A Critical Sociological Analysis of the Skills Development Initiative of India

May 2019

R. Maithreyi
Ketaki Prabha
Anusha Iyer
Sridhar R. Prasad
Jyotsna Jha

Centre for Budget and Policy Studies

This study was supported under 'Azim Premji Foundation's Research Grants Program'

Draft

Note on authorship: All members of the team have been a part of the larger discussions around the framework and structure of the study and report. R. Maithreyi has contributed to the conceptualization of the study since its inception and has contributed to several chapters of the report. Ketaki Prabha has contributed to the introductory chapter of the report in addition to her own chapter. Anusha Iyer, and Sridhar R. Prasad are equal authors and have contributed to individual chapters in the report. Jyotsna Jha has guided the development of some of the chapters in this report and has provided editorial inputs.

Acknowledgements

This report would not have been completed without the valuable support of a number of people. Firstly, we would like to thank the Azim Premji Foundation for providing financial assistance for the study, based on which the chapters in this report were compiled.

We would like to express our gratitude to our colleagues at the Centre for Budget and Policy Studies (CBPS) who have supported us in various capacities to complete the study. We record our thanks to Shruti Padmanabhan, and Priyanka Dutta who were part of the research team that conducted field visits as part of the study, and Sharad Pandey and Thyagarajan R. for providing intermittent assistance with fieldwork. Thyagarajan R., Mrinalika R Pandit, Usha P V, Vanaja S., and Ramesh K. A. provided field and administrative assistance throughout the period of the study.

We would like to extend our thanks to all our respondents from the research study who willingly participated in the research study by sharing valuable time, insights and experiences, without which this report would not have been possible: students, government officials, school principals and administrators, teachers, skill subject trainers; the vocational training partners, principal and staff of a diploma college in Mysore; and industry representatives from the automobile and healthcare sectors. .

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction

R. Maithreyi and Ketaki Prabha

The Vocationalisation of Secondary and Higher Secondary Education (VSHSE) program was introduced in 2013 by the Ministry of Human Resource and Development (MHRD) to offer optional vocational courses in schools, alongside academic subjects. A national vocational training program has been available in India since the 1950s, while a vocational education program was introduced in the 1980s with the aim of providing avenues for employment for those with little access to higher education (Gupta, Raman & Krisanthan, 2016). The newly introduced VSHSE has extended the vocational education scheme further to include students from classes nine and ten. Previously, vocational education (and most forms of vocational training) was available post-completion of class 10.[1]

The extension of the vocational education program into basic years of schooling needs to be seen in relation to the growing advocacy for skilling, internationally and nationally, in the last two decades. Historically, the promotion of work education and skills-based education as part of schooling is not new in India, and it has seen strong advocates like Gandhi and Tagore (Holzwarth, 2015; Sadagopal, 2016). However, the rationalities that underpinned these earlier visions for the vocationalization of education have been distinctly different from the current trends. While earlier advocates like Gandhi and Tagore argued for the inclusion of manual, productive forms of learning for overall development and attaining self-sufficiency for everyone, rather than a distinct and separate stream for a few, the current emphasis on skilling is meant for a few and not as a compulsory and integrated part of the entire course structure for everyone.

Skills-based education, in the current context, reflects the neoliberal values through which educational programs are increasingly being structured and it has been justified through arguments regarding greater choice, flexibility and transparency afforded to students and employers. However, a wide body of literature has also established a macro-theoretical critique of how the neoliberal language of skilling glosses over structural limitations (see

[1] For a more detailed discussion and review of the scheme, and the vocational education and training structure in India, refer to CBPS' study, *Skills Development, Social Mobility and Educational Change: A Sociological Analysis of the Effects of the National Policy on Skills Development in India*, undertaken through the first round of funding of the APF Research grant in 2016-17. The report is attached in Annexure III.

Ainley and Corbett, 1994; Jackson & Jordan, 1999; Warhurst and Thompson, 1998) such as that of jobless growth experienced by several countries such as India, and the responsibalization of the individual within this context, foregrounding the extractive practices of capitalism and neoliberalism that draw on an individual's social relations and affective labor to reproduce itself (Hardt & Negri, 2004; Hoschild; 1983; Warhurst & Thompson, 1998). Against a context of declining investments by the state in social welfare, skills have come to be positioned as the panacea for all ills–ranging from poverty and unemployment to the changing contexts of work, culture and society (Craig & Porter, 2003; Jackson & Jordan, 1999; Lauder, 2013; Rashtriya Madhyamik Shiksha Abhiyaan [RMSA], Karnataka, 2013; Singh, 2012). Additionally, in India, skilling has been seen as the means to harness the 'demographic dividend', particularly targeting the large volume of informal and informally trained workers produced every year (King, 2012).

Within this context, India launched the National Skills Development Policy (NSDP) in 2009, revised to the National Policy on Skills Development and Entrepreneurship (NPSDE) in 2015, with the vision to

> create an ecosystem of empowerment by skilling on a large scale at speed with high standards and to promote a culture of innovation based on entrepreneurship which can generate wealth and employment, so as to ensure sustainable livelihoods for all citizens in the country. (Ministry of Skills Development and Entrepreneurship, MSDE, 2015, p.11).

The policy provides a framework for an ambitious skilling program, linking over 20 ministries, approximately 38 trade sectors, and multiple educational trajectories (i.e., general, vocational, technical and modular skills training programs). 'Policy borrowing', or a country's interest in or cross-national attraction to foreign practices and policies (Phillips and Ochs, 2003) is evident in the methods adopted for skills planning and design, especially in the development of a national qualifications framework along the lines of those followed by over 120 countries in the world. The National Skills Qualification Framework (NSQF) came into effect in 2013 as a competency-based framework ordering all systems of education (i.e., general, vocational and technical), and qualifications according to a series of levels, from 1-10, with each level associated with specific knowledge, skills, aptitudes and competencies. The NSQF seeks to provide quality assurance through standardized, nationally recognized

learning outcomes, expecting to facilitate mobility within and between different streams of education; create equivalence with international standards for global mobility of the workforce; and allow for transitions from non-formal labor markets into the formal market through the recognition of prior learning.

With funds and technical assistance drawn from international donor organizations like the World Bank, a target of skilling 500 million workers by 2022 was initially set by the state in 2009, which was subsequently reduced to 402 million in 2015 (MSDE, 2015). The MSDE has since distanced itself from these targets (Mallapur, 2017). This was amidst criticism that huge physical targets had been set for various sectors in an arbitrary manner, without proper analysis of sectoral requirements (MSDE, 2016). In another more recent statement[2], the MSDE articulated the challenge, rather than a target, of skilling 104 million new entrants into the workforce annually, between 2015-2022, and re-skilling and up-skilling of close to 298.25 million of the existing workforce, stating the need to strengthen the already existing industry-led demand driven skilling ecosystem (King, 2012), rather than move to a supply-driven one.

Another missed target of the policy has been the plan to make all training and educational institutes mandatorily NSQF compliant within five years from inception, by December 2018. With the period having lapsed, and multiple barriers remaining to the realization of a comprehensive skilling ecosystem, including poor uptake of the NSQF standards, narrow conceptualization of occupational roles, overlaps and confusion regarding roles and responsibilities of various agencies and ministries, inadequate training infrastructure and substandard quality of training (MSDE, 2016), plans for an extension in the future remain unclear.

Vocationalisation of Secondary and Higher Secondary Education

Corresponding with these developments, the vocational education program in the country also underwent revisions, and was aligned more closely with the national skills policy and NSQF, and was reintroduced as the new VSHSE scheme. The VSHSE program maps on to levels 1-4 of the NSQF, and was specifically designed with the objectives of "enhance[ing] employability of youth through demand- driven, competency-based, modular

[2] The statement was released as a response to questions posed by IndiaSpend in 2017 and was retrieved from https://docs.google.com/document/d/1tQLUeSiQMPq_WPNog0hX8VmZv-LYXvnk9Z9KgJZyOfA/edit

vocational courses" (p.7), as well as to reduce drop-out levels and the burden on higher education (MHRD, 2014).

The VSHSE was launched in Karnataka in 2014-15 (Maithreyi et al., 2017). The specific trades selected for introduction through the VSHSE programs within government schools in each state are supposedly based on a district-level skill-gap study conducted by the National Skills Development Corporation (NSDC),[3] a public-private partnership for skilling that was set up by the government in 2009. The five trade sectors that have been identified for Karnataka were automobile, retail, health, beauty and wellness, and information technology (IT).The skill subjects were initially introduced in 100 government schools in Karnataka (with a maximum of two subjects to be introduced per school, and a maximum of 25 students to be trained per class, per sector each year), and later expanded to a 150 schools (RMSA, 2013). While students are marked along with the other subjects through internal and external examinations each year, certification in the trade, allowing students to apply for a job in the sector, is provided after completion of four levels of training after class 12, allowing students to apply for a job in the sector. In the initial years of implementation, the skills subjects were provided as additional subjects to be learnt in addition to the core subjects, but since 2016, the skills subject has been offered as an optional subject to be taken instead of the third language in Karnataka. Trainers for skills training are hired on a contractual basis via private vocational training providers (VTPs) selected for each sector by the RMSA through a tendering process.

In the first phase of a study by CBPS to understand the social impacts and outcomes of this program in schools, several insights were gained into the existing skilling environment in schools. The scheme was found to have been implemented with an urgency at the cost of effective end to end planning, resulting in inadequate preparation of institutions, personnel and infrastructure on the ground. This was further exacerbated by highly centralized planning of the program, fragmented operationalization due to lack of clarity and coordination, and a large role given to the private sector in the implementation which did not account for local concerns. As a result, students were impacted adversely through procedural delays in trainer appointments, fund transfers, introduction of higher levels of courses, and lack of certification upon completion of various levels of the course. Further, there was no clarity on

[3] The NSDC is a not-for-profit company in which the majority stakes are held by the private sector.

future avenues for vocational training opportunities, revealing a disregard for outcomes of the courses for students as well as student aspirations around education and employment[4].

A second phase of the study sought to examine these findings in more depth to provide a critical sociological account of the impact of the skills program on students from poor and disadvantaged families. The volume presents findings from the second phase in the context of major gaps in research on the skilling environment in India that have remained limited to macro accounts of the policy and its implications. Most research on skilling and vocational education in India have mainly focused on the dynamics of supply and demand, institutional and policy provisions, and quality issues (Gautam & Navin, 2014; Gupta et al., 2016; Mehrotra, 2011; 2014; Pandya, 2016; Pilz, 2016; Singh, 2012; Dar, 2008). A report commissioned by the MSDE on rationalizing and optimizing the functioning of sector skills council (MSDE, 2016) also presents the shortcomings in planning for the policy as well as implementation failures, and even recommends providing a stronger foundation of general education till the secondary level, and only introducing vocational education at the higher secondary level.

Aside from the lop-sided planning, few studies have critically analyzed the micro-politics of skilling, and their impacts at the social level. Few scholars such as Kenneth King (2012), Krishna Kumar (2011) and Radhika Saraf (2015) have pointed to the implicit caste/class connotations associated with vocational education and training. Specifically analyzing the VSHSE program, Saraf (2015) has argued that routes to acquire jobs within the high value-added services sector is closed off to youth in government schools who are instead being prepared for blue-collar jobs in the low-end service economy. Pointing to the declining capacity of agriculture and manufacturing to absorb labor, and with few avenues to access quality education, she states that the VSHSE program, in fact, reproduces caste/class statuses of young people who are forced to rely on these options.

However, few in-depth studies examining the impacts of the skills policy and investments are as yet available which go beyond conceptual critiques based on secondary data. This volume attempts to fill this gap by linking a micro-sociological understanding of the program in schools. Through this analysis, it provides insights beyond accounts of gaps in design and implementation, by drawing attention to the manner in which the policy translates into processes involving active negotiations by actors as well as the effects and outcomes of

[4] A more detailed account of the findings can be found in the full report attached in Annexure 2.

these processes. Reiterating the implications drawn by Saraf (2015) our study makes note of the social reproduction enabled through the VSHSE program, and it also aims to show how these reproductive practices are fueled through the embedded neoliberalism and its tenets of individualism and individual accountability and enterprise.[5]

The volume is divided into four chapters. The first chapter undertakes a close reading of the curricular and NSQF policy framework and draws attention to the nature of skills that students from poor and marginalized communities are being prepared for. Through a close analysis of the curriculum, classroom transactions, and identified competencies for each job role, it shows how lower caste/class students are being trained for non-intellectual forms of work within the growing urban service economy, thus reproducing earlier divisions between manual/menial work and white-collar work as well as the reproduction of gendered labor through VSHSE.

The second chapter on students' contexts and aspirations discusses this further by showing the disjuncture between professional higher education that students' and families seek in order to escape their social status and contexts, and the nature of training offered by the programs. Drawing attention to the precarious relationship that students and families from the lower castes/classes have with education, the chapter shows how the students nevertheless attempt to maximize their odds. Such attempts include selecting the skills subject under the VSHSE program as back-up options, or simply as an easier means to pass the exam. Against this context, the chapter shows how the program still fails to meet even their minimal aspirations.

The third and fourth chapters take on a sectoral analysis of the automobile and healthcare industries respectively for which students are being prepared through the VSHSE program. The chapter on the automobile sector draws attention to how the course neither prepares them for jobs nor for further education, with the practical and theoretical skills being too inadequate to pursue jobs and education respectively. The chapter on the healthcare industry again draws attention to the selection of job roles for training within a professional field like medicine, and shows how manual/menial jobs that have been associated with lower castes/classes have been selected, despite the industry having a huge shortfall of labor in

[5] The term neoliberalism here is used as a political ideology that advocates for lesser state regulation of markets, including within the social sector, promotion of laissez faire policies and greater individual economic participation through choice-making.

other technical/professional roles. Put together, the four chapters present a picture of the social reproduction of caste/class positions of students within the VSHSE program.

Methodology

The chapters in this volume draw on insights from an ethnographic study of the VSHSE program in government schools in Bangalore, and Mysore. The study was conducted over a period of one academic year (June 2017-March 2018), during which we conducted in-depth classroom observations and semi-structured interviews with key stakeholders including trainers, teachers, students, parents and private vocational training providers.[6] Ten schools in Bangalore were chosen for the study, covering the five vocational subjects of retail, automobile, IT, healthcare and beauty and wellness. Weekly visit to each school was made (expect when schools had exams or holidays) by one of the team of seven researchers involved in the study.[7] For the most part, a single researcher visited the same school repeatedly in order to ensure continuity of observations, and develop rapport within the schools. Researchers recorded the classroom transactions and student-teacher interactions within the skills classes, and also spent some time outside the skills classes in staffrooms with students, during mid-day meals, and recorded other activities of the school. The researchers also attended guest lectures and field visits with students and trainers in some schools. Home visits were also made to selected students' homes to interact with parents and understand students' home contexts better, based on students' and parents' willingness and availability. Students mostly belonged to poor/migrant families working in garment factories or within the informal urban economy as domestic helps, construction workers, petty traders or *pourakarmikas* i.e., sweepers and cleaners appointed by the municipality.

Each school was meant to offer four levels of two of the courses, i.e., levels 1 to 4 as defined under NSQF guidelines, each level corresponding with one academic year from 9th standard to the second year at pre-university college (PUC) or 12th standard. However, during our period of study, levels 3 and 4 were yet to be implemented in schools in Bangalore. So, additionally, one school in Mysore was covered as a case study.

