Deloitte.

IMPACT ASSESSMENT

Odisha State-wide Vocational Education project

April 2023

HDFC
WITH YOU, RIGHT THROUGH

Contents

Executive summary

In cognizance of the role of schools towards the inclusion of vocational education to bridge the skilling gap in the employment landscape, HDFC Ltd. through its CSR initiatives, supported Lend-A-Hand India (LAHI).

OVERVIEW

Investment and Project Overview

Cumulative project investment of **INR 3.2 crore**

	Intervention	Overview
1	*Project Swadheen*	• LAHI set up centres as labs and employed its own trainers to deliver the vocational education curriculum in 5 model schools in Bhubaneshwar, Khorda district (Odisha) • Labs compliant to deliver the Multi Skill Learning (curriculum and one trainer per school recruited and trained
2	*Project Catalyst*	• Worked with the Odisha Government to expand the vocational education initiative to other schools in 3 years • 960 schools to be able to provide vocational education • Implemented by LAHI's Programme Management Unit (PMU) which is co-located with the State Government's SSA (Samagra Shiksha Abhiyaan) team under Odisha School Education Programme Authority (OSEPA) • Project Catalyst provided project management and technical support to scale up vocational education in Odisha at no financial cost to the state

Project locations Odisha

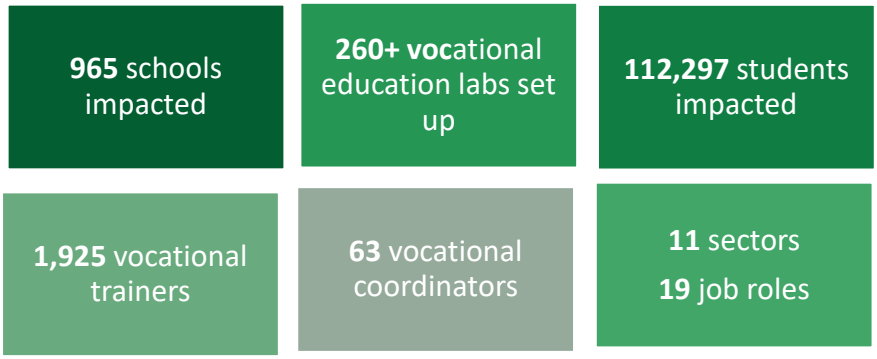
Project duration October 2019 to March 2022

Deloitte used a consultative approach incorporating elements of primary and secondary research. The data collection was followed by a phase of analysis and documentation of key observations and findings. The key stakeholders that were mapped for interactions included – Students, Alumni, Vocational Trainers, Vocational Coordinators, Parents, Leadership team, Programme Managers, Principals, School Management Committee (SMC) members, Internship Organizations. The team **interacted with a total of 161 stakeholders** as part of this exercise.

IMPACT ASSESSMENT FINDINGS

Below is a summary of Deloitte's observations and findings of the impact assessment undertaken to evaluate the vocational education projects implemented:

Impact created[1]:



Both Project Swadheen and Catalyst look at the skill-based model and incorporation of vocational training to the Indian education ecosystem, and thereby addressing the existing learning gaps. MSFC and vocational courses have garnered a lot of interest amongst the students and subsequently led to higher attendance. During primary interactions, students mentioned that they have gained significant technical and life skills along with increase in confidence which will help them gain employment in the future. Both the projects also address the emerging social and cultural biases which come into play while choosing subjects by students. The schools actively motivate the students to opt for courses they are genuinely interested in. Food processing seems to be one of the more popular courses which has witnessed stronger participation from young boys. Engineering has also garnered significant interest from girls in different schools.

Project Wise Achievement:

Project Swadheen

- Set up of Multi Skill lab in **5 schools**
- **1,261** students enrolled in five government schools in Bhubaneswar (AY 22-23)
- **INR 16,725** notional income generated through community work
- **33%** of students opted for VE after Grade 10th
- **12%** students aspiring to become entrepreneurs after 3 years of completing education
- Enrolments in VE increased by 62% in AY 2021-22 as compared to AY 2020-21

Project Catalyst

- **960 schools** where vocational education is being actively implemented
- **111,036 students** enrolled in vocational education in AY 21-22
- **11,105 students** opt for vocational education after finishing grade 10th
- Increase in the number of students opting for VE in grades 11 and 12 from AY 2019-20 to AY 2022-23 by over 186%

Pivots to the implementation model due to Covid-19:

- During the Covid-19 pandemic, trainers faced challenges in conducting classes, maintaining student interactions, organizing guest lectures and industry visits.
- Technology became an integral part of lesson delivery. During the first year of COVID, all classes were shifted to virtual mode and were being held through WhatsApp groups and Google suite. Guest lectures were also being organized virtually
- Practical demonstrations were also conducted in the virtual mode, students were encouraged to practice the activities wherein materials were easily available in their respective households
- In some cases, students were invited to the vocational labs in batches for practical activities, based on the discretion of the school

[1] Based on data shared by the implementing partner.

Recommendations:[2]

- The VE curriculum is aligned with the National Skills Qualification Framework (NSQF). However, LAHI, with the support of the state, can look at incorporating aspects from the current industry standards within the course plan
- In Swadheen schools, Multi Skills Foundation Course (MSFC) can have separate activities for students belonging to different learning levels and interests, this will provide students to explore aspects of VE they may want to pursue further
- In some schools, the number of students enrolled was more than 40 (as per the standards set by CSSVSE). In such cases the student to trainer ratio was skewed. More sections can be incorporated in schools where enrolment rate is high
- LAHI can look at recommending the state to onboard more vocational trainers basis the demand for each course in various schools
- LAHI can undertake the responsibility for ensuring that proper safety measures are implemented in all the schools. Safety trainings and awareness sessions should be organized separately from the course content. LAHI can undertake the responsibility of conducting periodic and regular safety checks/ audits for vocational labs. Additionally, quantity of safety equipment available in each school can be increased
- LAHI, with buy-in and support from the state, can explore ways of standardizing equipment and vendors for all schools. This will also provide quality assurance/ standardization and economies of scale for tools and equipment procured

[2] Implementing some recommendations provided may require LAHI to collaborate with the state and rely on state support.

Background

1.1. About HDFC's CSR initiatives

Housing Development Finance Corporation Limited (HDFC) is an Indian financial services company based in Mumbai, India. It is a major housing finance provider in India that also has a presence in banking, life and general insurance, asset management, venture capital, realty, education, deposits, and education loans.[3]

HDFC's CSR initiatives are undertaken through direct partnerships with non-profit organizations and through its primary implementing agency, the H T Parekh Foundation (the Foundation). The Foundation is a Section 25 (now Section 8) company incorporated in 2012, to honor the rich legacy of its Founder Chairman, Shri H T Parekh.

The H T Parekh Foundation (HTPF) envisions an inclusive India where vulnerable communities have access and opportunity to transform their lives and move from a state of 'surviving to thriving'. HTPF's philanthropic activities are aimed at enhancing the quality of life of people from marginalized and vulnerable communities and creating a stronger and inclusive India.

Objectives of the engagement

The primary objective of the current engagement was to conduct an impact assessment HDFC's CSR grant support to Lend a Hand India (LAHI) which will be captured through:

- Primary data collection from a sample of representative stakeholders and beneficiaries across locations
- Use of sector specific tools and evaluation framework customization e.g., RBM framework for analysis
- Discussion with client's identified stakeholders to understand their requirements and sampling plan finalized for primary research
- Data collection from a sample of representative stakeholders and beneficiaries through field visit to the programme site
- Relevant data collection from primary stakeholders through variety of qualitative and quantitative methods including but not limited to Surveys, FGDs, etc.
- Analysis of primary data collected on field and secondary data including MIS/reports submitted to the donor to create draft based on framework
- Understand the existing baseline data through sample survey and advise as the client undertakes to evaluate progress against the same
- Analysis of data collected to create draft based on framework and submit the final reports to client for their consideration as they undertake correction to maximize effectiveness and/or impact of the grant

[3] HDFC website - https://www.hdfc.com/ accessed on 2nd December 2022

1.2 About Lend-A-Hand India

HDFC, through its CSR initiatives, has supported Lend a Hand India's 'Project Catalyst' and 'Project Swadheen' in Odisha from Oct 2019 to March 2022. The programme strives towards preparing youth for employment and entrepreneurship opportunities by working at the intersection of education and livelihood. It aims to integrate vocational education with mainstream education at secondary and higher secondary education level. LAHI's aim was achieved through their engagement with the state government and government-aided schools to introduce vocational education as a core component of the school curriculum.[4]

Lend A Hand India (LAHI) was set up in 2003 to address the gap in vocational education being addressed at the school level. Each state that LAHI works in has a Project Management Unit (PMU) comprising 3-4 people that sit in the State Government's Education Department office. The PMU provides project management and technical support to scale up vocational education in the state.

LAHI's flagship "Multi Skill Foundation Course (MSFC)" and its efforts to increase access to vocational education complement the existing secondary school curriculum of Grade 9 and 10 to help the students learn better with respect to skill education. It provides students with practical experience in skills such as: food processing, health and hygiene, electrical wiring, gardening, woodwork etc. It aims to tackle gender bias as girls learn electrical wiring and boys learn cooking. Students curiously undertake minor installations such as electric bell, repair of a bench, growing vegetables and selling in market, or helping at home to change fuse wire or fix a mixer.[5]

1.3 Project Brief

Odisha's current skills development system is confronted with a plethora of constraints such as: (i) insufficient training capacity, and the uneven geographic spread of training institutions; (ii) inadequate quality and relevance of training due to outdated curricula and equipment, and a shortage of industry-experienced trainers, especially at ITIs; (iii) lack of a robust quality assurance system to benchmark training institutions to international standards; (iv) weak employer linkages of training programmes; (v) limited autonomy in public institutions which constrain market-responsive training; (vi) absence of mentoring institutions which are to transform ITIs into more effective institutions; and (vii) need for viable training models to deliver advanced skills programmes, particularly for higher cost, capital-intensive manufacturing.[6] In light of these challenges, LAHI's expertise in the skilling sector, outreach in the community, and work at the intersection of education and livelihood supports the state's aim to train additional 15,00,000 people by 2024.[7]

Project Catalyst supports state governments by providing quality talent support for technical and programme management function to offer vocational education as part of mainstream education in multiple state[8].
Over the period of 2019-2021, the program has undertaken key activities including introduction of vocational education in new schools, revamping of 231 government vocational higher secondary schools, orientation of Headmasters and Principals of 385 newly approved schools, setting up of 270 labs, capacity building of VT, conducting over 2000 online classes and gauging attendance of over 4,000 students.[9]

Project Swadheen provides multi-skill vocational education and career guidance to young boys and girls from urban and rural communities as part of secondary and higher secondary school education. Foundational level exposure is provided in over 20 different skills ranging from food processing, healthcare, electrical wiring, gardening, landscaping, welding, and carpentry after which the student specializes in a skill of her/his choice in grades 11 and 12.[10] The program implementation from 2019-2021 include "Hands On Skill" activities in Multi Skill Labs, leveraging

[4] LAHI website- https://lendahandindia.org/about-us/ accessed on 2nd December 2022.
[5] Anil Swarup, Making It Happen: Lend A Hand India, *The Daily Guardian*, September 14, 2021.
[6] Odisha Skill Development Authority, *Report on Social Safeguard activities under OSDP*, 2021, p. 4.
[7] Odisha Skill Development Authority, *Report on Social Safeguard activities under OSDP*, 2021, p. 4.
[8] LAHI website- https://lendahandindia.org/about-us/ accessed on 2nd December 2022.
[9] Documents received from HDFC CSR
[10] LAHI website- https://lendahandindia.org/about-us/ accessed on 2nd December 2022.

WhatsApp groups, Google forms, online platforms for the continuance of training over online mode, activities for practical learning, along with guest lectures and field visits for an enhanced understanding of the course.[11]

1.4 Project overview

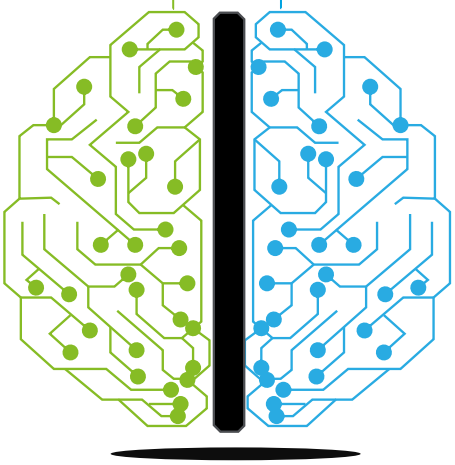
The project works towards integration of vocational education as an applied learning method with mainstream education at Secondary and Higher Secondary levels by mobilizing public, private and community resources. This is carried out with the spirit to bring awareness and self-sufficiency within the communities towards the inculcation of skill-based approach to education while consequently empowering them to improve their employability skills under the learning framework executed in schools. The operational model is unique as it engages and empowers young learners. This is carried out through a two-way partnership among the State Government and Lend a Hand India.

