Catalyzing Change in Secondary Education in Africa and India

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The universal education movement has dramatically increased the number of children attending primary school in Africa and Asia. Progress is now sorely needed at the secondary level. Children are unable to enter and complete secondary school given a daunting array of socioeconomic, cultural, and logistical barriers. Those who manage to overcome these barriers and attend secondary school are still held back—by outdated curricula and pedagogies that offer inadequate preparation for the 21st century marketplace.

To help address these challenges, a group of donors—including Dubai Cares, Echidna Giving, the John D. and Catherine T. MacArthur Foundation, The MasterCard Foundation, and an anonymous donor—collaborate in grant making through the Partnership to Strengthen Innovation and Practice in Secondary Education (PSIPSE). Emeritus donors have included the Central Square Foundation, the Douglas B. Marshall, Jr. Family Foundation, ELMA Philanthropies, the Human Dignity Foundation, and the Intel Foundation.

PSIPSE partners seek to draw attention to these challenges of limited access, low retention, poor quality, and low relevance, and catalyze systemic change in secondary education. Together, they aim to support the development and testing of innovative models to address barriers to achievement in secondary education, facilitate the scale-up of effective interventions in its target countries, and promote efforts to expand the evidence base. Between 2012 and 2016, the PSIPSE committed almost $50 million to support grantees in the Democratic Republic of Congo (DRC), India, Kenya, Malawi, Nigeria, Rwanda, Tanzania, and Uganda.

Mathematica Policy Research started working with the PSIPSE in late 2014 as its learning partner. In this brief, we share our analysis of the PSIPSE approach to effecting change in secondary education—starting with the partnership's theory of change, countries of focus, and interventions supported.

We end by presenting the monitoring, evaluation, and learning (MEL) framework developed for the PSIPSE and distilling some implications of our analysis for the future.

THE PSIPSE APPROACH

The PSIPSE aims to improve secondary education participation, quality, and relevance—with a dual focus on *maximizing reach* by targeting large marginalized groups (such as girls and out-of-school children), and on *promoting equity* by addressing the needs of particularly vulnerable, disadvantaged, or underserved youth (such as children in conflict and post-conflict areas, children in migrant or pastoralist communities, and children with disabilities).

The PSIPSE approach to catalyzing action to achieve this goal is anchored in a strong belief that its efforts must be based on a deep understanding of the country context, led by local stakeholders, and spurred by knowledge.

The PSIPSE Approach
to helping marginalized youth access high-quality, relevant secondary education

Donors assess country context to identify:	Donors search for innovative solutions that:	Grantees test and scale solutions that:	The PSIPSE advances learning by supporting:	The PSIPSE promotes systemic change by supporting:
• Key secondary education challenges • Opportunities to leverage • Local stakeholders	• Tackle access, quality & relevance challenges • Are at the pilot, adaptation, or scale-up stages	• Provide direct support to youth • Enhance teacher quality • Strengthen school leadership • Build parental and community support	• Monitoring and evaluation • Research projects • Targeted dissemination of evidence	• Scale-up efforts • Outreach to policy-makers and key stakeholders to highlight problems/solutions

The PSIPSE approach:

Begins with an assessment of the country context to identify secondary education issues to address, opportunities to leverage, and local stakeholders to engage

The PSIPSE currently operates in seven developing countries in Africa and in India. It revisits its country focus based on a yearly review of donor priorities and periodic landscape assessments to identify countries that have a strong enabling environment for systemic reform. Enabling conditions might include a strong national commitment to improving secondary education and the presence of high-capacity nongovernmental organizations working in education.