[6] See Annexure II for the questionnaires used to conduct the interviews.

[7] Field work was conducted by seven researchers. However, two of the researchers left CBPS following the field work period, and have not been part of the analysis of data.

Primary and secondary data consisting of field notes, interviews, socio-demographic checklists, curricular and policy texts and secondary reports on the demand and quantum of skilling have been systematically analyzed using qualitative software such as NVivo and ATLAS.ti. All names of persons, schools and other institutions have been anonymized in the chapter to protect the confidentiality of informants. The following chapters present a more detailed account of the data analyzed for the study.

References

Ainley, P. and Corbett, J. (1994). From Vocationalism to Enterprise: Social and Life Skills Become Personal and Transferable. *British Journal of Sociology of Education*, 15,3,365-374.

Craig, D., and Porter, D. (2003). Poverty Reduction Strategy Papers: A New Convergence. *World Development*, 31,1, 53-69.

Gautam, R. S. and Navin, T. (2014). 'Challenges in Promotion of Vocational Education among Rural Youth: A Study of Bihar and Rajasthan States of India'. *Indian Journal of Vocational Education*, 19, 1.

Gupta, V., Raman, C., and Krisanthan, B. (2016). Secondary (9-10) and Higher Secondary Education (11-12): Preparation for the World of Work: Secondary and Higher Secondary Education in India. In Mathias Pilz (Ed.), India: *Preparation for the World of Work* (41-63). Springer

Hardt, M., & Negri, A. (2004). *Multitude: War and democracy in the age of Empire*. New York: The Penguin Press.

Holzwoth, S. (2015). *Gandhi and the Nai Talim: Rural Craft Education for a New Village-Minded Social Order*. (Unpublished dissertation). Berlin: Humboldt University.

Hochschild, A. R. (1983). *The Managed Heart: Commercialization of Human Feeling*. Berkeley: University of California Press.

Jackson, N. and Jordan, S.S. (1999). *Skills training: Who benefits? Training matters*. (Working Paper Series 04). Centre for Research on Work and Society, Ontario: York University. Retrieved from http://www.yorku.ca/crws/network/ members/Jackson-Jordan.pdf

King, K. (2012). The geopolitics and meanings of India's massive skills development ambitions. *International Journal of Educational Development*, 32,5, 665-673

Kumar, K. (2011). Vocational Education: Tangled Visions. *Norrag News*, 46, 35-36.

Lauder, H. (2013). Education, economic globalisation, and national qualifications framework. In Michael Young and Stephanie Matseleng Allais (Eds.), *Implementing National Qualifications Frameworks Across Five Continents* (pp.3-6). Oxon: Routledge

Maithreyi, R., Padhmanabhan, S., Menon, N., and Jha, J. (2017). *Skills Development, Social Mobility and Educational Change: A Sociological Analysis of the Effects of the National Policy on Skills Development in India*. (Unpublished Report). Bangalore: Centre for Budget and Policy Studies. Retrieved from http://cbps.in/wp-content/uploads/CBPS-E105-Skill-Development-and-Educational-Change-Final.pdf

Mallapur, C. (2017, July 24th). How Govt Skills Training Programmes Aimed For Wrong Targets & Wasted Public Funds. *IndiaSpend*. Retrived from https://archive.indiaspend.com/cover-story/how-govt-skills-training-programmes-aimed-for-wrong-targets-wasted-public-funds-13387

Mehrotra, S. (2011). Skill Development Initiatives: Private- Public Partnership and Private Initiatives in India. *NORRAG News*, 46. http://www.norrag.org/fileadmin/Full%20Versions/NN46.pdf)

Mehrotra, S. (2014). *India's Skills Challenge, Reforming Vocational Education and Training to Harness the Demographic Dividend*. Oxford University Press 2014, New Delhi.

Ministry of Human Resource and Development (MHRD) (2014). *Revised Centrally Sponsored Scheme of Vocationalisation Of Higher Secondary Education*. New Delhi: Government of India.

Ministry of Skill Development and Entrepreneurship (MSDE) (2015). *National Policy on Skills Development and Entrepreneurship*. New Delhi: Government of India

Ministry of Skill Development and Entrepreneurship (MSDE) (2016). *Report of the Committee on Rationalization and Optimization of the Functioning of the Sector Skills Councils*. New Delhi: Government of India

Pandya, R. (2016). *Skill development and Entrepreneurship in India*. New Delhi: New Century Publications.

Pilz, M. (2016). Introduction: Why India's Focus on Preparation for the World of Work is Highly Relevant. In Matthias Pilz (Ed.), *India: Preparation for the World of Work: Education System and School to Work Transition* (pp. 15-23). Springer Fachmedien Wiesbaden. 10.1007/978-3-658-08502-5

RMSA-Karnataka. (2013). *National Vocational Educational Qualification Framework (NVEQF)*. No:- Circular No. RMSA/NVEQF/21/2013-14. Bangalore: Office of the State Project Director, RMSA.

Sadagopal, A. (2016). 'Skilling India' or Deskilling India. An Agenda of Exclusion. *Economic and Political Weekly*, 51,35, 33-37.

Saraf, R. (2016). Skill Training or Nipping Potential in the Bud? *Economic & Political Weekly*, 51,18, 16-19.

Singh, M. (2012). India's National Skill Development Policy and Implications for TVET and Lifelong Learning. In Mathias Pilz (Ed.), *The Future of Vocational Education and Training in a Changing World* (pp. 179-214). Springer VS. doi: 10.1007/978-3-531-18757-0

Warhurst, C. and Thompson, P. (1998). 'Hands, Hearts and Minds: Changing Work and Workers at the End of the Century'. In P. Thompson and C. Warhurst (Eds.), *Workplaces of the Future* (pp.1-24). London: Macmillan.

Dar, A. (2008). *Skill Development in India. The Vocational Education and Training System*. Washington D.C.: Human Development Unit, South Asia Region, World Bank.

Chapter 2: Curricular Analysis of India's Vocationalisation of Secondary and Higher Secondary Education Scheme

R. Maithreyi

Introduction

The chapter presents a critical analysis of the curricular content and structure of the VSHSE program. Closely examining the curricular framework and subject-specific workbooks, the chapter presents the neoliberal ideology that informs the state's vision of education and human power planning. Devoid of social consciousness, critical reflection or ethical responsibility, the chapter shows how the educational and work opportunities made available to poorer students in government schools post-schooling and skilling, in fact, reproduce their caste/class (Sharma, 2014) contexts by slotting them into menial jobs at the lowest end of the service economy, and also consolidating gendered conceptions of the self and body through certain courses.[8]

The chapter draws on data from primary fieldwork in the form of classroom transactions of the curriculum, and it offers a textual analysis of curricular material, government circulars and documents. In addition, it draws on insights derived from families and their aspirations for education. For many of these families that we covered in our study, higher education remained aspirational as their sons and daughters were the first generation to access post-primary schooling while many students had elder siblings who had dropped out due to the pressure to work.[9] Contextualizing the emphasis within the curriculum against this background of families and children, this chapter attempts to point to the ways in which the curriculum remains insensitive to their everyday realities and instead contributes to reproducing their social contexts and conditions. This is achieved through a close and critical reading of the micro-aspects of the curriculum, identifying its underlying aims and expectations of students.

[8] The conjoining of caste-class here refers to the 'nexus' between caste and class in processes of social stratification in India

[9] More details regarding the methodology of the larger study is presented in the introductory chapter. Detailed accounts of students and their contexts is also presented in chapter 3.

Educational studies adopting textual and discursive analytic techniques have been critiqued for being unable to demonstrate how "large-scale social discourses are systematically (or, for that matter, unsystematically) manifest in everyday talk and writing in local sites" (Luke, 1995-96, p.11). This chapter analyses the language of specific curricular material and classroom transactions to show how "texts are constructive of social formations, communities, and individuals' social identities" (Luke, 1995-96, p.9). The aim of the curricular analysis is to show how "broader formations of discourse and power are manifest in everyday aspects of texts in use" (Luke, 1995-96, p.11). The following table presents a list of the material analyzed for this purpose:

Table 1: List of documents used for curricular analysis

Sl.No.	Document	Author / By	Date
	Government Orders and Notifications		
1.	Notification. The Gazette of India Extraordinary, Part 1, Section 2.	Ministry of Finance	December 27, 2013)
2.	The scheme of Secondary and Higher Secondary Education – List of Job Roles	MHRD	May 31, 2017
3.	National Vocational Education Qualification Framework	RMSA Karnataka	September 20, 2013
4.	Timetable and assessment forms for the NSQF scheme	Secondary Education Department, Government of Karnataka	August 3, 2016
	Curricular material		
5.	Competency-based Curriculum (for classes 9 to 12; NSQF Level 1-4) – Healthcare – General Duty Assistant (QP Ref. Id.: HSS/Q5101)	PSSCIVE	
6.	Curriculum Auto-SRV L1-NQ – L4-NQ (student workbook)	PSSCIVE	2016
7.	NVEQ Level 1 BW101-NQ2013 – Introduction to Body care (Student workbook)	PSSCIVE	2013
8.	NVEQ Level 2 BW201-NQ2013 Body Care and	Labournet	2013

	Wellness 1 (Student Handbook)		
9.	Information Technology NVEQ Level 1 IT101-NQ2012 -Functional English -- to --- IT107-NQ2012 – Email Messaging	PSSCIVE	2012

Note: This analysis was undertaken by R. Maithreyi

All material was systematically reviewed and thematically coded using qualitative software like NVivo and Microsoft Excel (Excel). The following sections first provide a brief description of the program and then the general and subject-specific insights from the analysis are offered.

Vocationalisation of Secondary and Higher Secondary Education (VSHSE): The scheme and its limitations

The revised VSHSE program for students of classes 9 to 12 was launched in Karnataka in 2014-15 (Maithreyi et al., 2017). An earlier study conducted by CBPS has identified several issues arising from just the planning and implementation of the program. For example, in the arbitrary selection of a limited number of students to receive these skills, the criteria required for taking certain subjects like IT further reinforces the division between the privileged few with access to English language education and those with no access to it. There are delays in notification of the subject within the state government's Board of Studies, which has led to at least two batches of students receiving no certification in the subject. The choices offered by the program, namely that of dropping the language subject for the skills subject, cause a restriction in avenues for higher education and loss of years for at least some students.[10]

In this chapter, significant issues with the curriculum are identified. While policy and scheme documents as well as accounts by most teachers, trainers and VTPs have presented the program as beneficial, considering the poor and marginalized backgrounds of students, this very socio-material history of students is drawn upon to show how the curriculum serves to reproduce and consolidate their everyday contexts of disadvantage.

[10] A detailed discussion of the implementation challenges and failures has been reported in an earlier report by Maithreyi et al. (2017), attached as Annexure III; a discussion of how dropping the language subject restricts further opportunities has been demonstrated by Prasad, in this volume.

The chapter makes three central arguments: one, the choice of trades to be offered does not even reflect the market demand as posed by the very agencies responsible for identification of skill-needs, and instead reinforces the caste/class disadvantage of students; two, the curricular focus and structure does not follow any clear or consistent framework leading to confused and contradictory contents using culturally alien language and expectations from students; and three, the content and transactions not only reproduce gender, class and caste norms and expectations but also uncritically introduce neoliberal values as given and desirable.

Learning for specific job roles and caste/class reproduction through the VSHSE

Despite over 20 sectors, including sectors such as agriculture and allied services, tourism and hospitality, real estate and building construction, identified by the NSDC as generating high demand for employment (NSDC, 2013), only 5 trade sectors have been identified for training through the VSHSE across the state of Karnataka. Further, only two of these sectors, IT/IT enabled Services (ITeS) and healthcare, have been listed among the high growth sectors, while the others such as beauty and wellness, retail and automobile do not appear within this list. A perusal of policy documents provides no help with understanding the rationale for selection of these specific trades nor does it provide any clue as to why the same subjects have been chosen for implementation state-wide when mammoth efforts have been made in identifying differences in skills-gaps in districts by the NSDC.

What appears to be evident, however, is the predominant focus of Karnataka's VSHSE program on the urban service economy. Further, an examination of the specific job roles for which students are being prepared makes it evident that these roles (such as service technician, general duty assistant, sales associate, etc.), offered to the poorest students from marginalized and minority communities for whom state schools are the last resort, are the lowest rungs of their respective industries.[11] While the large share of the service economy in Karnataka's Gross State Domestic Product (GSDP), at 56%, may be used to explain these selections along with economic forecasts that show a greater demand for semi-skilled (at 43%) and unskilled labor (at 25%) (NSDC, 2013), such explanations only demonstrate the

[11] For more details regarding the demographic population of the state schools covered in this study, refer to chapter 3 in this volume. For a discussion of how access to education has been reduced to poor quality state schools for marginalized communities such as Scheduled Castes/Scheduled Tribes (SCs/STs) and minorities, see Batra, 2013; Chavan, 2009; De, Noronha & Samson, 2002-2003; Dyer, 2009; Mooij, 2008; Velaskar, 2010.

state's privileging of narrow economic factors (over socio-historical ones) in educational and humanpower planning.

What is also evident is that this choice of job roles has entailed a selective use of economic data leaving statistics which shows incremental demands for humanpower in other sectors that, for example, can support the rural economy (e.g., in agriculture and allied sectors) or even social sectors such as education and skills development (NSDC, 2013) that might in fact contribute more significantly to aspects of social equity and welfare. What is interesting to note from the NSDC's (2013) projections is also how these social sectors of education and even healthcare (which has been selected for implementation) show a greater demand for *skilled* humanpower (for which, presently there is little demand otherwise, at just 5% of the total workforce of Karnataka), rather than for the semi-skilled humanpower. The NSDC (2013) report clearly shows that when compared with all other high demand sectors, healthcare is the only sector for which the greatest demand is for skilled and highly skilled workers (90% as opposed to 10% for semi-skilled workers), despite which the focus of the VSHSE program remains on the lowest end of the healthcare sector (as is the case with the other four sectors).

This is also despite the MHRD's identification of alternate job roles that students can be prepared for within these sectors with the same duration and levels of training (see Table 2 below).

Table 2: Alternative job roles identified by MHRD

Skills Sector (Subject)	**Job Role selected for training under the VSHSE program in Karnataka (post-Level 4 training)**	**MHRD identified alternate job roles available post-level 4/class 12 training**
IT/ITES	Service Desk Attendant	Domestic Data Entry Operator; Junior Software developer; Customer Relationship Manager- Voice; Customer Relationship Manager Non-Voice
Automobile	Automotive Service Technician	Sales Executive Dealer; Customer Relationship Executive cum tele-caller
Retail	Sales Associate	-
Healthcare	General Duty Assistant	Home health aide; Dental Assistant; X-ray technician; Diet Assistant
Beauty & Wellness	Beauty Therapist	-

As seen from Table 2, while opportunities for acquiring more professional roles such as that of a sales executive dealer in automobile or an X-ray technician or diet assistant in healthcare exist (and are also desired by students and parents, as evident from our ethnographic interviews which revealed students' aspirations of becoming garage owners or nurses and doctors), the VHSHE program in Karnataka, in fact, prepares students for menial/manual roles, such as that of a service technician (i.e. mechanic) or general duty assistant (GDA is a role involving house-keeping and cleaning). Considering the poor urban, migrant families that students come from, with parents in these families already engaged in various forms of manual labor considered undesirable as it involves 'dirtying one's hands' (e.g., cleaning and housekeeping jobs, mechanic roles, *pourakarmikas*), the VSHSE course actively institutionalizes the social reproduction of caste/class positions while also being unmindful of student aspirations.[12]

Moreover, considering the forms of training and skills emphasized up to level 4 of the NSQF that correspond with the VSHSE program, it can further be argued that the program does not just limit social mobility based on the limited forms of training it offers but also reproduces discriminatory caste-based practices that have historically shaped differences in acquisition of intellectual/cognitive versus manual/non-cognitive knowledges for different groups. Table 3 presents a summary of the different kinds of knowledge, skills and responsibilities associated with graduates at each subsequent level of training of the NSQF.

