in one or more of the domains defined by Valerio et al.

What are the Outcome Domains Presented in this Guidance?

Each programming guidance section provides recommendations for features to include in programs to achieve outcomes in "primary" and "secondary" domains. Outcome domains refer to a measurable set of outcomes drawn from analysis of the programs analyzed in preparing this guidance. The primary domain represents the outcome with which program features had the highest level of success. The secondary domain represents the outcome which appeared to have the second most often level of success. The composition of each of the four outcome domains is presented in Table 2.

Table 2. Outcome Domains

Entrepreneurial Mindsets	Entrepreneurial Capabilities
Socio-emotional skills and awareness of entrepreneurship associated with entrepreneurial motivation and future success as an entrepreneur. • Socio-emotional skills (persistence, self-efficacy, need for achievement, proactivity, creativity, optimism, locus of control, openness to ambiguity, opportunity recognition, self-confidence) • Communication and teamwork leadership • Entrepreneurial awareness • Values, attitudes, and norms • Perception of entrepreneurship, willingness and intention to become an entrepreneur	Entrepreneurs' competencies, knowledge, and technical skills associated with their entrepreneurship business and management. • General business knowledge • General enterprise management skills • Accounting and financial literacy • Marketing and sales—planning and execution • Strategic planning—strategic and risk assessment, business plans, problem forecasting • Networking skills • Vocational skills
Individual Entrepreneurial Status	**Firm/Business Performance**
How a participant's individual entrepreneurial, employment, or income status has changed (or life has improved) • Enterprise formation • Employability—private sector and self-employment • Income and savings, and wages • Network formation	How indicators of a business venture's performance have changed as a result of an intervention • Profits, sales, cash flow, and sustainability • Job creation • Business expansion (markets, exports, borrowing) • Productivity • Formalization • Reinvestment • Implementation of innovation • Products and services (quality and customer satisfaction)

Source: Adapted from Valerio et al. 2014.

For What Programming Areas Does this Document Provide Guidance?

For each subpopulation, this document provides recommendations for eight programming areas to achieve specific primary and secondary outcomes.

Entrepreneurial Mindsets	Entrepreneurial Capabilities
Profile of Trainers	Does training led by teachers, practitioners, or experts yield the best outcomes?
Delivery Method	Should training be conducted in a classroom setting, in an experiential setting, or online?
Duration	What is the recommended duration of training associated with success for each specific programming situation?
Training content (top five in rank order)	What are the five areas of program content that generate the best outcomes for each programming situation?
Individual "complementary services"	What additional services to individual participants support the achievement of program outcomes?
Firm "complementary services"	What additional services should be provided to participants' businesses or firms to enhance outcomes?
Business types	Should training focus on assisting participants in starting a general business, an agricultural business, or another "niche" business?
Class size	What is the optimal size of training groups for each subgroup of participants?

For each programming area we recommend the top programming feature (element)—the one that was present in the largest number of successful programs—except in the case of training content, where up to five recommendations are provided.

Why is there such a strong emphasis on education and training?

EE&T is the most common entry point for youth entrepreneurship efforts whether or not programs provide additional complementary services or support. Globally, there is a limited base of high-quality research on youth entrepreneurship programming, and the vast majority of youth-focused programs that have been rigorously evaluated are centrally focused on education and/or training (Ellis and Williams 2011; Valerio et al. 2014). This is consistent with the findings of Blattman and Ralston (2015) that "despite the growing number of studies, there are almost none comparing capital transfers with and without training" (p. 14).

The purpose of this research is to look at the landscape of entrepreneurship support programs with high-quality evaluations to try to discern—based on the most rigorous possible quantitative analysis—what works best for target populations of interest to USAID. A comparison of outcomes of the majority

of training-centric programs with the few nontraining-centric youth interventions (e.g., cash grants) is not possible as there is little evidence available on those programs, and often research methodological and structural differences in how data was coded bar easy comparison.

The main data set used for this analysis (Valerio et al. 2014) was chosen because it is the best available and most comparable data despite some limitations. It focuses specifically on education and training-centric interventions but also provides significant data on the complementary services provided along with training in each of the analyzed interventions. While extensive, this data is not granular enough—nor is the data set large enough—to allow rigorous comparative analysis of EE&T-centric versus non-EE&T centric programs, nor to distinguish programs that expend large shares of their resources on training as opposed to other types of support services such as the provision of finance. Moreover, the paucity of impact assessments for nontraining-focused interventions (such as cash transfers only) and the fact that these are not per se entrepreneurship programs would make integration into this data set difficult and would not be expected to produce comparable results.

What are the Strengths of this Guidance?

By combining extensive evidence from a large set of experimentally and quasi- experimentally evaluated entrepreneurship training programs, this guidance provides program designers and implementing partners with an array of features known to be present in successful programs for specific subgroups of program beneficiaries/participants. It can help USAID and other development program designers and implementing partners understand what outcomes can reasonably be expected from programs for specific populations that follow the guidance.

We have also included in the recommendations only those program features/elements with a greater than 60 percent (in the top two outcome domains) or 75 percent (in the emerging practices category) probability of generating positive outcomes in the sample of programs analyzed. Based on the use of these thresholds, even those recommendations noted as "lowest" strength are affirmative recommendations. More complete detail on the method of selecting recommendations appears in Annex 2.

What are the Limitations of this Guidance?

Across all programs and their corresponding outcomes, our study is limited by the availability of complete and comparable data. For the purpose of this study, we assume the information reported in the reviewed documents accurately reflects program performance for each beneficiary group, but we cannot be completely certain this is the case.

While the total sample of programs analyzed in the combined data sets is relatively robust, the evidence base also narrows as we focus in on specific subgroups. For example, evidence related to rural agriculture programs excludes all programs not targeting agriculture entrepreneurs and all programs not delivered in rural areas. This limits our sample size for each subpopulation. As a result, our confidence in the recommendations is lower for subsets of beneficiaries for which there are fewer programs in our sample.