Searches for innovative solutions to secondary education challenges

The PSIPSE collaborative seeks to identify and scale up innovations to address secondary education challenges. But what is an "innovation?" The PSIPSE brings together a wide range of foundation partners, which naturally define innovations in different ways. However, their definitions do converge on one point: an innovation involves a change in the manner of approaching a problem in a particular setting, even if that change entails adopting a practice that is not entirely new in other settings. Active learning is a good example. It is an innovation if used in a setting where traditional teaching methods are the norm, even though active learning is not a new pedagogy in many parts of the world. An innovation can also be about "new actors,

new partnerships, new structural arrangements, and tools brought together to influence learning outcomes."

In searching for innovations, the PSIPSE issues requests for proposals (RFPs) for projects at different stages of implementation. Although these may vary over time, they have included: (1) pilot projects, which develop and test innovative intervention approaches, (2) expand and adapt projects, which have implemented an intervention for a few years and are ready for rigorous evaluation, and (3) scale-up projects, which generally have an established model with proven impact, and preliminary but well-structured plans for facilitating the take-up of the model by government or others. (The early RFPs also invited applications for research studies. The 2016 RFP excluded research but included new funding categories to encourage collaborations among grantees and enhance stakeholder engagement.)

Supports grantees testing and scaling solutions that aim to improve key educational outcomes through a variety of intervention approaches

The PSIPSE supports grantees implementing projects that seek to (1) increase secondary school access and completion, (2) improve learning outcomes in core academic subjects, and (3) facilitate successful transition to employment and adulthood by helping youth acquire relevant skills—both hard/technical and soft/transferable skills.

Seeks to use learning, dissemination, and targeted stakeholder engagement as catalysts for change

The PSIPSE aims to catalyze broader change in secondary education through evidence sharing and strategic outreach to key secondary education stakeholders. By supporting project evaluations, it aims to support program improvement and understand which practices are effective and why. By supporting dissemination of that evidence to relevant stakeholders, the PSIPSE seeks to increase the visibility of key secondary education issues and encourage the adoption of potential solutions by government, community stakeholders, or organizations working on secondary education issues. Through learning and outreach, the PSIPSE hopes to advance knowledge and spur action in the field of secondary education more broadly.

An innovation could be...

- a new way to tackle a problem
- something that challenges existing assumptions
- not necessarily something that is brand new or technology-related
- something that has been tried and was successful, but now is applied to a new setting
- about new models—new actors, new partnerships, and new structural arrangements and tools brought together to influence learning outcomes

—PSIPSE donors
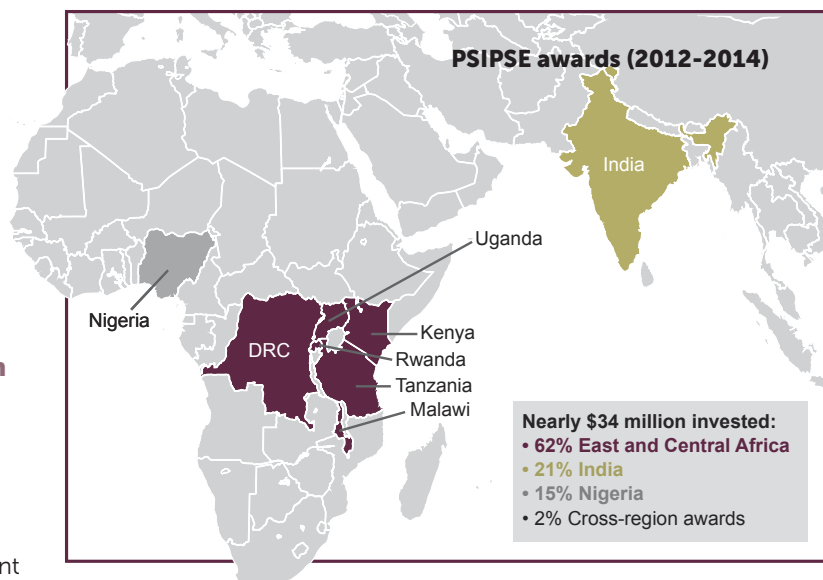
PSIPSE COUNTRIES

Through its first three RFPs, the collaborative cast a wide net to search for innovative secondary education models to address barriers to achievement in secondary education in Africa and India. This resulted in a grant portfolio spread across multiple countries and pursuing multiple secondary education goals and intervention approaches.