Project Title	Investment (INR)	MoU Period	Project Location	Project Overview	Project Outreach [12]
Grant support to LAHI (Project Catalyst and Project Swadheen)	INR 3.2 crore	October 2019 to March 2022	Odisha	Project aims at the integration of vocational education as an "applied learning" method with Mainstream Education for 9th-12th grade students	• Project Swadheen: 1,261 students enrolled in 9th and 10th grade for the academic year 2019-20,2020-21,2021-22 • Project Catalyst: 111,036 students enrolled across 960 schools across 30 districts of Odisha from 2019-22

For each of the project outcomes mentioned above, different activities were conducted as highlighted below[13]:

Project Catalyst

- Worked with the Government to expand the initiative to other schools in 3 years
- 50 of the schools in the secondary grades to be able to provide vocational education
- Implemented by LAHI's PMU which is co located with the State Government's SSA (Samagra Shiksha Abhiyaan) team to provide project management and technical support (at no financial cost to the state) and scale up vocational education in the state



Project Swadheen

- LAHI set up centers as labs and employed its own trainers to deliver the curriculum
- Established 5 model schools in the Bhubaneshwar district. Labs are compliant to deliver the Multi Skill Learning curriculum and one trainer per school is recruited and trained

[11] Documents received from HDFC CSR
[12] Project Outreach data received from LAHI. Project Outreach data may differ from the numbers reported to HDFC CSR team as enrolment data was collected through Google Forms which was filled by the VTs during Covid period and few duplicate data was found. According to the IP, the data was cleaned during the assessment (April 2022)
[13] Documents received from HDFC CSR

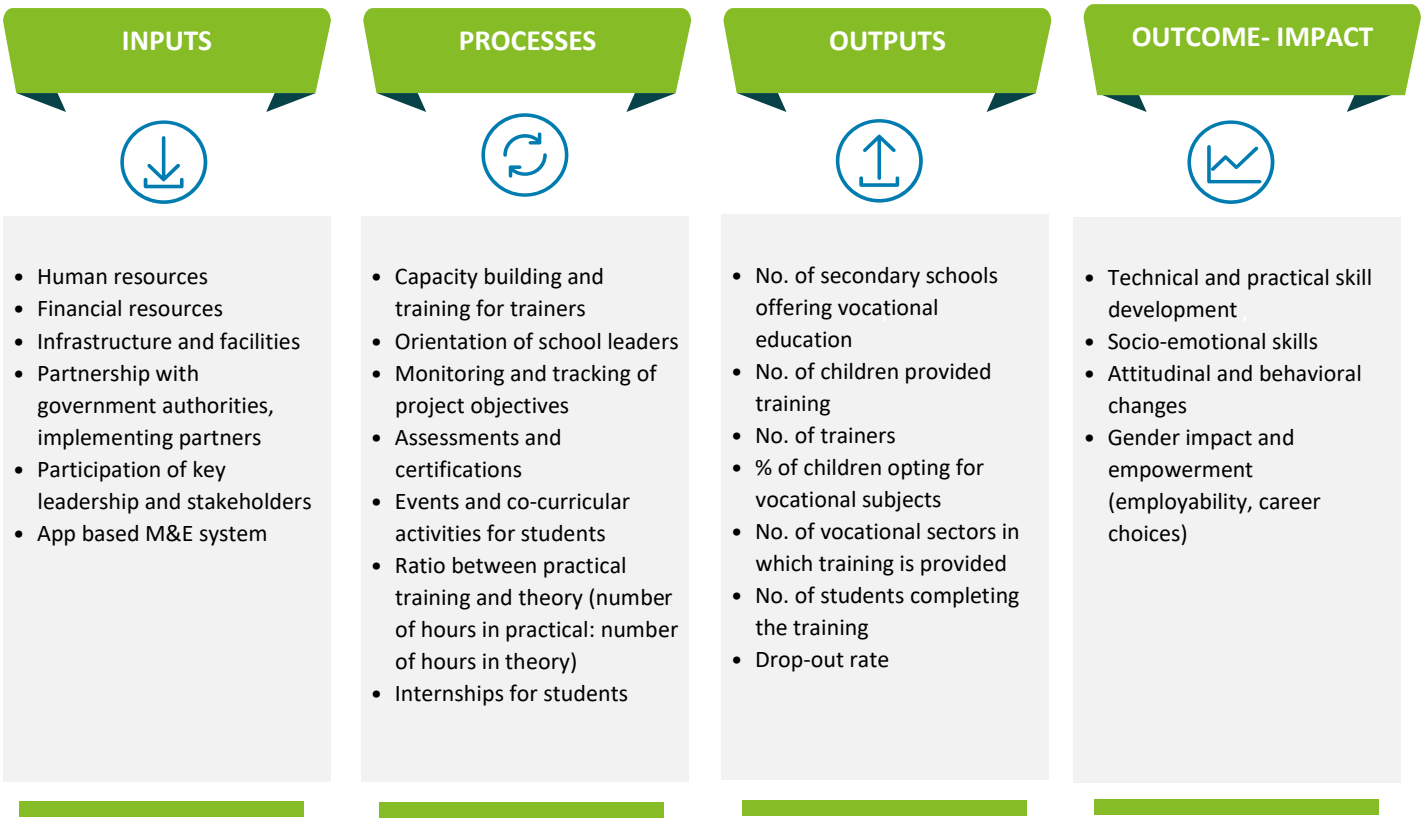
Approach and methodology

2.1 Approach

A dual-pronged approach was applied to gain a holistic understanding of the impact of the project parameters including student learning outcomes and model components of the project. Our approach was consultative and grounded, based on interactions with key stakeholders, aided by focused primary and secondary research along with data analysis, and complemented by domain knowledge.

2.2 Methodology

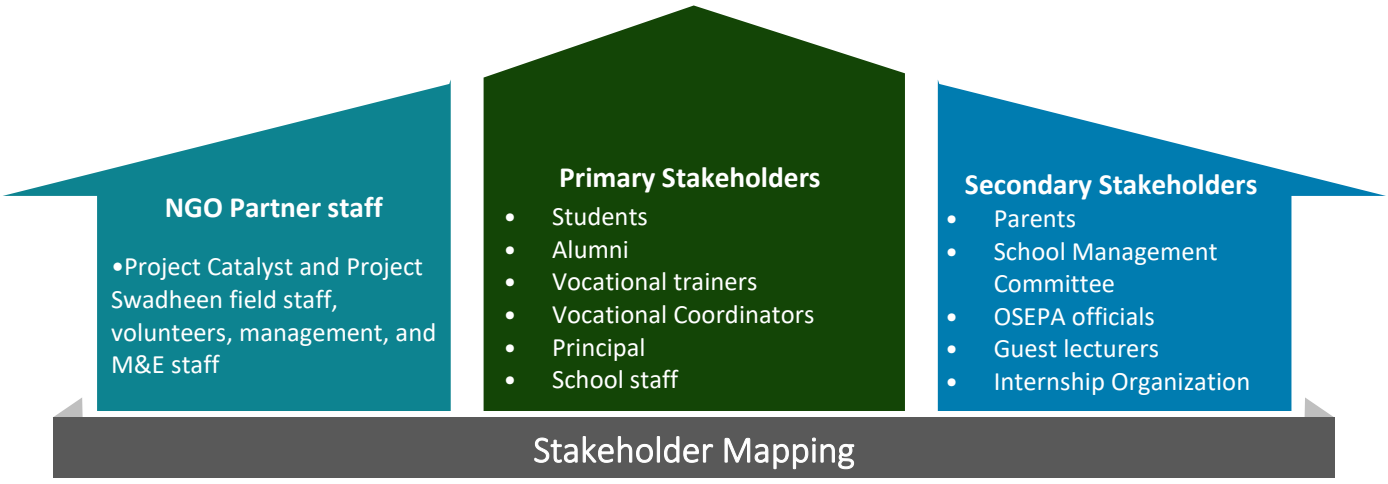
An impact assessment study of a development project is an analysis of the change, positive and negative, brought about in the lives of intended or unintended beneficiary either directly or indirectly due to the implementation of the said project.[14] The impact assessment for Project Catalyst and Project Swadheen utilize both qualitative and quantitative research methods to evaluate the impact the project has on the lives of stakeholders. The impact assessment helped in mapping the progress of the programme across the outcomes outlined along with providing recommendations of best practices that can be implemented in future projects of similar nature.
Some of the indicators that were evaluated through the assessment included the following:



The impact assessment for the projects was conducted through a desk review and field visit to the programme sites in Odisha. The indicators listed were studied using both qualitative and quantitative methods to ensure a holistic understanding of the project impact.

[14] International Fund for Agricultural Development (IFAD), Evaluation Manual, February 2015.

2.2.1 Stakeholder mapping



2.3 Study design

The assessment has been carried out in following stages –

	Design	Stakeholder Consultation	Documentation and Analysis	Final stage: Consolidation
Objective	Develop study tools	Data collection	Analysis of findings	Final report with the way forward
Key Activities	Identifying sample beneficiaries	Primary site visits to Odisha	Data collection	Consolidate final report
	Designing study tools	Conduct stakeholder interaction	Data refining	Document success stories
	Document collation	Data collection and validation	Data analysis	Recommendations
Deliverables	Inception report	List of stakeholder consultations	Draft report	Final report/Presentation

2.4 Sampling

The sampling technique varied basis the population at hand. The assessment employed proportionate sampling for selection of primary beneficiaries and purposive sampling for secondary stakeholders.

Through a 3-day field visit, the team covered a total of 7 schools for Project Swadheen and Project Catalyst, across Bhubaneshwar, Puri, and Cuttack in Odisha. The team interacted with primary and secondary stakeholders using a mix of research tools.

S.No.	Stakeholder Type	Project	Sample Covered	Method
Primary Stakeholders				
1.	Students	Project Swadheen and Project Catalyst	108	Case Study, Survey, Focused Group Discussions
2.	Alumni	Project Swadheen and Project Catalyst	12	Key Informant Interview
3.	Vocational Trainers	Project Swadheen and Project Catalyst	8	Key Informant Interview
4.	Vocational Coordinators	Project Catalyst	5	Key Informant Interview
5.	Principal	Project Swadheen and Project Catalyst	2 Principals 3 Assistant Principals	Key Informant Interview
6.	School Staff	Project Swadheen and Project Catalyst	1 Project Coordinator	Key Informant Interview
Secondary Stakeholders				
1.	Parents	Project Swadheen and Project Catalyst	6	Key Informant Interview
2.	Members of School Management Committees	Project Swadheen and Project Catalyst	2	Key Informant Interview
3.	OSEPA Officials	Project Swadheen and Project Catalyst	2 (Deputy Director and Assistant Director)	Key Informant Interview
4.	Guest Lecturers	Project Swadheen and Project Catalyst	2	Key Informant Interview
5.	Internship Organizations	Project Swadheen and Project Catalyst	2	Key Informant Interview
NGO Partner Staff				
1.	PMU and LAHI Staff (Implementation team)	Project Swadheen and Project Catalyst	8	Key Informant Interview, Group Discussions with the implementation team

2.5 Desk review and secondary research

The study team had an introductory call with select members of the NGO team to understand the nuances of the project. The meeting was attended by the founder of Lend-a-Hand India, the project implementation team and the field team. The LAHI team explained the project need and operating model, the targets and achievement of Project Catalyst and Project Swadheen, and the key indicators against which achievements were mapped. Through the discussion, the team was able to understand the available data sources and formulate assessment methodology.

As a next step, the team undertook an in-depth desk review of the available documents to understand the project at length. Available data sources will be identified, utilized, and reviewed to identify specificities to be explored during the primary process of data collection.

Below is an indicative list of documents that were reviewed as part of the assessment (non-exhaustive) –

Project Swadheen:

- Student level documentation maintained (Lighthouse application)
- Progress and quarterly reports

- Attendance records – students and trainers
- Details of students opting for vocational subject after 10th Grade
- Course material and workbooks
- Theory and Practical Assessments undertaken
- Certifications issued by SSC and Odisha Board of Secondary Education
- Training agenda/ other related documents for Training of Trainer (ToT)
- School timetable

Project Catalyst:

- MoU with the State Dept. of Education
- Progress and quarterly reports
- Student level documentation maintained (Lighthouse application)
- Findings from the exit survey conducted
- Annual plan prepared for the government
- Curriculum and course materials
- Attendance records – students and trainers
- Training agenda/ other related documents for ToT

Field level stakeholder interactions

The assessment was conducted using qualitative and quantitative methods. Field visit to Bhubaneshwar, Puri and Cuttack (Odisha) accounted for the primary research component and were conducted by a team of two members of the engagement team in the third week of December 2022. The dates were finalized in consultation with the NGO partner. The qualitative tools included focus group discussions, key informant interviews, and case study. Survey forms were used to gather feedback from the primary beneficiaries i.e., students.

- **Focus Group Discussion (FGD)**

A FGD is a qualitative research method used for collecting data in which a homogeneous group of individuals are facilitated by a moderator towards exploring and unearthing a given topic in-depth.[15] The method helps in understanding the thoughts, perceptions, and attitudes of the group on several concerns in the interaction that allows the researcher to delve deeper into both the individual experience along with the collective narrative of the group. The FGD utilizes a semi-structured set of questions that guide the discussion where the moderator encourages equal participation to the discussion.

- **Key Informant Interviews (KII)**

KII is a tool where the researcher can closely interact with the critical members or "key informants" of the project implementation team. The key informant interview utilizes semi-structured guidelines to gather insights and observations made by the informant on a wide range of concerns related to the project implementation. These observations are then validated across different stakeholders.[16]

- **Survey**

A survey is a research method which involves collecting information or data from a sample of elements drawn from a well-defined population using questionnaire or interview schedules[17] to infer the characteristics of a defined population or universe.[18] For the purpose of this study, the survey questionnaire will be used to understand the feedback of primary beneficiaries impacted by the intervention.

- **Case study**

Case study method is an in-depth study of a particular situation or a subject or refer to study of a small group of persons or events regarding analyzing the same in depth. It is a method used to narrow down a very broad field of research into one easily researchable topic. The case studies look intensely at an individual or small participant pool and draws conclusions only about that participant or group and only in that specific context.[19]

[15] Eeuwijk and Angehrn (2017). How to…conduct a focus group discussion (FGD). Methodological Manual.
[16] MN Marshall (1996). The key informant interview technique.
[17] Visser, Krosnick and Lavrakas (2000). Handbook of research methods in social and personality psychology.
[18] Kerlinger (2009). Foundations of Behavioral Research.
[19] (egyankosh.ac.in)

Relevance of the initiative

Employment and Skilling in the Indian Context

A prime indicator of the state of the economy is unemployment, which is a relentless concern in India. Lack of formal vocational education and industry-ready skills in professional courses, high school dropout rates, and lack of technical qualifications are some reasons for unemployment among youth in India[20]. A mere **4.7%** of India's total workforce has undergone **formal skill training**.[21] Only 6.5% of employed people in India work in the formal sector as compared to the 80.9% of the working population occupied in the formal sector[22]. These statistics highlight the intensity of the problem in terms of retaining students in the formal skills training system and embedding skills that can establish a formal career path. Therefore, in this transition from informal to formal vocational training is key. This highlights the critical need to build access to and enhance the quality of education systems to propel youth towards employment and entrepreneurship.[23]

School-level Interventions

Given the role of educational systems to mitigate the problems of the Indian workforce, inclusion of vocational education becomes a tool to close the skill gap in the employment landscape by preparing students for being industry ready. This indicates that Vocational Education and Training (VET) needs to be improved in India. This will, in turn, play a vital role in ensuring low school dropout rates and facilitate the **school-to-work** transition in the country[24]. Concurrently, the number of **schools offering vocational courses has increased from 8,700 to 44,000** from 2015 to 2019[25]. However, nearly **85% of Indian schools** are **yet to implement vocational courses as part of their curriculum[26]**.