[12] For more details on students' and families' perceptions of different jobs, and aspirations for better jobs, see chapter 3 in this report.

Table 3: Knowledge and skills associated with different levels of NSQF training

LEVEL	Process Required	Professional Knowledge	Professional Skill	Core Skill	Responsibility
1	Prepares to carry out processes that are repetitive on a regular basis and requires no previous experience	Familiar with common trade terminology	Routine and repetitive, takes safety and security measures	Reading, writing, addition, subtraction; personal finances, familiar with social and religious diversity, hygiene and environment	No responsibility, under continuous instruction and close supervision
2	Prepares to carry out processes that are repetitive on a regular basis with little understanding and more practice	Material and tools application in a limited context, understands context of work and quality	Limited service skill used, select and apply tools, differentiates good from bad quality	Receive and transmit oral and written messages; personal finances, familiar with social and religious diversity, hygiene and environment	No responsibility, under continuous instruction and close supervision
3	Carry put a job which requires limited range of routines and is predictable	Basic facts, processes and principles applied in trade of employment	Recall and demonstrate practical skill; routine and repetitive in narrow range of application	Language to communicate (written or oral) with some clarity; basic arithmetic, algebraic principles, persona l banking basic knowledge of social, and natural environment	Under close supervision, some responsibility for own work within defined limit

4	Work in familiar, routine, predictable situation of clear choice	Factual knowledge of field of study	Recall and demonstrate practical skill; routine and repetitive in narrow range of application, using appropriate rule and tool and quality concept	Language to communicate (written or oral) with required clarity; basic arithmetic, algebraic principles, personal banking basic knowledge of social, political and natural environment	Responsibility for own work and learning
5	Job that requires well-developed skills with clear choice of procedures in familiar context	Knowledge of facts, principles and processes and general concepts in a field of study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic tools, methods, material and information	Desired mathematical skills, understanding of social and political and some skill of collecting and organising information and communication	Responsibility for own work and learning, and some responsibility for others work and learning
6	Demand wide range of specialised technical skill, clarity of knowledge and practice in broad range of activity involving standard and non-standard practice	Factual and theoretical knowledge in broad contexts in field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in field of work or study	Reasonably good in mathematical calculation, understanding of social and political, data collecting and organising, and logical communication	Responsibility for own work and learning, and responsibility for others work and learning

Source: Ministry of Finance, 2013

As seen from the table, students are mainly being prepared to undertake routine, repetitive tasks with no responsibility and under close supervision up to level 4, in roles such as that of IT service desk attendant, sales executive or even service technician. Even when students may have opportunities to work in high skills or high-end service industries like IT/ITeS or retail, what is clear is that they will still be involved in repetitive or manual jobs such as attending to phone calls (IT service desk attendant) or packaging and labelling (retail), which allow for little application of intellectual skills such as decision-making, logical reasoning, use of high-end technology–skills that may have however been expected of alternate job roles with similar levels of training such as of a junior software developer or X-ray technician (see Table 2) due to the very nature of these jobs.

Together, these observations present two significant insights: first, it shows that students might have been given additional forms of intellectual training (e.g. in logical and mathematical reasoning) if alternate roles such as that of a junior software developer had been selected under the VSHSE program by Karnataka; and second, it reinforces the observations that poor and lower caste students within government schools are being reserved for non-intellectual tasks within the urban economy reproducing earlier forms of caste-based discrimination in the acquisition of knowledge. Considering that the policy itself notes that many of these students are at a risk of dropping out and may be unable to access higher education (RMSA-Karnataka, 2014), limiting these students to non-intellectual forms of knowledge and job roles might not only contribute to limiting future mobility but also fail to address the historical, caste-related discrimination that marginalized groups have long-faced within education.

Having presented the focus of VSHSE and how it contributes to a reproduction of caste/class positions, a more in-depth analysis of the curricular structure and classroom transactions follows. Examining the curricular content, evaluation patterns and teaching-learning practices, it is clear that the program fails to meet the needs of even the specific job roles that have been identified for training.

Curricular Content and Structure: Confused Intentions

A second serious concern with the curriculum is its lack of clarity regarding what it prepares students for. The model curriculum for each sector has been prepared by the Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), a unit of the National Council for Educational Research and Training (NCERT), along with consultants

and experts from the specific industry under which a given job role falls. A total of 200 hours of training has been planned for the first 2 years (levels 1 and 2 corresponding to classes 9 and 10) and 300 hours for the next two (in levels 3 and 4, corresponding to classes 11 and 12) (RMSA-Karnataka, 2013).

With the aim of the program being to prepare students to be 'job-ready', greater weightage is given to practical training. This (i.e., the emphasis on practical training) is also reflected in the evaluation patterns as can be seen from Table 4 below.

Table 4: Assessment format of the VSHSE program

Sl No.	Type of Examination	Maximum Marks	Minimum Marks (to be scored)
i	Practical Exam	50	18
ii	Theory Exam	30	10
iii	Internal Assessment (scored against projects, classroom participation in activities, behavior and attendance)	20	-
	Total	100	28

*Translated from the Department of Education, Government of Karnataka's Notification on Timetable and Assessment pattern for the NSQF program

However, observations of the translation of the curriculum within the classroom belie the intentions of developing practical skills in students. While an important reason for this is the lack of adequate facilities (such as computers, healthcare equipment, beauty and wellness products or other equipment required for the automobile course), the curriculum itself is also designed to teach practical skills instrumentally or through rote methods, preparing students inadequately to practically apply this knowledge.

For example, take the IT curriculum. It was observed that practical operations such as creating files, saving files, naming files and using various functions of programs such as Microsoft Word (Word) and Excel were taught to students as a set of processes listed on the blackboard or through memorization of jargon. During a class attended at an east Bangalore government school, it was seen that a topic such as 'Applying Characters' (that aimed at teaching students how to use certain functions of the word processor such as options to increase or decrease font size, change color etc.), was taught as a long list of functions to be memorized (personal communication, July 19, 2017). Opening a Word document that was

typed up in capital letters, the trainer, Bhaskar, started calling out a series of locations and functions such as 'Home Tab', 'Font Tab', 'Font Style', while also writing it on the board as follows:

Home Tab ---> Font Tab ---> Font Style

This was followed by a series of other instructions in the same manner on the other functions available under the Font tab such as font size, grow font, shrink font, highlight text, change font color, superscript, subscript, and change case (i.e., upper case, lower case, capitalize each work, sentence case and toggle case). Opportunities to practice these functions were to be provided later.[13] However, observations during this session showed how practical learning (which could perhaps be better gained through opportunities for trial and error and experimentation) was reduced to a series of names, definitions and functions to be memorized.

This was also evident in the manner in which Bhaskar conducted a revision of a chapter taught in a previous class, wherein instead of asking students to demonstrate their learning using a computer, he asked them factual questions such as to recall the number of tabs and names of tabs of a word processor. A little later on, Bhaskar also turned his attention to the question paper, reminding students of the topics that they must memorize; for example, symbols for various functions (as shown in Table 4) that had appeared in the last year's paper as a *Match the Following* question for four marks.

Table 5: Word processor functions and their symbols

Functions	**Symbols**
Superscript	x^2
Subscript	x_2
Grow Font	A▲
Shrink Font	A▼

The pedagogic style of the classroom might be attributed to the larger rote culture of schooling and the education system in the country as a whole. However, the transactions

[13] As each class/school was visited only once a week, it was not possible to verify whether children were actually given the opportunity to practice specific lessons that were observed in theory. However, during classroom visits, students were seen practising at least some of the functions/programmes taught.

observed within the VSHSE IT classroom do not simply represent the rote culture of schooling but also point to the nature of the VHSHE curriculum, which seeks to introduce what are essentially practical skills that must be gained *in situ* and through repeated experience and practice, through the context of regular schooling. This requires the VSHSE syllabus to then be structured according to the timetables, teaching-learning resources and evaluation patterns designed for other academic subjects.

In addition to most classroom transactions structured in this manner, focused on learning factual/theoretical information and on how to score marks (specifically in theory) in order to pass it, an examination of the syllabus also shows a complete mismatch between the objective of practical training and the large factually loaded content of the syllabus. Even trainers such as Bhaskar spoke of the heavy (content-loaded) syllabus, pointing out that a total of 83 chapters (which were divided into 7 units) had to be covered for students of Level 1 in IT in the 100 hours that had been set to complete the theoretical syllabus (personal communication, July 19, 2017). What is immediately noticeable from this remark is not just the heavy content that has to be covered but also the inappropriate weightage given to theory and practical learning in terms of teaching hours wherein both receive 100 hours each of the total 200 hours allotted to the subject even though the evaluation scheme provides a greater weightage of marks to practical learning.

A closer analysis of the syllabus also shows the mismatch between the content of the curriculum and the role that students are being prepared for. For example, take the health curriculum (which trains students to become GDAs) and the beauty and wellness curriculum (which trains students to become assistant beauticians). It can be seen that the syllabi include complex and dense topics on human biology such as on human body structure, bodily functions and nutrition; drug delivery systems and microbiology; sterilization and disinfection (under healthcare); and detailed descriptions of human organ systems and arm and bone structures (under beauty and wellness)(see Table 6 and Table 7 below), which have no relationship with the role-expectations.

Table 6: Model Healthcare curriculum for classes 9-12

Level	UNIT	Healthcare
I	1	Healthcare Delivery Systems
	2	Role of the Patient Care Assistant
	3	Personal Hygiene and Hygiene
	4	Primary Healthcare and Emergency Medical Response

	5	Immunisation
	6	Communication at the workplace
II	1	Hospital Structure and Functions
	2	Introduction to Care Plan and Care of Patients
	3	Sterilization and Disinfection
	4	Basic First Aid and Emergency Medical Relief
	5	Human Body: Structure, Functions and Nutrition
	6	Public Relations in Hospital
III	1	Hospital Management System – II
	2	Drug Delivery System
	3	Microbiology, Sterilization & Disinfection II
	4	Handling Emergency Services
	5	Administration of Medication
	6	Physiotherapy
IV	1	Medical Record / Documentation
	2	Role of General Duty Assistance in Elderly & Child Care
	3	Bio-waste Management
	4	Operation Theatre
	5	Role of General Duty Assistance in Disaster Management & Emergency Response
	6	Self Management and Career Scope

Table 7: Model Beauty and Wellness curriculum for Level 1

UNIT 1	1	Human Organ Systems
	2	Nutrition
	3	Basics of Cosmetology
	4	Introduction to Wellness
UNIT 2	1	Arm and Hand Bone Structure
	2	Nail Structure
	3	Hand Skin and Finger Nail Diseases
	4	Hand Care and Nail Care
UNIT 3	1	Leg and Foot Anatomy
	2	Foot skin and Nail Diseases
	3	Foot Care and Nail Care
UNIT 4	1	Hair Structure and Growth
	2	Hair Types and its Characteristics
	3	Common Hair and Scalp Problems
	4	Hair Care
	5	Head Massage
UNIT 5	1	Mehendi
	2	Nail Art

The incongruence between the job role prepared for and the subject matter taught is further seen from the kinds of questions on which students are tested on, as can be seen from

Figure 1: Questions given in the Model Question Papers by Karnataka Secondary Education Examination Board

Model Question Paper for Beauty and Wellness (Level 1)

The part of the digestive system in which food is stored for 3-4 hours is
A. Oesophagus C. Colan [sic]
B. Stomach D. Liver

What are 'ligaments'? Mention the functions of collateral ligament?

Model Question Paper for Healthcare (Level 1)

9. The vaccine given to infants through sub-cutaneous route is
A. OPV
B. Measles
C. B.C.G.
D. D.P.T.

24. What is the meaning of the following terms?
i) Blood borne pathogens

The first two examples are drawn from a model beauty and wellness question paper for level 1, while the last two are drawn from a model healthcare question paper given by the Karnataka Secondary Education Examination Board (KSEEB). What can be seen here are the unnecessary levels of technical detail that students are tested on. For example, knowledge of the specific organ of the digestive system in which food is stored may be completely irrelevant to the practical skills of a beautician.

Discussions with potential employers similarly revealed how they also viewed the syllabus as incongruent with the practical requirements of the job role. For example, during interviews with superintendents and medical officers of different private and government hospitals in Mysore, it became amply evident that these students, with the limited training available to them, would never be actually allowed to undertake patient care. Anjan (the superintendent of a private hospital in Mysore) summarized this succinctly by stating, "We are not working with machines here, we are working with humans" (A. Iyer, personal communication, March 1, 2018).[14] In fact, Anjan went on to state that the VSHSE students could definitely not be involved with the kinds of training provided through the syllabus, such as immunization which clearly forms an important part of the syllabus considering that it is an important question that students are tested on in final exams (see Figure 1 above).

[14] For more details on responses of hospital staff refer to chapter 5 in this report.

Further, respondents from the healthcare industry saw no requirement for a GDA, a role that mainly involves housekeeping and bed making responsibilities, but is mostly filled by informal/unskilled labor. Discussions with the principal and lecturers of a Bachelor of Vocational Education (B.Voc) college in health technology similarly showed how they viewed responsibilities such as measurement of blood pressure (BP) to be incongruent to the age and maturity level of children in secondary and higher secondary schools (personal communication, March 2, 2018). Such opinions expressed by hospitals as well as other higher education institutions clearly indicated how the syllabus appeared to lack contextualization with field realities.

Overall, a detailed analysis of the curricular intentions, syllabus, evaluation patterns and classroom transactions show a complete mismatch between what the VSHSE program attempts to achieve and what the field realities and contexts of students' lives are. While a heavy content-driven syllabus was noted for many subjects with disproportionate time allotted to practical learning, assessment patterns watered down even the theoretical focus of the syllabus by not just reducing the marks awarded to theory but also simplifying the paper so much that a number of students managed to pass the skills paper without being able to pass the other general subject papers (e.g., maths, science and language).[15] With just 18 marks required in the theory paper to pass the skills exam, students were easily able to (and also taught by the trainers during the classes how to) score these marks by attempting easy sections of the paper such as *Fill in the blanks*, *Match the following* or *Multiple choice questions*. In fact, the ease with which the skills subjects could be passed became the primary logic that students used to opt for them (as the next chapter in this volume shows) but also then posed a hurdle to continuing further education. Based on these observations, it is clear that in providing inadequate practical and theoretical training, the VSHSE program appears to be in fact be disabling/deskilling students, rather than preparing them with either a strong practical or theoretical foundation in the selected vocation.