The PSIPSE portfolio includes projects across multiple countries in Africa and Asia—although most of the funding is concentrated in Central and East Africa

About half of the PSIPSE projects operate in Central or East Africa, namely in the DRC, Kenya, Malawi, Rwanda, Tanzania, and Uganda; these grantees received 62 percent of total PSIPSE funding across the first three RFPs. The remaining funds supported 11 projects in Nigeria, 16 projects in India, and 2 projects operating across multiple countries in Africa and Asia. The share of support devoted to East Africa will likely grow in 2017, as the new cohort of projects responding to the 2016 RFP will be concentrated in that region.

Countries where PSIPSE projects operate are likely to experience increased demand for secondary education

Access to secondary education will become a greater challenge within the next decade in the countries where the PSIPSE supports projects. In recent years, less than half the youth in some PSIPSE countries enrolled in secondary education (see Selected Indicators box below). However, the adoption of free primary education has been a notable success in terms of increasing enrollment, with net enrollment in primary education above 90 percent in some of these countries. Combined with rapid population growth and the fact that children under age 15 account for a very large share of the population in these countries, the increase in participation in primary school

PSIPSE awards (2012-2014)

India

Uganda
Nigeria
DRC
Kenya
Rwanda
Tanzania
Malawi

Nearly $34 million invested:
- 62% East and Central Africa
- 21% India
- 15% Nigeria
- 2% Cross-region awards

is likely to result in larger numbers of students seeking to enroll in secondary education.

These countries face challenges with quality and relevance of secondary education

In many cases, poor quality of secondary education stems in part from an inadequately trained teaching force (see Selected Indicators box below) combined with standards for teacher certifications that focus on outdated pedagogical methods. Use of active learning pedagogies, especially those that rely on the use of technology, is often hindered by inadequate infrastructure (secondary schools lack basic equipment and sometimes even electricity). In addition, in several countries, quality of education varies drastically across a hierarchy of public schools that have different criteria for enrollment or different funding sources (national versus local). Due to poor quality or limited alternatives, a relatively large share of families (50 percent or more in some countries) send their children to private secondary schools.

Selected Education and Demographic Indicators in PSIPSE Countries

	India	DRC	Kenya	Malawi	Nigeria	Rwanda	Tanzania	Uganda
Net primary education enrollment rate (percentage)	90*	35	85*	97	64*	96	78*	84
Net secondary education enrollment rate (percentage)	67		57*	37*				24*
Percentage of population ages 0–14	29		42	45	44	41	45	48
Percentage of secondary school teachers who are trained		24	92*	66*	93	89		82
Percentage of lower secondary schools with electricity		12		54	69	89	42	35
Percentage of secondary level enrollment in private schools	50	18	13	16	19	13	21	52

Sources: World Bank Databank and UNESCO Institute for Statistics (UIS)
Notes: Most recent year available. Empty cells indicate no data available.
DRC = Democratic Republic of Congo
*UIS Estimation

Some of the same constraints on quality of education influence the relevance of the curriculum. A focus on rote learning prevents students from acquiring the skills employers are looking for, a problem exacerbated by an inadequate infrastructure that prevents students from developing needed computer skills and accessing information. Indeed, hiring difficulties rooted in talent shortages were reported by 58 percent of employers in India (ManpowerGroup 2015) and are frequently cited as a bottleneck to growth by companies in Africa (The Africa-America Institute 2015). Employers want to hire youth with "life skills," such as communication, teamwork, and leadership (Results for Development 2015). Life skills are also particularly important in the informal economy, where many youth in low- and middle-income countries (such as those covered by the PSIPSE) begin their employment trajectories (Results for Development 2015; Garcia and Fares 2008).

