2019 SNAPSHOT
MAHARASHTRA, INDIA
OVERVIEW

The number of youths in India accounts for one-fifth of the population and is projected to total more than one-third by 2020, reaching nearly 500 million. The growth rate puts India on a course to become the most populous country in the world. This growth in population brings a host of opportunities and challenges: The increase in the number of working-age adults is an opportunity to boost the economy, which is already among the largest worldwide. Yet the rapid pace of growth requires the addition of an estimated 10 million jobs annually, which means adding more than 27,000 jobs each day to keep pace. India has experienced long-term, consistent growth in the economy over a period of decades, yet reports show unemployment rates are on the rise, with recent figures reaching six percent — the highest unemployment rate in four decades. The higher unemployment rates are raising concern that the number of available jobs is not keeping pace with the increase in the number of young adults trying to enter the economy. One survey found that nearly a quarter of urban youths (15 to 29 years old) are unemployed.

At the same time, schools also are trying to keep pace with the burgeoning population. Access to education has been on the rise in India in recent decades, yet achievement rates lag: 62 percent of students drop out by grade 10, with girls experiencing particularly high dropout rates. Students drop out of school for a multitude of reasons, including lack of access to a secondary school, a family’s inability to pay school-related fees that kick in at the secondary level, a need for the student to earn money to support the family, or that a family sees limited value in pursuing further education.

To address the high dropout and unemployment rates among youth, the government proposed expanding vocational education, a relatively small system that generally enrolls fewer than three percent of students at the secondary level. Despite few students in India having access to vocational education, the educational pathway has yielded promising results: Only two percent of working-age adults in India have received vocational training, yet among those who have received training, 57 percent are employed.

As part of a public/private partnership, Lend-A-Hand India (LAHI), a non-profit focused on improving the career readiness of youth, is collaborating with state governments to integrate and scale vocational education in schools throughout India. LAHI launched the initiative in a single state, Maharashtra, which is the second most populous state in India. The initiative in Maharashtra was made possible by support from multiple philanthropic sources — including an investment from the JPMorgan Chase & Co. New Skills for Youth initiative in 2016. The New Skills for Youth investment supported LAHI’s efforts to integrate vocational education into 500 schools to reach 25,000 students and to develop a technology infrastructure to further scale to other states in India. The project builds on earlier investments from JPMorgan Chase that enabled LAHI to design and pilot a vocational education model in 2015 in grades 8, 9 and 10 in 20 government schools in Maharashtra to bridge the gap between what young people learn in school and what is required in real life.
EDUCATION IN INDIA

In 1947, when India became independent from the British, estimates are that only 10 percent to 20 percent of the population was literate. Fast forward to 2019, and literacy rates have significantly improved: The overall literacy rate for the country is 73 percent, with male literacy rates at 81 percent and female literacy rates at 65 percent. Yet, the education system struggles to compete with the rest of the world on even basic measures of student outcomes for math and reading. The system is faced with challenges around access for poor students, equality for females and overall quality of teachers.

Education in India is governed by a multitude of boards, with each state having at least one board and perhaps multiple boards. Similar to the United States, the boards determine curriculum and assessments, which can result in different standards for what students learn from one state to the next. State boards partner with Sector Skill Councils (SSCs) to offer joint certification and assessments for vocational education. SSCs are autonomous industry-led bodies that create occupational standards and assess and certify trainees on the curriculum aligned to the standards. Mostly, state boards conduct theory exams, and SSCs conduct practical assessments.

Education in India is compulsory from ages 6 to 14, spanning grades 1 through 8 (five years in elementary, then three years in upper elementary/middle school). Secondary education, which is grades 9 and 10, is optional and focuses on the continuation of academic coursework from the earlier grades. A small number of technical schools offer vocational courses in addition to the standard academic curriculum. At the end of grade 10, students take assessments administered by the federal board of education covering five or six subjects. Students who pass the exams are awarded a certificate. Students may then choose to advance to upper or higher secondary education (grades 11 and 12), which is divided into two tracks: general academic and vocational. Students in general academic must select a focus on humanities, commerce or science. The vocational track is designed to prepare students for employment in one of 150 specializations. Students in both tracks take school-based exams at the end of grade 11 to be promoted to grade 12. At the end of grade 12, a student may earn a certificate upon passage of additional board exams. Tertiary education (i.e., postsecondary education) follows the grade 12 certificate for students who choose/are eligible to continue their education.