Having identified the unclear intentions of the VSHSE curriculum which neither prepares students for vocational or academic careers,[16] in the final section of the chapter, a deeper analysis of the curriculum of one specific sector – beauty and wellness – is undertaken

[16] A more detailed discussion of how the VSHSE prepares students neither for work, nor higher education has been undertaken by Prasad in his chapter on the automobile sector, presented later in this report.

to show how the beauty and wellness curriculum explicitly discriminates and propagates prejudiced and stereotypical ideas around gender.

Reproduction of Gender Norms through the VSHSE Curriculum

Before undertaking a deeper analysis of the curriculum, one might question the very choice of beauty and wellness as a subject introduced to high school students, considering the significant implications this has on the understanding of the self. As many feminist scholars have noted, conceptions of beauty associated with female bodies inscribe moral judgements on them and signify the work of patriarchy and capitalism that produce, reproduce and propagate narrow conceptions of who is considered as desirable, undesirable, modern, successful, and/or ideal (Aizura, 2009; Bordo, 2003; Jha, 2016). As Aizura (2009) notes, such constructions of the ideal or desirable are often produced through the conflation of characteristics of 'whiteness' (and upper caste and class bodies) with ideas of beauty.

Within this context, the introduction of a subject like beauty and wellness for poor and disadvantaged high school students by the state needs to be questioned. While broader critiques of the industry, emphasizing the negative influences the industry has on body images and the construction of identities and subjectivities particularly amongst women, have been growing in the public domain and within academic and activist circles, the state, through its VSHSE program, appears to be promoting gendered, racialized and casteist conceptions of beauty amongst a group of young, female, lower caste/class adolescent students in government schools.

A more detailed analysis of the curricular content of the beauty and wellness program further reveals the co-option of the state by, and its propagation of, capitalist ideology (see Table 8 below).

Table 7: Textual Analysis of Unit 1 (for Level 1) of the beauty and wellness Curriculum (by PSSCIVE in collaboration with Labournet)

UNITS.	Introduction	Session 1: Human Organ Systems	Session 2: Nutrition
	• Presents the size of the beauty industry and growing demand for it • Explains this demand as a result of changing lifestyles, consumerism and globalization • Links the above point to growing disposable incomes of the middle class and the increase in stress as contributing to their willingness to "look and feel good" • Argues "Today everybody is becoming conscious of their body and has started to take interest to know different ways to build and maintain it, for one to look beautiful and healthy." • Explains that "Personal appearance is a key factor in keeping one's morale high." • Argues for particularistic ideas of beauty – "Beauty is a characteristic of a person, animal, place, object, or idea that provides a perceptual experience of pleasure or satisfaction….An "ideal beauty" is an entity which is admired, or possesses features widely attributed to beauty in a particular culture, for perfection."	• Starts with an explanation of how "Reaching and maintaining optimum health and wellness requires an understanding of body and its functions that affect our appearance and wellbeing." • The remainder of the chapter focuses on detailed discussions of the various organ systems from digestive, respiratory, circulatory, integumentary, skeletal, endocrine and nervous systems • While much of the chapter discusses complex biology and makes little reference to how this is linked to concepts of beauty, there is passing reference made to healthy skin in the section on the circulatory system: "Anything that promotes healthy circulation helps to keep skin healthy and vibrant." • The chapter even contains references that would be	• Starts with a discussion on nutrition and malnutrition linking the latter to nutritional deficiencies and food security. However, there is a lack of critical engagement with the idea of food security, which is simply explained as "The term hunger, which describes a feeling of discomfort from not eating, has been used to describe undernutrition, especially in reference to food insecurity." • The remaining chapter focuses on balanced diet, unbalanced diet, and types of diets for various purposes such as to gain weight, lose weight, athletics, etc. • Recommends eating five meals a day, and describes the different kinds of foods to be added into the diet across the five meals • Examples given to explain the above point again name foods

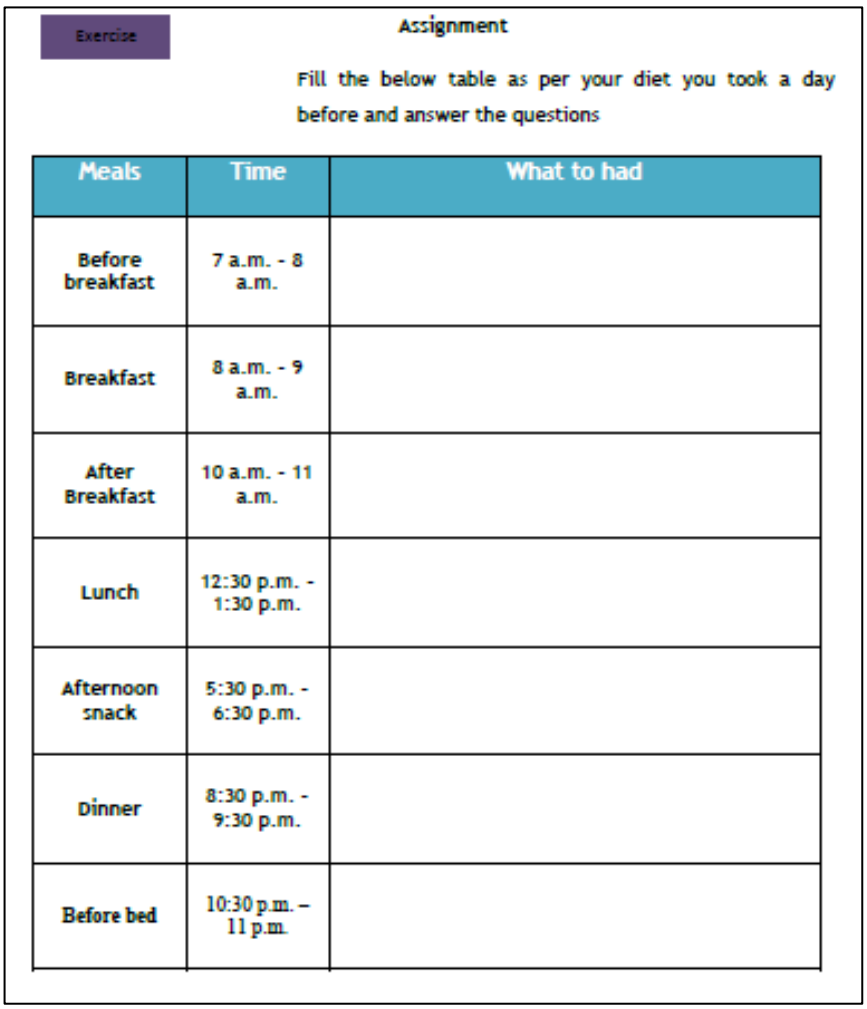
	• Finally positions students as serving "elite customers" through personalized services, or other job roles in department stores, hotels, spas or through demonstration of products • Argues that for this, students must be "well-dressed", accommodating", "patient", "well-mannered, polite and courteous", while also having knowledge of latest trends, having a "flair" for applying make-up and knowledge of human anatomy	unfamiliar to most government school children (and even others from more elite backgrounds) – e.g., in the section on respiratory system, the questions asked is "Did your traps rise like you were shrugging a couple dumbbells?", in order to identify appropriate forms of breathing	that might be unfamiliar and/ unavailable to the children from the government schools in which these programs are conducted: e.g., "Have a tuna sandwich with seeded bread at lunch"; "Try soy-based yogurts in place of what you usually buy"; On how to bring diary into your diet - "Obvious, but pouring milk over your cereal or oatmeal"

Providing a rationale for the introduction of the subject, the introductory chapter in the workbook for students of class nine points to the "exponential growth" in the beauty and wellness sector in India due to "consumerism, globalization and changing lifestyles" (NVEQ Level 1 BW101-NQ2013 – Introduction to Body care [Student Workbook], *henceforth* referred to as Student Workbook). Rather than discussing the effects of globalization and consumerism and its homogenizing and/or other negative effects on people and culture, the workbook goes on to state the following:

> Rising disposable income of the rapidly expanding Indian middle class, demand fuelled by increasing stress levels and willingness of people to look and feel good are further fuelling the growth of the Beauty & Wellness industry. (Student Workbook, p.8)

What is seen here is not just the positioning of the industry in service of the middle classes for whom lower caste/class students from these government schools are being trained but also an explicit description of these students' job roles as that of providing personalized services to regular and elite customers (Student Workbook, p.8-9). Statements such as these, along with other lessons such as that on nutrition make it amply evident that the curriculum is designed to be applied in the service of upper caste/class clients far removed from the lives of the children in these government schools. Lessons on nutrition present a discussion of balanced diets for various purposes (e.g., losing weight, gaining weight, athletics, etc.), unmindful of the contexts of these children's lives. In the lesson on nutrition, the ideal diet is described as consisting of seven meals. The learning activities expect children to fill in details of the seven meals they have had the previous day, and analyze their nutritional content as practice, for many children the mid-day meal provided by the government school may in fact be the only or one of the two meals of the day.

Figure 2: Assignment on nutrition given in the Level 1 Beauty and Wellness Workbook



Exercise

Assignment

Fill the below table as per your diet you took a day before and answer the questions

Meals	Time	What to had
Before breakfast	7 a.m. - 8 a.m.	
Breakfast	8 a.m. - 9 a.m.	
After Breakfast	10 a.m. - 11 a.m.	
Lunch	12:30 p.m. - 1:30 p.m.	
Afternoon snack	5:30 p.m. - 6:30 p.m.	
Dinner	8:30 p.m. - 9:30 p.m.	
Before bed	10:30 p.m. – 11 p.m.	

Further, references are also made to foods alien to children within these schools: "tuna sandwich with seeded bread" (p.59), "soy-based yoghurt" (p.59), "cereal and oatmeal" (p.60). These are foods that are unaffordable to them and that they might never have seen. Even for students coming from non-poor households, these could be culturally alien food items that they would have perhaps never had or heard of. Examples such as these and, indeed, the very language of the workbook encodes what appears to be familiar upper/middle class routines (see illustrative examples below) and clearly show how the course is designed for, and in service of, an urban elite audience for whom children from lower caste/class homes have to re-make themselves by imbibing practices, products and routines unfamiliar and inaccessible to them, in order to become employable.

Illustrative examples from the beauty and wellness workbook

> If you want to increase the amount of calcium that you consume, then here are some ways of adding it to your diet: *Obvious*, but pouring milk over your cereal or oatmeal (italics mine; p. 60)

> Did your traps rise like you were shrugging a couple dumbbells? If all of this happened, then you are a chest breather. (p. 15)

While inaccessibility and unfamiliarity with the concepts and products mentioned in the workbook is just one concern, a more significant one is how middle-class nutritional values and physical lifestyles are being instituted as the norm through the lessons. For example, a discursive analysis of the lines from the workbook reproduced above shows how practices such as taking milk with cereal or oatmeal or the use of dumbbells are presented as familiar and taken-for granted routines. The structuring of these sentences within the workbook through words such as "obvious" and jargon such as "traps rise" and "shrugging dumbbells" suggest that such practices constitute common knowledge that students would be (or should be) familiar with too.[17] The language of the textbook reinforces a sense of inferiority within students by presenting such knowledge as commonly known and available, while, in fact, they index the lifestyles of the elite with the resources and time to conspicuously invest in themselves.

The language of the workbook also discursively produces new forms of understanding of the self and beauty through what Carolan (2003) describes as an "upper class civilising appetite". Tracing how practices of diet and health have changed over the centuries as greater food security has come to be afforded by the upper classes, Carolan shows how dietary palates have now come to focus not on *how much* one eats but *what* one eats, with the content of one's diet becoming a marker of class.

Carolan also further points to how this refinement of palate has also come to be associated with concepts of health and beauty, a topical elision that can also be seen within the beauty and wellness curriculum. Such elision is noticeable even in the naming of the course as *beauty and wellness* and the naming of the job role for which students are to be prepared for as that of a beauty therapist. Trainers such as Bhavana, teaching at the government school in north Bangalore, reiterated this, stating that the course should not be viewed as a *beautician's course* but as *treatment* by which students would be able to diagnose and identify problems and give solutions appropriately (personal communication, December 15, 2017).

[17] The second example is particularly significant as it is only one of the many exercises that can be undertaken using dumbbells that involves the shrugging of shoulders.

Taking note of such elision is important as it associates upper caste/class dietary practices and physical routines with health, the most basic requirement of everyday living. In addition, it also allows for the products and services of the beauty industry–which otherwise are classified as luxury items–as essential and basic. Justified through this analogy drawn with health, students in the beauty and wellness course were taught to imbibe a set of consumptive practices around beauty and self-care that were articulated as essential to health.

Students' responses to questions about the curriculum also showed how this transfiguration of the subject was complete. For example, when asked about the classes and what they learnt in them, students like Sindulekha, a class 10 student from a government school in north Bangalore, explained that she was learning about health, *hengirubeku* (how to be), how to look after one's skin and the importance of keeping healthy (personal communication, December 15, 2017). Similarly, another student, Kavya, from class nine of the same school, also explained that the beauty teacher had taught her how to take care of pimples and keep her hands, legs and nails clean. She further stated that she had learnt that she had to wear gloves and slippers to protect her hands and feet and learnt about what products to use on her body and what might adversely affect her (personal communication, December 15, 2017). Kavya's explanation of the beauty classes focused on issues of cleanliness and hygiene and her use of words such as 'protect' and 'affect' again point to the close associations made through curriculum and classroom transactions between beauty and health.

While the presenting of concepts of beauty as health has resulted in students and trainers evaluating the course positively, it in fact promotes uncritical (and unaffordable) consumerism, further reproducing caste/class and gender divisions. For example, during a discussion, Divya, a student from one of the north Bangalore government schools we visited, pointed to having learnt the importance of applying *Fair and Lovely* (a skin-whitening beauty cream) daily, stating that earlier she had only been using it once in a while. Another student, Priya, stated that she had learnt the importance of washing one's face at least thrice a day (personal communication, August 7, 2017). All of these new knowledges had been received by children during classes on skin color, pigmentation and skin problems. While these lessons did not explicitly promote gendered norms of fairness, in teaching children both the industry as well as commonly perceived standards of beauty, they legitimized 'fairness, a characteristic common to white and upper caste bodies, as the norm. Along with such information on products for fairness given to students, which created aspirations to fit with

these standards and encouraged consumerist tendencies such as increased use of beauty products among them, classroom transactions on beauty reproduced racist gender norms in other ways. For example, during classes on skin care routines on using cleansers, toners, moisturizers and sunscreen, trainers such as Vindhya (from a north Bangalore school) taught children to apply sunscreen over the moisturizer, at least six times a day, stating that this was so that they did not tan or become dark (*kappagubaraduantha*) as they came to school by bus (personal communication, August 19, 2017). During another session on haircare, Vindhya similarly told children that it was those who went out in the sun or worked in the sun (*bisillali kelasa maadavaru*) who would have dry, brown hair with split ends, and instructed children to stay away from the sun.

