Vocationalization of secondary education in India

Prepared by:
Vasundhara Kaul, Catalyst Management Services

July 2014

The **Partnership to Strengthen Innovation and Practice in Secondary Education (PSIPSE)** aims to accelerate innovation in secondary education programming, research, and development. It is led by a group of private donors and donor advisors, including Comic Relief, Dubai Cares, ELMA Philanthropies, Human Dignity Foundation, Intel Foundation, the John D. and Catherine T. MacArthur Foundation, MasterCard Foundation, and an anonymous donor. Project durations are one to three years, and are located across East Africa (encompassing the DRC, Kenya, Rwanda, Tanzania, and Uganda), India, and Nigeria. Results for Development Institute (R4D) has been selected as learning partner, and will work with three local learning partners to monitor the funded projects, draw out and share important learnings from the efforts, and use these learnings to inform future programming.

Catalyst Management Services is the Local Learning Partner (LLP) for PSIPSE in India; a programme targeted towards encouraging innovation and learning that can help inform the imminent expansion and transformation of secondary education. As Local Learning Partner, CMS supports 12 projects in India. As the LLP, one of the mandates of CMS is to facilitate shared learning among the grantees as well as synthesize and analyze their individual learnings. CMS is a professional service company with extensive experience in M&E, impact assessments, and documentation in the livelihoods, education, and health sector.

Table of Contents

Executive Summary

As economies transition through different phases in the growth cycle, education systems have to adapt to reflect the new demands of society and the labour. In today's world, many countries are in the process of introducing qualification frameworks. While the basic principles of these frameworks remain the same, the reasons behind their adoption vary.

In India, it is envisaged that "...the [National Skills Qualification Framework, (NSQF)] will stimulate and support reforms in skills development and facilitate establishment of nationally standardized and acceptable, and internationally comparable qualifications." This focus on skill development is a result of the growing demand for a skilled labour force in the country combined with a sense of hesitance amongst the youth in opting for vocational education and training due its operation as a separate vertical from general education. The NSQF attempts to address this issue by integrating the two verticals to allow for horizontal mobility between both at different levels and by providing internally recognized qualifications.

This report is an attempt to understand the work being undertaken by vocational education and training organizations in India set against the backdrop of the nationwide scale up of the NSQF. Currently, the work being undertaken by independent organizations is extremely fragmented with minimal levels of collaboration and cross-learnings. This report is an attempt to share the nature of the work being undertaken by some of the different organizations working in this area as well as their learnings. The sharing of best practices is a crucial step towards building a sense of community as well as hastening the progress of work being undertaken.

The first section of the report of provides a brief background on the growing relevance of vocational education and training in India and the second section provides an overview of the manner in which analysis has been undertaken in this report. The third section attempts to look at challenges facing organizations involved in the area of vocational education and training. This includes a variety of factors ranging from people's disposition towards vocational education to the structuring of various interventions, particularly with reference to working with government schools. The fourth and final section looks at the various methods that have been adopted to address these challenges. An important idea that has been proposed in this section is integrating with the NSQF to not only address attitudinal barriers to vocational education but also to facilitate scale-up. Development of a strong resource base through teacher training and effective use of appropriate technology is another important factor that emerges at the end of this report. Given the diversity that defines India, the importance of adapting to the local context cannot be overemphasized. Neither can the importance of relationship building with government schools that educate majority of the children who are the intended beneficiaries of such training and education.

1. Vocationalization of Secondary Education in India

With India inching closer towards attaining the goal of universalization of primary education, there has been a concomitant increase in the focus on an increase in access as well as an improvement in the quality of secondary education. Apart from this cascading effect, a focus on secondary education is also crucial in light of the changes taking place in the Indian labour market. The development process is, in general, becoming increasingly skill-driven. This in turn is generating a growing demand for secondary school-educated workforce. It is, therefore, important to raise the educational endowment of the future generation of workers through the expansion of secondary schooling, at least to augment the number of trainable if not fully trained people.[1] The growing demand for skilled labour is quite evident from a recent study that was conducted by the Associated Chambers of Commerce and Industry of India (ASSOCHAM). The study predicts a deficit of 40 million working professionals by the year 2020. However, given that our existing skill development capacity stands at 3.1 million, a concentrated effort needs to be made to skill India's work force.[2]

In order to establish this strong link between education and the world of work, it is important to look at the role of vocational education at the secondary level. The primary question that arises is around the manner of integration of vocational education: through the development of a comprehensive and integrated high school system or establishment of a separate and distinct vocational track. Until very recently, general education and vocational education have been functioning as two distinct streams. This differentiation has strengthened the stigma associated with vocational education where it has come to be viewed as being synonymous to lower educational and hence lower socio-economic attainment.