These assertions solidify two school level interventions. Firstly, the inclusion of vocational education at school levels. Followed by the implementation of the aforementioned vocational education and training courses across schools. The World Economic Forum (WEF) recognizes Lend-A-Hand India's contribution in its *Education 4.0 India* Report. WEF acknowledged LAHI's focus on the **integration of vocational education with existing school curricula** and **exposure to students in the 9th and 10th grades to multiple vocational courses** vis-à-vis the inclusion of vocational programmes at school level.

'School-to-work' Transition

According to WEF, the Knowledge and Information Network for Digital Learning and Education (KINDLE) umbrella studied the existing government and private interventions aimed at improving learning outcomes in schools. One of the four areas ripe for innovation in the (K-12) space was iterated as 'school-to-work transition'. This priority area focuses on making students job-ready in a rapidly evolving employment landscape. The report suggests interventions using digital and hybrid models to upskill students, enabling them to attain a good fit with available and emerging jobs[27].

The report additionally puts forth the **relevant impediments** including lack of trainers, inadequate resources and infrastructure, deficient integration with the mainstream school curriculum and linkages between the courses and localized skill gaps. Additionally, pedagogy, stakeholders' opinion of vocational education as the second-best option

[20] Manoj Neelamegan, "Role of vocational education and training in reducing unemployment in India", Financial Express, August 21, 2022.
[21] UNICEF, Global Business Coalition for Education (GBC-Education) Report, 2019.
[22] International Labour Organisation, *Women and Men in the Informal Economy – A Statistical Picture*, 2018, p. 88.
[23] World Economic Forum, Education 4.0 India Insight Report, 2022, p. 25.
[24] Manoj Neelamegan, "Role of vocational education and training in reducing unemployment in India", Financial Express, August 21, 2022.
[25] World Economic Forum, *Education 4.0 India Insight Report*, 2022, p. 25.
[26] World Economic Forum, *Education 4.0 India Insight Report*, 2022, p. 5.
[27] World Economic Forum, Education 4.0 India Insight Report, 2022, p. 5.

to mainstream education, and lacking reference to industry needs in the credit transferability to enable students to transfer between formal and informal channels of education and training stand as obstacles[28].

Directives and Policies

Policies and directives such as the New Education Policy (NEP) 2020 and Samagra Shiksha Abhiyan (SSA) must become essential in view of the contemporary pace and scale of inclusion of vocational programmes.

- The **NEP 2020** looks at the skill-based model and incorporation of vocational training to the Indian education ecosystem. It aims to achieve **at least 50% of learners to gain exposure to vocational education through the school and higher education system by 2025**.
- Some salient features of the NEP include exposure to vocational education in school and higher education system, early vocational exposure in middle and secondary school, internship opportunities with local vocational experts, ensuring adequate number of trainers and requirements of teacher education curricula for vocational education as per NCFTE 2021 and high-quality common aptitude test, as well as specialized common subject exams by the National Testing Agency (NTA) in vocational subjects at least twice every year. Alongside a new and comprehensive National Curricular Framework for School Education (NCFSE) 2020-21 is being formulated which ensures no hard separation between 'vocational' or 'academic' streams[29].
- Based on the recommendations in the NEP, Odisha government too aims to implement VE in 50% of the schools by 2025, and in 100% of the schools by 2030. Lend-a-Hand-India is essential to the state in reaching this goal.
- In 2018, the state Education Department announced the merger of three Centrally sponsored schemes of Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education (TE) to constitute the **Samagra Shiksha Abhiyan** (SSA)[30]. Furthermore, OSEPA is responsible for implementing the SSA[31]. The SSA looks at the integrated scheme for school education from pre-school to grade 12th. The SSA is an overarching programme prepared with the broader goal of improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes.[32] One of its 15 major interventions is mentioned as 'Vocational Education'. Some of the mainstays include: **convergence with the Ministry of Skill Development and Entrepreneurship and other Ministries** with respect to expansion of vocational education for providing funding for skills, **support extended to Government aided schools** under Vocational Education in addition to Government Schools and grant/number of job roles/sections linked to enrolment and demand, and **provision of Classroom cum workshop** for Vocational Education in schools serving as Hub for other neighbouring schools; transportation and assessment cost for schools serving as Spokes in the Hub and Spoke model has been made[33].
- The Skill Gap Index provides detailed information for each district but on an aggregate level certain trends can be seen emerging within the state. Observing the current growth trends, state policies, and contribution to the GDP, it is evident that the secondary and tertiary sector in the state are experiencing growth. In the secondary sector in Odisha, automobile and automobile components, chemicals and pharmaceuticals, electronics and hardware, IT and ITes are emerging industries. In the tertiary sector, tourism and hospitality, media and entertainment, education etc are emerging industries[34]. VE is seen as a tool to bridge this skill gap.
- Considering the relevance, realities, challenges and interventions in the realm of primacy towards incorporation of vocational programmes at school level; a larger center stage is garnered for the related interventions which bring greater momentum to the current pace of execution. Furthermore, LAHI's oeuvres, expertise, and recognition in the field of vocational education acts as an indispensable support to the projects centred around the intervention.

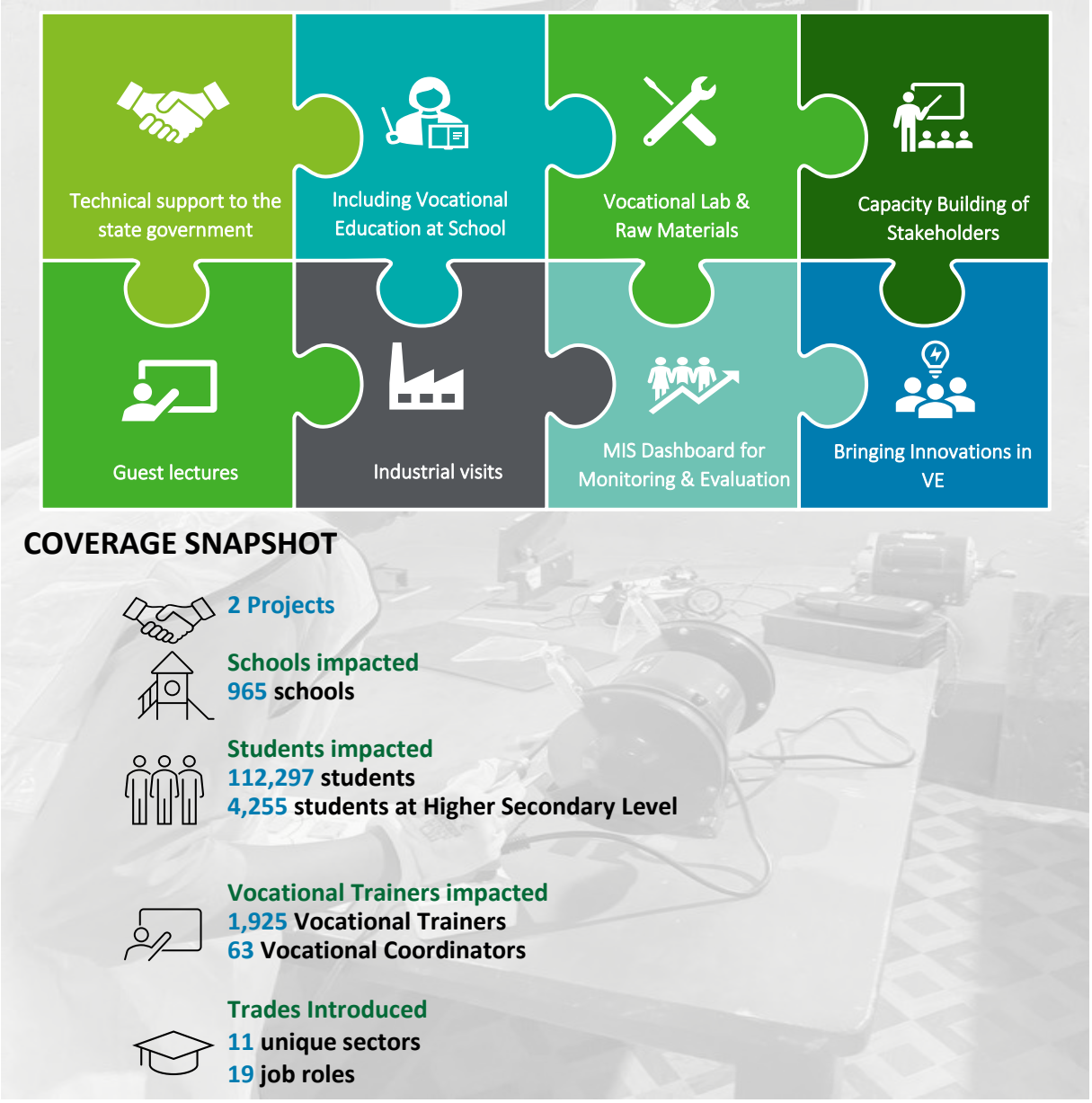
[28] "85% of Indian schools yet to implement vocational courses: WEF report," Business Standard, October 7, 2022.
[29] Government of India, Ministry of Education Department of School Education & Literacy, and Department of Higher Education, *Annual Report 2020-21*, 2021, p. 139.
[30] Department of School Education and Literacy, Ministry of Human Resource Development, and Government of India, "Integrated Scheme for School Education: Merging the Centrally Sponsored Schemes of SSA, RMSA &TE", January 22, 2018.
[31] OSEPA website - http://osepa.odisha.gov.in/ accessed on 9th February 2023
[32] OSEPA website - http://osepa.odisha.gov.in/ accessed on 9th February 2023
[33] Ministry of Education, "Cabinet approves continuation of Samagra Shiksha Scheme for School Education from 1st April, 2021 to 31st March, 2026," press release, August 14, 2021.
[34] Skill Gap Assessment for the State of Odisha - http://www.inskills.co.in/download/States/Odisha%20-%20SGR.pdf

Impact assessment findings

To improve access to vocational education, HDFC supported Lend a Hand India, a pioneer in the vocational education space. The support provided by HDFC was able to aid building of vocational lab facilities, build capacities of educators, provide career opportunities, among others. The team addresses the learning gap in formative years of students through the following intervention model:

Intervention model:

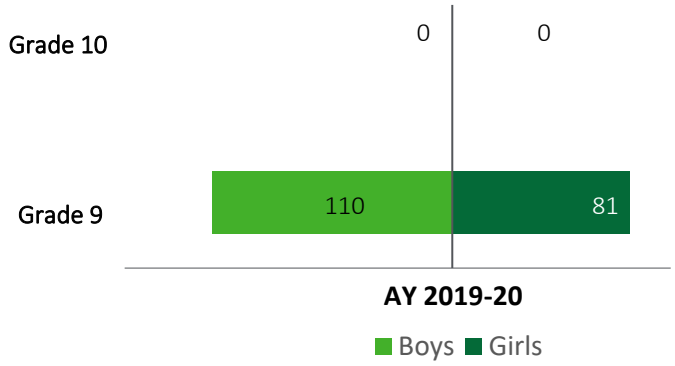
The following is a comprehensive representation of the major activities undertaken by Lend-A-Hand India:

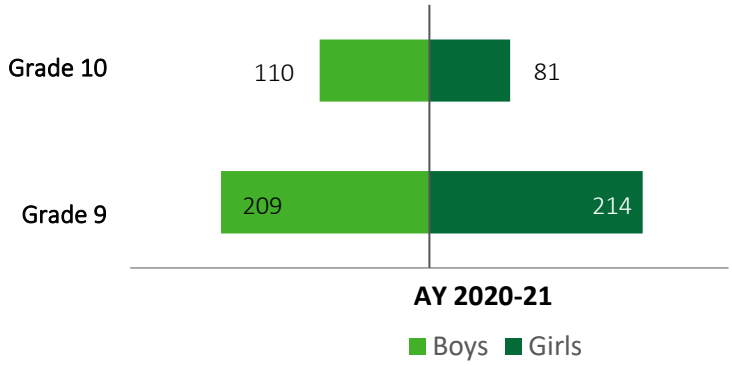


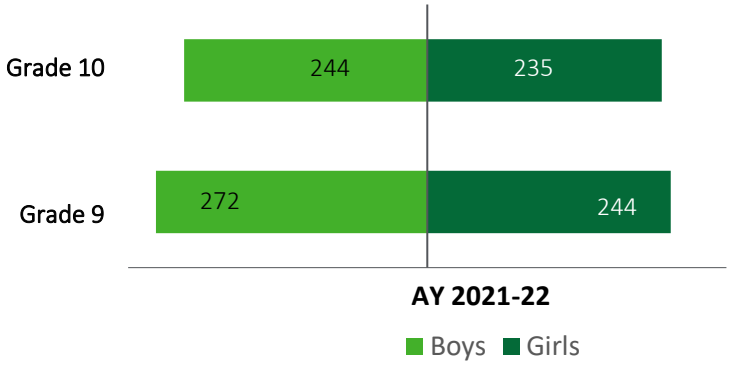
Key Findings

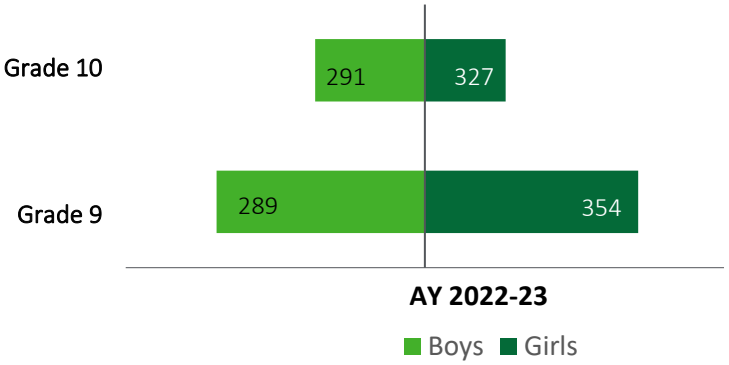
Project Swadheen:

Grade and Gender-wise Student Enrolments from Academic Year 2019-20 to Academic Year 2022-23 from Grade 9-12 under Project Swadheen









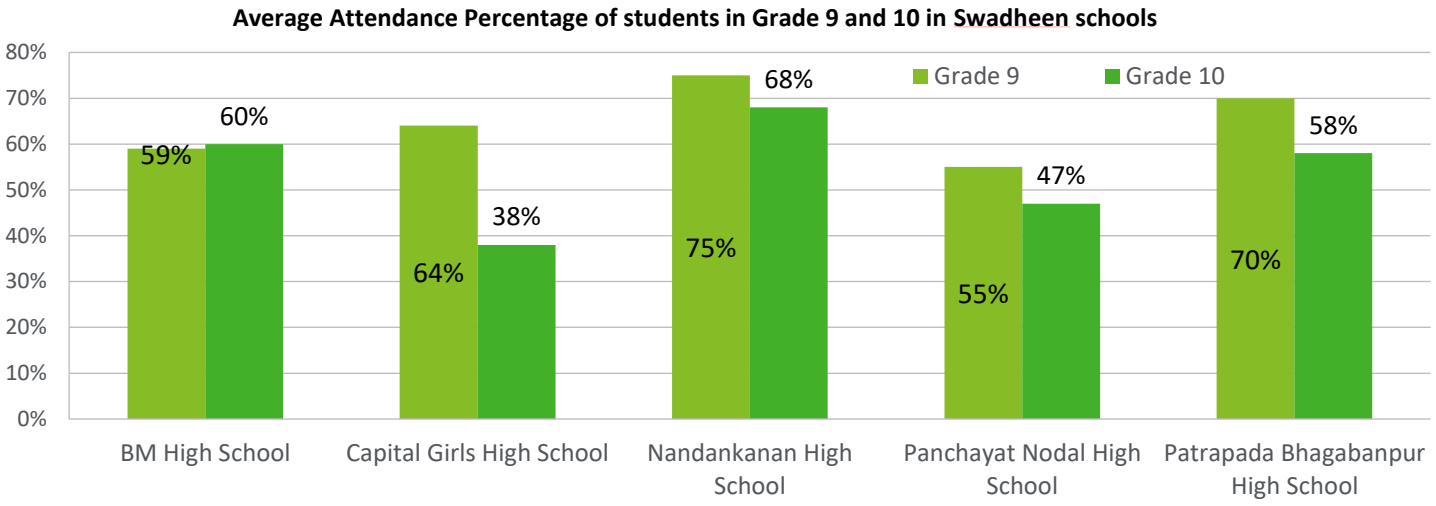
221% increase inenrolments from AY 2019-20 to 2020-21

62% increase in enrolments from AY 2020-21 to 2021-22

27% increase in enrolments from AY 2021-22 to 2022-23

The general enrolment pattern across all the four AYs has shown a progressive trend. This is indicative of the successful mobilization and counselling undertaken which, in turn, facilitated the increase in enrolments visible from the nascent stage of implementation. In the case of grade 9 students in AY 2019-20 who are promoted to grade 10, the enrolment tally remains the same which indicates no dropouts. Following this, the other enrolment tallies indicate towards the increase in enrolments over the years of implementation.

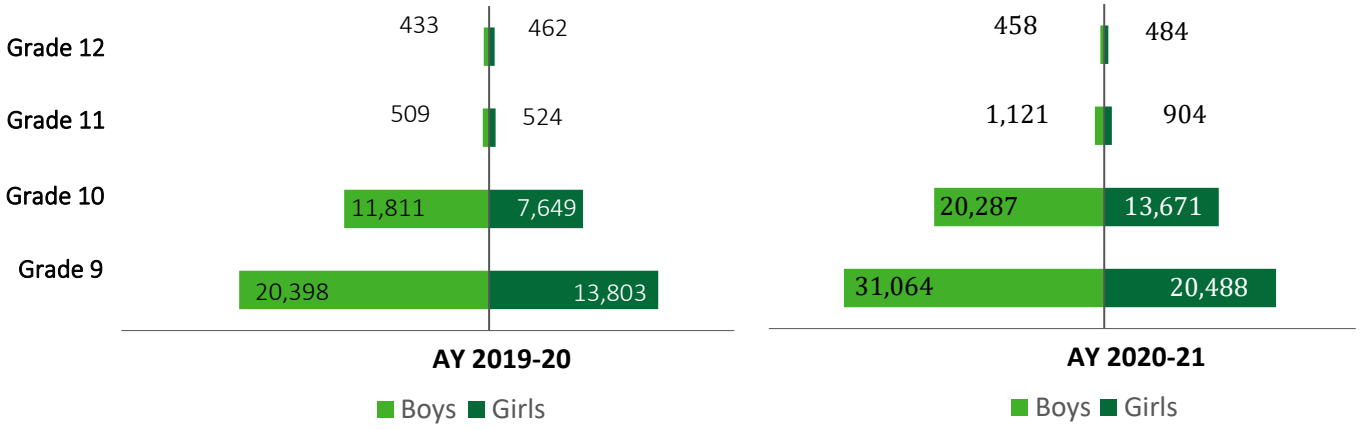
School and Grade wise Average Attendance Percentage of students in AY 2021-22 in Swadheen schools

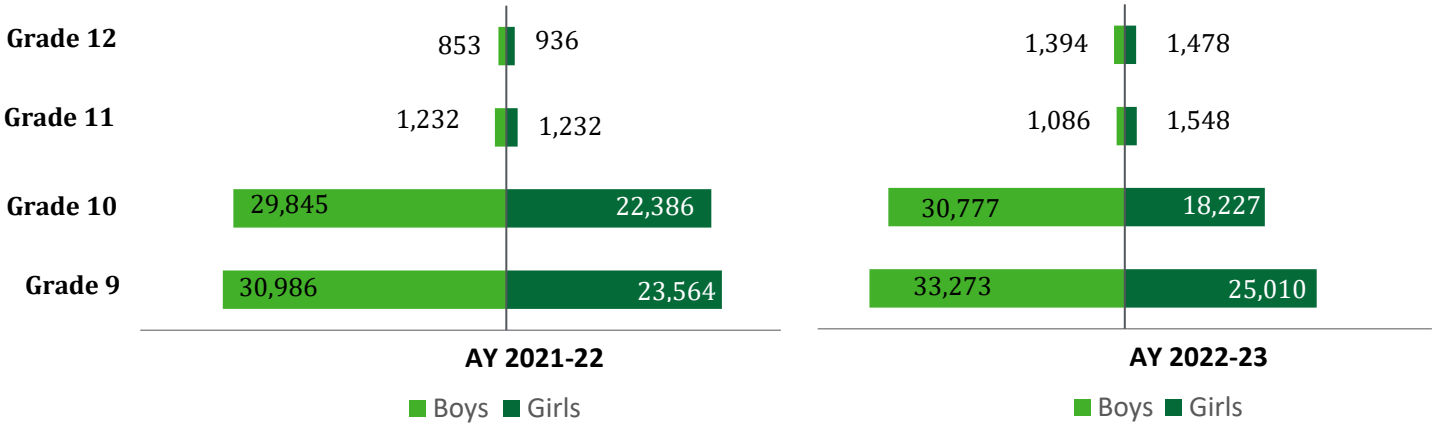


There is a general decline in attendance witnessed when students are promoted from Grade 9 to Grade 10. In some cases, especially female students, the children are expected to contribute to household chores and/or livelihood activities and education moves to the back burner; resulting in low attendance in school subsequently reflecting badly on grades too. In some cases, students take up part-time/full-time job in various small businesses which results in shift in interest towards earning money early than completing their education. In AY 2021-22, most of the classes were conducted online owing to the pandemic. This also led to a decline in attendance among students who lacked the infrastructural support to join online classes such as lack of ownership of smartphones, lack of financial resources to afford regular internet services, etc. Vocational trainers conduct home visits and regular interactions with parents under Project Swadheen which helps trainers encourage families to send their children to school and also understand any other challenges that the students might be facing.

Project Catalyst:

Grade and Gender-wise Student Enrolments from Academic Year 2019-20 to Academic Year 2022-23 from Grade 9-12 under Project Catalyst





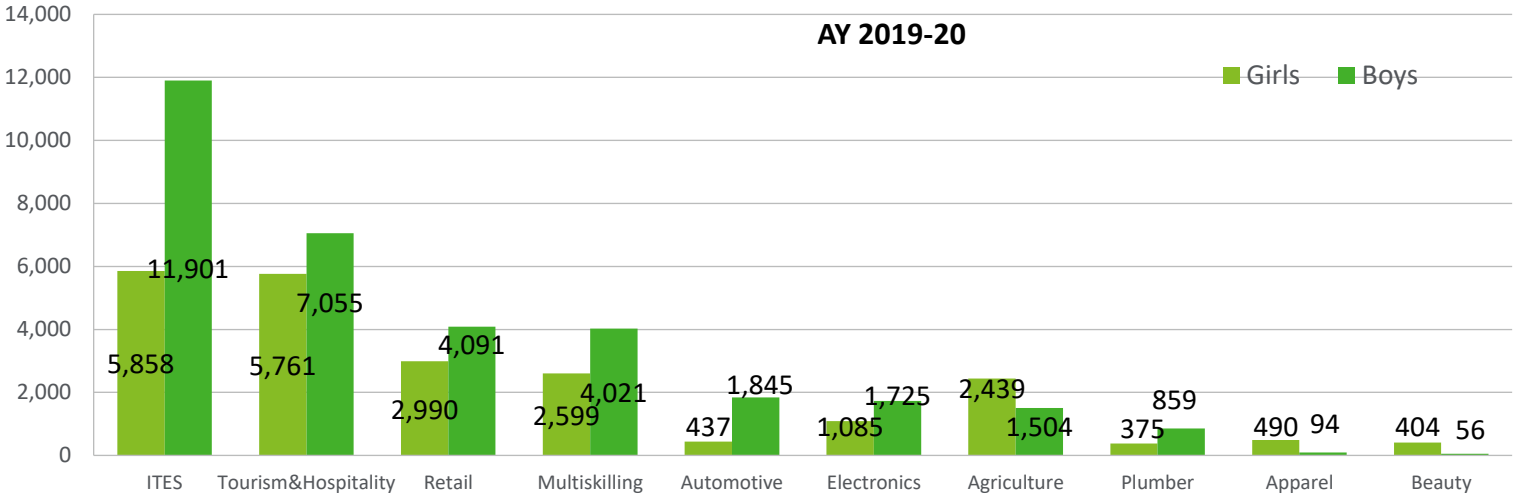
59% increase in enrolments from AY 2019-20 to 2020-21

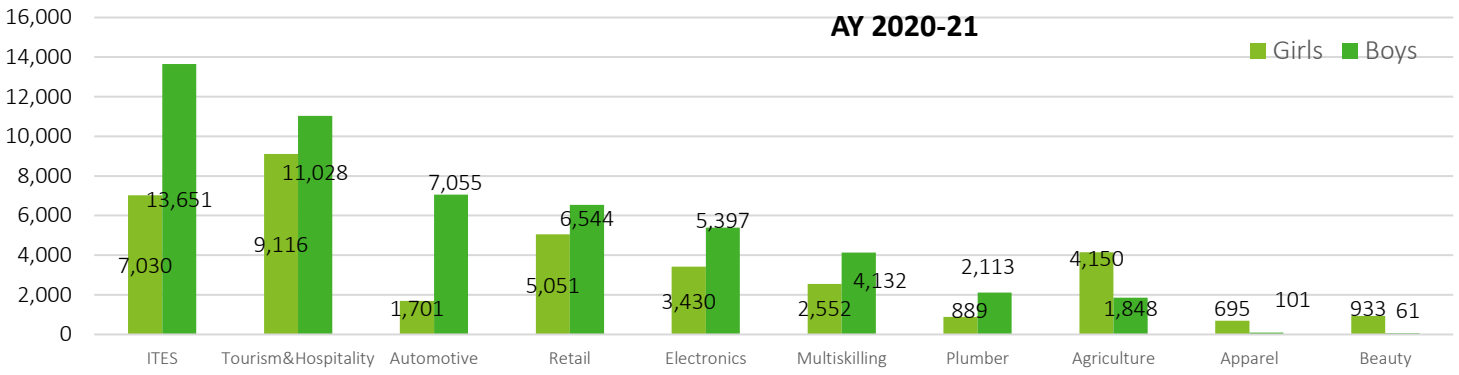
25% increase in enrolments from AY 2020-21 to 2021-22