Setting up middle class/upper caste lives as the norm (whether it is in reference to diet, work, or lifestyle such as being able to avoid the sun), the beauty and wellness course not just encourages uncritical acceptance of a gender-insensitive and consumerist industry, it also reproduces social divisions between dark-skinned/fair-skinned persons, and manual labor castes/classes and professional workers (based on their appearance). With a majority of students in the government schools in which the course is being conducted belonging to lower caste/class homes, such curricular transactions within the classroom are not only humiliating but reinforce a sense of inferiority within students that is profoundly gendered. Further, with students aspiring to attain such standards, curricular transactions are not just re-establishing divisions within society but even within families, with children adopting appearances or diets very different from that of other family members.

Finally, through such expectations for transformation in appearance and lifestyle, involving affective labor, the beauty and wellness curriculum not just teaches students to locate themselves within a patriarchal and consumerist culture, it also places an onus on them to become ‘employable’ by adopting the required personality and appearance for their newly trained job roles. These expectations are overtly made in the introductory chapter of the student workbook, where the following is stated:

> A beautician has to look well-dressed, neat and smart-looking at work. She/he has to be always polite, punctual and professional in her/his approach. When interacting closely with the clients, it is imperative that the beautician is patient and accommodating, inspiring the clients' trust and have good rapport with them. She/he must take an interest in

> the latest beauty trends and products to be knowledgeable enough to advise clients when required. (p.8)

Expectations are for students to not just adopt the right appearances (well-dressed) but also the right attitudes, mannerisms (polite, punctual, accommodative and patient) and the right knowledge (such as knowledge of latest beauty trends) which may be inaccessible to children coming from marginalized backgrounds and lower caste/class cultures with negligible cultural capital. That students struggle even to keep up with the lessons taught in the classroom was evident from instances such as children using the word *rose* for *blusher*, and trainers such as Vindhya scolding them for being stuck on the beauty concepts and terminologies of a past era (‘*neev innu haLe kaaladalli idhira.eega rose antha kariyalla’*).

While children struggled with many of the terms (such as moisturizer and concealer) taught and expected of them, and some such as Rachna (of class nine from a government school) even admitting that these words did not even enter their mouths (*baayige baralla idhu*), the curriculum placed expectations on them to stay constantly updated on new beauty concepts, products and services. What all of this seems to suggest is not just the reproduction of caste, class and gender discriminations through the beauty and wellness curriculum but also the subjectification of students into enterprising neoliberal workers who would continuously work upon themselves in order to serve the interests of the elite and the beauty industry.

Conclusion

The chapter undertook a critical analysis of the VSHSE curriculum and demonstrated the ways in which it contributes to furthering inequalities against its stated intentions of furthering opportunities for students from disadvantaged communities. In fact, a close reading of the scheme documents as well as curricular material shows how, on the one hand, they are constructive of material caste/class divisions, and on the other, they are limiting opportunities for social mobility for students from lower caste/class families and discursively associating beauty and desirability with white, upper caste/class bodies and lifestyles.

The latter aspect of the curriculum not just legitimizes upper caste/class advantage, but more problematically reiterates racialized and gendered norms of beauty and body care that are significantly located within upper caste/class lives to young adolescent girls from lower caste/class backgrounds in government schools. Though students across all five sectors of

training are being prepared by the VSHSE curriculum to serve elite customers through various forms of bodily labor, the beauty and wellness curriculum particularly lays expectations on students to also remake themselves by rejecting their own caste/class positions (i.e., through a rejection of their own skin color, hair texture, diet, lifestyle, and work) in order to become more appealing to the customers they serve. That is to say, it lays expectations for students to contribute not just through bodily labor but also affective, gendered, and immaterial forms of labor, demonstrating how the state's policies on education and humanpower planning are aligned with the demands of the neoliberal economy.

The textual analysis of the curriculum across the subjects also shows how poor and marginalized students within government schools are being prepared for non-intellectual forms of work, requiring few cognitive skills, while alternate roles and demands for intellectual labor, with similar levels of training, exist. With most students in these schools at risk of dropping out, investments made by the skills program in training students for manual/non-intellectual job roles (many of which can be acquired informally with little training), rather than in building intellectual/cognitive skills, significantly contribute to a reproduction of caste, class and gender hierarchies. Along with the earlier observations, what this points to is the state's intentions of privileging economic productivity even at the cost of social discriminations that it fosters.

References

Ainley, P., and Corbett, J. (1994). From vocationalism to enterprise: Social and life skills become personal and transferable. *British Journal of Sociology of Education*, 15, 3, 365-374. Retrieved from http://www.jstor.org/stable/1393149

Aizura, A.Z. (2009). Where health and beauty meet: Feminity and racialisation in Thai cosmetic surgery clinics. *Asian Studies Review*, 33, 303-317. Doi: 10.1080/10357820903153707

Batra, P. (2013). Positioning teachers in the emerging education landscape of contemporary India. In *India Infrastructure Report on Education: Private Sector in Education* (pp.219-231). New Delhi: Routledge

Bordo S. (2003). *Unbearable Weight: Feminism, Western Culture, and the Body*. Berkeley: University of California Press.

Carolan, M.S. (2003). The conspicuous body: Capitalism, consumerism, class and consumption. Worldviews, 9,1,82-111.

Chavan, M. (2009). Managing elementary schools. *Vikalpa*, 34, 2, 74-77. Retrieved from http://www.vikalpa.com/pdf/articles/2009/34_2_61_90_page.pdf

De, A., Noronha, C., and Samson, M. (2002-2003). Private schools for less privileged: Some insights from a case study. *Economic and Political Weekly*, 37, 52, 5230-5236. Retrieved from http://www.jstor.org/stable/4413020

Dyer, C. (2009). Cascade training: Learning going missing? *Vikalpa*, 34, 3, 77-81. Retrieved from http://www.vikalpa.com/pdf/articles/2009/34_2_61_90_page.pdf

Government of India (GoI). (2009). *National Skills Development Policy*. New Delhi: Ministry of Labor and Employment, GoI

GoI. (2014). Revision of the scheme of Vocationalisation of Higher Secondary Education. Circular No. F. No. – 10-4/2012-VE (pt). New Delhi: Ministry of Human Resources Development, GoI

GoI. (2015). *National Policy for Skill Development and Entrepreneurship*. New Delhi: Ministry of Skills Development and Entrepreneurship, GoI.

Hardt, M. and Negri, A. (2004). *Multitude: War and Democracy in the Age of Empire*. New York: Penguin

Hochschild, A.R. (1983). *The Managed Heart*. Berkeley: University of California Press.

Jackson, N. and Jordan, S.S. (1999). *Skills training: Who benefits? Training matters*. (Working Paper Series 04). Centre for Research on Work and Society, Ontario: York University. Retrieved from http://www.yorku.ca/crws/network/ members/Jackson-Jordan.pdf

Jha, M.R. (2016). *The Global Beauty Industry. Colour, Racism and the National Body*. New York: Routledge

King, K. (2012). 'The Geopolitics and Meaning of India's Massive Skills Development Ambitions'. *International Journal of Educational Development*, 32, 665-673

Lauder, H. (2013). Education, economic globalisation, and national qualifications framework. In Michael Young and Stephanie Matseleng Allais (Eds.), *Implementing National Qualifications Frameworks Across Five Continents* (pp.3-6). Oxon: Routledge

Luke, A. (1995-1996). Text and discourse in education: An introduction to critical discourse analysis. *Review of Research in Education*, 21, 3-48. Retrieved from http://www.jstor.org/stable/1167278

Maithreyi, R., Padmanabhan, S., Menon, N., and Jha, J. (2017). *Skills Development, Social Mobility and Educational Change: A Sociological Analysis of the National Policy on Skills Development in India*. Unpublished Report submitted to Research Grants, Azim Premji Foundation.

Mooij, J. (2008). Primary education, teachers' professionalism and social class about motivation and demotivation of government school teachers in India. *International Journal of Education Development*, 28, 508-523. doi:10.1016/j.ijedudev.2007.10.006

NSDC. (2013). *District Wise Skill Gap Study for the State of Karnataka*. New Delhi: NSDC

RMSA-Karnataka. (2013*). National Vocational Educational Qualification Framework (NVEQF)*. No:- Circular No. RMSA/NVEQF/21/2013-14. Bangalore: Office of the State Project Director, RMSA.

Sharma, K. (2014). Explaining Caste–Class Nexus: Continuity and Change. In A. Pankaj & A. Pandey (Eds.), *Subalternity, Exclusion and Social Change in India* (pp. 338-354). Foundation Books. doi:10.1017/9789384463113.016

Singh, M. (2012). India's National Skill Development Policy and Implications for TVET and Lifelong Learning. In Mathias Pilz (Ed.), *The Future of Vocational Education and Training in a Changing World* (pp. 179-214). Springer VS. doi: 10.1007/978-3-531-18757-0

Velaskar, P. (2010). Quality and inequality in Indian education: Some critical policy concerns. *Contemporary Education Dialogue*, 7, 1, 58-93. Retrieved from http://www.teindia.nic.in/e9/pdf/articles/Padma_Velaskar_Quality_article.pdf

Warhurst, C., and Thompson, P. (1998). Hands, hearts and minds: Changing work and workers at the end of the century. In Paul Warhurst and Chris Thompson (eds.), *Workplace of the Future* (pp.1-24). Hampshire: Macmillan Press Ltd.

Young, M.F. and Allais, S.M. (Eds.) (2013). *Implementing National Qualifications Frameworks Across Five Continents*. London: Routledge


Google Calendar
Getting started with your Google calendar!
Mae Vaughan Chilson
Tech Support, Siskiyou COE


A Presentation On
Microsoft Office

Chapter 3: Centering Student Voices in Vocational Education Policy

Ketaki Prabha

Introduction

The schooling component of the National Policy on Skills Development and Entrepreneurship (NPSDE) (MSDE, 2015) policy specifically focuses on disadvantaged students who are considered to be at risk of dropping out of schooling, offering them alternative training opportunities for employment. This chapter takes a critical sociological approach to the implementation of the skills program in schools, viewing its impact from the standpoint of the intended target group of underprivileged students, and how they interface with the program. In particular, this chapter attempts to understand the behaviors, attitudes, aspirations, and decision-making around educational and employment trajectories of students, in relation to their broader contexts of home and schooling, while using the skills program as a reference point. In doing so, it seeks to foreground the agency of students as social actors who actively negotiate with the education system, rather than being passive recipients of macro-policies targeted at them. The representation of these voices and the micro-cultures of schooling which influence them are shown to problematize the policy's current conceptualization of students in their narrow socio-economic profiling. The inclusion of these insights is central to understanding the materialization of policy on the ground, challenging its embedded assumptions, and further creating potential to strengthen it.

The impact of education policy on students has received significant attention, with equity being a key concern in research on sociology of schooling in India. Literature on the neoliberal nature of policy shifts in the education sector in recent decades has elaborated on issues of deteriorating quality in government schools as well as its disproportionate impact on those already marginalized along the axes and intersections of caste, class and gender, further contributing to the reproduction of these social structures (Velaskar, 2010; Nambissan, 2012, 2014; Vasavi, 2015). A common critique of skilling programs has also noted its neoliberal orientation towards human resource planning driven by private economic interests, rather than equipping individual workers with improved opportunities at the workplace (Jackson, 99). Saraf (2016) argues that the introduction of vocational education programs at the secondary school level in India only serves to consolidate informality by limiting socially and

economically disadvantaged students to blue collar employment opportunities, and therefore perpetuating and institutionalizing inequality.

While educational and social structures no doubt affect outcomes of schooling, such macro-level explanations do not offer any insight into the manner in which individual students navigate these structures. Noting structural barriers such as the lack of economic resources as central to the context of everyday life, the chapter aims to situate student perspectives within these constraints, rather than focusing solely on them as victims of these constraints.

The following analysis primarily draws on interviews with children, situating them in the contexts they take place in, as understood through observations and interactions in schools. The next section provides an overview of the home and schooling contexts of children in order to understand the material, social, and cultural environment which inform student perceptions, notions and rationalizations.

Home and school context

Interviews with children revealed the precarity of their home contexts and how these conditions play a major role in shaping their decision-making. Most of the children attending these schools belong to socio-economically disadvantaged families. The table below shows the caste composition of children formally interviewed (Table 8). This is similar to the overall government school caste profiles where children from lower castes, backward classes, and minority communities have higher representation than general castes. While family incomes are varied, most parents are engaged in similar kinds of occupation in the informal sector. Several of the children's mothers work as domestic helps in neighboring apartment complexes or in housekeeping in offices while their fathers work as drivers, painters, welders, watchmen and tailors, among other occupations. Some families are involved in street vending. Schools situated closer to the industrial areas have parents working in garment factories.

Table 8: Distribution of students interviewed by social group and skills subject.

Caste/Sector	Health	Automobile	Beauty	Retail	IT	Total
SC	2	4	5	1	1	13

ST	2	-	1	-	-	3
OBC	4	8	3	1		16
Gen	3	1	2	-	2	8
Minority	6	1	4	2	-	13
Not mentioned	2	1	-	3	-	6
Total	19	15	15	7	3	59

Several of these families own agricultural land back in their native hometowns in parts of Karnataka, Andhra Pradesh and Tamil Nadu, and have moved to Bangalore in search of better job prospects. Some part of the extended family continues to manage the cultivation in their hometowns in these cases. In conversations with teachers, they expressed, some sympathetically while others pityingly, the difficult circumstances that these children came from. Bhaskar, an IT trainer, told us how even if parents wanted to support their children with education, they may not be able to afford it as they are often dependent upon their children for family income. He stressed on the role of home culture and parental behavior as being the determining factor, noting that children from single parent households or alcoholic parents were very different from those belonging to middle class homes, and parents often did not think about their children's futures (R. Maithreyi, personal communication, December 15, 2017).. A similar sentiment was echoed by many teachers who either noted the poor backgrounds that children came from as a major barrier to education, or felt that illiterate parents did not understand the value of education and thus could not offer adequate support.

From interviews it was gathered that parents had rarely studied beyond 8th or 10th standard and many had never attended school at all. Some children had older siblings who had dropped out after 10th standard to work but many also had siblings and cousins enrolled in PUC, diploma and bachelor-level courses, indicating that they may be the first generation in their families to be pursuing higher education. At the same time, financial constraints affecting the continuation of education were evident. Many children themselves were engaged in part-time work after school. Ankit, a level 1 retail student whose family migrated from Tamil Nadu when he was younger, helps his father at their tailoring shop every day after school, till 9 p.m. During peak season, his mother also joins them, and they work up till

2 a.m. (personal communication, December 13, 2017). Many other children aid their parents in street vending or in garages or working in small shops to make some extra money.

Girls, especially, also help out with household work. Nasreen, a level 2 healthcare student with five younger siblings has a daily routine which comprises of waking up at 5:30 a.m., reciting the namaz, sweeping the house, washing vessels and helping her mother in the kitchen, after which she goes to school. After schools ends, she attends tuition classes and upon returning home at 8 p.m., helps her mother with household chores again, before finally going to sleep at 11:30 p.m. (A. Iyer, personal communication, December 18, 2017). Much like Nasreen, many other girls we interviewed had similar routines that involved juggling housework with schooling.

The financial and social disadvantages of these students create a precarity which extends into their relationship with school. Educational exclusion has been well-documented through prior research which shows that the most marginalized families face disparate educational deprivation in terms of lowered access to educational institutions, the worsening quality of public provisioning, a deepening class divide in the context of privatization, discrimination within classrooms, and poorer educational attainment levels (Velaskar, 2010; Nambissan, 2012).

