



QUEST
ALLIANCE

A Change Map for Industrial Training Institutes in India:

Insights from
Ecosystem Leaders

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1



Career development

To ensure that learners are adequately prepared with critical career awareness and career navigation skills to meet the increasing requirement of holistic skill-sets by employers.

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2



Effective pedagogy

To ensure effective learning for different types of learners through focus on training of trainers to use more learners centric blended learning pedagogy that helps them build a growth mindset.

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3



Leadership for change

To ensure professional development of principals to help them visualize a different and better tomorrow for their institutes.

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4



Employer engagement

To ensure that learners get adequate exposure and opportunities for work and industry networking.

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5



Student hub

Invest in self-driven learning solutions that helps students take lead in driving their knowledge and skill building efforts and create their personal career journeys.

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6



Community and family engagement

Promote for ways to include families and community to support career and decision making for students.

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Introduction

An Evidence based Reform Agenda for the ITI Ecosystem in India



This study is an effort towards driving evidence based reform in ITIs in India. Through one-of-a-kind India level survey of principals - from both private and government ITIs - and in-depth qualitative interviews with key Directorate General of Training (DGT) government officials, it presents an overview of challenges, priority gap areas and solutions strategies that can drive reform in the ecosystem.

It is hoped that the insights presented in the report will be able to inform ecosystem stakeholders (such as principals, government officials and non-profit organizations) in their work towards enabling effective career transitions for ITI students.



Skill Development in India: An Overview

The Indian economy witnessed a high growth rate of 7.6 percent in January- March 2016, thereby making it the fastest growing economy of the world for that quarter. The favorable demographic dividend of India gives it an advantageous position against other economies, with 65 percent of the population in the working age group of 15 to 59 years and more than 54 percent of its population below the age of 25.¹



65%

Population in working age
group of 15 - 59 years



54%

Population below
the age of 25

**700
million
working
people by
2022.²**

India is expected to have an approximate of 700 million working people by 2022. The advantage derived from this group of working population can meet the demand for skilled manpower in India if they are equipped with adequate set of market-related skills. Therefore, in this regard skills development emerges as one of the most critical aspects of India's human resource policies. Yet, against this background, Vocational Education and Training (VET) in India does not adequately prepare students to fully utilize this opportunity.



According to the definition of VET
as per European Union (EU),

“Vocational education and training (VET) is the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate. Vocational education may be undertaken at an educational institution, as part of secondary or tertiary education, or may be part of initial training during employment, for example as an apprentice, or as a combination of formal education and workplace learning.”

-European Union (Eurostat), 2016

¹ UNDP, 2018

² Boston Consultancy Group, 2016

The ITI Policy Ecosystem

The Department of Training and Technical Education (DTTE) is the apex coordinating and controlling department of VET in India. Under this, technical education is imparted through the ITIs, Industrial Training Centres (ITCs) and VTPs. The National Council for Vocational Training (NCVT) was established in 1956 with the objective to function as a main agency for advising the GoI in framing vocational training policy and coordinating the same across India.

These institutes offer several skill training programmes. The policy ecosystem overlooking skill development includes the Apprentices Act, 1961, the National Skill Policy, and the National Skills Qualification Framework (NSQF). The Apprentices Act, 1961 ensures that there is participation from the Industry in the skill development of the students undergoing a formal technical education.

As of 2017



13,105
ITIs in India³



2,293
Government ITIs

+



10,812
Private ITIs

³ DGET, 2017



Governed by a council of 38 member representatives from industry, government and consumers, the Quality Council of India (QCI) was set up conjointly by the Government of India (GoI) and the Indian industry represented by the three premier industry associations i.e. Associated Chambers of Commerce and Industry of India (ASSOCHAM), Confederation of Indian Industry (CII) and Federation of Indian Chambers of Commerce and Industry (FICCI).

The overarching aim was to establish and operate a national accreditation structure and promote quality through National Quality Campaign. All ITIs intending for NCVT affiliation are required to first obtain accreditation from QCI for seeking NCVT affiliation. National Accreditation Board for Education and Training (NABET), one of the constituents Board of QCI, is responsible for handling the scheme of accreditation of government and private ITIs.