In addition, the "strength" of recommendations is not comparable across program domains or subgroups. This is because we have presented in each case the strongest recommendations available for each "domain" of programs (profile of trainers, program content, supporting services, etc.). We are confident in the recommendation of the strongest feature or element available in each programming area, though the strongest recommendation in one domain *may be stronger or weaker than the strongest recommendation in another domain.*

Finally, of the 37 programs included in the sample, 17 were not limited to participants within our definition of youth. In these instances, implementers included at least some participants over the age of 30, so the recommendations are not based exclusively on youth-focused programs.

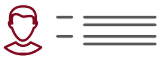
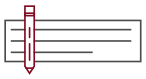
General Programming Guidance

Below we provide guidance from a broad overview of the highest-level group of our data—one that covers all the projects (Table 4, overleaf). We then illustrate the similarities and differences between each of these subgroups based on how program elements performed across each of the eight domains (Table 4 and 5).

First, across the board, the most widely generated outcomes were entrepreneurial individual status and firm/business performance. This suggests that USAID program designers and implementing partners can reliably generate improvements in *individual entrepreneurial status* (income or employment for program beneficiaries), and *firm performance* of participants' existing business activities using entrepreneurship interventions. In only two cases—currently practicing entrepreneurs and rural nonagricultural populations—programs showed strong ability to generate outcomes related to entrepreneurial *mindsets* and *capabilities*. It is unclear whether the programs we analyzed are not measuring changes in other types of skills or whether these changes are more difficult to detect.

Second, we found that for most populations, overall programming recommendations are very similar. The main differences between recommendations for different populations are found in the priorities for content, training modalities, and the most appropriate types of support services. These differences, however, are minor compared to the commonalities in recommendations across subpopulations, *and regardless of the primary outcomes that programs were reporting*. This represents an unexpected degree of consistency and suggests interventions that comply with relatively straightforward programming guidance can achieve some measure of success.

Table 3. Core Programming Recommendation for EE&T

Profile of Trainers 	For all populations, training should be **conducted by a recognized educator** (e.g., a trainer, teacher, or university professor). It appears that educators have the most uniform expertise in passing on knowledge and serve as a backbone to educational or training interventions.
Delivery Method 	For **most subgroups** (already practicing, potential, female, rural agricultural, and rural nonagricultural), training **should be conducted in a classroom setting**. However, when targeting populations by their **risk levels (both high- and low-risk), or in nontargeted programs**, training should be delivered through **experiential, applied, or hands-on learning approache**s (e.g., internships, apprenticeships, or other forms of on-the-job training).
Program Duration 	There is no strong or consistent recommendation across population groups regarding the optimal duration of training experiences. For most subgroups, recommendations regarding optimal class size were relatively weak. Please refer to recommendations in Annex 3.
Training Content 	For nearly all sub-groups of participants, training should focus on **developing general business and management skills**- teaching the principles of business, and skills needed to manage and operate a business. Training should also focus on developing **core entrepreneurial skills**—those related to opportunity identification, organizing resources, and taking action including teamwork, communication, and creativity, and fundamental skills and principles of entrepreneurship. For five of the subgroups analyzed, this content ranked in the top three recommendations. For most sub-groups, entrepreneurship education and training should also focus on **developing complementary vocational skills** (e.g. skills for specific occupations or employment such as carpentry, masonry, electrical wiring, plumbing, sewing, etc.). Vocational skills were recommended for six sub-groups. Training should also focus on using program activities to **build a range of supporting entrepreneurial skills**. (e.g. product design and creation, "pitching" business to potential funders, legal aspects of business startup, and localized content). This program feature was recommended in eight cases, most strongly for practicing entrepreneurs, rural agricultural entrepreneurs, and not-at-risk populations.
Individual complementary services 	For five sub-groups, the strongest recommendation is to provide **business coaching or mentorship opportunities** to participants (e.g. pairing with an entrepreneur or trainer/coach to assist them in applying the new knowledge to their own business and/or opportunities to interact with other entrepreneurs). Overall, and for three sub-groups, the strongest recommendation is to **offer financial or in-kind incentives** to participants encourage participation and completion of program (e.g. cash rewards for minimum attendance, waiving of fees, free meals for attendance, etc.). These incentives are recommended for all rural situations, likely due to transportation challenges and/or the need for income replacement, but also for not-at-risk populations who may have better alternative options to program participation.

Firm complementary services 	For the total population and all sub-groups, we found that programs should provide access to finance or means of gaining access to finance to participant firms (e.g. cash grants or loans, partnerships with microfinance institutions, etc.). The majority of programs 1) provided small capital grants or loans to start up business, 2) provided financial prizes based on pitch/ business model competitions, 3) provided access to more formal loans or credit, or 4) targeted participants in microfinance programs. Our sample did not allow comparison of the effectiveness of these approaches.
Business type 	Business types supported by successful programs vary considerably across the sub-groups we analyzed, making overall recommendations impossible.
Class size 	Class sizes had almost no detectable influence on outcomes.

Key Findings and Specific Recommendations for Subgroups

Despite a high degree of consistency across recommendations, there are notable differences between those for all groups and those for specific subgroups/populations and programming situations. Where USAID wishes to tailor programming to specifically address the needs of a subgroup of youth or a programming situation, some features can be optimized. This section provides key findings and specific recommendations for each subgroup analyzed.[1] A detailed version for each subgroup is presented in Tables 4 and 5 at the end of this chapter. Table 4 presents recommendations for programming to achieve each subgroup's primary (strongest) outcomes, while Table 5 presents the same information for secondary (second-strongest) outcomes for each subgroup.

Potential Entrepreneurs

Provide potential entrepreneurs with longer training periods to compensate for limited business experience and focus strongly on training in core entrepreneurial skills such as opportunity identification and teamwork.

Potential entrepreneurs (PoEs) are young people who have no business experience or only limited experience selling goods for survival. They typically have not had formal exposure to entrepreneurial concepts, methods, or mindsets. The highest performing outcome for programs targeting PoEs is individual entrepreneurial status, which measures economic success at the individual level. This is logical since potential entrepreneurs have not yet started businesses. Improved business performance can only happen after participants start a business, which requires longer timeframes that may be beyond the duration of the program.