These government schools are the central sites where the skills policy and program can be observed to materialize. However, the translation of the program in schools is mediated through local cultures of schooling that form an important influence in the lives of the students. It has been noted that schools act as "spaces (that) mediate home and nation, playing a constitutive role in the lives of children who move back and forth between them" (Benei, 2008, p.5 as cited in Vasavi, 2015, p. 37). The organisation of the schooling system and processes that form a part of it, such as the nature of classroom transactions, the agency of teachers or the socially construed role of schools, all affect the lifeworlds of those who enter it (Vasavi, 2015). Responses of students regarding various aspects of the skills courses then must be viewed in conjunction with the culture within these schools, and the manner in which they shape the discourse around these subjects.

One such prominent feature of school life was the conception of a 'good' student. Interactions and observations revealed an implicit understanding of 'good' or 'bright' students as those who can secure good marks and have a relatively better grasp over the English language. Vindhya, a beauty and wellness trainer, explained to us that good students

were those who could write well, speak well, and perform well on their practical exams, as she reflected upon her identification of the main problem being her students' inability to even write their ABCDs (S. Padmanabhan, personal communication, January 10, 2018).

Students considered to be bright were often seen to be encouraged to take up skills subjects in schools. This was also a complaint by the Hindi and Kannada language teachers who lamented that all good students would end up taking the skills subject. This push towards encouraging bright students to take up the skills subjects conveys a presumed hierarchy between skills courses and other subjects. The attempts to posit the skills courses as superior, and therefore attractive, were made visible in instances such as schools arbitrarily deciding to offer the IT subject only to English medium students.

This appears to be indicative of the efforts to reposition vocational subjects as useful and relevant, against the historical trend of persistently lower preference shown by students towards vocational streams, in comparison to academic streams. Teachers also echoed this view, framing the usefulness of the skills subjects as lying in their 'practical' nature. Meera, an IT trainer, listed out some of the relative benefits of the subject as the knowledge of computers providing students with an extra edge over others when it came to applying for jobs; the functional English module in the IT course aiding in improved English pronunciation and teaching students how to write resumes, and the idea of operating computers and being able to speak English comfortably as together contributing to students appearing 'better', and feeling more confident (A. Iyer, personal communication, January 9, 2018)..

In fact, one of the challenges recognized by the NPSDE (MSDE, 2015), as by reports and recommendations before it, is that vocational streams have been considered last resort options for those who are unable to succeed in academic streams; this is why students were hesitant to opt for it. Perhaps this would explain the need to make the courses more appealing to students, especially through the newer languages of the entrepreneurial skills they offer.

This kind of attractive packaging of skills courses, sometimes furthered inaccurate representations of the kinds of possibilities or job opportunities they could offer, and led students to take up the subject without an awareness of its limitations. Lakshmi is one such student in level 2 health, who says that her 'sir' had given her the idea that she could become a doctor after studying healthcare, and her field visits to hospitals has given her a sense of what the job looks like, involving emergency wards, stitches, checking blood pressure, using

stethoscopes and weighing machines. Lakshmi belongs to the Scheduled Caste (SC) community, has several siblings (older and younger), has parents who are illiterate, and she is the most highly educated in the family so far. Working as a domestic help during her holidays, Lakshmi hopes her family can support an education in medicine despite its high costs, since she wishes to start her own clinic someday so as to be able to make a living through helping others (R. Maithreyi, personal communication, December 5, 2017). However, the healthcare subject only trains for the job role of a general duty assistant (GDA), similar to a housekeeping job.

In a similar case, although the automobile course trains for the job role of a service technician, Ashok, enrolled in level 3 of the course, who has over time grown to love the automobile sector, has long term plans to take a loan from a bank and open his own service station with some friends. He does however feel that his practical training is insufficient, and feels he needs to spend a lot more time in garages to strengthen his practical knowledge (S. Prasad, personal communication, January 16, 2018). While such skills would potentially improve Ashok's opportunities to land a service technician job, his ambition of opening his own service center would require a different set of managerial and financial skills, perhaps with a whole different educational trajectory.

Nevertheless, teachers and trainers, along with family members, are hugely influential sources of information for students, and sometimes the only sources of advice or guidance regarding future educational trajectories.

Madhavi, a level 2 automobile student, who lives with her mother and sister, told us she would like to pursue a diploma in mechanical engineering after completing 10th standard, as would most of her classmates, since their trainer, Keshav sir, had told them about it. She did not know anything about where she would pursue it, or what the course entailed, even remarking, after learning from the interviewer that the course involved up to 8 subjects in one semester, that it was 'too much'. Yet she aspired to work in the ship industry since Keshav sir had told them about the requirements of mechanical engineers on cargo ships. He was also the one who actively encouraged them to study at least up till level 4 or further, since it would assure them better jobs (personal communication, December 20, 2017).

Another one of Keshav's students, Vinay, confidently informed us that Keshav had advised them to only focus on performing well on their 10th standard examinations, promising to guide him, and others, with whatever help they needed, along with necessary

tips for pursuing automobile courses afterwards (personal communication, December 20, 2017)..

These instances communicated a strong sense of trust placed by students on individuals who took up the role of advisors. With the lack of avenues for students for relevant guidance and information regarding future trajectories, several immediate decisions as well as plans for further studies involved consultations with trainers, teachers, family members, siblings or friends who were enrolled in higher education courses or were employed. Word of mouth communication through friends and relatives were also seen to be factored into decision making.

Opinions on the usefulness of the skills courses varied across schools and trainers. Some were of the view that these subjects would genuinely allow students to gain some employment if they were to drop out after 10th standard, while others were skeptical of this possibility, unless students received further training. Vikas for example is an automobile trainer who initially took up the job since he felt it was in the core domain of mechanical engineering. While unsure of the employment prospects of the skills program after completion of level 4, he believes that the course is nonetheless useful in the skills it provides, and the foundation it creates for further learning (S. Prasad, personal communication, January 16, 2018).

Vikas' opinion on the subject however should also be noted in relation to his own circumstances as a trainer, a position he soon came to realize had poor job security; the low salaries and delayed payments having forced him to take up an additional part time teaching job at an Industrial Training Institute (ITI) to support his parents, brother, wife and son. At the same time, he expressed his sense of job satisfaction through guiding underprivileged students towards larger worldviews and better job prospects. Here, one notes a great degree of investment on the part of the trainer to guide his students, despite constraints of his own. The precariousness that many other trainers also faced at the job, on account of its uncertain contractual nature and lack of accountability, were seen to affect the abilities of even the most well-intentioned trainers to carry out their teaching jobs, due to added financial pressures.

Functioning in a space of precarity themselves, trainer perceptions of the benefits of skills courses and their further perpetuation of the sometimes-exaggerated ideas around it must also be interpreted in a contextual fashion. Alok, a retail trainer for example, had completed a Master of Business Administration (MBA) degree, and was of the opinion that

the retail subject could go on to help students become entrepreneurs, or open their own businesses (though the course only prepares for the job role of a sales associate). He himself came from a family of farmers in South Karnataka, an occupation his elder brother had also joined, while Alok, and his sister Shilpa had pursued higher studies. Shilpa completed a bachelor's degree in engineering, and was also a healthcare skills trainer in a different school in Bangalore. Alok also expressed the difficulty of managing finances, boarding at a shared paying guest facility, and having to borrow money from friends to get by. Yet, he was passionate about teaching and wished to continue with the job, believing that all students were intelligent and only needed the right amount of motivation and family support to succeed (S. Padmanabhan, personal communication, February 1, 2018).

Alok's own home background and experience would have no doubt contributed to his notions of the advantages that the skills subject offered. The precarity of contexts of trainers in the form of uncertain employment, financial difficulties and their own struggles under conditions of constraints, along with their desire to help students they perceive to be in a position of disadvantage, offer a lens to understand the kinds of ideas that they extend to students regarding employment opportunities afforded by the skills courses. The resultant fragmented and even imprecise understandings of the skills courses only add to the vulnerable contexts of the students.

Challenging the deficit discourse

Policies and programs for skilling as well as their proponents have articulated underprivileged students within the deficit discourse. The deficit paradigm in education says that some people lack adequate resources, which restrict their participation in the economic benefits of society, and that this can be remedied with the provisioning of the necessary inputs or skills (Rogers, 2006). The skills policy draws on this idea in its assumption that students at risk of dropping out from school should be targeted under special programs intended to impart skills that will make them employable at earlier stages. This framing of underprivileged students retains no scope for higher educational opportunities for these students, and, in fact, reinforces exclusionary practices through the idea that these students should be trained under alternative streams. The deficit discourse has further trickled down into schools where teachers are of the view that illiterate parents from deprived and difficult contexts do not have an understanding of the importance of education which is why children do not take schooling seriously.

Such a view is directly contradicted by observations from the field. Children consistently reported that their parents wanted them to study further and allowed them a great degree of freedom in opting for subjects that they liked, found easy, or could potentially help them out at a later stage in getting jobs. There were, of course, variations in the role which parents played and the extent of their ability to support their children. Some children said their parents would decide what subjects to pursue; others said their parents would gather the necessary financial resources for them to study further; and some were apprehensive of the costs of higher education and have considered getting part time jobs to finance it.

Contrary to the opinions expressed by the teachers at school, there appears to be an awareness of the necessity of schooling and education in order to get a job and also a desire among students to pursue higher education. Manasi, a beauty and wellness student noted that her family members predominantly worked as construction laborers and had not received education, but that now there was an increasing trend towards pursuing education among the younger ones, among her cousins. In her opinion, this was caused by an increasing realization among their parents that one could not secure a job without education, so they were willing to finance it (R. Maithreyi, personal communication, December 15, 2017). Rajeshwari, another student of beauty and wellness, even told us that she would only marry a man who was less educated than her because a man who was more educated than her would not allow her to study or work. While both her sisters are also pursuing higher studies in PUC, she observed how despite education, it is often difficult to get jobs, and perhaps the practical nature of the beauty course may help with this (S. Padmanabhan, personal communication, December 15, 2017).

The desire for higher education is seen not only as a means towards decent employment, but also in terms of the social standing which comes with it.

The cost of education came up as the most crucial factor in the decision to pursue it. Interestingly, in some cases, this seems to be the reason that parents have enrolled one sibling in a private school and the others in government schools. In these instances, they also seem to have marked out one child for pursuing higher education and another for dropping out of school and starting work after the 10th standard. Abdul, who was a retail student, but already assisting his father as a mechanic in a garage and getting paid for it, explained to us that his father wanted him to drop out and continue the job full-time, though his brother, who was elder but in the same grade and also not doing as well in school as him, would be made to

join PUC to study further (personal communication, December 13, 2017). While he did not explain the reasons for this, it appeared quite clearly to be related to the family's financial situation.

Chaitanya is a level 3 student of automobile, belonging to a single parent SC household, and his mother has been working as a garbage collector for 20 years. Their house is a temporary shed which does not even have toilet facilities because of which his sister was forced to enroll in a free hostel so that she could continue her studies. While the vice principal at school advised Chaitanya to take up the skills course, assuming he would need to take up a job due to his family circumstances, his mother wishes him to study beyond high school. She sold her jewelry to meet hospital expenses when he was unwell, and made him quit his part time job as a newspaper delivery boy so that he could focus on his studies. He had hopes of joining an ITI, but by the time he finished clearing all the subjects in which he had to reappear, all the seats had filled up. He also would have preferred to join PUC with commerce stream since he feels subjects like accounting, finance and business will serve as a good foundation for his long-term ambition of starting his own service center, but had to settle for the arts stream since he could not meet the cut off marks needed for admission in the commerce stream. He plans to take up a bachelor's degree in vocational studies after high school; if this is unavailable in his city, he would alternatively take up a diploma course in automobile engineering in the government polytechnic institute. He is simultaneously an apprentice at a nearby service station, and will continue with that as a back-up job if compelled to do so (S. Prasad, personal communication, January 16, 2018).

Even under financial constraints, students and families thus display a clear desire towards higher education, and attempts towards well-reasoned courses of action for their futures, weighing in all possibilities to whatever extent they can.

The lens of the deficit ideology and its framing of underprivileged students identifies the "problem of inequality as *located within*, rather than as *pressing upon*, disenfranchised communities so that efforts to redress inequalities focus on 'fixing' disenfranchised people rather than the conditions which disenfranchise them" (Gorski, 2011, p. 154).

The skills policy looks at students from marginalized backgrounds as likely to drop out of school after secondary education, and identifies this in itself as a problem to be remedied, rather than addressing the conditions that cause it to happen. By not accounting for students' desire for, and capacity to pursue higher education in academic streams within a

context of socio-economic disadvantage, the policy in effect furthers a discourse of deficiency among these students.

Precarity and decision-making

Though this desire for higher education was commonly expressed, there was also simultaneously an uncertainty in the ability to go ahead with it and the trajectory to be followed after the tenth standard. This is different from middle class families who usually chart their children's educational trajectory beforehand as they are able to mobilize the necessary resources well in advance. Lareau's (2002) work describes the practice *of* 'concerted cultivation' among middle class families wherein they invest in multiple organized activities at every stage of a child's growth, in order to actively inculcate culturally valuable life skills. Working class families, on the other hand, allow for *natural growth* where children's lives are not organized for them and they are allowed to grow and thrive at their own pace under the provision of basic care. She also argues that middle class child-rearing practices led to an emerging sense of entitlement among children whereas working class children developed a sense of constraint. This sense of constraint was evident in the manner in which students struggled to plan in advance for their education or employment trajectories, and focused on more immediate decisions around the same.

To begin with, future decisions were contingent upon first passing the10th standard board exams, and on how well one could score on these exams. As Ambika, a retail student, astutely observed, costs of education were related to marks obtained in exams, since higher marks would increase the chances of obtaining scholarships (S. Padmanabhan, personal communication, December 28, 2017). Others also stressed the need to focus on their 10th standard board exams before they took any decisions regarding the future course of action.

Even opting for the skills subject and dropping the third language of Hindi or Kannada in the process was seen to factor in the immediate concerns regarding the secondary school examinations. The skills courses were introduced as a means to improve the employment opportunities of students; however, the reasons presented by students for opting for the skills course were often not in line with the intended goal of the skills policy. Most students said they chose the subject because they wanted to drop their third language. Many of these students had either Tamil or Urdu as their first language and found Hindi and Kannada difficult as a subject. Kannada medium students felt that Hindi was not significantly

useful for them, that they would have to drop it as a subject after the 10th standard anyway and felt that the skills subject was easier to score marks in.

Scoring marks is the main marker of success in these schools and teaching is also oriented in a manner so as to achieve the maximum pass percentages. *Performing well* was rooted the idea of rote learning, which has been noted earlier for many other government schools (Vasavi, 2015). Since teaching-learning strategies themselves involved repetition, both in writing down the same set of notes or answers or verbally reiterating sections of text, assessments also involve reproducing notes that have been previously taken down in class. Succeeding in schools is contingent upon the ability to rote learn. The skills subjects are meant to have a majority practical component, which is generally considered easier to score marks on when compared to the theoretical sections of the course, by reducing the sheer volume of syllabus that has to be rote-learnt for written examinations.[18] This allowed students to feel they could pass the subject more easily, and the trend in schools also revealed better performances in the skills examinations as compared to other subjects. In some cases, it was found that though students performed extremely well on the skill subject examinations, they ended up failing in other subjects.