To upgrade VET, the government of India (GoI) designed a promising policy framework bearing in mind the existing skill gap in the country. Most significantly, unlike the other Five Year Plans (FYPs), the GoI has laid extensive focus to increase the workforce participation in India.



As of 2017, increased government focus and expenditure on VET, recruitment, entrepreneurship⁴



40
Skill Development
Programmes

These plans were implemented by over 18 departments/ministries of the GoI.



20-26
Million

Young people found some form of employment due to increase of independent and self-employment opportunities.

Preliminary results of these initiatives were highlighted by the India Skills Report 2018 (ISR)- approximately 20-26 million people found some form of employment during 2014- 2017 owing to increased government focus and expenditure on VET, recruitment, entrepreneurship and increase of independent and self-employment opportunities.

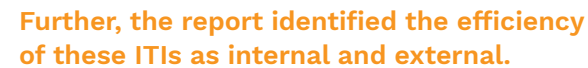
However, as this report also suggests, there are gaps in the quality and capacity of training infrastructure at the ITI level. This impedes the employability of ITI graduates.

The ISR 2018 is also a significant landmark because of its emphasis on acquisition of soft skills by students for enhancing their employability.

⁴ Ministry of Skills and Entrepreneurship Development (MSED), 2017

A decorative graphic featuring a light blue background with various geometric shapes and icons. There are solid and dashed lines, a circle, a plus sign, a hand holding a briefcase, and a four-pointed star. A dark teal vertical bar is on the right side.