[1] These recommendations are based on analysis of different subsets or "slices" of the total set of programs. These subsets vary in size/number and in many cases overlap.

PoEs need longer training than practicing entrepreneurs—up to six months—which is not surprising given their limited experience, and these groups often are either in school or have dropped out and are unemployed. They may have more time available to learn new skills. Programs longer than six months did not, however, further strengthen outcomes. *Core entrepreneurial skills*—those related to identifying opportunities, mobilizing resources, and taking action—is rated the top content feature, followed by more conventional management, vocational skills, and strategic planning. The most important complementary services to provide to this population are business coaching and access to finance, and programs should be oriented toward youth starting general rather than sectoral or agricultural businesses.

Practicing Entrepreneurs

Shorten training for practicing entrepreneurs to less than two weeks and focus on immediately applicable business management, finance, and marketing skills. Prioritize business coaching as the key individual complementary service and use broad-based rather than sector-specific training and services to address the widest variety of business contexts.

Practicing entrepreneurs (PrEs) are young people who already engage in business activity, either on their own or as part of a family unit. Programs to reach them are typically noncurricular (e.g., youth clubs, after-school programs, or targeted outreach to young self-employed people). The sample of programs includes entrepreneurs from varying socioeconomic and educational backgrounds who may or may not have any prior training in business or entrepreneurship. It includes secondary and tertiary graduates with relatively formal, sophisticated businesses as well as dropouts and graduates who participate in family-level microenterprises. The primary outcome for programs targeting practicing entrepreneurs is the performance of their business or firm, while the second strongest outcome is individual entrepreneurial status, which captures income, wealth, and employability effects.

The most strongly recommended training content for practicing entrepreneurs focuses on helping them build general business management, financial, and marketing skills that contribute directly to existing businesses, as well as supporting entrepreneurial skills (that support innovation and business expansion). Programs with very short training durations (less than two weeks) were most effective in generating positive outcomes, presumably because longer education and training experiences take time away from running the currently active business.

Business coaching is the most effective individual-level complementary service for this population. Short classroom-based training combined with longer-term coaching support translates into an experiential or hands-on learning context, with the participant's own business as the learning lab. Outcomes were stronger in programs that focused on assistance for general rather than sector-specific businesses. This suggests that entrepreneurship programming can be most effective in serving PrEs if training is relevant to all business and vocational skill situations rather than being trade- or sector-specific, with ongoing business coaching providing context-specific support for the actual businesses in which trainees are engaged.

Rural Youth Engaged in Agriculture

Structure programs for rural agricultural entrepreneurs to be more like traditional business or enterprise development training with less emphasis on promotion of opportunity-driven entrepreneurship, reflecting their lower tolerance for risk. Training durations should be short to not take much time away from farm activities and should include vocational skills while facilitating access to finance and providing direct or in-kind incentives for program completion.

Young rural residents engaged in agriculture can be reached through school-based curricular or noncurricular interventions, or through community-based entrepreneurship training, possibly offered through existing farmers organizations or cooperatives. Our recommendations are drawn from a relatively small base of programs that includes both those targeting participants who are already active in an agricultural business and those who are not yet active. Since the majority of rural youth engage in family farm activities from a young age, they are therefore counted as already active in an agricultural business or livelihood.

Entrepreneurship program interventions for rural youth populations in agriculture (e.g., Feed the Future) can improve both the individual entrepreneurial status outcomes and the performance of existing (e.g., personal or family) agricultural businesses or farms. The recommendations for these two outcomes are virtually identical because income and farm performance are closely linked in most rural households.

The profile of an effective entrepreneurship program for this group looks more like traditional business training and less like preparation for opportunity-driven entrepreneurship. It includes short-duration training that does not take too much time away from farm activities, includes vocational skills, and provides complementary access to finance services. Training on core entrepreneurial skills or ongoing business coaching are not strongly recommended. Direct or in-kind financial incentives for participants are also weakly recommended for both outcomes, presumably because in some cases these are necessary to replace or compensate for lost farm income during training.

Rural Youth not Engaged in Agriculture

Shorten training for rural nonagricultural youth to less than two weeks and focus on immediately applicable business management, finance, and marketing skills. Prioritize business coaching as the key individual complementary service, use broad-based rather than sector-specific training and services to address the widest variety of possible business contexts, and offer financial incentives to cover costs of program attendance.

Nonagricultural entrepreneurship in rural areas can encompass a wide range of off-farm or postproduction activities in rural areas. Rural youth are frequently engaged in household-level mixed livelihood strategies that include business activities, thus the primary outcomes of these programs relate to *firm/business performance*. For most rural youth, improving the family-level off-farm enterprise will be

a key goal. Entrepreneurship programs can also strengthen participants' entrepreneurial *competencies* to a limited extent, principally by slightly varying program elements. This will be more useful when rural in-school youth are the intended beneficiaries.

To support firm/business *performance* outcomes, recommendations for these programming situations look similar to the recommendations for practicing entrepreneurs and strongly prioritize general business management skills, financial literacy, and sales and marketing competencies. Financial incentives are also weakly recommended, presumably due to low income status of many rural participants and the need to offset lost farm income or transportation costs to training locations. Training duration did not strongly influence performance outcomes, though shorter duration training supported *capabilities* outcomes slightly better. To build entrepreneurial *capabilities*, programs can be modified to include strategic planning, networking, and a focus on niche market businesses. Incorporating literacy and numeracy skills into programming may also support the capabilities outcome.

Female-Only Participants

Provide female-only participants with training by a recognized educator in a face-to-face/ classroom context, include general business skills, provide business coaching, and support participants to prepare for niche businesses. Financial literacy and marketing/sales training should be included to support business performance objectives.

The female-only subgroup may include secondary and postsecondary students, school dropouts, graduates engaged in more complex businesses, contributors to family-run microbusinesses, and self-employed tradespeople such as tailors or seamstresses. Female-only cohorts arise in specific programming for women's and girls' economic empowerment, Feed the Future (FTF)/rural, urban, and livelihoods/ microenterprise, as well as in mainstream economic growth programs with robust gender targets operating in places where mixed-gender groups are not culturally acceptable. Program designers can use entrepreneurship training primarily to support individual entrepreneurial status outcomes of women and girls. Secondarily, programs can also support *business/firm performance outcomes*.