Since passing the 10th standard examination in itself is uncertain for these students, and the dominant culture of schooling emphasizes examination results as a marker of educational success, the decision to opt for the skills subject is also taken with these considerations in mind. It is not necessarily the long-term advantages that the course may provide, of which in any case there is little information available to the students, but the immediate and pragmatic goal of passing their 10th standard exams which leads to this decision.

Planning for immediate goals were combined with uncertainty regarding the future arising through the precariousness of their everyday realities, and the kinds of constraints this produces. Conversations around future education were either unsure, lacked clarity or were dependent upon several unforeseeable circumstances A typical conversation involved multiple responses, possibilities and even contradictory statements. For example, Nabeela, a student of beauty and wellness, aspired to become a teacher since she feels there are many children who want to learn but not enough people to teach them. She said she would take up

[18] The reality on this count is however different, with classroom teaching remaining focused on theory. Refer to chapter 2 in this volume for details on curricular design.

commerce in PUC, and asked the interviewer what subjects this comprised and upon being told this would include business studies, accounts and mathematics, she promptly changed her decision to PUC with science as she would get to work in labs (S. Padmanabhan, personal communication, December 15, 2017).

Another student Hemant who had taken up retail said he would have much rather taken up IT as a subject to become a software engineer, but it was not offered to the Kannada medium students. He then said his father wants him to study retail since he feels it would prove useful for eventually managing the family business of selling bananas at the local market. He then reconsidered his response and said he would opt for retail even if given the choice. In terms of higher studies, he said he would join an ITI or maybe take up the science stream at PUC, but after some thinking, said he would leave it up to his father to decide. Even though he wishes to move away from the family business, and discontinue retail, he says he would maybe prefer some path that would allow him to study both retail and IT as subjects (S. Padmanabhan, personal communication, December 28, 2017).

Several students responded in this manner and even when they told us they would take up ITI or diploma courses, they were unsure what these entailed. Even students who were sure of what they wanted to do after school, and articulated nuanced responses about the relative benefits and disadvantages of various subjects and courses, expressed the conditionality of their decisions on external factors. For example, Vinay, who had opted for the automobile course explained how he would like to eventually open a business of some sort but that the practical nature of the skills offered by the automobile course enabled him to acquire skills for a whole range of jobs, from a lower level job at a local garages to the service technician role in bigger companies or even opening one's own garage. This, in his opinion, offered him a kind of flexibility to drop out at any point during the course and still manage to get a job. He would need this as a constant backup plan while he pursued higher education, since he felt the financial circumstances at home could change at any point. In the same conversation, he told us that this was a kind of flexibility that the IT course did not offer, since one would have to be highly proficient at the subject before getting a high-level 'company job'.

This particular example encapsulates not only the precarity experienced by students due to their socio-economic contexts and how this operates in decision-making but also the

nature of rationalization that students offer based on their own understanding of subjects and skills

Decision making for students is not as linear and organized as the policy may expect. It happens in very diverse ways, arising from multiple kinds of rationalizations and intertwined with aspirations as well as constraints. They are however common in their dissimilarity from middle class sensibilities of planning for the future. The precarity of context is seen to create an uncertainty which makes decision making less secure, and more immediate and contingent.

Aspirations for social and cultural mobility

Student responses around what they believe the skills courses prepare them for, reveal how these influence their aspirations for upward mobility, and the social and cultural markers of status embedded within these. These aspirations in many cases do not necessarily align with the actual job roles that skills courses train for but at the same time the introduction of the courses have created ideas around potential opportunities that may be made available at later stages.

In the beauty and wellness course, for example, a few girls said they aspired to become engineers or policewomen earlier but that with this new course, they were now also interested in opening beauty parlors as a side job. The reason they opted for the course arose from having been told that opening a beauty salon could always work as a backup job option but also from an excitement at the idea of being able to do manicures, pedicures and facials for others as well as themselves. Most of the girls interviewed said they enjoyed these activities and had begun to practice on themselves and their friends but also realized that their knowledge of the subject was limited and insufficient to get them jobs unless they opted for further professional training.

Long term considerations in general were not seen to factor into choices, though the ways in which the usefulness of the courses was construed, or justified, were interesting to observe. Students who realized that the health course would be inadequate as foundational training to become nurses or doctors mentioned that the course was still useful because it taught them a general awareness of their own bodies and simple remedies or procedures to be followed when someone at home fell sick. Some girls in IT said basic computer skills were useful in an everyday sense since they would help in booking bus and train tickets and filling up of online applications.

While in the former example, the beauty course does not serve any purpose beyond a novel leisure activity for some, in the latter, the skills received are seen from the point of view of everyday usefulness. It is worthwhile to note in both sets of examples that such skills were also considered valuable even if this may not be the most befitting avenue to learn them as opportunities for learning these may not be easily available otherwise. Another point that strikes one is the realistic or pragmatic approach of students to their own aspirations with a clear sense of the limits that dictate their attainment.

In one instance, a few girls who had taken up the automobile course, expressed their surprise at the unpleasant nature of work in a garage after watching manual work being done in a garage during a field visit. They were worried that they would have to do similar work, but their trainer reassured them saying they would have different jobs for girls which would involve sitting at the reception desk. The program document does not make any such gender distinctions for job roles, and in fact mentions the need to actively challenge gender stereotypes associated with different kinds of jobs. But the experience of students displays an evident socialization into gendered notions of work, which was being reinforced in institutions. There was an implicit gendering of skills subjects by schools, which was directly or indirectly imposed, and was visible in the distributions of students among courses. Automobile was seen to be dominated by boys, and healthcare largely by girls, while the beauty and wellness course had only girls across all schools observed. Retail and IT in comparison were relatively mixed. In general, as well, schools were seen to encourage a certain degree of separation between boys and girls, having them sit in a segregated fashion in classrooms and assembly.

The strong gendered socialization of students was seen to come into conflict with the cultural implications of the intended benefits of skills courses. For example, Madhushree in level 2 retail, who was desperate to finish her 10th standard exams and start working so she could support her family financially, expressed her reservations about working in a ‘mall job’, in reference to the sales associate job role offered under the retail subject since it would require her to wear jeans. While she would choose to stand up to her brothers who she says would beat her for even wanting to work in the first place, she was unwilling to go against her parents’ wishes and dress in jeans even if this meant it could get her a job (personal communication, December 13, 2017). The negotiation of gender roles is not straightforward in this case, where Madhushree chooses to challenge the gender stereotype about women

working outside the house but is not comfortable with the idea of protesting clothing norms. Yet even this assertion for her constitutes mobility.

In another example, Ambika, whose father works as a construction laborer, and mother at a housekeeping job in a company, once worked as a house help at an apartment complex over one summer, and expressed her dislike towards the job which involved cleaning several rooms, and other household chores. She got paid INR 250 for it, of which she gave INR 200 to her parents and kept the rest for herself. She mentioned that her brother had been offered a job for dog-walking and feeding in the same apartment, which he was not interested in, but she would not mind taking that up. It would also pay INR 1500 per month (S. Padmanabhan, personal communication, December 28, 2017). In a context where girls are already expected to engage in housework, tedious domestic chores which pay low wages are not a desirable option for Ambika; even though her brother rejected it, dog walking becomes an attractive and novel opportunity for her.

Another aspect of the jobs that students were attentive to, and comes through in Ambika's example, was the nature of labor involved. Manual work has been associated with 'getting one's hands dirty' and has caste-based connotations which factors into students' aspirations to move away from such jobs. For instance, some students in automobile reflected upon the physically taxing labor involved in working in garages and thought that retail jobs would be easier in comparison. Interviews with industry personnel echoed a similar view, noting that young people do not want to engage in such labor and there was a much higher preference for desk jobs such as receptionists or customer service staff.

Meenakshi comes from a family of laborers, who she admitted are finding it increasingly difficult to support her education. She took up IT since she feels it provides useful skills for jobs in the future, and she has a desire to study it privately as well, and eventually become a teacher. She reflected upon IT jobs which in her opinion involved sitting and working at a desk in front of a computer and she supposed this would be *aaram* or relaxed (R. Maithreyi, personal communication, December 5, 2017).

Retail has similarly been associated with 'mall' jobs without much clarity on what kind of job roles this might entail. Mall jobs are associated further with a clean, glamorous, air-conditioned environment, the ability to speak in English, and knowing how to communicate fluently with customers.

Some anxieties around the ability to *fit in* were expressed by students, notably in discussions of IT-related jobs which were termed as office or company jobs. Sushmita, an IT student working towards becoming a software engineer, came from a relatively educated family background. She remarked that a job at Infosys or Wipro was about working in big offices, dressing and speaking well, talking with lots of knowledge, researching topics correctly, talking and connecting with people over the phone, and getting work done perfectly along with the autonomy and flexibility. She simultaneously spoke of her apprehensions around the need to greatly improve her computer skills for this, work hard and learn as much as possible through observation (R. Maithreyi, personal communication, December 5, 2017). The attributes referred to here, appear to revolve around self-motivation, adaptability, possessing social and networking skills and acquiring knowledge that is currently inaccessible.

While skills subjects and related job roles by themselves may not be aspirational for students, there are clear associations that are made with these jobs, and these markers point at an aspiration towards upward mobility. This idea of mobility in itself is quite complex, and is negotiated from within students' caste, class, and gender locations. Rather than speaking about economic gains, students articulated their aspirations in the language of desirable traits, behaviors or lifestyles, which were also in part to be shaped by perceptions of the skills courses.

Conclusion

Literature has shown how students belonging to lower socio-economic strata, and with the most precarious relationships with education, have limited opportunities to engage or even imagine engaging in higher education (Harwood et al, 2013). Systemic inter-generational exclusion from formal education renders students at the margins unable to imagine themselves as participants of university education; aspirations around having a better life or becoming someone through higher education are ridden with obstacles such as financial constraints or pressures to support family incomes, and also psychological concerns arising from self-doubt and a sense of otherness or not belonging to the university space (ibid.).

Student respondents also conveyed a similar lack of surety, when they named institutions and courses that they would like to attend or enroll in, but lacked clarity on how to go about these, or what such courses entailed. On the surface of it, this kind of disconnect

with the education system may be interpreted as disinterest in higher education. Similarly, the shaping of aspirations around the newly introduced skills subjects and altering of one's potential educational trajectory to align with these courses may be considered a convergence with the objectives as laid down by the skills program. However, closer examinations as elaborated in this chapter reveal the complex and dynamic nature of decision making by students as well as the important role played by the precarity of the contexts within which it takes place. Students aspire both towards higher education as well as social and cultural mobility, and would, no doubt, act upon these aspirations with certainty under more enabling circumstances. In the absence of this, they resort to navigating their immediate environment in multiple ways, but with little or no security.

Regardless of the outcomes of these strategies, the processes of decision making by students do not convey any particular affinity towards the goals or intentions of the skills program; the program, at the very best forms an additional dimension of the education system that students continue to struggle to navigate within existing constraints and cultures of schooling. The envisioning of the skills program in its current form proves to be entirely disconnected from the reality of student lives. Moreover, in its attempt to cater to industry demands by creating employable youth, it does not factor in the youth and their voices. The present profiling exposes a narrow conceptualization of students, bracketing them into a target population of educationally disadvantaged youth who cannot access higher education and are therefore expected to be willing to train for specialized industry requirements. If at all the students are to be the intended beneficiaries of this program, they need to be viewed as more than just inputs for human resource planning, in what is a poorly conceptualized and haphazardly implemented policy. In order to expand their opportunities, policy must center students as critical stakeholders, and as active capable agents with their own motivations and aspirations.

References:

Gorski, P. (2011). Unlearning Deficit Ideology and the Scornful Gaze: Thoughts on Authenticating the Class Discourse in Education. *Counterpoints,*402, 152-173.

Harwood, V., O'Shea, S., Uptin, J., Humphry, N., & Kervin, L. (2013). Precarious education and the university: Navigating the silenced borders of participation. *International Journal on School Disaffection*, 10(2), 23-44

Jackson, N. S., & Jordan, S. S. (1999). Skills Training: Who Benefits?. *Centre for Research on Work and Society*, York University.

Laurau, A. (2002). Invisible Inequality: Social Class and Childrearing in Black Families and White Families. *American Sociological Review.* 67(5). 747-76

Ministry of Skill Development and Entrepreneurship (2015). National Policy on Skill Development and Entrepreneurship. *Government of India.*

Nambissan, G. B. (2012). Private schools for the poor: Business as usual?. Economic and Political Weekly, 47(41), 51-58.

Nambissan, G. B. (2014). Poverty, markets and elementary education in India. TRG Poverty and Education Working Paper Series, Max Weber Stiftung.

Saraf, R. (2016). Skill Training or Nipping Potential in the Bud?. Economic & Political Weekly, 51(18), 17

Rogers, A. (2006). Escaping the slums or changing the slums? Lifelong learning and social transformation. *International Journal of Lifelong Education*, 25(2), 125-137.

Vasavi, A.R. (2015). Culture and Life of Government Elementary Schooling. *Economic and Political Weekly.* 1(33), 36-50

Velaskar, P. (2010). Quality and Inequality in Indian Education: Some critical policy concerns. *Contemporary education dialogue*, 7(1), pp 58-93.

Chapter 4: Neither preparing for the world of work nor offering seamless mobility – A critical examination of skilling school children for the automobile industry

Sridhar R. Prasad

India is currently the fourth largest automobile manufacturer in the world and the automobile industry accounts for 7.1% of the country's overall Gross Domestic Product (GDP). According to a study commissioned by the National Skill Development Corporation (NSDC) on skills gaps across 24 emerging sectors of Indian economy with automobile sector being one of them, traditional vocational training courses such as those offered by Industrial Training Institutes (ITIs) and polytechnics alone are not sufficient to meet both the quantity and quality of skilled labor required by these sectors (KPMG, 2013). In 2009, a National Skills Development Policy (NSDP) was formulated to provide a framework to help meet the skilling demands of these emerging sectors. Under this policy, the centrally sponsored scheme of Vocationalisation of Secondary & Higher Secondary Education (VSHSE) by the Ministry of Human Resource Development (MHRD) was also expected to bridge the skilling needs of these emerging sectors. The KPMG-National Skill Development Corporation (NSDC) study also identified shortages of labor across different skill levels and sub-sectors within the automobile industry (car manufacturers, auto component makers, dealerships and service centers) but highlighted that one of the most challenging shortages to fill was the cheap and minimally-skilled labor needed in a service center since this job role is at the very bottom of the automobile industry value chain. Thus, the choice of skilling school children for the job role of an automobile service technician under the VSHSE scheme is an attempt to fill this lacuna of blue-collared jobs in the automobile industry. As per the VSHSE scheme, each school is provided with a flexible budget of INR 14.5 lakh per annum for imparting four years of vocational skills training covering both secondary and higher secondary schooling (MHRD, 2014).

The central argument of this chapter is that the VSHSE scheme is neither catering to the industry's expectation of work preparedness nor is it enabling a seamless pathway for academic mobility in the automobile sector. The auto service technician vocation course taught in secondary and higher secondary government schools is fraught with several deficiencies, especially with regard to the curriculum design, training methods and imparting practical skills. The chapter also questions the heavy budget allocation towards skills training that instead could be better utilized for improving the quality of mainstream education so that

students can strengthen their foundation upon which they can subsequently build vocational skills should they so choose.