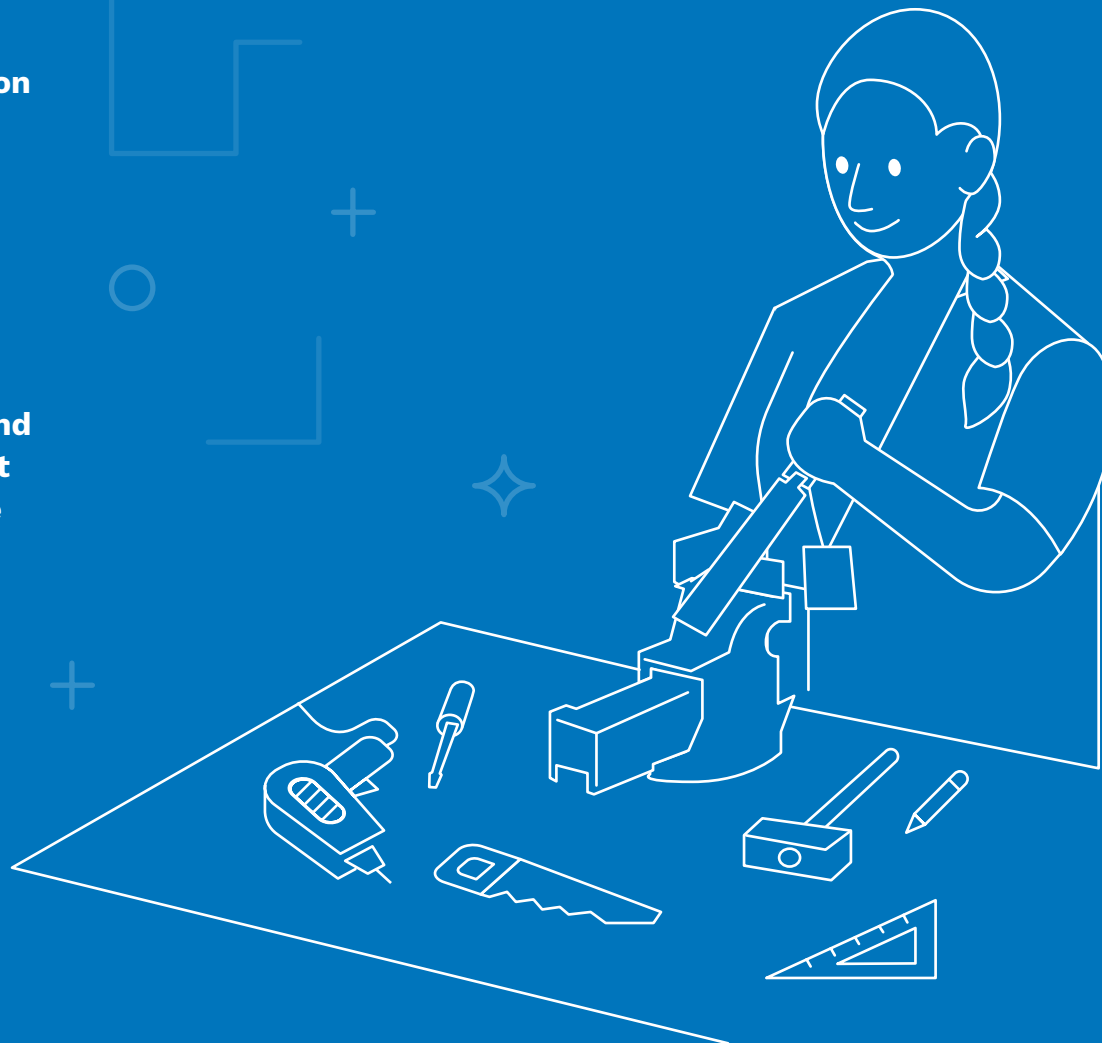
10



11

As per several studies conducted by Quest Alliance, the major challenge that students face is the lack of a planned career orientation and implications of their career choices.

For instance, during the admission stage, most students choose trades with little thought given to their own aptitudes and career paths and without understanding the scope of chosen professions.



This problem is more acute amongst women who make this choice based on various factors including their families' or communities' belief systems and restrictions laid on them.

Providing structured career development support within the ITIs, therefore, can equip the youth with essential employment related skills, decision-making abilities and focused knowledge for career growth.

Based on its experiences of working with ITIs and research conducted in the last three years, Quest proposes a change map for ITIs, to drive reform focused on providing students with holistic knowledge, skillsets and awareness that matches changing market realities.

This change map is meant to serve as a guiding framework for Quest's efforts towards employability, through its flagship program, MyQuest.

It has been envisioned as an advocacy tool for its work with ITI principals, relevant national and state government departments and other relevant stakeholders of the ecosystem.

This change map envisions a transformed ITI ecosystem, to help young people enter the world of work, with abilities to navigate their personal and professional growth by making informed career choices. With a 6 point agenda, it proposes reforms for the ITI ecosystem in India.

1

Career development

To ensure that learners are adequately prepared with critical career awareness and career navigation skills to meet the increasing requirement of holistic skill-sets by employers.

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Effective pedagogy

To ensure effective learning for different types of learners through focus on training of trainers to use more learner-centric blended learning pedagogy that helps them develop a growth mindset.

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Leadership for change

To ensure professional development of principals, to help them visualize a different and better tomorrow for their institutes.

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Employer engagement

To ensure that learners get adequate exposure and opportunities for work and industry networking.

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Student hub

Invest in self-driven learning solutions that help students take the lead in driving their knowledge and skill building efforts and create their personal career journeys.

6

Community and family engagement

Promote ways to include families and community to support career and decision making for students.

An Evidence based Reform Agenda

The Leadership Point of View



This study focused on the 6 point change map, to understand and incorporate key stakeholder perspectives on enabling holistic reform in the ecosystem. It brings together qualitative and quantitative insights from ITI principals and key government officials and analyses them against existing research and data on ITIs.