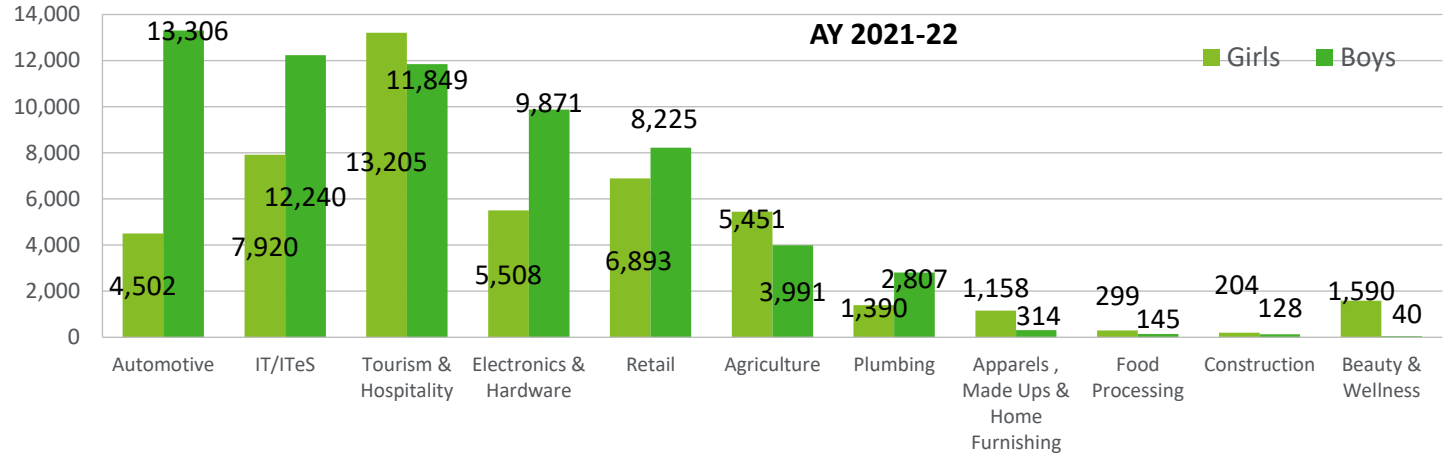
2% increase in enrolments from AY 2021-22 to 2022-23

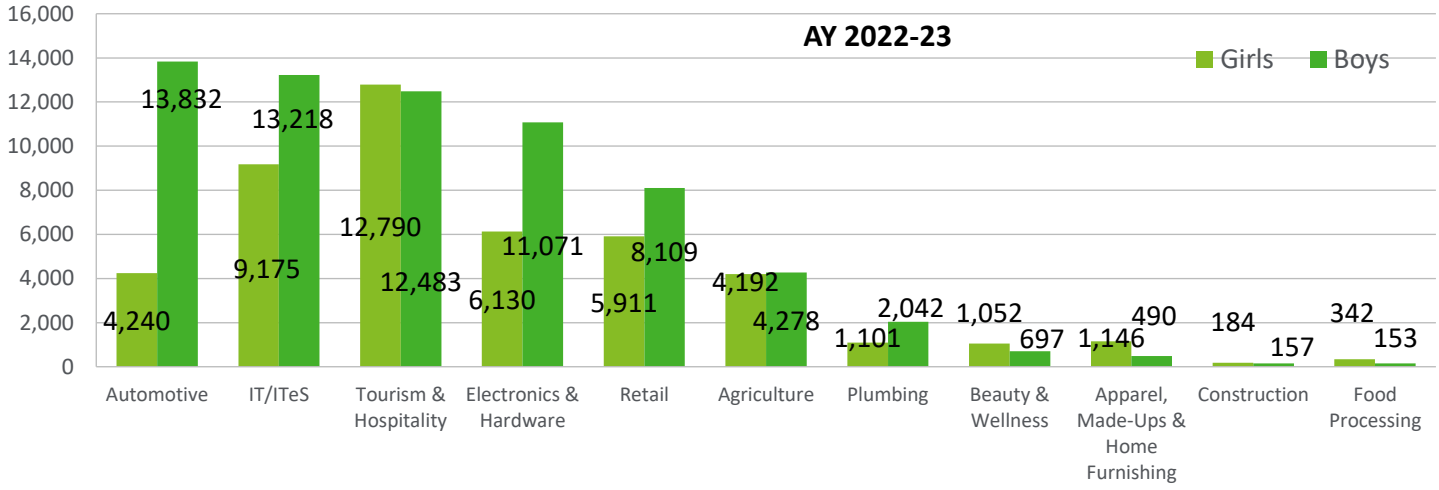
The general enrolment pattern across all the four AYs show a trend of progressive decline with each successive grade. However, there is an increase in the number of students opting for VE in Grades 11 and 12 from AY 2019-20 to AY 2022-23 by 41.87% (CAGR).

Sector-wise Student Enrolments from Academic Year 2019-20 to Academic Year 2022-23 from Grade 9-12 under Project Catalyst




AY 2020-21
Girls
Boys
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
7,030
13,651
9,116
11,028
1,701
7,055
5,051
6,544
3,430
5,397
2,552
4,132
889
2,113
1,848
4,150
695
101
933
61
ITES
Tourism&Hospitality
Automotive
Retail
Electronics
Multiskilling
Plumber
Agriculture
Apparel
Beauty


AY 2021-22
Girls
Boys
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
4,502
13,306
7,920
12,240
13,205
11,849
5,508
9,871
6,893
8,225
5,451
3,991
1,390
2,807
1,158
314
299
145
204
128
1,590
40
Automotive
IT/ITeS
Tourism & Hospitality
Electronics & Hardware
Retail
Agriculture
Plumbing
Apparels , Made Ups & Home Furnishing
Food Processing
Construction
Beauty & Wellness


AY 2022-23
Girls
Boys
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
4,240
13,832
9,175
13,218
12,790
12,483
6,130
11,071
5,911
8,109
4,192
4,278
1,101
2,042
1,052
697
1,146
490
184
157
342
153
Automotive
IT/ITeS
Tourism & Hospitality
Electronics & Hardware
Retail
Agriculture
Plumbing
Beauty & Wellness
Apparel, Made-Ups & Home Furnishing
Construction
Food Processing

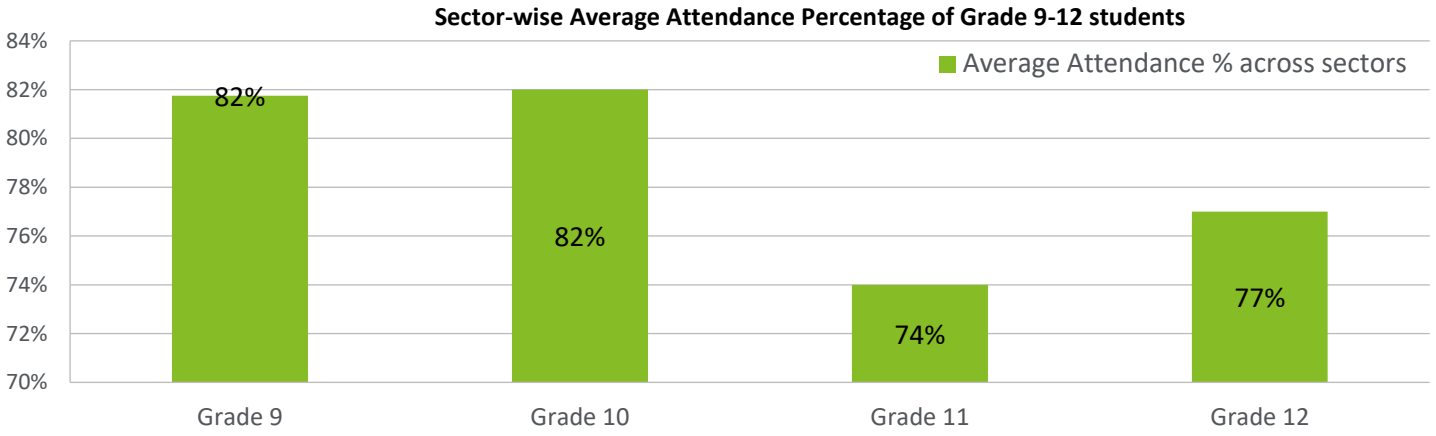
ITeS, Automotive, Tourism, and Retail remain as some of the most sought-after sectors across the academic years. Most of the students pivot towards these courses owing to the lucrative opportunities that these courses might provide in the region. During the field visit, it was observed that the demand for these courses is so high among students that schools are forced to conduct an entrance test for students to get enrolled into the course of their choice. Students of Grade 9 mentioned that the learning from Retail course that they have opted for is tremendous and they look forward to taking it up in the form of higher studies as well.

AY 2019-20 shows a stark difference between the other sectors as compared to ITeS. Contrastingly, a greater trend towards diversification of sectors is observed in the AY 2020-21 onwards. There is a rise in the Tourism and Hospitality observed AY 2021-22 onwards. This can be attributed to the relaxation of lockdown protocol, increase in recreational activities, and resultant rise in the demand for workforce in the sector.

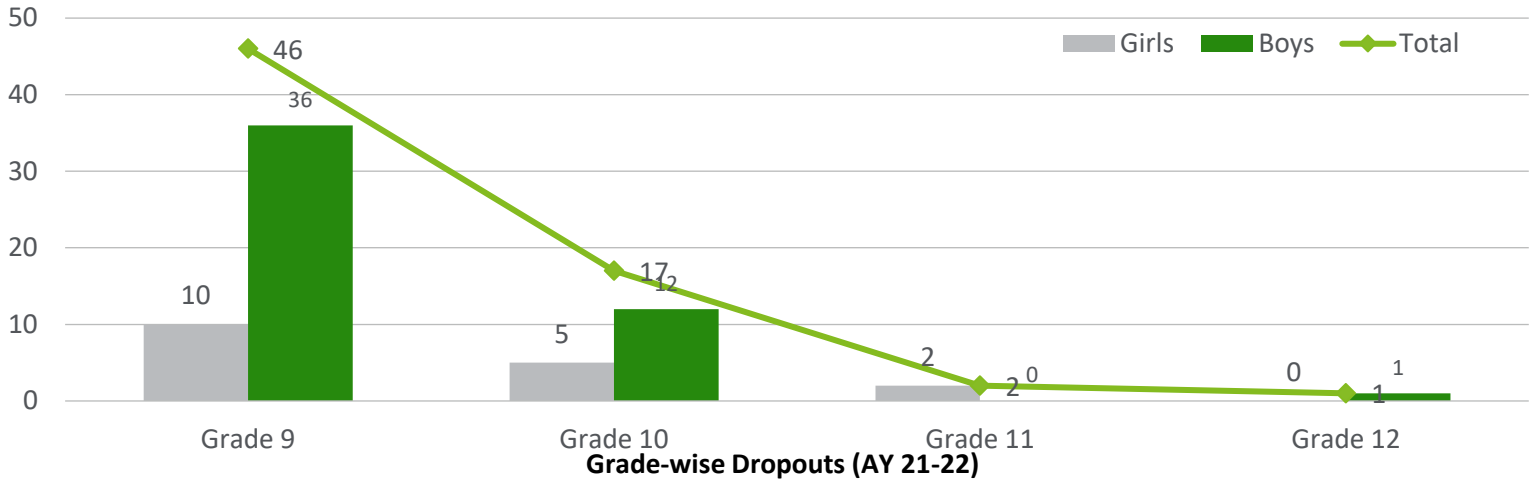
With an exception in the tourism and hospitality sector which has witnessed the tally of female enrolments surpassing the counterpart; gender parity has not been observed in the sectors like Automatives, Electronics, IT/ITes etc. Nevertheless, the tally of female enrolments is notable. A similar trend is observed in the agriculture sector.

Furthermore, a positive increase is observed in these sectors, showcasing the encouraging trend of girl students pursuing vocational course. This, in turn, indicates towards interest in gaining proficiency for acquiring skill based job opportunities.

Grade wise Average Attendance in Academic Year 2021-22 in Catalyst schools



Grade and Gender-wise Student Dropouts from VE Courses

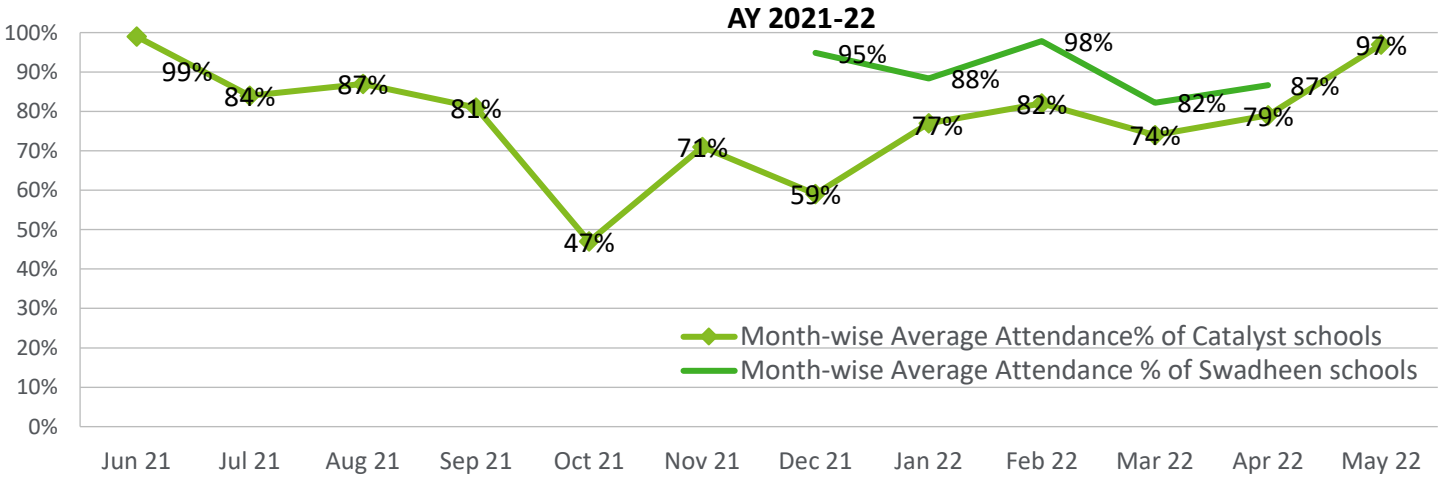


Grade-wise Dropouts (AY 21-22)

It is observed that the number of dropouts decrease with each successive grade in the higher secondary bracket, the maximum dropout comprising of Grade 9 students. Another demographic finding indicates that boys constitute 74% of the total dropouts.