JPMORGAN CHASE NEW SKILLS FOR YOUTH INITIATIVE

Launched in 2016, New Skills for Youth is a $75 million, five-year global initiative aimed at transforming how cities and states ensure that young people are career ready. The overarching goals of the initiative are to:

- Dramatically increase the number of students who successfully complete career pathways that begin in secondary school and culminate in postsecondary degrees or credentials tied to high-wage, high-demand jobs; and
- Catalyze transformational approaches to the design and delivery of programs and policies to increase students’ career readiness and disseminate lessons learned around the world.

This snapshot is part of a series documenting the progress of the local investments from across the globe that aim to identify and implement the most promising ideas in career education, with a special focus on communities with the greatest needs.
THE LAHI INITIATIVE

The New Skills for Youth investment provided LAHI an opportunity to partner with the government to expand vocational education in Maharashtra. The goal of the investment was for LAHI to provide students with access to workplace and technical training in career pathways that enable them to succeed in India’s growing economy with a focus on:

- Expanding LAHI’s vocational education model to 500 schools and 25,000 youths in grades 9 and 10;
- Developing and piloting vocational training and internships with 200 students in grades 11 and 12;
- Establishing a master training program for teachers; and
- Introducing a technology infrastructure to help scale the program across the country.

LAHI finished the one-year implementation timeline for its 2016 New Skills for Youth initiative and has already received additional funding to expand the program beyond Maharashtra.

IMPACT OF THE LAHI INITIATIVE IN MAHARASHTRA

- Number of schools served (goal was 500): 524
- Number of students in grades 9 and 10 served (goal was 25,000): 34,110
- Number of students who participated in an internship in grade 10 (goal was 1,000): 1,100
- Number of businesses that participated in work-based learning activities held at the school with students in grade 10: 215
- Number of students who opted to pursue vocational training following grade 10 (goal was 2,500): 3,100
- Number of students served in the pilot to expand programming to grades 11 and 12 (goal was to reach 200 students): 220 enrolled in grades 11 and 12
  - Student specializations included general engineering (37 students), health care (30 students), auto service technician (55 students), gardening/nursery management (47 students), electrical and electronics (37 students) and food processing (14 students).
- Number of employers that provided internships in the pilot for grades 11 and 12: 27

Source: Lend-A-Hand India
The model LAHI launched in Maharashtra provides vocational training — career pathway exposure, work readiness skills and technical skills — to students in grades 9 and 10, delivered through the Multi Skill Foundation Course. The curriculum introduces students to the world of work using a learn-by-doing approach that provides them with practical exposure to technical skills related to potential careers such as electrical wiring, gardening, welding or food processing. Once a student completes the foundation course, they can opt for a sector-specific specialization in grades 11 and 12.

The Multi Skill Foundation Course has been approved by the National Skill Development Agency as a National Skills Qualification Framework — Level 2 qualification, titled Multi Skill Assistant Technician. The Central Board of Secondary Education and various state boards have also adopted the Multi Skill Foundation Course. The curriculum has been approved by the Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), and course materials are currently under review, pending formal approval from PSSCIVE. The course is currently being implemented in close to 600 government schools in 13 states throughout India as part of the Centrally Sponsored Scheme of Vocationalization of Secondary and Higher Secondary Education (CSSVSHSE). The CSSVSHSE provides financial assistance to states to cover the costs of the workshops, including the tools and equipment, salaries for vocational trainers, textbooks, workbooks, field visits, guest lectures, assessment and certification and teacher training programs.

### Vertical Mobility for Multi Skill Foundation Course in Grades 11 and 12

Students who complete the Multi Skill Foundation Course in grade 10 and continue with the program are eligible for further training for the following job roles in grade 11 or 12:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Possible Job Roles</th>
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<tbody>
<tr>
<td>Agriculture</td>
<td>1. Gardener</td>
</tr>
<tr>
<td></td>
<td>2. Micro Irrigation Technician</td>
</tr>
<tr>
<td>Automotive</td>
<td>1. Automotive Service Technician</td>
</tr>
<tr>
<td>Construction</td>
<td>1. Multi Skill Technician (Fabrication)</td>
</tr>
<tr>
<td></td>
<td>2. Mason General</td>
</tr>
<tr>
<td>Electronics and Hardware</td>
<td>1. Field Technician — Wireman Control Panel</td>
</tr>
<tr>
<td>Food Processing</td>
<td>1. Multi Skill Technician (Food Processing)</td>
</tr>
<tr>
<td></td>
<td>2. Jam, Jelly and Ketchup Processing Technician</td>
</tr>
<tr>
<td></td>
<td>3. Fruit Pulp Processing Technician</td>
</tr>
<tr>
<td>Health Care</td>
<td>1. General Duty Assistant</td>
</tr>
<tr>
<td></td>
<td>2. Vision Technician</td>
</tr>
<tr>
<td>Plumber</td>
<td>1. Plumber General — II</td>
</tr>
</tbody>
</table>

Source: Lend-A-Hand India
Assessments of students taking the Multi Skill Foundation Course are conducted jointly by the state and the SSCs. As part of LAHI’s efforts to enhance the model, New Skills for Youth funding also provided an opportunity to pilot expansion of vocational education programming to grades 11 and 12 to provide students with more intense training and work-based learning experiences in a specialization within a chosen career pathway. The pilot includes an 80-hour unpaid internship experience that begins with shadowing and progresses to practicing skills in the workplace under the supervision of the employer.