It is with the intention of bridging this gap that the centrally sponsored scheme of 'vocationalization of secondary education' was revised to 'vocationalization of secondary and higher secondary education.' Along with being subsumed under the Rashtriya Madhyamik Shiksha Abhiyan (RMSA), the scheme was also aligned with the National Vocational Education Qualifications Framework (NVEQF) in an attempt to integrate general academic education, vocational education, and vocational training into a comprehensive system of higher education. More recently, the NVEQF has been replaced by the National Skills Qualification Framework (NSQF). The NSQF is a nationally integrated education and competency based skill framework that provides for multiple pathways, horizontal as well as vertical, both within vocational education and vocational training and among vocational education, thus linking one level of learning to another high level. It provides multiple entry and exit points between vocational education, skill training, general education, technical education, and job markets.

The primary intention with which the NSQF was put together is not only to stimulate skill development but also to facilitate the establishment of qualifications framework that is standardized at the national level and is internationally comparable. Such standardization is extremely important in the Indian context due to the fragmented nature in which vocational education is imparted at the moment in the country. There is no uniformity across different institutions involved in vocational education, with regard to curriculum or certification. This has a far reaching impact on the level and nature of employability of students and also strengthens the stigma associated with vocational education and training.

---

[1] Majumdar, Manabi. "Schooling and 'Skilling' of the Country's Youth - Secondary Education in Four Indian States." **Economic and Political Weekly.** May-June 2005.
[2] Ministry of Human Resource Development

The National Skill Development Agency (NSDA) has been given the mandate to anchor and operationalize the NSQF. The responsibility of its development, implementation, and maintenance is distributed across many stakeholders; both public and private. However, the NSQF is still in its nascent stage, with the rollout in different states just beginning. Furthermore, a large number of private players are also involved in the process of imparting vocational education and training. This further adds to the fragmented nature of the delivery mechanism since most of these initiatives tend to be localized and vary in the nature of skill training provided.
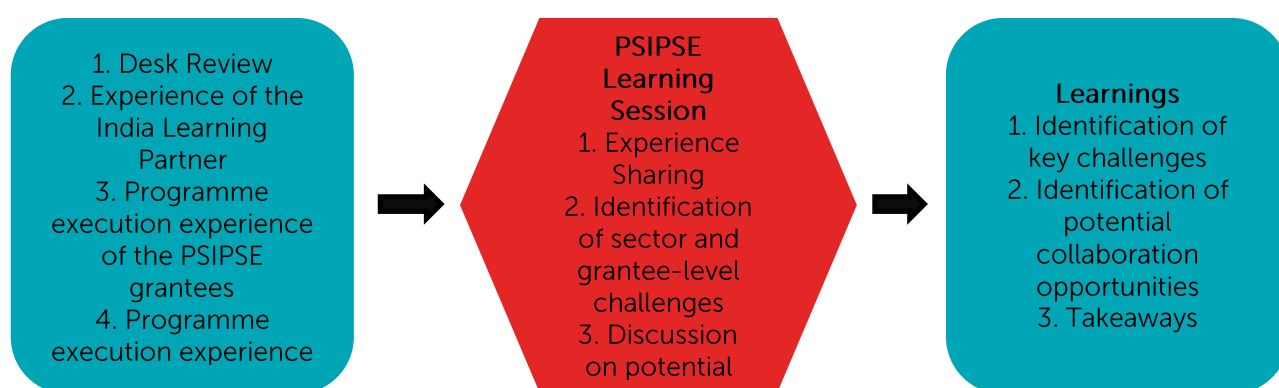
Given this context, in order to develop a better understanding of the work being done on vocational education and training at the secondary level, it is crucial to look at stakeholders at all levels and then work towards an integration at the national level under the aegis of the NSQF. It was with this intention that Catalyst Management Services (CMS) proposed to conduct a learning session on Vocationalization of Secondary Education. Considering that four out of the twelve Indian grantees funded by the PSIPSE collaborative are currently working in the area of imparting vocational skills or looking at the issues of employability after secondary education (Aga Khan Foundation, International Centre for Research on Women (ICRW), Going to School and Lend-A-Hand India), it was felt that a learning session would provide the ideal platform to encourage interaction between the grantees and other stakeholders working in the area of vocational education and skill development to address an issue of increasing relevance in the country.