Dropout rates at the secondary level remains a concern for Odisha as it has a dropout rate of 23.6%[35]. The state, however, has been working continuously to reduce the same. In comparison with the state's average, the dropout rate of students in vocational education courses is relatively low as the implementing partner reported on 66 dropouts of VE in Samagra schools in AY 21-22. Only 10.6% of students dropping out of VE courses discontinued education. Other reasons of discontinuing VE include personal and health concerns, and interest patterns of students. It must also be noted that dropouts in VE courses do not equate to a chasm in vocational education as 13.63% of the dropouts opt for another course.

Average Attendance Percentage of Vocational Trainers (VTs)



**Data related to average month-wise attendance percentage of Swadheen schools is only available from December 2021-April 2022*

The average attendance for VTs stand at 78% for Catalyst schools. Attendance declined most in October 2021, which is usually denoted by the beginning of second term. Through field interactions it was noted that during the

[35] UDISE Dashboard 2019-20; https://odisha.gov.in/sites/default/files/2022-03/Economic_Survey_2021-22_0.pdf

time of festivities, such as Durga Puja which is an important festival in Odisha, average attendance dropped for both students and VTs, in Swadheen and Catalyst schools. However, a steady increase is observed in the successive months. As for Swadheen schools, the highest attendance percentage is 98% in the month of February. This is likely to be attributed to matters of syllabus completion, revision, and doubt solving prior to the final examinations of the AY scheduled in March.

Additionally, to ensure regularity, all the Vocational Trainers are required to log in daily to submit their attendance on Lighthouse portal which can be accessed through their mobile phones along with photographic evidence. All trainers have been provided with individual access for their respective courses and schools to update the daily data. The vocational coordinators also connect with the VTs on a regular basis to understand the progress and challenges in completing the syllabus and conducting classes.

Key Processes and Observations

An analysis of the interactions based on the review conducted are presented in the below section.

Project Swadheen and Project Catalyst:

The goal of project Swadheen is to develop model schools for vocational education with demonstrated impact. Schools under Project Swadheen offer a course covering skills from multiple sectors of the economy to give foundation level exposure of "World of Work" to the secondary school students during Grade 9th and 10th.

The goal of project Catalyst is to map local skilling needs & expose students to several vocations with multi-entry, multi-exit learning opportunities and vertical mobility/ interchangeability in qualifications. Schools under Project Catalyst offer vocational courses based on Skill gap analysis. The following themes form the core of the intervention pivots implemented by the partner:

S. No.	Theme	Aspects	Project Swadheen	Project Catalyst
1	**Immersive learning experience for students**	Vocational lab set up	• MSFC Vocational labs are set up by the LAHI team to increase engagement levels of students through practical training • It was observed that all labs have basic equipment for the skill training that is being taught in the school • The lab set up also consists of safety equipment that is supposed to be used while conducting experiments • Considering the requirements of the course, industry standards and practices codified by the NSQF, LAHI creates its own set of guidelines for the setup of vocational labs	• Vocational labs are set up by the respective school to increase engagement levels of students through practical training • Setting up of labs and procurement of equipment done by the respective schools in discussion with Principals/Headmasters, SMCs, and VTs • It was observed that all labs have basic equipment and safety gear for the skill training being imparted in the school • LAHI provides inputs on the setup of the labs based on the guidelines of NSQF
		Course structure	• All schools under Project Swadheen offer a Multi Skill Foundation Course which includes two categories of skill development courses: Technical skills and Life sciences skills	• All schools under Project Catalyst choose the courses they wish to offer • Courses offered in these schools range from Retail business to engineering and automotive. • In the automotive course, students are taught basics of

		• Under Technical skills, students are taught Basic Engineering along with Energy and Environment • Students learn how to operate series and parallel connections and make innovative models based on it • Under Life sciences skills, students are taught Health & Hygiene along with Gardening, Nursery and Agriculture • Students learn how to make organic pesticides for gardens and make the same at their homes as well	fixing a motor vehicle. The students have a dummy car in their school compound that they can practice during the practical sessions • Under the retail business course, students are taught the basic concepts of retailing and the practical is primarily based on role play and dialogue exchange between students
	Course selection	• All Swadheen schools offer a Multi Skill Foundation Course for Grade 9th and 10th as an optional or additional subject depending on the school	• Vocational subjects offered as optional subject (in third language) or as additional subjects depending on the school for Grade 9th and 10th • Schools are recommended to select courses based on the Skills Gap Index of the district and interests of the students • Observations from the field reiterated this process • List of courses include – beauty and wellness, tourism and hospitality, retail etc. • The course curriculum and syllabus are aligned to NSQF • For example, in Puri, Jageshwari Bidyapitha and Balagandi High School chose tourism and hospitality as the VE subject, which has emerged as a key trade in the district • Similarly, in the Samagra schools visited in Bhubaneshwar and Cuttack, retail, electronics and hardware, and automobile trades were highly popular amongst students
	Training delivery	• The curriculum includes a proportional division of theory and practical classes. All topics are first covered in theory and then conducted in practical • Technology became an integral part of lesson delivery during COVID. During the first year of COVID, all classes were shifted to online mode and were being held	• The learning pedagogy lays a strong emphasis on providing hands-on learning experiences through practical modules • The focus of these classes is to impart employable skills to the younger grades through practical classes where they learnt to demonstrate

		through channels like WhatsApp and Google suite • The syllabus had to be reduced in that year since it was difficult to complete the entire courses with only one class allocated to vocational education. 70% of the course was covered and evaluations were conducted through google forms • It was observed during the field visit that the trainings are contextualized depending on the region where they are offered. For example: Under Food processing, the dishes being taught to cook are largely found in Odisha	everything learnt in the theory classes • Technology became an integral part of lesson delivery during COVID. During the first year of COVID, all classes were shifted to online mode and were being held through WhatsApp groups and Google suite • Students are encouraged to come with innovations and the same is supported in the labs. For example: At Syed Mumtaz Ali High School (Samagra School) students had created Bluetooth operated race toy cars with the help of their Vocational Trainer. Similarly at Capital Girls Highschool, a student had built a small battery-operated vacuum cleaner
	Duration of classes	• Under Project Swadheen, three periods a week are allocated for theory classes and another three are allocated for practical classes. The duration of these classes is 40-45 mins each. • Practical classes are held after discussing the theory components for each module.	• Under Project Catalyst, students have 2 periods in a week dedicated to vocational education. Two continuous periods are allocated to vocational education classes. The first one is a theory class followed by an immediate practical session for the same. The duration of these classes is 45 mins each
	Guest lectures/ Industrial visits	• During the interactions, it was observed that most schools have managed to organize one guest lecture and one industrial visit in the current academic year • Students were taken for industrial visits to ITI, etc. Guest lecturers from different fields which had the potential to provide an opportunity of vertical integration to the students were invited to teach the students	
	Assessment	• Assessments were conducted in two parts where students have to give a theory exam worth 30 marks followed by practical assessment which accounted for 70 marks • Practical assessments are conducted by the Sector Skills Council • Students opting for VE in Grade 10th also receive a certificate as per the CSSVSE guidelines • It was observed that MSFC was available as an optional (in place of	• Assessments were conducted in two parts where students have to give a theory exam worth 30 marks followed by practical assessment which accounted for 70 marks • Practical assessments for Grade 10th students are conducted by the Sector Skills Council • Based on the guidelines set under CSSVSE, Grade 10th students opting for VE also

		3rd language) or additional course based on the respective school's discretion	receive a certificate post assessment • It was observed that there is a high demand for Vocational courses as a third subject among students due to its engaging pedagogy and mark fetching benefits as well • Some schools had to conduct entrance tests for students to get enrolled in the course since only 40 students could get enrolled in a batch
Progress tracking	Regular tracking through lighthouse	• All trainers have been provided with individual access for their respective courses and schools to update the daily data • VTs are required to update real time data on the Lighthouse portal • Trainers update student attendance, images from classes, details of guest lecturers and industrial visits organized regularly through Lighthouse • The portal can be accessed through their mobile phones • Access to data limited according to employee's job roles. Separate login credentials and access maintained for each employee including VTs and VCs • The trainers also connect with the Vocational coordinators on a regular basis to understand the progress and challenges • VTs submit a monthly plan to the VC and PMU staff • Lend-A-Hand India's team also visit the schools regularly to get updates on the status of implementation	
	Follow up post exit	Students are required to fill exit survey forms while graduating from the course	

Capacity building, training, and support for educators under Project Swadheen and Project Catalyst

Educators for the program were selected after a rigorous screening process. Capacity building programs played an instrumental role towards enabling the educators to meet the ever-evolving demands of the sector.

	Project Swadheen	Project Catalyst
Selection and Onboarding of vocational trainers	• Trainers are onboarded onto the project directly by the school. • Capacity building was conducted by Lend-A-Hand India to prepare the educator to meet the demands of the MSFC. The induction training consisted of sessions that empowered the teachers in delivering	• Schools hire Vocational Training Partners based on the skill being offered in their school • Vocational Training Partners onboarded for specific subjects and courses only • Vocational Coordinators (VCs) hired by VTPs to manage and assess Vocational Trainers (VTs)

		the expected curriculums in the way they had been designed. • The training was conducted for a period of 5-7 days in Pune office of Lend-A-Hand India. • The educators were provided with reference material from which the training was to be conducted.	• VCs are required to conduct field visit to every school under their VTP monthly • Vocational Trainers report to the Vocational Coordinators who report to the VTP • The VTs, VCs, and VTPs are monitored by the LAHI team • Capacity building was conducted by Lend-A-Hand India to prepare the trainer to meet the demands of the Vocational courses. The induction training consisted of sessions that empowered the teachers in delivering the expected curriculums in the way they had been designed. • The training was conducted for a period of 5-7 days in Pune office of Lend-A-Hand India. • Vocational Coordinators received training around email writing, project management, processes, lighthouse • The educators were provided with reference material from which the training was to be conducted.
	**Technological training for vocational trainers**	• Trainers were taught how to use the Lighthouse application used to monitor the progress of the project. All educators have received exclusive access to the Lighthouse portal where they can upload data regularly. • Capacity building also aided educators' transition towards effective online lesson delivery.	
	**Support for vocational trainers**	• All educators under Project Swadheen report to the team of Lend-A-Hand India and the	• All educators under Project Catalyst report to the Vocational Coordinators along with the Lend-A-Hand India

	Headmaster/Principal of their respective school. • Any issue/challenge that needs attention is conveyed to the headmaster and/or the Lend-A-Hand India depending on the nature of the issue • All the educators are in regular contact with Lend-A-Hand India's project team and are visited by them at least once a month.	team and Headmaster/Principal of their respective school. • Depending on the nature of the issue/challenge, the educator reaches out to the Vocational Coordinator and/or the headmaster of the school for a resolution. • Educators interact with their Vocational Coordinators almost on a daily basis and keep them apprised with the activities of their schools.

Challenges:

Lack of access to tech during COVID	• It was difficult to conduct online classes due to lack of access to smartphones for all students. • Students were asked to refer to the YouTube videos shared on groups to conduct practical classes virtually. • It was difficult to get guest lectures during this period.
Infrastructural issues	• Inadequate space for the entire batch leads to practical classes being conducted in smaller batches delaying the overall pace of course completion • Current labs consist of basic infrastructure to stimulate initial interest among students. However, the lab equipment needs to be upgraded regularly • During the field visit it was observed that students do not use the safety equipment provided in the labs • Equipment in the vocational lab also need regular maintenance
Lack of defined roles for trainers	• Trainers teach additional subjects in schools as and when required • Trainers are supposed to fulfill additional responsibilities such as filling in the MIS of the school, invigilation duties, timetable scheduling, etc. basis on the discretion of the school • Facilitating Guest lectures and Industry visit within the stipulated budget was also communicated as an add on responsibility by the trainers • It was also difficult for the vocational trainers to find guest lecturers to visit in villages with less connectivity within a limited budget
Over enrolment of students	• Despite the CSSVSE guidelines stating that only 40 students per class per section should be enrolled in VE, it was observed during the field visit that over 200 students had enrolled for the vocational course in one school • The student to trainer ratio in such cases is skewed and it becomes difficult for the trainer to manage the volume of students

Observed impact during field visits:

The traditional mode and curriculum of education focuses a lot more on rote learning with lesser focus on transferable life skills. Both Project Swadheen and Project Catalyst look at the skill-based model and incorporation of vocational training to the Indian education ecosystem and addressing the existing learning gaps

 **High attendance of VE courses**	• MSFC and vocational courses have both garnered a lot of interest among the students and reported an increase in attendance in schools • This can be inferred through the attendance rates reported by the implementing partner (IP) • The interest of students to come to school due to vocational classes was also emphasized through interactions on field with students, parents, and school faculty
 **Increase in skills and confidence**	• The traditional mode of education did not lay an emphasis on providing vocational and life skills to students. Students mentioned that they have gained significant technical and life skills which will help them get employment in the future • 8% of students from the 2020-21 batch have taken admission in ITI and diploma courses.[36] According to the IP, the percentage of students taking admission in ITI and diploma courses is low because of lack of higher study VE institutions, and because many students want to finish their education before taking up vocational education • 7% of students from the 2020-21 batch are engaged in entrepreneurship activities.[37] According to the IP, the percentage of students taking up entrepreneurship activities is low because many students want to finish their education first. Moreover, the exit survey was conducted for Grade 10 students who may not have decided a career as of now • The addition of these courses has made the entire curriculum a lot more comprehensive for overall growth of students.
 **Involvement of parents**	• Home visits are conducted regularly by the vocational trainers to connect with the parents of students • Regular PTMs are also conducted in the school where the vocational trainers interact with the parents to provide feedback on the children's progress
 **Addressing the emerging social and cultural biases**	• Gender bias was evident in selection of courses by students. For example: In Bentakar High School of Cuttack, all the students in automotive training were boys. The school is actively trying to motivate the students to opt for courses that are guided by their interests • Food processing seems to be one of the more popular courses which has witnessed stronger participation from young boys. Engineering has also garnered significant interest from girls in different schools

[36] Data from Exit Survey Findings of 10th grade students of 2020-21 shared by the IP
[37] Data from Exit Survey Findings of 10th grade students of 2020-21 shared by the IP

Programme Implementation and Sustainability

In 2020, the NEP set a goal of ensuring that 50% students have access to vocational education by 2025 and 100% students have access to VE by 2030. This will ensure that there is no strict distinction between vocational and academic streams, and that students have access to multi-entry, multi-exit learning opportunities and vertical mobility/ interchangeability in qualifications. NEP also emphasizes the need for pre-vocational education in schools and the need for important vocational crafts, such as carpentry, electric work, metal work, etc., to be "sampled" as decided by States and local communities during grades 6 to 8.