The specific objectives of this study were:

- To understand the leadership's point of view on the proposed change map
- To further refine each of the 6 reform areas under the change map
- To consolidate insights that can inform ecosystem stakeholders such as principals, government officials and non-profit organizations working with ITIs



Findings are based on analyses of insights from

211

Principals from both government and private ITIs covered through e-survey

41

ITI principals covered through in-depth interviews

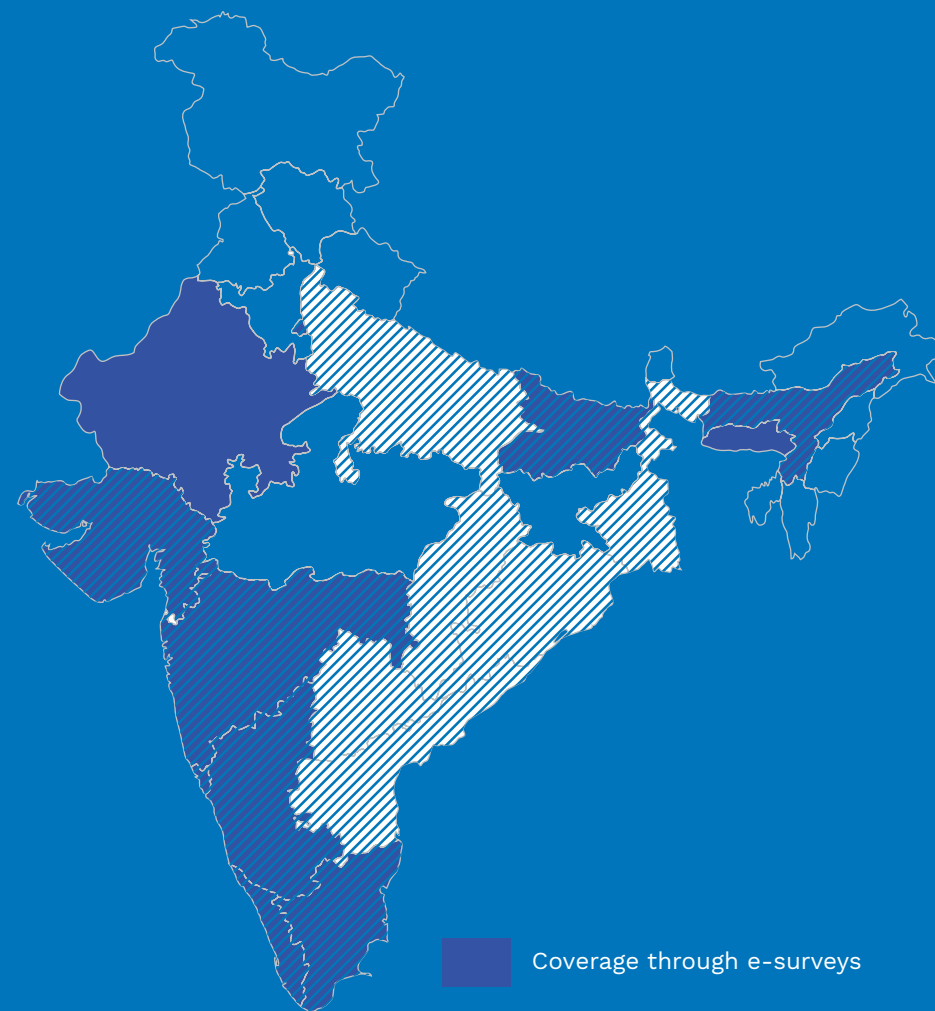
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Government officials covered through in-depth interviews

These officials include state directorate officials of varying ranks from training and placement officers to joint directors, directors and principal secretaries.

16

States, including intervention and non-intervention ITIs, were covered to consolidate insights from across the country



- Coverage through e-surveys
- Coverage through in-depth interviews
- Coverage through both interviews and e-surveys

Key Findings

Present priority gaps and solutions along the six point change map



Reform Area 1: Career Development



In-depth interviews with principals suggest that ITIs need support with modules on effective market readiness - especially workplace readiness and soft skills. Both principals and government officials emphasised that these skills impact students' functional English speaking skills and critical thinking abilities - which are also the most in-demand skills by employers in the job market.