The recommendations for programming for female-only groups do not differ substantially from the recommendations for other subgroups, but the strength of a few key recommendations is noteworthy. Our analysis strongly recommends that training be providing by recognized educators in a face-to-face/ classroom context and include general business skills. Inclusion of business coaching and supporting participants in niche businesses are also clear recommendations to support the primary individual status outcomes. To support *performance* outcomes of participants' businesses, financial literacy and marketing/ sales program content are key recommendations, but more applied learning or experiential approaches as for other similar situations are not indicated. Program designers and implementing partners have flexibility regarding the duration of training regardless of the outcomes: programs of over six months and under two weeks performed similarly. As is the case for the PrE group, a combination of short-term training with longer-term mentoring and/or business coaching may be the most cost-efficient option for supporting female entrepreneurs.

Mixed-Gender Participants

Serve mixed-gender participants with programming that follows the same model as female-only with an emphasis on general business skills and facilitating access to finance to generate individual status outcomes. However, to support business/firm performance in these groups, business people should be the preferred trainers, and hands-on learning approaches are strongly suggested. To support both outcomes, a focus on general business skills and provision of access to finance are strongly recommended.

The population of mixed-gender participants is a large and diverse cohort that may include secondary and postsecondary students, school dropouts, graduates engaged in more complex businesses, contributors to family-run microbusinesses, and self-employed tradespeople such as mechanics, tailors, or seamstresses. This cohort can arise in a wide range of programming contexts including FTF/rural, urban, and livelihoods/microenterprise as well as in more mainstream economic growth programs. Because this is a very heterogeneous group, program designers and implementing partners should supplement these recommendations with those from context-specific subgroups (e.g., agricultural, at-risk, etc.) where available.

Main recommendations around individual status outcomes were practically indistinguishable from the recommendations for female-only groups, suggesting that *gender may not influence program content as much as might be expected*. The main exception is that our recommendations support a focus on agricultural businesses, a finding which may be a statistical anomaly resulting from composition of the sample. In the secondary outcome domain of *firm/business performance* however, there is no preference for an educator to serve as the trainer, and applied or hands-on learning approaches are indicated. This may be because programs for practicing entrepreneurs make up a large part of this sample and, in these cases, experiential/hands-on approaches are favored. Program content on general business skills and provision of access to finance strongly support achievement of both outcomes.

At-Risk Populations

Intensify hands-on (experiential) training for at-risk populations, focusing on vocational skills and core entrepreneurial skills, as well as niche businesses, such as those linked to vocational skills. At-risk populations may also benefit from longer training programs.

Programs targeting at-risk populations, in general, focus on out-of-school youth and youth with low levels of education, orphans and vulnerable children (OVC), the disabled, and other marginalized groups. This may also include youth who are in a conflict/violent setting, pregnant girls or young mothers, youth who are heads of households, and youth from economically vulnerable families.

The at-risk subgroup differs significantly from most other groups in terms of program content required to support the primary *individual entrepreneurial status* outcomes. At-risk populations require more applied/hands-on training, a top priority on vocational and core entrepreneurial skills, and a focus on niche businesses, presumably those linked to vocational skills. They may also benefit from longer training

programs. To support secondary outcomes related to *firm/business performance* for at-risk populations, program content that includes general business and management skills is highly recommended, along with financial literacy and supporting skills. There is also modest evidence that shorter training durations combined with business coaching or mentoring can support *firm/business performance* outcomes. Access to finance appears to be a primary determinant of success in achieving both *individual status* and *firm performance* outcomes, which is not surprising considering the life situations of participants.

We note elsewhere in this report that for extremely vulnerable youth, particularly those at risk of engagement with crime and violence, research has shown that direct provision of capital can be a strong influence on positive outcomes. Unfortunately, lack of detail in our sample means we cannot detect or formulate recommendations on which access to finance strategies produce the strongest outcomes.

Not-at-Risk Populations

In the rare case that USAID provides programming to groups that exclude all at-risk populations, these not-at-risk populations are best served by providing training in smaller class sizes, deploying both applied/hands-on learning and delivery by recognized educators, perhaps via more formal experiential learning opportunities.

Recommendations for not-at-risk populations were formulated by removing all programming for at-risk populations from the sample of programs analyzed. Not-at-risk populations are included as a comparison case and to inform programs specifically targeting higher socioeconomic status participants, for example, young business owners in mainstream economic growth programming or potential entrepreneurs in secondary or postsecondary settings. We believe that given the nature of development programming, few programs will target not-at-risk populations only.

According to this analysis, the primary objective for not-at-risk populations is individual entrepreneurial status. For this objective, participants benefit slightly from smaller class sizes and are more likely to need financial inducements to complete training, perhaps because they have other attractive educational or professional alternatives. This group benefits strongly from both applied/hands-on learning approaches and delivery by recognized educators. Program content that emphasizes both general business and management skills and supporting entrepreneurial skills (product design, pitching, etc.) is strongly recommended.

To achieve secondary *firm/business performance* outcomes, program content to enhance marketing and sales skills should be added (more important), along with business coaching (less important). Facilitating access to finance is strongly recommended as a means of achieving results related to both *individual status* and *firm performance* objectives.