Based on the recommendations in the NEP, Odisha government too aims to implement VE in 50% of the schools by 2025, and in 100% of the schools by 2030. Lend-a-Hand-India plays a key role in reaching this goal in the state. LAHI's PMU team has been integral in incorporating VE in the state. The team has been involved in aspects like initiation, implementation, monitoring and evaluation, training, providing administrative support to the state etc to ensure access to VE. LAHI played a key role in building capacities of the state government (SSA-OSEPA) staff in terms of accounting and finances, monitoring through Lighthouse application, onboarding and managing VTPs etc. Initially the PMU team was handholding the entire intervention very closely, but slowly, after training and capacity building, the responsibilities were handed to the state. The organization has set up many systems to ensure a smooth transition along with timely and easy functioning of processes. The biggest example of the same is automating a part of monitoring through the Lighthouse application. Government officials were trained to use the app and website to keep a track of vocational training in both Catalyst and Swadheen schools in the state.

The PMU's role in the future in different avenues of implementation was evident through the observations on field. To achieve 100% access, LAHI is formulating newer ways of making VE accessible in discussion with the state. This includes various other models and projects like –

- Hub & Spoke model - 263 Hub and 263 spoke schools approved for 2022-23 academic session by the state
- World Bank STARs project which aims to provide Vocational Education for Out of School Children and Pre-Vocational for grade 6^{th} to 8^{th}
- formulating skill hub initiatives under PMKVY 3.0 - 123 schools have been identified under Skill Hub Initiative and classes commenced from January 2022.
- implementing in conjunction with the state's HST-5T programme - Dual model of Vocational Education approach has been undertaken for 5 5T High School Transformation schools in collaboration with LAHI

Furthermore, LAHI's MoU for Project Catalyst with OSEPA was renewed for 3 years in May 2021. For Project Swadheen, the MoU was signed in 2019 for a duration of 5 years. Based on discussions with the Assistant Director (AD) and Deputy Director of OSEPA, it was inferred that another renewal of the MoU is a forecasted possibility. Resultantly, a collaborative bent is likely to be observed as a way forward. The PMU's focus will be to increase coverage and ensure that sectors that reflect the skill gaps index and local needs are reflected during implementation processes. Therefore, while LAHI's role has been integral, there is a slow but constant shift in responsibilities to ensure the sustainability of the project by the state.

Stakeholder experiences

STUDENT FEEDBACK

Schools Visited

7 schools

4 Samagra schools under Project Catalyst

- Bentakar Nodal High School, Cuttack (10)
- Syed Mumtaz Ali High School, Bhubaneshwar (7)
- Jageshwari Bidyapitha, Puri (24)
- Balagandi High School, Puri (28)

3 Direct Implementation schools under Project Swadheen

- Panchayat Nodal High School, Paikarapur (14)
- Patrapada Bhagabanpur High School (10)
- Capital Girls' High School, Bhubaneshwar (15)

Students Giving Feedback

108 students

69 students under Project Catalyst

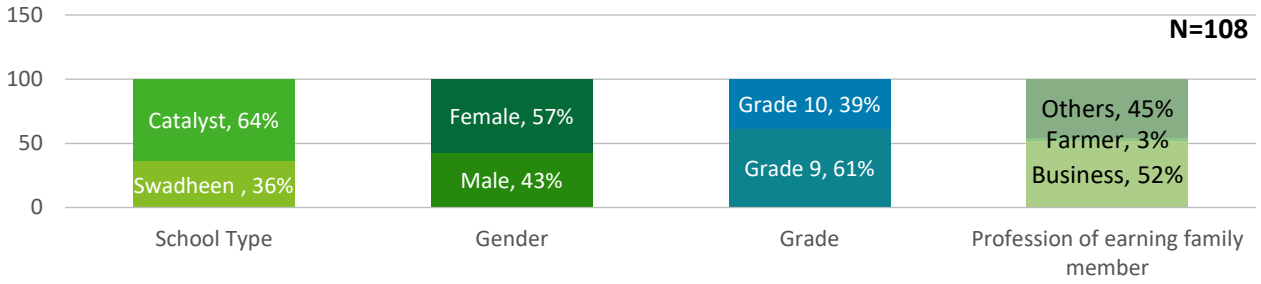
39 students under Project Swadheen

Gender Ratio of Students Giving Feedback

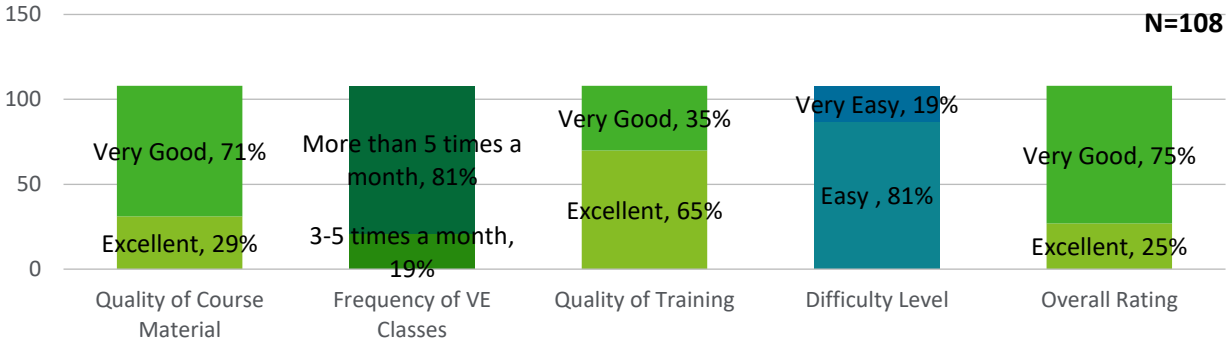
62 female students

44 male students

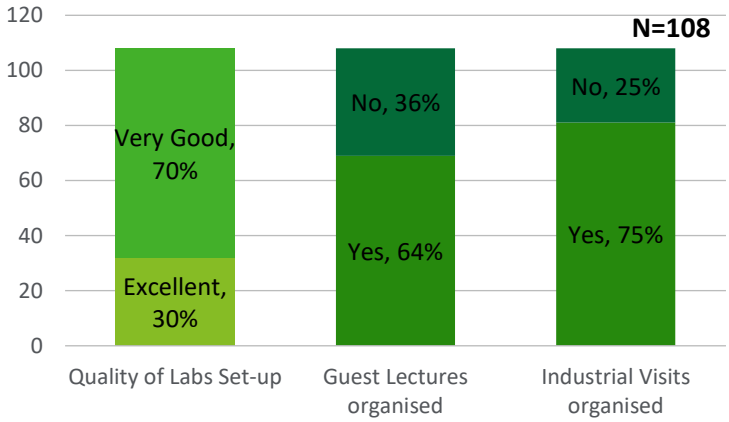
Profile of Respondents



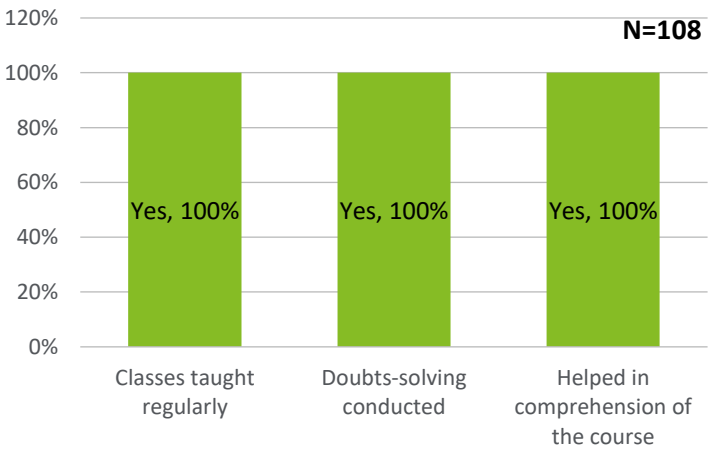
Quality of Course provided



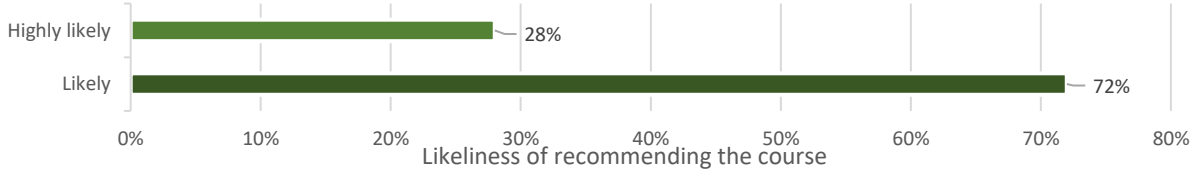
Practical Learning



Feedback on Trainers



Likelihood of recommending the course



Student Feedback Theme	Samagra Schools (Under Project Catalyst)	Swadheen Schools
Quality of Course Provided	• Through the field interactions, positive student feedback for the classes was noted • During the visit it was observed that the students wanted more VE courses to be available based on their interests and job requirements in Samagra schools • It was noted that while the curriculum design is easy and understandable, many of the aspects and activities incorporated in the trainings are basic and students wanted to have more in-depth training for the separate components. This can also be attributed to the different components taught as part of MSFC curriculum	
Feedback on Trainers	• During the field interactions, students provided positive feedback on the trainer in terms of accessibility, regularity, teaching ability and approachability • Many students and alumni shared how the VTs had guided them to different opportunities in vocational education	

"By studying vocational subjects, I am ensuring that I open up more avenues for my future. Studying vocational courses is not just scoring, but it also ensures I have more sources to earn in the future."

- Student (a girl studying Tourism and Hospitality in the 9th grade in a Samagra School)

Experiences of Alumni

1. Alumni of the MSFC course provided at Patrapada Bhagabanpur High School

Another way to earn a living

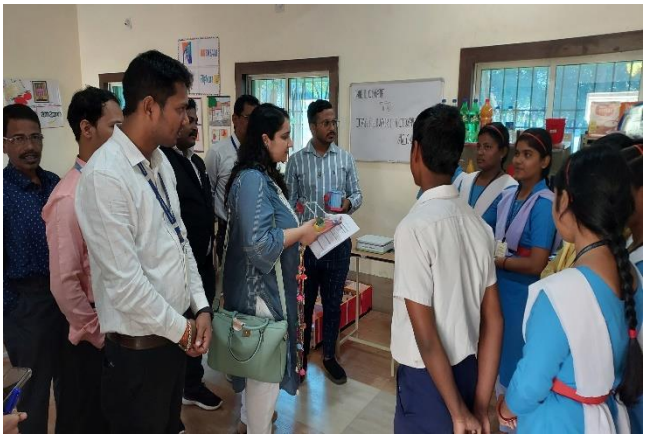
Ajay Kumar cleared his Grade 10 exams in 2020. He was enrolled in the Multi Skill Foundation Course facilitated by LAHI at the Patrapada Bhagabanpur High School.

Even though his classes were shifted to an online mode during the pandemic, his class still got the chance to visit the lab in groups to practice the practical implementation of what they studied in the vocational course.

After completing 10th grade, Ajay joined the Sanatan Harichandan Higher Secondary School to study commerce. However, because of financial constraints he also had to start earning to support his family. He was able to utilize the skills he learned in the vocational classes to gain part-time employment for electric and hardware repair. He joined a repair shop near his house on a part time basis and spends his evening working there.

"While studying Multi Skills in the lab I was able to learn a lot that was not usually taught in class. More than that, I got an opportunity to see and learn the tools we had never used before."

- Alumnus (a girl who studied in a Swadheen School and is now pursuing her BA)



2. Interactions with students and vocational trainers

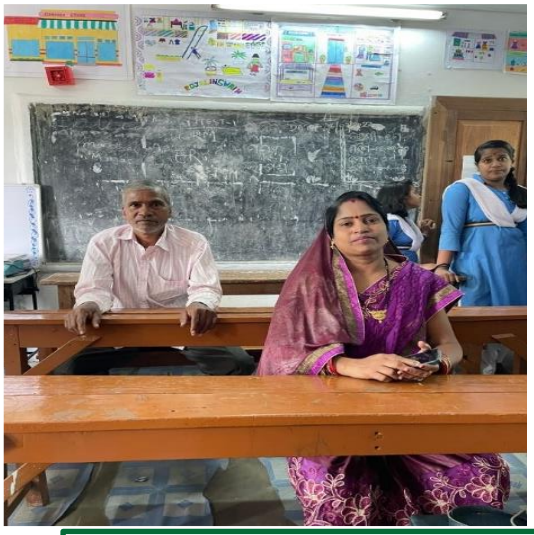
3. Demonstration of practical skills learned during VE classes by students

4. Interactions with school staff and vocational trainers

Experiences of Parents

"After my son joined the vocational education course for retail in the 10th grade, he started scoring well. He also took up interest in business and began helping me to manage our family shop. He organizes the products and helps the customers."