Three elements stand out among the LAHI initiative’s efforts to expand vocational education in Maharashtra: rapidly scaling the vocational education model, building the capacity of teachers, and changing mindsets of stakeholders to value vocational education.

**Rapidly Scaling the Model to Expand Access to Vocational Education**

LAHI successfully designed, launched and began scaling a vocational education model in partnership with the government in a relatively short time span, and the model is yielding positive outcomes for students. Scaling a program of this size and scope given the decentralized infrastructure and government bureaucracy in India is no small feat. Part of the success lies in LAHI’s strategic approach, which takes into account the political, economic and educational landscape. The model and the approach to implementation closely align to the government-supported strategies and policies around vocational education, as well as economic and workforce development needs. For example, the internship program that LAHI designed and launched reflects the available jobs, which are mostly in micro-enterprise. The model also tackles long-standing challenges that have plagued the current education system, such as teacher quality and inequitable educational access and outcomes for girls. Further, the model is designed to integrate vocational education into mainstream academic education to ensure sustainability (as opposed to creating standalone vocational education schools and programs).

LAHI entered into a memorandum of understanding with the state department of education to deploy staff to build the capacity of the government to introduce vocational education into schools, a model that has LAHI working with and within the government. The government provided funding to support the schools while JPMorgan Chase provided funding to support LAHI. The goal is to build capacity so the government can independently execute the initiative within five years. Over a three-year period beginning in 2016, the outlay by the government to expand vocational education was $81 million. The government funds were allocated for overall execution of the model, including tools and equipment, trainers’ salaries, field visits, training of trainers and on-the-job training for students in grade 11 or 12.

The scaling of the model also includes standardization of process and resources. LAHI put in place internal systems, policies and procedures to ensure that the work is being executed with an eye toward quality and scalability. To start, a centralized unit at LAHI manages the staff, who work directly with the government and the schools to scale the model. This unit holds a one-hour call each week to discuss implementation and progress. LAHI staff, who work on the ground, one-on-one with the government and with schools, participate in internal trainings and meet face-to-face every three to four months because not all staff are centrally located in a single state. Because of the close working relationship with the government, LAHI is very deliberate about being transparent about its work, particularly given the role staff play in awarding contracts as part of their capacity-building activities with government staff.

“Student interns learn that the practical world is very different than books. On-the-job training boosts the confidence of the interns and helps them to enhance their soft skills in the field.”
—Employer Partner
LAHI also standardized processes and resources specific to the model, particularly related to the internship component. This effort included standardizing the soup-to-nuts procedures for getting permission from school leaders and parents for students to participate, creating templates to confirm approval, recruiting businesses and placing interns, and developing an application for students to use to apply for internships, as well as a sample work report that is used at workplaces. The sample work report is a daily diary signed by the employer that asks the intern to write about their work, observations, learnings, challenges and experiences in detail. LAHI also developed protocols for the employer partners, which are often in place for large corporations but not for smaller micro-enterprises. The protocols focused on issues such as safety, sexual harassment and monitoring procedures for intern supervisors.

Finally, as part of the New Skills for Youth investment, LAHI developed technology infrastructure to support scaling the model, which includes video content related to practical, hands-on activities, as well as quality assurance measures, such as monitoring and tracking. The technology infrastructure was built in 2016 and formally launched in 2018.

Building the Capacity of Teachers

One of LAHI's most significant accomplishments was the launch of a master teacher training center in 2016: The Karagir — School of Applied Learning (SAL). LAHI views teachers as key to nurturing and empowering students. SAL focuses on building the capacity of teachers by equipping them with pedagogical tools, providing them with a robust support system through a team of coaches and enabling them to achieve professional growth. This work is accomplished through a focus on improving pedagogical, interpersonal and leadership skills for professional enhancement; providing a robust and consistent support system through coaching that enables effectiveness and efficiency; and setting an ambitious and aspirational growth path that enables accountability and motivates teachers to go the extra mile. The teacher training at SAL focuses on complementing academic content knowledge with the broader concepts of practical learning.