Table 4: Programming Recommendations for Each Sub-Group for Primary Outcomes

	GROUP →	ALL	Potential	Practicing	Rural Ag	Rural Non-Ag	Female Only	Mixed Gender	At-Risk	Not At Risk
	PRIMARY OUTCOME DOMAIN →	Status	Status	Performance	Status	Performance	Status	Status	Status	Status
PROGRAM ELEMENT	Profile of Trainers	Educator	Educator	Educator	Educator	Educator	Educator	Educator	Educator	Educator
	Delivery Method	Experiential	Face to face/ classroom	Face to face/ classroom	Face to face/ classroom	Face to face/ classroom	Face to face/ classroom	Face to face/ classroom	Experiential	Experiential
	Training Duration	2 weeks to 6 months	2 weeks to 6 months	Less than two weeks	Less than two weeks	Less than two weeks, Longer than 6 months	2 weeks to 6 months, longer than 6 months	Less than two weeks, 2-6 months	Greater than 6 months	2 weeks to 6 months
	Program Content 1	General business/ management	Core entrepre-neurial skills	General business/ management	General business/ management	General business/ management	General business/ management	General business/ management	Vocational	General business/ management
	Program Content 2	Core entrepreneurial skills	General business/ management	Financial literacy/ accounting	Supporting skills	Financial literacy/ accounting	Vocational	Core entrepreneurial skills	Core entrepreneurial skills	Supporting skills
	Program Content 3	Supporting skills	Vocational	Marketing/ sales	Marketing/sales	Marketing/sales	Core entrepreneurial skills	Supporting skills	General business/ management	Core entrepreneurial skills
	Program Content 4	Vocational	Supporting skills	Supporting skills	Vocational	Core entrepre-neurial skills	Supporting skills	Strategic planning	Supporting skills	Strategic planning
	Program Content 5	Income-generation activities	Strategic planning	Core entrepre-neurial skills	Core entrepreneurial skills	Supporting skills	N/A	Vocational	Strategic planning	Vocational
	Individual complementary services	Financial or In-Kind Incentive	Business coaching	Business coaching	Financial or In-Kind Incentive	Financial or In-Kind Incentive	Business coaching	Business coaching	Business coaching	Financial or In-Kind Incentive
	Firm complementary services	Access to finance	Access to finance	Access to finance	Access to finance	Access to finance	Access to finance	Access to finance	Access to finance	Access to finance
	Business type	Niche	General business	General business	Agriculture	General business	Niche	Agriculture	Niche	Niche or Agriculture
	Class size	Greater than 30	30 or fewer	30 or fewer	NR	30 or fewer	N/A	greater than 30	N/A	30 or fewer

Table 5: Programming Recommendations for Each Sub-Group for Primary and Secondary Outcomes

	GROUP →	ALL	Potential	Practicing	Rural Ag	Rural Non-Ag	Female Only	Mixed Gender	At-Risk	Not At Risk
	SECONDARY OUTCOME DOMAIN →	Performance	Mindsets	Status	Performance	Capabilities	Performance	Performance	Performance	Performance
PROGRAM ELEMENT ↓	Profile of Trainers	N/A	N/A	N/A	Educator	N/A	N/A	N/A	N/A	Educator
	Delivery Method	Experiential	N/A	N/A	Face to face/ classroom	N/A	N/A	Experiential	Experiential	Experiential
	Training Duration	Less than two weeks	N/A	N/A	Less than two weeks	Less than two weeks	Less than two weeks	Greater than 6 months	Less than two weeks	less than two weeks
	Program Content 1	General business/ management	Strategic planning	Supporting skills	General business/ management	General business/ management	Financial literacy/ accounting	General business/ management	General business/ management	General business/ management
	Program Content 2	Financial literacy/ accounting	Marketing/ sales	Vocational	Supporting skills	Marketing/sales	Marketing/sales	Marketing/sales	Financial literacy/ accounting	Marketing/sales
	Program Content 3	Marketing/ sales	N/A	N/A	Marketing/ sales	Strategic planning	Strategic planning	Financial literacy/ accounting	Supporting skills	Financial literacy/ accounting
	Program Content 4	Literacy & Numeracy	N/A	N/A	Vocational	Literacy & Numeracy	Established Curriculum	Supporting skills	Income-generation activities	Supporting skills
	Program Content 5	N/A	N/A	N/A	N/A	N/A	N/A	Vocational	Marketing/sales	Income-generation activities
	Individual complementary services	N/A	N/A	Networking	Financial or In Kind Incentive	Networking	N/A	Business coaching	Business coaching	Business coaching
	Firm complementary services	Access to finance	N/A	N/A	Access to finance	N/A	N/A	Access to finance	Access to finance	Access to finance
	Business type	Agriculture	N/A	Agriculture	Niche	Niche	N/A	Niche	other	Agriculture, Niche
	Class size	N/A	N/A	N/A	NR	30 or fewer	30 or fewer	N/A	N/A	N./A

Recommendations for Further Research

The programming guidance contained in this document represents the most complete effort to date based on empirical findings about entrepreneurship education and training and related programming. The recommendations are based on the best available data, and our findings track relatively closely with previous analysis of similar data sets. At the same time, the report's findings raise several important issues and highlight the need for more nuanced monitoring and evaluation to better understand outcomes from entrepreneurship programs.

Insufficient Data to Measure Magnitude of Effects And Programs' Efficiency in Generating Outcomes

The main limitation of this analysis from a programming perspective is that data on evaluated programs is not sufficiently comparable to allow us to look at the magnitude of outcomes across programs or in relation to the cost of programs. To compensate for differences in data between reviewed programs, our analysis treats outcomes in each domain as "binary"—either programs generated a particular outcome or they did not. This means that our recommendations can inform the choice of programming elements in several domains but cannot estimate the magnitude of the effect of programs, either individually or comparatively. This constrains our ability to address the relative efficiency of interventions ("how much bang for the buck will investment in this program generate relative to available alternatives?") and to accurately compare the strength of effects across programming contexts and objectives ("how much impact can I really have on high-risk youth compared to non-risk youth?"). These are important motives for improving program data quality and increasing standardization of monitoring and evaluation.

More Data Needed on the "Entrepreneurial Ecosystem"

Research cited in a previous section has asserted the importance of a supportive entrepreneurial ecosystem or context, and various comparative measures of, and proxies for, ecosystem quality are available for a growing number of countries around the world, including for an increasing number of development aid recipients. We would expect that larger positive effects on business/firm performance are seen in places with higher ecosystem quality and initially attempted to incorporate ecosystem strength measurements into our analysis but faced two limitations. First, ecosystem quality data was not available for a large enough sample of program contexts for us to draw robust conclusions from the analysis. Second, the lack of information about the magnitude of program effects (noted above) means that we cannot (1) definitively establish the existence of ecosystem effects in programming, (2) determine

the size of influence of ecosystem factors on program results, or (3) determine whether some programs did not produce outcomes (overall or in specific domains) because of ecosystem-related issues. What we can say is that positive outcomes in several domains were generated for specific groups in countries with ecosystems of varying quality. This is still an important finding, but with better data on magnitude of effects of specific programs and complete cross-national data on entrepreneurial ecosystem quality or reliable proxies this analysis would be able to support more robust, context-specific recommendations.