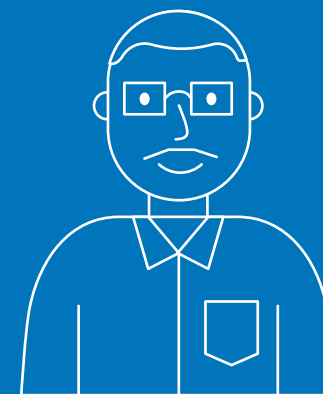
Several principals also pointed out the need to introduce sessions on improving confidence through mock interviews and career counselling sessions.

Both the survey responses and interviews further brought out the need to update existing curriculum of different trades - based on the changing market needs. While the DGET updated the ITI curriculum in 2016; principals covered under the study highlighted that technical trades such as COPA are still behind changing market demands.



96%

Principals covered under the survey highlighted that ITI students need more support for their career development



Communicative
English

90%

90% highlight Communicative English as critical to career development

Inter Personal
Skills

88%

88% emphasized on inter-personal skills as critical for career development

Reform Area 2: Effective pedagogy



“Currently, the ES module is considered as an add-on subject and not taught as an important module. The Quest syllabus is useful and comprehensive but we also need to focus on the ability of trainers.”

- Government official in Gujarat

94%

Of the surveyed principals feel that there is a need to improve the teaching and delivery methodology in ITIs

92%

Agreed over the need for group activity and project work as essential and effective forms of curriculum delivery in classrooms

Guest lectures by alumni, faculty and industry experts and industry engagement through market scans, hackathons etc. were the second and third most essential components, reported by 87 and 86 percent respondents respectively. 82 percent also considered apprenticeships/ internship opportunities as significant for effective pedagogy and 67 percent principals highlighted alumni mobilization to be an essential part of effective pedagogy.





A significant majority of principals expressed the need for safe spaces for students, to enable them to give feedback on content and training.

Overall, most of the principals are in favour of different components of the effective pedagogy under this reform area.

Principals' expectations with respect to capacity building sessions for ITI trainers

95%

Principals believe that ITI trainers require in-service/ refresher training

57%

Principals stated that at least one in-service/ refresher ToT per year should be provided

27%

Principals emphasized on the need for ToTs at least twice per year

10%

Principals stressed on the need for ToTs at least three times per year

Important components of TOTs, as highlighted by ITI principals

77%

Mentioned the need to focus on improving classroom management, communication and interaction skills of trainers

Owing to the fact that ITIs are a hub for students from different locations, with varied socio-cultural and economic backgrounds, principals and government officials emphasize on perceptive communication skills as key to effective training delivery.

73%

Principals also agreed that there is a need to provide training on curriculum updates across different ITI trades

On the whole, both principals and officials highlight the need for focused ToTs along with principal awareness sessions/workshops as key to ensuring effective pedagogy in ITIs. It is interesting to note that despite the differences in the nature of ITIs (government and private), leadership views on effective pedagogy areas remain similar. This calls for designing common reform strategies for effective pedagogy adaptable by both government and private ITIs.



Our interviews revealed the following good practices for effective pedagogy

- Government ITI, Guwahati, Assam, has training labs setup by partner employer industries (Samsung, CISCO, and Hyundai) for students. Students receive a certificate of completion by these companies after completion of training.
- Mahila Government ITI, Ahmedabad, Gujarat, engages employer companies through Public Private Partnerships (PPPs) and Institute Managing Committees (IMCs). This offers maximum autonomy and flexibility in utilization of resources for improving ITI infrastructure and other facilities for students.
- Bhusan Private ITI, Rajasthan has had an active placement cell since 2006 and they regularly connect with employers through emails, phone calls or visits. The placement cell has a centralised online database of employer companies' email IDs.



“In our ITI, every morning students have an assembly-like one hour discussion where they are encouraged to share their experiences or any other problems. Foreman, faculty and staff members also participate in this. This helps build a comfortable relationship between educators and students, thereby allowing the latter to view the ITI as a safe space.”