GRANT PORTFOLIO (2012-2014)

PSIPSE donors issued grants in 2012-2014 to support 49 projects seeking to pilot, expand, or scale up secondary education intervention models (referred to as implementation grants) and 8 projects to conduct or disseminate research (referred to as research grants).[1]

The portfolio of grants emphasizes all three priority goals—improved educational participation, learning outcomes, and preparation for employment

Implementation grants seek to:

- Increase secondary school participation, including access (enrollment, re-entry, and attendance) and retention (attainment and graduation)

- Improve core learning outcomes, including reading, writing, numeracy, and learning in science subjects

- Improve life skills to position youth for a successful transition to employment and adulthood

Research grants focus on:

- Assessing the impact of in-service and pre-service teacher training programs or alternative forms of secondary education (such as open and distance learning)

- Studying factors that affect demand for secondary education or factors that are correlated with secondary education outcomes at the student level

- Exploring influences on girls' participation in secondary education, including pregnancy and exposure to female teachers

- Disseminating evidence on successful approaches to improving learning

Grantees serve a variety of disadvantaged groups, particularly girls and out-of-school youth

Grantees seeking to narrow gender gaps in secondary school outcomes (comprising two-thirds of the portfolio) either prioritize girls in their delivery of standard support services or conduct activities that specifically address the needs of adolescent girls. In addition, several grants target out-of-school youth, facilitating school re-entry and completion by providing academic and other support to beneficiaries and conducting community engagement activities. Similar strategies were adopted by a handful of grantees seeking to address the needs of other marginalized groups, such as children in conflict areas, children in pastoralist communities, and children with disabilities.

Over two-thirds of the implementation grantees adopted intervention approaches targeting youth, teachers, and communities, and under half engage in school-level efforts

Implementation grants seek to:

- Provide instruction or support directly to in- and out-of-school youth, offering tutoring on academic subjects, mentoring in soft skills, career guidance and internships, entrepreneurship training, and logistical support (such as safe transportation)

- Enhance teacher effectiveness and motivation, providing training in pedagogy (particularly active learning approaches), training in academic subjects, and networking opportunities

- Improve community support for secondary education, often conducting a variety of activities to increase parental and community awareness of the returns to secondary education[2]

- Improve school-level outcomes, undertaking efforts to improve school leadership and management (for example, by training principals, facilitating strategic planning, and promoting the take-up of innovative financing mechanisms)

Grantees adopt three different approaches to foster change: designing and scaling innovative interventions, assisting governments in rolling out reforms, or seeking to uncover and support grassroots solutions

Our analysis reveals that grantees have adopted different approaches to foster innovation and facilitate the widespread implementation of promising interventions. These approaches may be described as (1) grantee-led—where grantees develop an intervention and facilitate its scale-up by government or other stakeholders, (2) grantee-assisted—where grantees assist in the implementation of new or existing government policies, or (3) grantee-mediated—where grantees "re-grant" to community-based organizations and support their development of grassroots secondary education solutions.

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[1] The analysis provided here is based on grantee projects supported through the first three waves of RFPs (2012-2014). Note that two additional projects were supported later and the PSIPSE recently released its fourth RFP to issue awards in 2017.

[2] These activities were most frequently rolled out in conjunction with student-level interventions and had the relatively narrow scope of building support for that programming among parents.

Intervention Approaches Adopted by PSIPSE Implementation Grants (2012-2014)

Share of implementation grants providing direct support to youth

84%	Any type of direct student support
67%	Provision of instruction, coaching, or mentoring (1)
49%	Work experience or support for entrepreneurship
35%	Support to improve access (2)
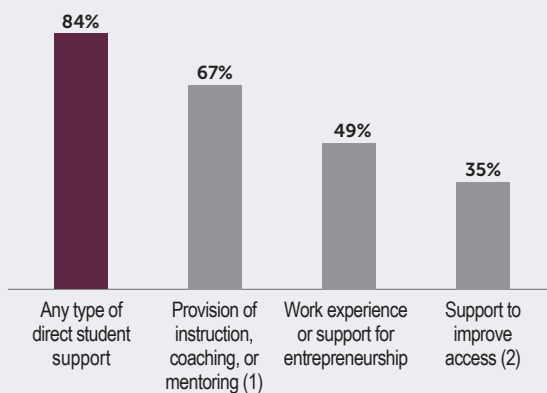
Share of implementation grants conducting capacity building for teachers