More Attention to Measurement of Youth Entrepreneurial Capabilities and Mindsets

Individual entrepreneurial status and firm/business performance outcomes were the most common results reported and evaluated in the programs we reviewed. In the context of livelihoods, economic growth, and agriculture-related programming, these immediate economic gains are, logically, of primary interest. However, if EE&T is to be extended to youth as part of education-focused interventions, USAID and program implementers need more and better information about how to generate meaningful outcomes in entrepreneurial capabilities and mindsets. This is particularly true where USAID wants to support students—who will and should remain in school and will be economically inactive beyond the intervention timeline—in gaining the transferrable entrepreneurship skills that will eventually support improved labor market or self-employment outcomes. More attention to these intermediate outcomes in program monitoring and evaluation would begin to build this evidence base, while longer term (five–10 year) controlled longitudinal studies of economic outcomes for students receiving entrepreneurship education while in school would significantly strengthen our understanding of the long-term value of entrepreneurship programming.

Should Financial Assistance be Provided as Cash or Credit?

Should financial assistance to program participants be structured as cash grants or through facilitated access to microfinance or mainstream lending? While some research has demonstrated robust impacts of small grants of initial capital to young, high-risk program participants and other research suggests stronger effects of cash grants compared to microfinance access, our sample of programs did not include enough detail on the means of facilitating access to credit to answer this question. A dedicated analysis of existing evaluated programs might shed further light on answers to this question, while future research should explore comparative outcomes of cash versus credit for specific youth subpopulations.

Need for Better Evidence On Training Versus Other Services Across Contexts

Much more work is needed to address the widely cited lack of evidence regarding the comparative effectiveness of training-centric versus nontraining-centric youth entrepreneurship programming for different populations, particularly in light of the increasing scrutiny that training interventions are currently receiving. USAID program designers and implementing partners should consider designing interventions to facilitate evaluation of different combinations of training- and non-training program elements for different subpopulations. Programs could use a phased approach to introduce different combinations of training, direct financial support (transfers), access to loans, mentoring/coaching, and other program approaches, and rigorously evaluate the effectiveness of these combinations in achieving specific outcomes in the cases of household enterprises, self-employment, and growth-oriented business activities. This could generate more nuanced evidence to inform future youth entrepreneurship programming.

Annexes

Annex I
Entrepreneurship Programming Contexts Relevant to USAID

Entrepreneurship education and training (EE&T) for youth is relevant to a number of USAID programming goals. Where the economic well-being of participants and their businesses is the objective of programming, there is good evidence this programming can be effective. Examples include livelihoods, employability, rural development, and women's economic empowerment. However, these individual- and firm-level objectives do not always align precisely with, or flow up to, USAID's program-level indicators, for example, in programming for economic growth, orphans and vulnerable children (OVC), and countering violent extremism (CVE). This section provides examples and ideas of situations in which entrepreneurship programming might be employed to support a range of USAID goals, recognizing that the evidence base linking to high-level outcomes varies by situation.

Economic Growth

Entrepreneurship—the formation and growth of business enterprises through innovation—is a key method of achieving economic growth, increased productivity, and expanded employment.

USAID economic growth programs support these goals alongside other goals such as improved business environments, modernization or upgrading of industries or value chains, and trade integration. Youth entrepreneurship programming aligns directly with many economic growth-related objectives, but not all youth populations will contribute immediately or directly to these broader (formal) economy goals because not all youth have the educational and professional backgrounds, risk tolerance, and social networks to become high-growth entrepreneurs. Nonetheless, economic growth goals can be supported through programs that encourage existing young business operators in targeted sectors to be more productive, efficient, or competitive.

Workforce Development

Whether as part of an economic growth or education intervention, youth- focused workforce development programs are an extremely common venue for EE&T, usually as one element of a broader skills development effort. Technical and vocational education and training (TVET) programs, in particular, frequently combine vocational skills training and entrepreneurship based on the expectation that many

learners will be self-employed in the future. Entrepreneurship skills are also increasingly viewed as a useful skill set for formal sector employees who are expected to identify opportunities and solve problems creatively and independently. In contexts where TVET systems are treated as second-chance systems for youth with low socioeconomic status and weak basic education, programming expectations should be appropriately calibrated.

Livelihoods and Microenterprise

According to USAID's Livelihoods and Conflict Toolkit (2005), "Livelihoods are the means by which households obtain and maintain access to the resources necessary to ensure their immediate and long-term survival." Income-generation interventions "attempt to address poverty, unemployment, and lack of economic opportunities to increase participants' ability to generate income and secure livelihoods." (USAID Project SEARCH, no date). Youth interventions
such as workforce/skill development, microenterprise, self-employment, and enterprise development can support the general well-being of young currently active microentrepreneurs and may also be relevant to livelihood-enhancing interventions targeting youth populations in rural contexts.

Agriculture and Rural Development

Development programming has often treated rural livelihoods as principally composed of smallholder agriculture, but recent research under Leveraging Economic Opportunities (LEO) by USAID (ACDI-VOCA, 2015) has found that most rural households engage in a mix of on- and off-farm business and wage-labor activity, as well as nonfarm businesses and employment. In addition, weak service markets, difficulty introducing new innovations, and the prevalence of "copycat" businesses all hamper agricultural and rural economic development. Entrepreneurship programming for rural youth can provide skills and knowledge to support upgrading of these agricultural and nonagricultural businesses and livelihood activities, introduce concepts of innovation and product differentiation, and support opportunity recognition for diversification of rural business landscapes.