- Parent (Father of a 10th Grade student studying Retail in a Samagra School)



5. Interaction with parents of students opting for vocational subjects

Mother's aspiration

Swagata is a 14-year-old girl studying Tourism and Hospitality as part of her optional Vocational Course. Swagata's mother Soudha Pradhan shared how Swagata urged her to join the course as she wanted to work in the hospitality industry in the future. According to her mother, after Swagata expressed her interest in the course, the vocational trainer reached out to her to discuss the scope of the subject and the future opportunities her daughter could avail. She mentioned that the trainer guided her and her daughter and is available to answer any questions and doubts they may have.

"My daughter insisted on changing schools because this school had a vocational education course as an optional subject. She wants to be an air hostess when she grows up and thought that VE would provide her with exposure and bring her closer to her dream. She loves the industrial visits and talks about them constantly."

- Parent (Mother of a 10th Grade student studying Tourism and Hospitality in a Samagra School)

Experiences of School Administration

6. Deloitte's Interaction with the Staff and Students

7. Gauging students' experience through interactions and demonstration of practical skills

School Management Committee

Mr. Banku and Mr. Nanda are members of the School Management Committee. Mr. Banku is the President of the Alumni committee.

Both are pivotal in bringing vocational education to their school. They are in very good terms with the Headmaster and deliberate on a lot of discussions together. When they got to know about the concept, they were instantly interested in bringing it to their school. This was in line with OSEPA's goal of introducing vocational education to all schools. Moreover, the school committee members were also put at ease by LAHI's role in undertaking responsibility to facilitate the implementation process.

The Principal, in consultation with the SMC, decided to introduce Engineering and Retail courses in their school. They believed that the best outcome of these courses will be the employment generation they promote, and, in their region, it holds great importance in their community.

The demand for vocational course is so high in their school that they must conduct entrance exams to select students going forward.

Principal

Mr Nayak used to be an Assistant Teacher at Patrapada High school before becoming the Principal of Syed Mumtaz High School.

He trusts the decision making of the SMC of their school a lot and saw their vision in the introduction of Vocational Education courses. The demand for these courses is extremely high in their school. There are approximately 800 students in the 9^{th}-10^{th} batch of their school.

Their school gives equitable attention to students and helps in their overall development. He believes that the introduction of vocational courses has given these children an opportunity to tap into their hidden potential. He wishes to increase the number of trades offered in their school and add a new management as well. They are building a new lab which will become functional in about 2 months' time. "We want to be able to provide students with more of these opportunities as soon as possible. We would want to introduce more trades along with some additional teachers in the school."

Strategic differentiators and way forward

Strategic differentiators

The implementing organization focused on vocational learning by engaging with multiple stakeholders. The differentiators observed in the different projects of the organization are listed below –

Themes	Samagra Schools (Under Project Catalyst)	Swadheen Schools
Governance Structure	• LAHI works at the state level with support of Samagra Shiksha and OSEPA • The PMU reports to different officers of OSEPA on a regular basis • At the district level, LAHI works with District Tribal Officer, District Education Officers, and District Program Coordinators to facilitate programme planning and implementation • Additionally, at the district level LAHI shares monthly updates with the BEO/ADEO • At the school level, LAHI follows up with the school principals, the VCs and VTs regularly	
Innovations in pedagogy & content dissemination	• Industrial visits organized for students for on-field exposure • Guest lectures by experts in respective vocational industries organized regularly for the students • English textbooks for vocational subjects translated by the LAHI team for students • Students receive reference materials prepared by LAHI	
Region Specific Training	• Vocational subjects selected based on the findings from the Skills Gap Index • Final decision of which subject to be implemented remains with the school	• Multi Skill Foundation Course offered – specific activities may vary from region to region. For e.g.: different dishes learnt in the Food Processing module based on region
Focus on student engagement	• Equal ratio of theory and practical classes – students first learn the theory and then apply the skills practically • Role-plays organized for client-facing subjects like Retail, Tourism, Hospitality etc. • Students are involved in various practical projects and activities for the vocational subject	
Focus on parent engagement	• Vocational trainers participate in the regular PTAs and PTMs conducted by the school • Vocational trainers discuss the importance of Vocational Education (VE) with the parents and guide them in understanding future opportunities • Vocational trainers are required to conduct home visits proportionate to the number of students in the class	

Way forward

	Aspect	Observations	Recommendations[38]
	***Vocational Subjects and Curriculum***	• Courses implemented in Samagra schools under Project Catalyst were on the basis of the needs identified in the Skills Gap index and up to the school's discretion • However, during the visit it was observed that the primary beneficiaries including the students and alumni, and the parents wanted more VE courses to be available based on their interests and job requirements to prepare them • Moreover, from the basis of the feedback gathered from students, it was noted that while the curriculum design is easy and understandable, many of the aspects and activities incorporated in the trainings are basic and not up to the level required and students wanted to have more in-depth training for the separate components. This can be attributed to the learning levels of students	• The PMU can look at incorporating more courses for vocational education with time, these courses can be aligned to the findings of skills gap index along with student feedback • The VE curriculum is aligned with the NSQF framework, however LAHI with the support of the state can work towards modifying and updating course content, syllabus, and curriculum • MSFC courses can have separate activities for students belonging to different learning levels and interests. This will provide students to explore aspects of VE they may want to pursue further
	***Number of Students***	• In some schools, the number of students enrolled was more than 40 (as per the standards set by CSSVSE) • In such cases the student to trainer ratio was skewed • Students were attending practical classes in batches, while the remaining students were not occupied • This also resulted in the timeline of the course material taught to be delayed	• More sections can be incorporated in schools where enrolment rate is high. • Additionally, LAHI, with support if the state, can also onboard more vocational trainers basis the demand for each course in various schools
	***Safety Measures***	• While safety equipment was available in all of the schools, it was observed during the visit that many of the students did not wear and use this equipment • This can be attributed to lack of awareness, limited equipment, and quality of equipment • A lack of quality equipment was highlighted by students of a few Samagra schools. It was noted that the students did not wear safety equipment in few instances and claimed it was not available in their size or because they could not work comfortably wearing it • Moreover, in some schools where the MSFC was practiced, it was observed that multiple activities for the different modules were conducted simultaneously. This was the case	• LAHI can undertake the responsibility for ensuring that proper safety measures are implemented in all the schools • Safety trainings and awareness sessions should be organized separately from the course content • Quantity of safety equipment available in each school can be increased • LAHI can undertake the responsibility of conducting periodic and regular safety checks for vocational labs • More VTs can be onboarded to ensure student safety through maintaining a proper student-trainer ratio

[38] It is important to note that many of the challenges observed do not come under the purview of responsibility of LAHI. Implementing some recommendations provided may require LAHI to collaborate with the state and rely on state support.

		especially in schools wherein the MSFC enrolment was high. The attention of the trainer was divided amongst multiple groups, this can be considered as a risk to safety	
	***Tools and Equipment***	• Through the feedback shared by students on the field it was noted that not all schools have equipment matching industry standards • Based on interactions with the implementing team and vocational trainers, it can be inferred that this can be the case in schools wherein the equipment is procured by the school itself	• Equipment and tools provided for each course can be upgraded to match industry standards • In Samagra schools, equipment procured by the school. LAHI with support of the state can explore ways of standardizing equipment and vendors • This will also provide quality assurance for tools and equipment procured

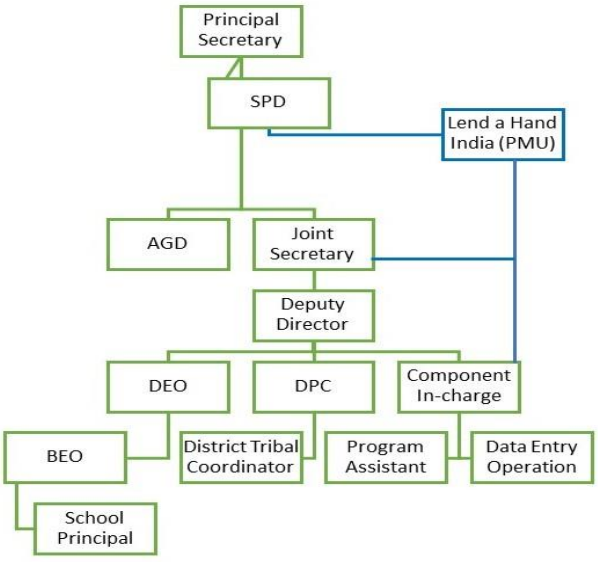
Appendix

- **List of abbreviations**

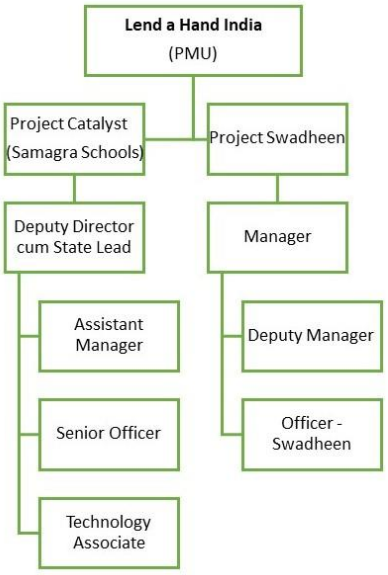
Abbreviation	Details
AY	Academic Year
CSSVSE	Centrally Sponsored Scheme on Vocationalization of School Education
DI	Direct Implementation
FGD	Focus Group Discussion
IP	Implementing Partner
KII	Key Informant Interview
KINDLE	Knowledge and Information Network for Digital Learning and Education
LAHI	Lend a Hand India
MSFC	Multi Skill Foundation Course
NCFSE	National Curricular Framework for School Education
NEP	New Education Policy
NSQF	National Skills Qualification Framework
NTA	National Testing Agency
OMSM	Odisha Madhyamik Shiskha Mission
OSEPA	Odisha School Education Programme Authority
PMU	Project Management Unit
PTA	Parent Teacher Association
PTM	Parent Teacher Meeting
RMSA	Rashtriya Madhymik Shiksha Abhiyan
SMC	School Management Committee
SSO	Samagra Shiksha Odisha
VC	Vocational Coordinator
VE	Vocational Education
VET	Vocational Education and Training
VT	Vocational Trainer
VTP	Vocational Training Partner
WEF	World Economic Forum

- **Governance structure at Odisha State, District Level and PMU Structure**

Lend a Hand India	**State Level Governance Structure (OSEPA)**	
	Component In charge	Daily reporting of programme facilitation, management of day-to-day activities, database management, VT attendance
	Deputy Director	• Regular reporting of programme planning and coordination • Aids in crisis management and stakeholder management • Charged with monitoring and evaluation especially. Also uses Lighthouse application
	Joint Secretary/Addl. Director	Weekly reporting and review of progress and planning
	State Project Director	• Monthly reporting and presentations • Aids in stakeholder management, reviews and proposals
	Secretary, DoSME	Reporting done on a quarterly and annual basis
	District Level Governance Structure	
	District Education Officer	Weekly discussions for planning, review, updates, support for programmatic inputs, orientation
	District Project Coordinator	Weekly review of progress and planning, communication, and facilitation
	District Tribal Coordinator	Daily consultation regarding fund disbursement, data collection, programme updates, monitoring, and using Lighthouse
	BEO/ADEO	Monthly updates on progress, monitoring, data collection and review
	School Principals	• Connected with regularly through school visits and discussions with VTs/VCs. • Lab Set Up, Contingency, Light House

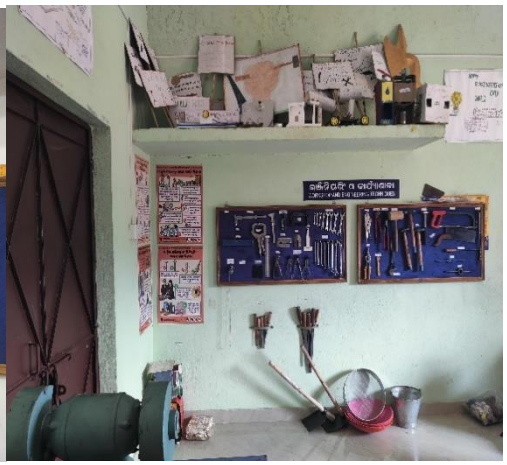


Governance Structure of Samagra Schools



Lend a Hand India – PMU Structure

- **Lab Set-up (Multi Skill Foundation Course)**


- **Lab Set-up (Tourism and Hospitality Sector)**


- **Images from the field**

Food Processing Activities as part of Multi Skill Foundation Course

Student demonstrations observed for gardening, and electronics and hardware courses

Interaction with students

Disclaimer

1. Deloitte refers to one or more of Deloitte Touche Tohmatsu India LLP, a UK private company limited by guarantee, and its network of member firms, each of which is a legally separate and independent entity. Please see www.deloitte.com/about for a detailed description of the legal structure of Deloitte Touché Tohmatsu Limited and its member firms.
2. This material and the information contained herein prepared by Deloitte Touche Tohmatsu India LLP (DTTILLP) is intended to provide general information on a particular subject or subjects and is not an exhaustive treatment of such subject(s) and accordingly is not intended to constitute professional advice or services. The information is not intended to be relied upon as the sole basis for any decision which may affect you or your business. Before making any decision or taking any action that might affect your personal finances or business, you should consult a qualified professional adviser.
3. For purposes of the exercise, Deloitte Touche Tohmatsu India LLP has used information obtained from various enquiries, primary interactions, and secondary information sources, which we believe to be reliable, and our assessment is dependent on such information being complete and accurate in all material respects. We do not accept any responsibility or liability for any losses occasioned to any party because of our reliance on such information.
4. Deloitte Touche Tohmatsu India LLP makes no representation or warranty as to the accuracy or completeness of the information used within this assessment, including any estimates, and shall have no liability for any representations (expressed or implied) contained in, or for any omission from, this assessment.
5. This report is for information purposes only. While due care has been taken during the compilation of this report to ensure that the information is accurate to the best of Deloitte's knowledge and belief, the content of this report is not to be construed in any manner whatsoever as a substitute for professional advice. Deloitte neither recommend nor endorse any specific products or services that may have been mentioned in this report and nor do they assume any liability or responsibility for the outcome of decisions taken as a result of any reliance placed in this report.

Deloitte.