2. Analytical Framework

To come up with a comprehensive analysis of the work being undertaken in the sphere of vocational education at the secondary level, a two pronged strategy was employed.

To provide a sector-level context, CMS conducted a thorough review of secondary sources to further augment the existing knowledge base and provide deeper insight into the relevance of vocational education and training for secondary education in India. It also enabled us to develop a better understanding of the different challenges faced by important stakeholders involved in this sphere, as well possible solutions for the same.

To make this macro level analysis more relevant for individual organizations, a learning session was conducted on the same area. Of the 2013 PSIPSE grantees, four are engaged in work targeted towards imparting vocational skills targeted to children at the secondary level. The learning session was structured around bringing these four grantees and other important stakeholders involved in vocational education or skill development together to facilitate sharing of their experiences and encourage cross-learnings.

1. Desk Review
2. Experience of the India Learning Partner
3. Programme execution experience of the PSIPSE grantees
4. Programme execution experience

PSIPSE Learning Session
1. Experience Sharing
2. Identification of sector and grantee-level challenges
3. Discussion on potential

Learnings
1. Identification of key challenges
2. Identification of potential collaboration opportunities
3. Takeaways

3. Challenges and Issues

As is evident from the first section, there are a variety of challenges faced by players involved in vocational education and skill development. This section attempts to highlight some of those issues based on the findings from the review of secondary literature as well as the field experiences of the PSIPSE grantees working in this area.

3.1. Attitude towards Vocational Education

As mentioned in the first section, there is a certain level of stigma associated with vocational education wherein it has become associated with lower educational attainment and lower socio-economic status. It is this very stigma that the NSQF hopes to address in the long run by providing nationally recognized certification. However, it is important to understand that parents and students are not the only groups with discriminatory mindsets. While working with government schools many programs that promote vocational education face a great deal of opposition from principals and teachers within the school.[3]

Most principals view introduction of a vocational education course as an additional burden to an already long list of responsibilities and duties. Furthermore, teachers employed in these schools currently do not possess the requisite skill sets to impart vocational education. Hence, resource people from outside have to be brought in to teach the courses. During the learning session, the Wadhwani Foundation noted that this creates a threatening atmosphere for the teachers wherein they feel that their skills will become irrelevant.

3.2. Employment vs. Employability

One of the critical components of the NSQF is related to industry engagement due to the emphasis laid on an outcomes-based approach. Involvement of the industry is envisaged at multiple levels: developing curriculum, defining job roles for each corresponding competency level, and possibly even providing training institutions. The intention of such an approach is to ensure that the children that are trained at different levels of the NSQF are equipped with market-relevant skills.

While such industry engagement is necessary, it is not sufficient. This is because employability does not always translate into employment, as was pointed by Wadhwani Foundation. To ensure that vocational education at the secondary level has the long term and sustained intended impact, it is crucial to focus on the issue of employability.

3.3. Learning Deficits

A common occurrence in the Indian education system is the existence of a discrepancy in the educational level of a child and the actual learning level. Hence, more often than not, student learning levels are a few years behind the class they are actually enrolled in. This is particularly relevant for drop-outs since such children usually remain outside the mainstream education system for a few years, creating a larger gap in their learning levels at the time of re-integration compared to those of their in-school counterparts.

This discrepancy is even more prevalent in the NSQF since it allows for multiple entry and exit points. Given that the focus of skill development is not only on learning a new manual skill but also the development of cognitive skills, it becomes important to address the issue of learning deficits to ensure that everyone is able to reap equal benefits from the different levels of skill training.

---

[3] The discussion is centred on government schools since the engagement of both, the NSDA as well as private players, has been primarily with government or government-aided schools.

3.4. Absence of Support Mechanisms
Results from the pilot project of the NSQF in schools in Haryana indicate that the establishment of actual training classrooms to impart vocational education and training is a relatively simple process. The availability and quality of teachers to impart the training poses a more significant challenge. Furthermore, teachers need to be convinced about the relevance and importance of vocational education and training to ensure that they have a positive impact on their students. This point was particularly highlighted by Going to School since they work directly with school teachers for the implementation of their intervention.

3.5. Engagement with government schools
As mentioned earlier, most of the work being undertaken in the sphere of vocational education and training at the secondary level has been in collaboration with government schools. However, for private players, this usually entails a long process of obtaining approvals and clearances. Even when project work begins, there are usually many bureaucratic formalities and requirements that need to be adhered to. A combination of these hurdles often results in a delay in project implementation and can sometimes even lead to restructuring of the intervention. Apart from being a trend that is widely acknowledged by many actors engaged in the education sector in India, this hurdle was also reported by the stakeholder present at the learning session.