At-Risk Populations and Orphans and Vulnerable Children (OVC)

Because of the special disadvantages in formal labor markets faced by at-risk youth and OVC, entrepreneurship programming is viewed as an option for improving likely future self-employment outcomes. At least 14 programs included in our research—funded by donors including the World Bank, ADOPEM, Finca, MCC, and ANDE—have explicitly incorporated entrepreneurship education and promotion into livelihoods programming for youth, including at-risk youth and, in limited cases, OVC. Many programs are accompanied by supporting interventions explicitly designed to address the needs of marginalized and at-risk youth. OVC programs, in particular, often provide financial literacy training to youth and integrate youth into village savings and loan groups. In contrast to this youth mainstreaming approach, there is growing interest in creating youth saving groups specifically geared to youth interests (Banking on Change Partnership, 2016). Entrepreneurship training was also integrated into USAID's

Livelihood and Food Security Technical Assistance (LIFT) mechanism for older OVC, and the Accelerating Strategies for Practical Innovation & Research in Economic Strengthening Project (ASPIRES) trained over 250 orphans, vulnerable children, and youth in the context of HIV prevention.

Economic Empowerment of Girls and (Young) Women

Women's economic empowerment is a key focus area of USAID programming, and building the entrepreneurial capabilities of girls and young women can directly support this goal. Additionally, there is a strong relationship between entrepreneurial competencies and several of the key soft skills identified through research for USAID (Lippman et al., 2015) that may underlie economic empowerment and labor market success. EE&T programming can be specifically targeted to adolescent girls and young women or in mixed-gender groups.

Countering Violent Extremism (CVE) and Promoting Stability

USAID may consider incorporating entrepreneurship programming into CVE interventions to help populations at-risk of radicalization improve their livelihoods and self-efficacy and develop recognized roles in their communities. Entrepreneurship advocates distinguish this from simple income generation, which may not be a strong enough deterrent. One peacebuilder succinctly stated the case for entrepreneurship training as a core CVE strategy: "If youth are involved in decision-making that concerns their future, then they will be have a better chance in turning down recruitment efforts from Violent Extremist groups. A major step towards harnessing youth talent is entrepreneurship training" (Kazi 2016). Many projects have used entrepreneurship programing as an element of CVE approaches. The PDEV 2 project, for example, provided business and vocational training as a major component of a broader youth empowerment approach to counter extremism. The evidence base for these interventions is promising but, to date, only suggestive. Researchers found, for example, that entrepreneurship training combined with modest start-up grants measurably helped Liberian ex-combatants shift from criminal activity to agricultural occupations and deterred many from enrolling in mercenary forces (Blattman and Annan 2015).

Annex 2
Methodology

Our methods build on existing research on entrepreneurship programs from recent years and supplement this work with a more targeted look at USAID investments in youth entrepreneurship not included previously. We describe our methodological approach and database below.

Selection Process

To answer our research questions, we conducted a systematic literature review and analysis of available data from three primary sources: Valerio et al. (2014)1 systemic literature review of entrepreneurship programs, Kluve (2016)2 meta- analysis of youth entrepreneurship programs, and the USAID Development Experience Clearinghouse (DEC). As data from DEC constituted new research, we also conducted stakeholder outreach to obtain additional documentation from 35 practitioners of USAID-funded programs to complement our search. Altogether, our final data set consisted of 37 experimental projects across Valerio et al. (2014), Kluve et al. (2016), and 18 USAID projects from DEC and stakeholder outreach.

Developing the Framework for Guidance

We examined the current evidence for entrepreneurship programs from the experimentally and quasi-experimentally evaluated projects and compared those findings to the USAID projects. As noted above, we based our framework structure on that of Valerio et al. (2014), which categorizes the main features of EE&T programs by their outcome domains (i.e., entrepreneurial mindsets, capabilities, individual entrepreneur status, and venture performance) and program elements. The authors set out to determine the elements of EE&T programs by their types of trainers, delivery, duration, content, curriculum, complementary services, business type, and class size. Based on a review of the program coding, the research team for this guidance document decided to use the terminology of entrepreneurship programming instead. This decision was made because our review of coded programs revealed that the vast majority included nontraining content such as access to finance, business competition, and mentoring or coaching, among other complementary services. Given the focus was not primarily on youth and to better capture similar programs targeted at youth entrepreneurs in developing countries, we adapted some of these elements and added others. Additionally, given the focus of practitioners on developing or emerging market countries, developed countries such as the United States or European nations were excluded from the data.

Demographic Information

In addition to the outcome domains and program characteristics identified by Valerio et al. (2014), in order to provide guidance to practitioners interested in different subgroups, we identified and divided up data according to demographic characteristics to better understand those specific entrepreneurship outcomes and their drivers. Characteristics of the program participants include gender, age, education level, rural/urban location, in school or out of school, prior work experience, and entrepreneurship experience, among others. Given these characteristics, we analyzed our outcomes by eight main target groups: (1) potential entrepreneurs, (2) practicing entrepreneurs, (3) rural agricultural, (4) rural nonagricultural, (5) female only, (6) mixed gender, (7) at risk, and (8) not at risk.

Analysis

Using the experimental programs, we reviewed the details of each program's evaluation to determine the relationships between the elements and the four outcome domains. We coded programs as having a positive outcome domain (e.g., positive mindset) if any outcome related to that domain (e.g., socioemotional skills or entrepreneurship awareness) was found to have a positive effect.

We calculated the probabilities to show the relationship between program elements and demographic characteristics for each of the four outcome domains and their program type. This was done across all projects as well as the eight subgroups. The resulting probabilities where then ranked by a score, generated from a combination of the probability of success, the number of projects using that element, and a weight. The summed score was then used to identify the top two outcome groups that each subgroup of programs produced. These top characteristics for the two top outcome groups were recorded in a table found in each subgroup annex. Each table also includes the probability score and number of projects using the top scoring program element. A third table was recorded for emerging best practices where there was a very high probability of success but low number of projects due to the element not having been used frequently.

Each subgroup table is specific to the findings for that subgroup. These annexes include narrative analysis and guidance based on the top program elements in each table.