**- Government Girls ITI Principal,
Gandhi Nagar, Gujarat**

Reform Area 3: Leadership for change

Principals are the key leaders at ITIs. This section presents the views of principals regarding their role as leaders, their views on the current status of ITIs, tentative goals of their institutions and desired changes in their role and capacity. It further outlines the kind of support principals need, to enable necessary changes in their institutions.

In-service training frequency, as expressed by principals



67%

Once a Year

17%

Twice a Year

11%

Thrice a Year

73%

Principals mentioned relationship building with industry as a key component of in-service training



95%

Principals covered under the survey believe that they require regular in-service training



“As a system/institute ITI curricula includes critical components of digital literacy, communication skills and employability skills and it is up to the principal to scale these or not.”

**- DTE Official, Delhi,
on the autonomy held by ITI principals**



Methods for improving student learning outcomes and relationship building with community were some other areas suggested as in-service training components for ITI leaders.

Principals also point towards several challenges that affect their ability to enable institute level reforms

52%

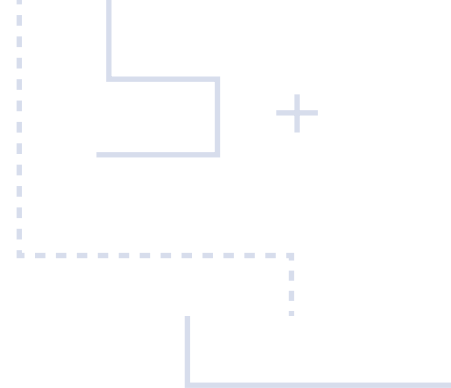
Stressed on the problem of vacant staff positions

43%

Highlighted the challenge of ineffective placement structures

To conclude, principals agreed to their role as being primal to building and maintaining relationships with different stakeholders: government, industry, trainers, parents and trainees.

They described the need for leadership training sessions as a way of addressing the current system level lack of learning spaces for leaders. For instance, many described such learning spaces as being critical to helping them learn about good practices in leadership from other ITIs, in different states.

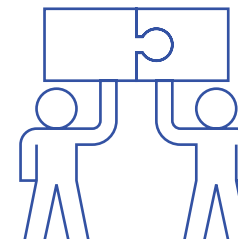


43%

Highlighted the lack of adequate financial resources

39%

Stressed on administrative responsibilities taking up their time



Government officials also described the importance of the ITI principal as a ‘facilitator’ in terms of his/ her role in motivating trainers working under him/ her and setting standards for quality of pedagogy. This was described as crucial to enabling institution level reform.

Reform Area 4: Employer engagement

Employer engagement can be defined as the systematic interface between ITI and industry employers for potential campus placements and employment of ITI students.

96%

Principals believe that ITIs need to strengthen and improve their level of engagement with employers

42%

Principals acknowledge the need to maintain an active database of employer companies to initiate measures for employer engagement

86%

Believe that on-the-job-training is the most important prerequisite for effective ITI-Employer engagement/interface

This is indicative of the fact that principals are largely unaware of how structured and planned networking mechanisms can contribute towards employer engagement (among both government and private ITIs).



Although apprenticeship programs are considered important by ITI principals for effective ITI-employer interface, the current record of apprenticeship engagement programs being undertaken by ITIs is low. The cause for this, principals mention, is the lack of trade appropriate industries across Tier 2 and Tier 3 cities, especially in states like Bihar, Assam and Rajasthan.

Several government officials interviewed also indicated that the number of employer companies visiting ITIs for placement is directly related to the extent of employer engagement initiatives undertaken by ITIs. Higher the ITI-employer engagement, more will be the number of employer companies visiting for placement.

It is interesting to note here that percentage of employer companies visiting government and private ITIs for placement is similar. This implies that despite the advanced level of VET provided in private ITIs, improved employer engagement is still lagging.

On the whole, most principals and government officials agree over the need for active well represented placement cells, to ensure better industry connect at the ITI level.