3.6. Integration with school curriculum
Currently, the PSIPSE grantees are working as independent projects in their intervention areas. Hence, not only do they have different approaches to vocational education and training and different target populations but the nature in which they engage with the school curriculum also varies. For example, one program - Going to School – encourages teachers and children read the 'Going to School skill stories' and undertake the activities every week for two hours on Saturday. While another program - , Lend-A-Hand India - envisages the adoption of its curriculum on vocational training as part of the secondary school curriculum.

The approach that is adopted has an important influence on the manner in which vocational education as a whole is viewed by different stakeholders: the teachers, the children and the parents. It also has an impact on the receptivity of a school to adopt the particular programme since it has a direct implication on the number of hours that other subjects need to be adjusted for to make space for the vocation education and training course and the amount of resources that need to be deployed for the same.

4. Learnings

The previous section highlights the various challenges analogous to the area of vocationalization of secondary education. In order to address these issues, different players have adopted different strategies based on their understanding of the occurrence of these issues and the reasons behind their persistence. This section attempts to highlight some of these strategies to overcome challenges and issues highlighted in the previous section. These learnings have been collated through the learning session that was conducted on vocationalization of secondary education for the PSIPSE and non-PSIPSE actors working in the area.

4.1. Importance of Non-cognitive Skills

All organizations attending the learning session emphasized the importance and are working in the area of non-cognitive, or soft skills. Organizations such as Lend-A-Hand India focus on imparting such cognitive skills along with their curriculum on areas such as engineering, energy, environment, agriculture, animal husbandry, and home and health science. The Aga Khan Foundation and ICRW have also developed a similar approach to vocational education. Through its intervention, Aga Khan Foundation will look to provide out of school adolescents training in non-cognitive, soft skills along with vocational training. Similarly, ICRW is also looking to incorporate communication and financial literacy modules into Gap Inc.'s Plan Ahead programme. For organizations such as Going to School, the emphasis is on imparting broad-based soft skills such as communication, negotiation and team work through their skill story books. While their aim is to encourage self-employment, they were of the view that such skills are also crucial for employment. Since organizations like Lend-A-Hand India and Going to School have experience in imparting cognitive skills, they can provide assistance to other organizations looking to do similar work.

If the vocational education programs want to reduce associated stigma, training in non-cognitive skills is imperative. At the present, both government and non-governmental organizations provide vocational training through short term courses which fail to develop essential, basic life skills requisite for professional success. There is also an acute absence of awareness about the variety of careers and opportunities available after vocational training. Such non-cognitive skills are also essential to foster a sense of entrepreneurship, an area that is often neglected in discussions surrounding vocational education and training. It is based on this recognition that the NSQF also defines skills across two fronts – cognitive (involving the use of logical, intuitive and creative thinking) and practical (involving manual dexterity and the use of methods, materials, tools and instruments).

4.2. Teacher Training

PSIPSE grantees identified teacher training as a significant area within vocational education, as all the grantees have trainers or resource people, external to the school system. For their PAGE programme, ICRW intends to train youth mentors from the community to implement their specialized, curriculum within the schools. Lend-A-Hand India also looks to the local community to recruit instructors. The instructors themselves often tend to be micro-entrepreneurs in the identified field. Going to School is the only grantee that currently provides teachers with training to use their skill books and the corresponding skill activities.

Such diversity is primarily due to the structure of the programs since those requiring more number of hours of instruction per week cannot utilize school teachers due to their already large set of responsibilities. In such a situation, it is advisable to have some form of orientation for the teachers and principal to enable better understanding of the

importance of vocational education and training. Under their programme, ICRW envisages a separate orientation of teachers and headmasters in the intervention schools in order to better acquaint them with the objectives of the programme, content of the curriculum, and their roles in the programme. They also intend to ensure engagement of the teachers in all their training programmes.

Teacher training is not only crucial to ensure the availability of qualified staff to impart vocational education and training but also to address the oppositional attitude that many teachers have toward introducing to vocational education.

4.3. Importance of Local Context
In the future, to address the issue of employability for the skilled workforce that is generated through vocational education and training it is crucial to ensure contextualization of both, individual interventions as well as the NSQF.