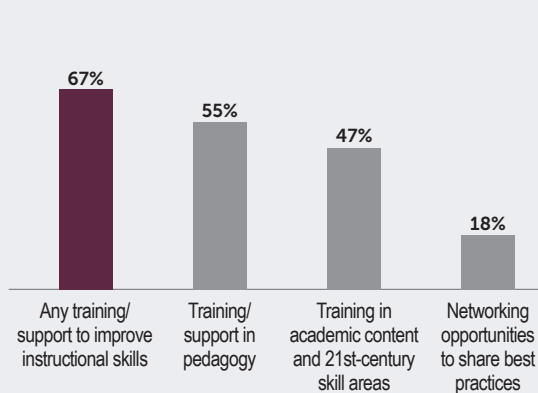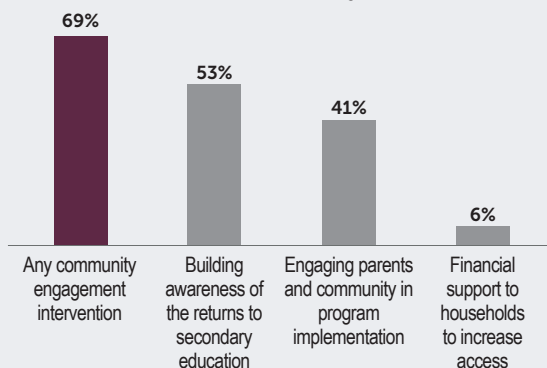|	
67%	Any training/support to improve instructional skills
55%	Training/support in pedagogy
47%	Training in academic content and 21st-century skill areas
18%	Networking opportunities to share best practices

Share of implementation grants engaging the community

69%	Any community engagement intervention
53%	Building awareness of the returns to secondary education
41%	Engaging parents and community in program implementation
6%	Financial support to households to increase access

Share of implementation grants improving school leadership, management, and infrastructure

47%	Any school-level outcome
33%	School leadership
14%	Other aspects of school management
22%	School infrastructure
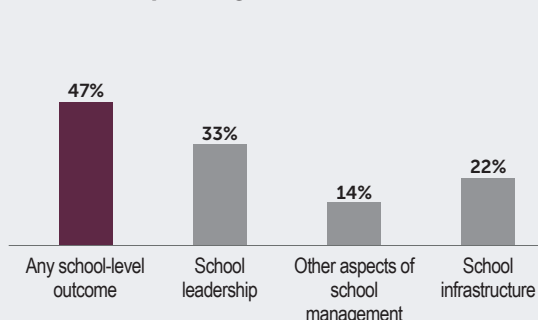
Source: PSIPSE grant proposals and reports.
Note: N = 49; percentages are restricted to implementation grants and are not mutually exclusive.
(1) In academic subjects and life skills.
(2) Including logistical support, demand creation, and alternative certifications.