LAHI initially launched SAL in a shared space, training 220 teachers in the first year. SAL is currently relocating to an independent facility in Pune, about 100 miles from Mumbai. Prior to the launch of the center, LAHI relied upon partners to train teachers; the launch of the center and relocation to a standalone facility is a significant step in scaling operations nationwide. LAHI aims to train 5,000 teachers in the next five years at SAL. In addition to training teachers, LAHI plans to become a resource center for other non-governmental organizations that are planning to join the cause of integrating vocational education into the high school curriculum. Relocating to a standalone facility will enable the center to expand to serve multiple needs, including the ability to:

- Function as a train-the-trainer center for vocational teachers to prepare others for large-scale expansion of vocational education;
- Provide vocational education training directly to students who reside near the center;
- Inspire young adults to become entrepreneurs by pairing them with local small businesses and micro-enterprises through internships and on-the-job assignments as part of the school curriculum;

“Our goal is to place interns near to home, near to school and to ensure their safety. Given that 80 percent of the Indian economy is small, micro-enterprise, it is important to raise these interns in an environment that mirrors where they are likely to work as an adult. When interns work for a small business, they receive the full expanse of experiences. Working in small businesses also exposes them to an entrepreneurial spirit.”

—LAHI Executive
• Serve as a DIY hub/makerspace and repair cafe where people can bring old dysfunctional appliances and repair them to contribute to a sustainable society; and
• Act as a supportive network to help local micro-entrepreneurs by providing them with ideas for better business planning, access to credit for expansion and growth, and technology and marketing support.

Changing Mindsets to Value Vocational Education

LAHI is gradually beginning to change mindsets among stakeholders about the value of vocational education. To successfully introduce and scale the program, LAHI has to convince stakeholders — students, parents, principals and business owners — that this approach to education has potential, particularly for those students who are on track to drop out of school and will likely struggle to find full-time work. LAHI meets this goal by employing strategies for making one-on-one connections and building and sharing evidence of success, which includes sharing impact through word-of-mouth among participants and community members. The internship component in particular has helped shift opinions of the value of vocational education.

“For students in India, typically when something goes wrong there is a punishment, so that is their mindset. The barrier for the student is ‘what will go wrong if I say the wrong thing?’
Many hours are spent helping students overcome that mindset through practice to achieve the confidence to speak to the owner and to customers.” — Vocational Trainer

“Working here has benefited me in two main ways. First, I can support my family. Second, I can learn new things daily.” — Engineering Intern

When LAHI first launched the internship program, it needed to build awareness among students, parents and principals. On the parent front, vocational coordinators and trainers visited homes to convince parents to allow their children to participate. Most students are from disadvantaged backgrounds, and many of the parents have a limited understanding of what vocational education is. Orienting the parents to the concept of an internship, helping them understand the types of tasks and activities students would be doing, and finding work-based learning opportunities close to home were important, given that many families lack the resources to support transportation to and from internships.

On the employer side, the challenge is finding small businesses and convincing them they should take on interns. The model is designed to target micro-enterprises, which requires a significant commitment of time and effort from the school trainers and coordinators. In the first year, LAHI learned how to communicate and engage with businesses to help owners understand how students could learn and contribute in their workplaces.
LAHI also designed an orientation session during the first year of the program to recruit students; however, after conducting the orientation session a couple of times, vocational coordinators struggled to engage principals and students. LAHI shifted gears and tried another strategy: bringing in someone from the community who shared a similarly challenging background to build trust among the principals and students. The community stakeholder talked with principals and students about the internship program. The strategy worked, and LAHI identified a few strong community members, mobilized them and facilitated dialogues, resulting in a better response from students and principals. Greater numbers of students are now electing to take the Multi Skill Foundation Course. Students feel the program gives them relevant training and early access to the job market; there is a sense that they are getting a leg up in positioning themselves for full-time employment or starting their own business, while bolstering their confidence and improving communication skills.

LOOKING FORWARD

The government has launched an ambitious plan to make vocational education part of every secondary school in India. LAHI is already scaling the model beyond Maharashtra to 23 additional states in India in partnership with the government. The JPMorgan Chase New Skills for Youth initiative is supporting LAHI’s efforts to expand to another 500 schools in Delhi and Telangana.

ACKNOWLEDGMENTS

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ENDNOTES

5. Ibid.
7. Information provided by Lend-A-Hand India.
8. Ibid.
10. For more information about LAHI, see https://www.lend-a-hand-india.org/index.php.
13. Ibid.
14. Information provided by LAHI.
16. Information provided by LAHI.
18. Ibid.
19. Ibid.
20. Ibid.
21. Ibid.
22. Ibid.
23. Ibid.
24. Ibid.
25. Ibid.
27. For more information about the Central Board of Secondary Education, see http://cbse.nic.in/newsite/index.html.