Limitations

Across all programs and their corresponding outcomes, our study is limited by the availability and quality of the data. In many cases, the documents we reviewed provided insufficient detail on program characteristics. Also, for the purpose of this study, we assumed that the available information reported for our analyses accurately reflected program content.

Similarly, our sample size of 18 USAID programs and 37 experimental programs is further reduced for each subgroup analyzed. Analyzing the data for specific target groups and outcomes reduces the number of programs with evidence to only those programs that include a specific target group and outcome. For

example, evidence related to performance outcomes for practicing entrepreneurs in rural areas excludes (1) programs that did not measure performance outcomes, (2) programs not targeting practicing entrepreneurs, and (3) programs not located in rural areas.

Furthermore, while our guidance is meant to inform youth entrepreneurship programs, we are limited by the available evidence. The Valerio data set, for example, includes both youth-specific programs and some (17) that included participants over the age of 30 years. Where possible, we attempted to draw conclusions for youth programs based on the literature of youth entrepreneurship.

Annex 3
Full Descriptions of Recommended Program Elements

This table presents a "key" to the programming recommendations for subgroups that are presented in abbreviated form in Tables 3.

SHORT NAME	CATEGORY/DESCRIPTION OF PROGRAM ELEMENT
Profile of Trainers	
Educator	Training should be **conducted by a recognized educator** (e.g., a trainer, teacher, or university professor).
Practitioner/ consultant	Training should be **conducted by a practitioner or expert consultant** (e.g. , a practicing entrepreneur, business owner, professional business advisor).
Delivery Method	
Face to face/ classroom	Training should be **delivered face to face or in a classroom-like setting** (e.g., groups of participants with an instructor giving lectures and answering questions)
Experiential	Training should be **delivered through applied or hands-on learning approaches** (e.g., internships, apprenticeships, or other forms of on-the-job training)
Online/tech	Training can be **delivered through an online portal or delivered by technology** (e.g., learning web portal, text-message-based instruction, or computer game)
Program Duration	
Less than two weeks	Training should last **less than two weeks**
2 weeks to 6 months	**Training durations of between 2 weeks and 6 months** were most common for successful programs.
Longer than 6 months	Training should last **more than 6 months**

SHORT NAME	CATEGORY/DESCRIPTION OF PROGRAM ELEMENT
Training Content	
General business/ management	Training should **focus on developing general business and management skills**: teaching the principles of business and skills needed to manage and operate a business.
Core entrepreneurial skills	Training should **focus on developing core entrepreneurial skills**—those related to opportunity identification, organizing resources, and taking action including teamwork, communication, and creativity, and fundamental skills and principles of entrepreneurship.
Supporting skills	Training should **focus on using other program activities to build a range of supporting skills** (e.g. , product design and creation, "pitching" business to potential funders, legal aspects of business start-up, and localized content).
Vocational	Entrepreneurship training should be **combined with vocational skills** training (e.g., skills for specific occupations or employment such as tailoring, carpentry, masonry, electrical wiring, plumbing, etc.)
Financial literacy/ accounting	Training should focus on **developing financial literacy and or accounting skills** (e.g., skills of calculating costs and prices, profits and loss, cash and money management)
Marketing / sales	Training should focus on **developing marketing and or sales skills** (e.g., those topics related to promoting and selling a business's products or services.)
Literacy & Numeracy	Training should focus on **developing literacy and numeracy skills**.
Income-generation activities	Training should focus on **developing income-generating activities with participants** (e.g., activities that are not described as entrepreneurial, such as roadside microenterprise or a salaried job).
Strategic planning	Training should focus on **developing strategic planning skills** (e.g., defining an organization's strategy or direction; making decisions on allocating its resources to pursue this strategy; business plan writing).
Individual complementary services	
Participation incentives	Program should **offer financial or in-kind incentives to participants** encourage participation and completion of program (e.g., cash rewards for attending a certain number of classes, waiving of fees, free meals for attendance, etc.).
Job counseling	Program should offer **job counseling to participants** (e.g., counseling on available opportunities, support with job readiness such as curriculum vitae (CV) or interview skills, and/or places participants into internship or job opportunities after the training).
Networking	Program should **offer networking skills and network-building opportunities to participants** (e.g. , planed networking events, guest speakers, develop an alumni community, etc.).

SHORT NAME	CATEGORY/DESCRIPTION OF PROGRAM ELEMENT
Business coaching	Program should offer **business coaching or mentorship opportunities to participants** (e.g., pairing with an entrepreneur or trainer/coach to assist them in applying the new knowledge to their own business and/or opportunities to interact with other entrepreneurs).
Firm complementary services	
Access to finance	Program should provide access to finance or means of gaining **access to finance to participant firms** (e.g., partnership with a microfinance institution, incubator, or labor organization).
Advanced	Program should offer **advanced firm-level wraparound support services** (e.g., connecting the firm with other key institutional actors, policy makers, industry leaders; supports firm with campaigns to improve regulatory environment; provides in-kind materials to improve firm performance).
Technical assistance	Program should provide **additional technical assistance to participant firms** (e.g., assistance with accounting, business planning, reading and creating financial statements, etc.).
Business type	
General	Program should help entrepreneurs develop **general businesses** (e.g., general sales of goods, general services), rather than vocationally focused or agricultural businesses.
Niche	Program should help entrepreneurs **develop specific businesses within a niche industry or market segment** (e.g., microenterprises of all types, or industry specific practices such as metallurgy, technology, etc.). This approach is associated with better outcomes than a focus on unspecified/general or agricultural. businesses.
Agriculture	Programs should help entrepreneurs develop **agricultural industry focused businesses** (e.g., production and sales of crops, agricultural support services, inputs for farms, etc.).
Class size	
30 or fewer	Training/class size should be limited to **30 or fewer participants**.
Greater than 30	Program should provide training in **classes or groups of more than 30 participants**.

Annex 4
Entrepreneurship Programs Evaluated

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U.S. Agency for International Development
1300 Pennsylvania Avenue, NW Washington, DC 20523
Tel: (202) 712-0000 | Fax: (202) 216-3524 | www.usaid.gov