MONITORING, EVALUATION, AND LEARNING

The PSIPSE MEL framework offers a blueprint to guide monitoring, evaluation, and learning activities aligned with its theory of change. Specifically, we designed the framework to help the PSIPSE:

- **Monitor.** Donors currently monitor progress of their own grants. Adopting a monitoring framework across all PSIPSE grants will enable partners to access the information needed to refine the PSIPSE strategy over time. Monitoring data can be used to assess the extent to which (1) an enabling environment exists in the target countries for the PSIPSE to effect change, (2) grant focus areas are aligned with country needs and donor priorities, (3) grantees are making progress on meeting their project objectives, (4) grantees are generating and using evidence and engaging key stakeholders, and (5) the PSIPSE is gaining visibility and reach.[3]

- **Evaluate.** Evaluations are critical for gauging the effectiveness of supported interventions and gleaning key lessons about implementation, sustainability, and scale-up. Grantees can use this information to gain insight into how to strengthen their intervention models, and to contribute to learning on effective solutions to secondary education challenges. The PSIPSE supports evaluations conducted by grantees with internal MEL capacity or by their external partners, and commissions external evaluations and research studies of efforts across grantees.

- **Disseminate and scale learning.** As described in the theory of change, dissemination and scale-up are important drivers of change for the PSIPSE. By engaging in well-structured, goal-oriented dissemination and partnership-building, grantees can draw attention to secondary education issues and encourage policy or programming action. In addition, by sharing persuasive evidence with

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[3] Ideally, once a year, the collaborative will collect and analyze both internal information (on grantee achievements, challenges, and progress on MEL and strategic outreach) and external data (on country context and funding for secondary education).
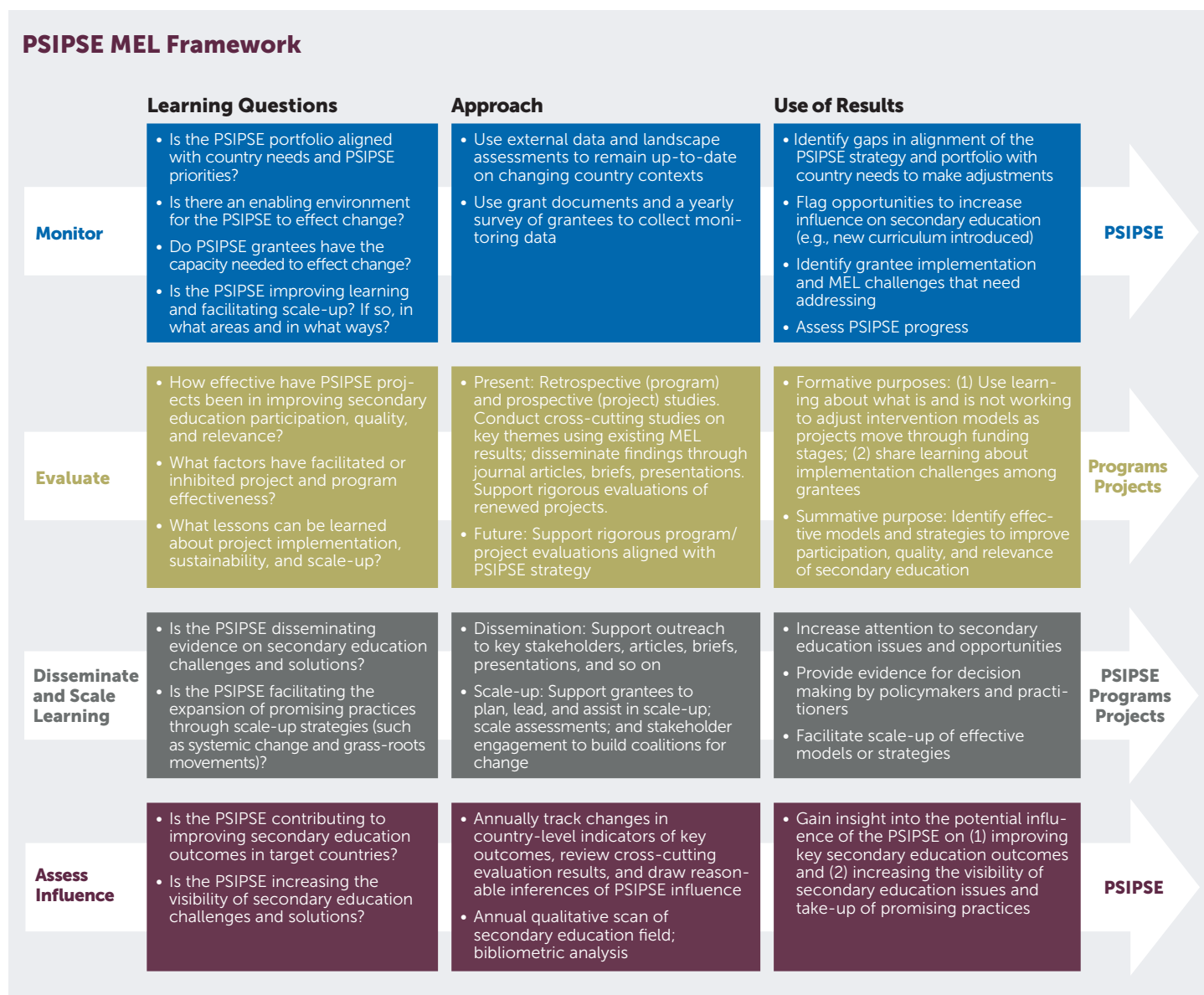
the relevant stakeholders, grantees can be instrumental in facilitating scale-up or replication of promising solutions. The PSIPSE supports grantee dissemination activities as well as projects that seek to scale up interventions and build partnerships with key stakeholders.