It is suggested that the skills that are imparted are mapped to the local industry and existing space for self-employment. This will then ensure that the skilled manpower that emerges at different levels of the NSQF or from stand-alone training programmes can be easily absorbed by the local economy. This point was heavily emphasized by PSIPSE grantees such as ICRW, Lend-A-Hand India, and the Aga Khan Foundation who have employed such a strategy. Lend-A-Hand India engages with local industries for the purpose of curriculum development and delivery so that later on they can benefit from locally available skilled manpower. Apart from establishing such partnerships, Lend-A-Hand India also partners with the local population by encouraging micro-entrepreneurs from the community to come in for the delivery of the curriculum. On the other hand, organizations including ICRW have undertaken formative research during the preparatory phase of their programme to inform the context specific adaption of the curriculum. The Aga Khan Foundation is also conducting a market analysis of the community they are working in, the findings of which can feed into developing a context-relevant curriculum.

4.4. Foundation Courses
While integrating vocational education into the school curriculum, it is important to ensure that the basic learning level of all students is at a minimum level to ensure that the process of vocational education and training itself is holistic.

Apart from the longer term goal of ensuring quality primary school education to all, foundation courses can be conceptualized and implemented to address the issue of learning deficits. The primary intention of these courses would be to bring the learning levels of all children at a given level in the NSQF at par with each other. Addressing learning deficits will not only ensure a more holistic process of vocational education and training but also improve the overall quality of the workforce, reduce the stigma associated with vocational education, and contribute towards improving dignity of labour.

4.5. Deployment of Technology
Apart from teacher training, technology can also play an important role towards vocationalization of secondary education. Technology can also be deployed to facilitate the implementation of the NSQF as well as individual interventions. Many skills can be taught with the help of technology to make the learning process more interactive and effective. Online learning games and graphic curriculum content are two examples of such technology based mechanisms.

Technology can also be utilized to facilitate sharing of best practices and to encourage networking across different stakeholders. This is particularly because most of the grantees

were of the opinion that learnings from one area of operation can be leveraged and adapted to a new area of operation.

4.6. Collaborating with Government Aided Schools

As pointed out by Wadhwani Foundation, working with government schools often requires an evangelist from the side of the government to ensure a complete and successful roll-out of any project. Hence, relationship building with the schools before the roll-out of any intervention is a must to ensure successful implementation.

It was also suggested by Lend-A-Hand India that working with government-aided schools, based on their experiences, is relatively simpler due to the greater decision-making autonomy they possess. Their intervention also looks at developing a sense of ownership within the school staff for the programme as measure to ensure successful implementation.

4.7. Integration with NSQF

At present, most programmes initiated by private players work over and above the secondary school curriculum. This often reduces the levels of receptivity exhibited by students, parents as well as the school staff towards the programme, as discussed in the previous section. Integration with the NSQF can help address this issue since it provides for internationally valid certification and allows for acquisition of higher degrees and qualifications.

Organizations such as Wadhwani Foundation that work closely with the government can assist other private players in collaborating with the government.

5. Conclusion

At the onset of the discussion on vocational education and training, it was mentioned that the fragmented nature of the work being undertaken in the sphere is extremely problematic. However, this fragmentation also creates space for cross-learnings to take place. This is primarily because the structure of the sector has resulted in different actors specializing in different areas. All of the sector's unique actors can benefit from each other's expertise.

With the wide scale implementation of the NSQF being undertaken across the country, integration with the same emerges as a practical option for individual organizations. Such a step would not only help address the stigma associated with vocational education but also help improve the level of employability of children undergoing such training. While on this topic, it is important to recognize that as the name suggests, the NSQF only provides a framework for a hierarchy of qualifications that are associated with the attainment of certain skill sets. It is neither pedagogy nor an education system. Hence, while working with qualification frameworks it is imperative to keep equal focus on the nature of knowledge being imparted and not solely on measurable outcomes. This is precisely why emphasis should be laid on local contextualization rather than national conformity. Facets such as addressing learning deficits as well focusing on non-cognitive skills also need to be given due consideration to ensure the successful implementation of the framework.

It is widely acknowledged that the delivery of any form of education or training needs to make sense to the educators, lecturers, and facilitators. However, at the same time, these educators also have to be equipped with the correct skill set as well as a recognition of the importance of vocational education to ensure successful implementation. Hence, developing a strong resource base through teacher trainings is crucial for the development of the area. Technology can also be employed to further strengthen the resource base by making delivery mechanisms efficient and effective. Sharing of best practices can also be facilitated to a large extent through the incorporation of technology.

Finally, in order to generate a certain degree of cohesiveness between the different stakeholders to hasten the development of vocational education, it is imperative to generate a sense of understanding and ownership. By collating the learnings of programs that support the vocationalization of secondary education, the PSIPSE learning sessions are a step in the right direction.