5 Companies

visit the covered ITIs each year for campus placements, as mentioned by 53 percent principals

6-10 Companies

visited the covered ITIs each year for campus placements, as mentioned by 22 percent principals

11-20 Companies

visited the covered ITIs each year for campus placements, as mentioned by 15 percent principals



Our interviews revealed the following good practices in employer engagement

- Government ITI, Rajasthan in collaboration with GoI, organized a 3-days apprenticeship induction for two-year trade students, after they completed the first year. They also conduct industry exposure visits with the support of IMC industry partners. This ITI also has a regular group instructor who handles all the placement activities at the institutes.
- Government ITI, Assam has training labs set up by companies such as Samsung, CISCO, and Hyundai where students get trained. After completion of training, students are granted with certificates of completion by these organizations. Soon after, they are employed with the retailers, distributors and service centres of these companies.

Reform Area 5: Student hub

Student Hub, as a concept, is premised on the idea of peer learning based support systems among ITI students. It has been envisioned as a one-stop-hub formed at the ITI level to improve student led networking amongst enrolled students.

The objective of setting up a students' hub is for students to attain key information and support required to improve learning outcomes and further their career goals.

All initiatives that can benefit from student leadership such as- exposure visits, guest lectures, alumni mobilization, etc are brought under the umbrella of this hub, so that all students can get answers to their most frequent queries.

94%

Principals believe that industry exposure visits are the most important component to be facilitated by the student hubs

Networking with guest lecturers, alumni mobilization and self-learning digital literacy classes are other important components, that principals believe should be taken up by student hubs.

Alumni engagement was also emphasised on as a key area of engagement that student hubs can take up.

Currently engagement of alumni occurs through informal methods with students personally staying in touch with trade instructors, largely for the purpose of gaining employment-related insights.



Currently, there is no culture in ITIs for alumni gathering. Some ITIs have held alumni meets but these are not frequent. It is due to administrative issues (that) we have not been successful in creating an alumni association. However, keeping in touch with alumni is important as it gives confidence to current students and especially those alumni who have established themselves well in top positions in companies. They can be noticeable motivators for current students. This is an important area of support that NGOs can help ITIs with.”

-DTE official, Delhi

Reform Area 6: Community and family engagement

Community engagement is a significant component at the ITI level. It allows for involvement of community stakeholders in the learning process of students and enables improved awareness among parents about career opportunities available to students. Such engagement also leads to positive orientation of parents towards career choices mapped by their children.



When asked about specific components of community engagement



84%

Principals believe that ITIs need to increase their level of community engagement



87%

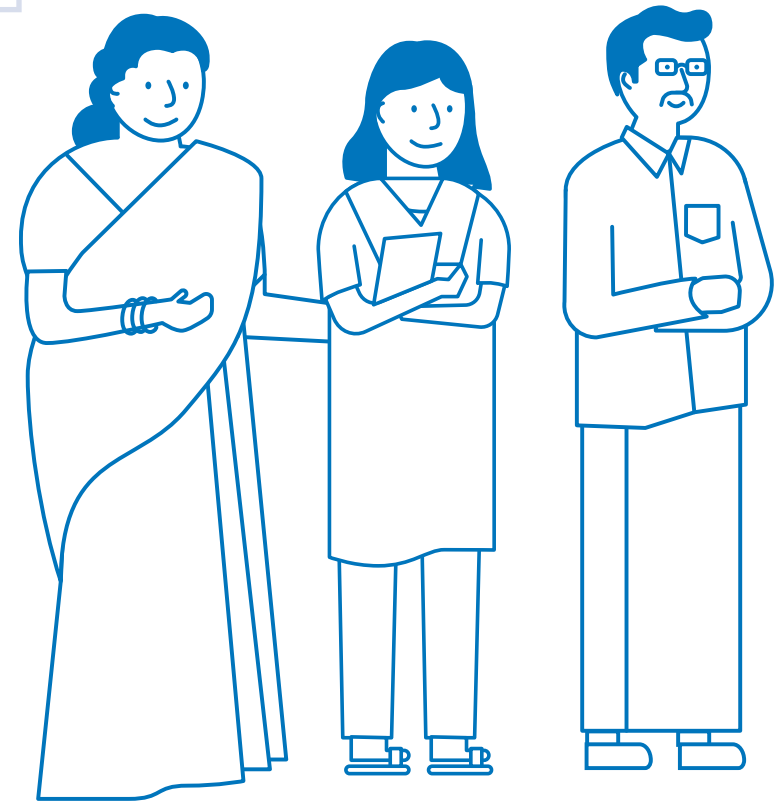
Principals mentioned Parents Teachers Meets (PTMs) as the most important effective strategy for community engagement