- **Assess influence.** The collaborative may seek to track its influence on secondary education by:

  - Monitoring key country-level indicators related to the PSIPSE's target outcomes (such as educational participation, quality, and relevance), reviewing findings alongside the impacts of PSIPSE projects, and making reasonable inferences about whether the PSIPSE might be contributing to observed changes.

  - Measuring contributions to increasing the visibility of secondary education challenges and solutions, either through dissemination or targeted stakeholder engagement.

IMPLICATIONS FOR THE FUTURE

Our analysis of the PSIPSE portfolio and collaborative in its early years of operation has yielded a few promising ideas regarding ways to strengthen the PSIPSE approach in its next phase of work. These include:

1. **Narrowing the focus of PSIPSE grantmaking.** By casting a wide net in its early years, the PSIPSE portfolio—spanning multiple countries, goals, interventions, and target populations—sought to generate learning in several spheres and uncover promising new approaches to enduring secondary education challenges. However, this approach may have limited the PSIPSE's contributions and influence in specific thematic areas (say, educational participation) or geographies (such as East Africa). The tightened focus of the 2016 RFP on improving the quality of secondary education in East Africa is a step in this direction, and reflects the PSIPSE's

PSIPSE MEL Framework

	Learning Questions	Approach	Use of Results	
Monitor	• Is the PSIPSE portfolio aligned with country needs and PSIPSE priorities? • Is there an enabling environment for the PSIPSE to effect change? • Do PSIPSE grantees have the capacity needed to effect change? • Is the PSIPSE improving learning and facilitating scale-up? If so, in what areas and in what ways?	• Use external data and landscape assessments to remain up-to-date on changing country contexts • Use grant documents and a yearly survey of grantees to collect monitoring data	• Identify gaps in alignment of the PSIPSE strategy and portfolio with country needs to make adjustments • Flag opportunities to increase influence on secondary education (e.g., new curriculum introduced) • Identify grantee implementation and MEL challenges that need addressing • Assess PSIPSE progress	**PSIPSE**
Evaluate	• How effective have PSIPSE projects been in improving secondary education participation, quality, and relevance? • What factors have facilitated or inhibited project and program effectiveness? • What lessons can be learned about project implementation, sustainability, and scale-up?	• Present: Retrospective (program) and prospective (project) studies. Conduct cross-cutting studies on key themes using existing MEL results; disseminate findings through journal articles, briefs, presentations. Support rigorous evaluations of renewed projects. • Future: Support rigorous program/project evaluations aligned with PSIPSE strategy	• Formative purposes: (1) Use learning about what is and is not working to adjust intervention models as projects move through funding stages; (2) share learning about implementation challenges among grantees • Summative purpose: Identify effective models and strategies to improve participation, quality, and relevance of secondary education	**Programs Projects**
Disseminate and Scale Learning	• Is the PSIPSE disseminating evidence on secondary education challenges and solutions? • Is the PSIPSE facilitating the expansion of promising practices through scale-up strategies (such as systemic change and grass-roots movements)?	• Dissemination: Support outreach to key stakeholders, articles, briefs, presentations, and so on • Scale-up: Support grantees to plan, lead, and assist in scale-up; scale assessments; and stakeholder engagement to build coalitions for change	• Increase attention to secondary education issues and opportunities • Provide evidence for decision making by policymakers and practitioners • Facilitate scale-up of effective models or strategies	**PSIPSE Programs Projects**
Assess Influence	• Is the PSIPSE contributing to improving secondary education outcomes in target countries? • Is the PSIPSE increasing the visibility of secondary education challenges and solutions?	• Annually track changes in country-level indicators of key outcomes, review cross-cutting evaluation results, and draw reasonable inferences of PSIPSE influence • Annual qualitative scan of secondary education field; bibliometric analysis	• Gain insight into the potential influence of the PSIPSE on (1) improving key secondary education outcomes and (2) increasing the visibility of secondary education issues and take-up of promising practices	**PSIPSE**

desire to build on its early experiences and maximize the collaborative's influence in the future. Other activities to achieve this goal may include performing (or updating) landscaping studies and conducting interviews with key national and international actors in the field. These will be helpful in assessing the level of attention to secondary education in target regions, the visibility of the PSIPSE in the field, and the alignment of the PSIPSE strategy with stakeholder priorities.

2. **Diversifying funding categories.** The funding categories considered under the 2012-2014 RFPs—pilot, expand and adapt, scale-up, and research—were focused on implementation and evidence generation. To catalyze the change it envisions, and support the scale-up of innovations to foster successful implementation of systemic reforms—the PSIPSE may need to consider supporting a wider range of grantee efforts. This broader portfolio could include activities such as in-depth planning, partnership-building, and advocacy.

3. **Strengthening dissemination efforts.** As described in the theory of change, the PSIPSE partnership has a strong interest in supporting the dissemination of evidence on secondary education issues and solutions as a means of generating progress towards scale. However, our analysis of the grant portfolio revealed that many grantees lack a strong focus on dissemination and would benefit from additional support or accommodations—such as dedicated funds for dissemination, a dissemination phase at the end of the implementation period, or assistance from external communications experts.

4. **Refining the PSIPSE learning strategy.** Learning is a critical engine of change for the PSIPSE. At present, the PSIPSE relies heavily on grantees' evaluation and research activities, yet grantees are generally more focused on implementation of their interventions. As the PSIPSE considers its next cycle of funding, it may also consider revising its learning strategy to include (1) targeted support to build grantee capacity for project-level MEL; (2) strategic support for academics, research teams, and expert learning partners to conduct cross-cutting, program-level studies that can make robust contributions to specific, prioritized areas of learning; and (3) a focus on generating evidence that is currently lacking in the literature, such as studies of long-term impacts, analyses of cost-effectiveness, and scalability and replication assessments (especially in new contexts) (Null et al. 2017).

5. **Assessing the efficacy of different strategic models.** The PSIPSE portfolio includes grantees that pursue radically different strategies to effect change. Some grantees are taking the lead on designing, testing, and scaling their own interventions. Others are assisting governments to foster successful implementation of ongoing reforms. A handful of grantees act as mediators—identifying and supporting community-based organizations working on local solutions to local challenges. This variation creates a unique opportunity to study the success of these alternative approaches in fostering innovation and scaling up what works, and to gain insight into the factors that enable or hinder their efficacy.

ACKNOWLEDGMENTS

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