PTMs were described as enabling immediate face-to-face interaction and query resolution with the community members/ parents. In-depth interviews revealed that parents either rarely connect, or never connect at all with the ITIs. In several tier 3 locations, for instance, there has been almost no interactions between ITIs and parents. In these locations, many parents who fail to attend PTMs and cultural events, belong to daily wage worker categories further indicating the need for ITIs to reach out to communities rather than vice-versa.

Thus, on the whole, parents meet the ITI staff only during the one day pre-enrolment orientation conducted within some specific ITI campuses. Our analyses also highlights the role principals can play in engaging parents. For instance, **the study specifically found that activities such as a parent orientation held by the principal him/herself (before course commencement) - where the principal takes the time to elaborate on the course structure, attendance requirements and motivates parents to send students regularly - can be critical to garnering support for and awareness around future career opportunities.**

Additionally, several women ITI principals emphasized on counseling sessions for parents of girls. They described the restrictions that young women face with regards to permissions to take up employment after getting placed. Thus, principals of women ITIs described parent engagement as facilitating female students' entry into jobs.



“The ITI has a conference room where once the students are enrolled, all parents are called to see the ITI (where the student will study) and get a motivation talk by the principal. This is compulsory and especially important for female students so that the parents support them in completing their ITI training. These PTMs also work as word of mouth advertisement for the ITI.”

- Government ITI Principal, Karnataka

Conclusion

This study aimed to assess the situation and viewpoints of ITI leadership around six key areas that form the change map Quest Alliance is currently working to further refine. As mentioned already, spawning across 16 states, the research covered private and government owned ITIs as well as state DGT department officials.

The findings reflect an overwhelming agreement over the need for comprehensive reform in the ITI ecosystem.

More specifically, the leadership views highlight priority gap areas and solution strategies - under the six point change map - to help stakeholders drive an evidence based reform strategy for the ecosystem.

Improve pedagogical practices

Owing to the lack of adequate industry-institute interface across ITIs, it is recommended that ITIs utilize guest lectures and industrial visits as effective pedagogical means for enhanced industry-institute interface. Guest lectures by industry level professionals and experts from leading ITI trade relevant companies (such as Capgemini, Genpact, Tata Consultancy Services (TCS), Wipro, Infosys; to name a few) has the potential to

- (i) develop professional knowledge and employment focused attributes amongst students
- (ii) provide students with industry level role models and;
- (iii) nurture aspirations for seeking employment after their graduation.

Strengthen the industry-institute interface

Presently, around 60% of government ITIs, pan India, have been adopted by corporate companies under the PPP model. The companies upgrade the infrastructure, provide training in latest technology and such other assistance to ITIs. This study recommends the industry institute interface to take place in a way that every ITI is linked to multiple of small, medium and large enterprises in and around the city. This can keep the ITIs abreast of broader industry needs and changes in required skills and technology.

Strengthen and support apprenticeship training programs

This is anticipated to enrich the industry-institute interface owing to greater accountability on the part of employer companies to engage ITI graduates meaningfully and offer formal terms of employment and salary. More number of employer companies partnering with the ITIs would imply more locations for apprentice training opportunities to more graduates.

To conclude, this study is an effort towards designing and working through an evidence based advocacy agenda for the ITI ecosystem in India.

Through a one of its kind survey, combined with detailed interview conversations, it brings out the challenges and solutions that can be implemented through and with the support of ITI leadership. The study establishes that principals and government officials must be looked upon and supported as agents of change.



Download the
report at:

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Published in October 2019