Urban mobility is classified as either automobile-dependent, mixed transport (which includes a mix of walking/cycling, private automobiles and public transport) or car-free. (Pai, 2010). Until the last decade, most Indian cities had a reasonable balance of mixed transport systems (Ravi, 2011). However, as the aspirations and incomes of urban residents in India continued to rise, more people were able to afford what is considered to be the most desirable and attractive mode of mobility—the car. Automobile dependence is an "irresistible force" (Lave, 1992). The unplanned urbanization of Indian cities coupled with inadequate public transport further skewed the balance in urban mobility towards automobile dependency. The Indian automobile industry grew exponentially to become the fourth largest automobile market in the world with the highest increase in year-on-year sales of passenger vehicles. The Indian auto industry is no doubt playing a big role in India's economic development. However, economic development needs to be balanced with the negative impacts of increased motorization such as air pollution, congestion and road safety.

According to the Automotive Mission Plan 2026's Vision 3/12/65 as envisaged by the government of India and the Indian automotive industry, by 2026, the industry aims to be among the top three in the world, growing in value to over 12% of India's GDP and generating an additional 65 million jobs (Society of Indian Automobile Manufacturers, 2016). This will result in a very lop-sided labor supply-demand scenario, thus creating a huge need for both skilled and semi-skilled labor in the automobile industry.

A school-oriented, ethnography-based, research was conducted for one academic year from June 2017 to March 2018 to study the VSHSE scheme in the state of Karnataka. As a part of this study, we applied three techniques: (i) classroom observations of the automobile service technician skills course across four government schools in Bengaluru and Mysuru, (ii) analysis of the curriculum, and (iii) analysis of the detailed interviews with key stakeholders - skills trainers, students, parents, authorized service center managers, local garage owners and representatives from the vocational training partner (VTP).

Skills Learnt, Work Preparedness and Industry Perspective

While most of the skills trainers have been hired by the vocational training partners (VTPs) as per the guidelines laid out by the scheme and the sector skills council, it is

interesting to note that very few trainers came with relevant work experience from the automobile service industry. A majority of the trainers had completed undergraduate or postgraduate degrees in mechanical/automobile engineering, but their work experience is from business functions as diverse as vendor management, quality and human resources (personal communication, January 16, 2018; January 18, 2018). From classroom observations, it was evident that the trainers had a reasonable grasp on the theoretical concepts but during field visits either to service stations or automobile laboratories, the onus of describing the servicing procedure, latest technologies, or the vehicle system architecture was more or less left to a member of the service station/laboratory staff. For instance, during one of the field visits to a local service station where students were witness to a mechanic servicing a car chassis, while the trainer limited his explanation to how the chassis functions along with identifying it's key sub-components, it was the mechanic present there who vividly shared with the students the different types of damages to the chassis that could potentially occur and the procedures/safety precautions to be followed while drilling and welding a chassis frame (personal communication, October 26, 2017).

Many of the teaching methods employed by the trainers also seemed ineffective in imparting skills knowledge to the students. In several instances and across schools, we observed that trainers would frequently rely on videos sourced from global car manufacturers to better describe the inner workings of an automobile system. In these learning videos, an engineer from either BMW or Mercedes Benz would speak in English with a heavy German accent, making it almost impossible to comprehend for a classroom of students in which more than half study in Kannada medium (personal communication, September 12, 2017). Another phenomenon frequently observed in the classroom was that most trainers emphasized the learning of technical keywords and their respective definitions through repetition and memorization without any attempt to ensure that the underlying physical concepts were understood well. During subsequent revision classes, students would randomly recollect a few of these technical jargons committed to memory without any real understanding of the contexts in which they were supposed to be used.

Most schools lacked a dedicated automobile laboratory where students could directly be in contact with vehicle hardware and hone their practical skills, an extremely vital attribute of an automobile service technician. On the other hand, a typical lab would just be a cupboard or two in which vehicle servicing and measurement tools along with a few vehicle components are stored. Some of the schools also had an old two-wheeler from which a few

vehicle parts could be disassembled and re-assembled. The trainers informed us that students belonging to levels 1 and 2 (classes 9 and 10) get to visit nearby service stations or local garages about four to six times a year but admitted that the experience isn't sufficient for them to learn the basic servicing procedures and be exposed to the automobile service industry working environment in general. The course also mandated a few guest lectures from industry representatives to fill this gap. However, the trainers opined that like in traditional vocational courses such as ITI or a diploma, the skills course offered under the VSHSE scheme should also lay more emphasis on hands-on training. They felt that students would learn much faster when they actually touch and feel the components and regularly disassemble/reassemble them. One of the trainers remarked, "The learning across the four levels of the National Skills Qualification Framework (NSQF) as outlined under the VSHSE scheme can at best reach only up to 75% of what is learnt in an ITI". According to him, traditional vocational courses focus more on practical skills thus making students skillfully employable in the truest sense (personal communication, March 2, 2018).

In a few field visits to the service stations that we accompanied the students of levels 1 and 2, we observed that the trainers would walk around the service station picking up random sub-components, auto parts, servicing tools and asking the students to identify them and explain their functionalities. The students would be reprimanded if they touched any hardware. The field visit entailed a very quick and superficial walk through of all the various automobile service-related departments. On most occasions, the students wouldn't pay much attention to what the trainer was explaining and instead seemed more interested in what the resident technicians were working on. For them, it seemed that these field visits were more like an outdoor picnic than an opportunity for technical training (personal communication, October 26, 2017). One of the guest lectures by a so-called industry expert (who was in fact a junior sales executive and the trainer's friend) began with him writing *Automobile* on the blackboard in illegible handwriting. He then spoke about the genesis of his company, the various models and their advanced features like navigation systems, airbags, braking systems and the minute a few photos of him giving the presentation were taken by the trainer, he walked across and sat down next to the students and the remainder of the 'guest' lecture was conducted by the skills trainer himself (personal communication, November 9, 2017).

A principal of a reputed ITI who has frequently interacted with VSHSE students told us that the practical training provided to these students isn't very rigorous and that these skills can't be gained in a day or two through field visits. He felt that these students are only

scratching the surface and to really master automobile servicing techniques, one needs to spend at least four hours a day in a workshop or a lab. The students can acquire practical skills on repair maintenance and overhauling only through modern training aids like dynamic cut section models and practice vehicle units. Stating this, he further elaborated with the following example: These students may have perhaps seen a bore during one of their field visits, he said, but to repair it, one needs to also be familiar with how to use a telescopic gauge. If they are not, it makes the skills they have acquired rather incomplete (personal communication, March 1, 2018; March 2, 2018).

A veteran supervisor from a reputed service station who reviewed the VSHSE curriculum felt that it emphasized more on academic/theoretical topics such as the history and evolution of automobiles, engine design, principle of gears, innovation in engine technology, and this had the potential to lay a solid foundation for a student to pursue a higher general education degree such as automobile engineering and not be limited to only a service technician's job role. For a service technician's job role, he felt that the course should be structured in such a manner that 80% of the time is dedicated to gaining practical skills and the remaining 20% on theoretical concepts whereas according to him it seemed just the opposite with regard to this course (personal communication, December 12, 2017).

Another seasoned service mechanic who owns a local garage told us that vehicle repair, maintenance and servicing can best be learnt by spending hours together in a garage or service station. Insufficient exposure to hardware (and by that he meant opening up vehicle parts, inspection, visualizing failure modes, diagnosis, root cause analysis and working with servicing tools) can result in a huge gap between skills acquired from within the confines of a classroom and what is really required to service a vehicle in a garage. A few students admitted that the only service-related work that they could perhaps perform independently is changing the engine oil while other basic service work such as changing air and fuel filters would require them to spend a lot more time learning on the shop floor (personal communication, May 30, 2018).

Interestingly, an analysis of the VSHSE curriculum reveals that the total class hours allocated towards on-the-job training is only 50 out of 250 hours (20%) for levels 1 and 2 and 50 out of 350 hours (15%) for levels 3 and 4. Almost all the trainers echoed that the 50 hours allocated towards on-the-job training is simply not enough and that it should be increased in the curriculum itself. The service-related workbook provided to students seemed to be

following an approach of gaining practical skills through a theoretical framework. It recommends course exercises such as listing the tools used, drawing cross-sections of the component to be serviced, watching service manual videos, listing the steps to be followed while servicing a component and safety precautions to be taken. While a theoretical foundation is vital, it cannot be at the cost of acquiring practical skills. As part of on-the-job training, most students were given a live demonstration of servicing a specific component or a system by a service technician and a one-time hands-on opportunity to experience the servicing procedure taught to them in the classroom. Since there is no lab facility available in the school for conducting the year-end practical exams, the students end up being primarily evaluated on skills such as identifying various servicing tools and sub-components.

In one of the schools we observed, the school authorities had tied up with a nearby local garage to provide students with the requisite 50 hours of on-the-job training. The students were split into groups of five each and the groups took turns in working at the garage once every three days. At the end of this training, two students were identified by the garage owner for an extended apprenticeship wherein they could further hone their practical skills by working every day for three hours after school (personal communication, January 17, 2018). We had a chance to talk to this garage owner who informed us that he would like to offer a service technician's job to these two students once they complete their 12th standard. He said that his decision to offer them jobs was not based on what they had learnt in their skills coursework but on his own assessment of the practical skills that they had gained during their apprenticeship in his garage (personal communication, January, 18, 2018).

A few representatives from the VTPs (private agencies responsible for managing the skills courses in government schools) that we spoke to said that most automobile service stations and dealerships have their own mandatory in-house training programs for new recruits and even though these recruits might have completed a National Skills Qualification Framework (NSQF)-certified course of an automobile service technician during their secondary schooling, they will still be required to undergo their training along with the rest who may not have opted for the skills course during their schooling (personal communication, October 16, 2017). Both the principal of the ITI college and VTP representatives had one point to highlight in common: the demand for labor in the automobile service industry far exceeded the supply and hence, the industry was willing to make concessions and hire even low and semi-skilled labor for entry level roles.

It was revealed during an interview with an authorized service center manager that traditionally an ITI degree (in mechanic motor vehicle) used to be the minimum qualification that the service industry would consider while hiring an automobile service technician. Most service stations used to have a formal tie-up with an ITI wherein the ITI would send its students to complete a six-month internship mandatory for students before they graduated from the course. The graduates from this internship program used to be a reliable pool of potential hires. However, these days only students with a poor academic track record pursue an ITI course and most of them opt for courses related to electronics or information technology. Among those who choose the automobile stream, a majority of them either directly go on to studying a diploma course in automobile engineering or resign within one or two years of their joining a service station to pursue a degree. A significant percentage of ITI graduates also choose to change the stream itself. He said that they receive many more resumes for roles associated with sales and customer care when compared to servicing/repair jobs. The sales and customer care roles are seen as white-collar jobs with the work mostly happening in air-conditioned office rooms whereas servicing/repair roles are seen as blue-collar jobs with the work mostly happening in the shop floor area. Willingness to learn, dedication and commitment to working in an auto service station environment have now become more critical attributes than the practical skills acquired from vocational training. In job interviews with potential candidates, the service manager we interviewed makes it a point to assess candidates on their personal attitude, future goals, commitment levels and salary expectations, rather than on the candidates' practical skills which he believes can be honed once candidates come onboard. He highlighted that in any case the gap between the service industry requirements and VSHSE can never ever be fully bridged due to inherent differences that exist in vehicle servicing procedures and toolkits used by any two automobile makers and also continuous innovation in vehicle technology. According to him, it becomes inevitable for the service station to invest in a few months of in-house training and hence, they are willing to hire potential candidates even with minimal practical skills and auto servicing procedures. He was open to considering even candidates who had completed only Levels 1 and 2, as long as they were above 18 years of age and willing to work as apprentices for six months before being confirmed as full-time service technicians.

One advantage of the VSHSE course that he highlighted was that (unlike an ITI course) the basics of automobile engineering are taught alongside other courses such as physics and maths. So, students are easily able to relate to physics-based concepts such as

friction, heat transfer and coolant that are frequently referred to in automobile engineering. He felt that a good student is able to appreciate the intersection between these subjects and this helps in strengthening fundamentals. However, an ITI student is introduced to the principles of automobile engineering only after he has stopped learning physics and maths (up to tenth standard). Hence, there is a tendency for ITI students to have already forgotten the key physics-based concepts when they are referred to during their coursework and this could result in a poorer understanding of the fundamental principles (personal communication, March 1, 2018).

Interviews conducted with local garage owners tell a slightly different story. The local garage owners that we spoke to firmly believe in hiring service technicians only through personal recommendation with someone vouching for a potential candidate's character and work ethics. They also felt that these attributes are far more important than the practical skills one may have acquired through a course. They believe in learning on the job and working under the guidance of an experienced service technician on a daily basis. They feel that through this approach one not only learns the standard procedures to be followed for repairing/servicing but also many other shortcut techniques that have evolved through experience (personal communication, May 30, 2018).

One of the garage owners said that many of the service technicians with a formal vocational training employ only pre-defined ways of servicing and diagnose the problem using one particular approach. He said that when a component fails, one needs to do a thorough root cause analysis by exploring all possible failure modes and that's where formal training can sometimes become very limiting. He said most formally trained technicians are very good in theory and are able to explain the functioning of a system to customers very well, but they do not have enough practical skills to perform a good "repair" job. He also stressed on the difference between a "repair" job and a "replace" job. He said that replacing is an easier solution but is often very expensive for customers whereas repairing is an art by which one can extend the residual life of a component with only an incremental cost to the customer. He felt that the art of repairing only comes with experience gained from working on the shop floor whereas replacing is something that can be easily learnt sitting in a classroom. He lamented that most students these days were being prepared for what he termed as replacement technology and not repair technology. He also informed us that they have been facing a severe shortage of labor in the unorganized service sector for the last decade or so since most youngsters prefer retail or the fancier *app-based* jobs. He ended by

saying that he is more than happy to train a committed candidate with a strong willingness to learn–VSHSE-trained or otherwise (personal communication, May 30, 2018).

Academic mobility with multiple entry and exit points?

One of the visions of the VSHSE scheme is to strengthen the hitherto weak provision for vertical progression in vocational education, and to ensure that students graduating from VSHSE are able to gain entry into mainstream higher education, including degree-level courses. A student should have the option to move from the vocational stream to the general education stream or vice versa at various stages, as provided by the school boards, universities and colleges. However, our field studies revealed that the new skilling pathways as conceived by NSQF have, in fact, made academic mobility more limited, complex and perhaps even tortuous for those pursuing VSHSE. This can be better illustrated by following the academic trajectories of a few students who pursued vocational education under the VSHSE scheme.

After completing his tenth standard/automotive service technician Level 2, Praveen Kumar was interested in joining a polytechnic institute to pursue a diploma course in automobile engineering as he wasn't sure if levels 3 and 4 (of the VSHSE) would be offered in any composite re-university college (PUC). However, once these higher levels were confirmed, he dropped the idea of enrolling in a diploma course and instead enrolled in a PUC. He opted for the science stream because he was very keen to pursue an automobile engineering degree course soon after his second year of PUC. As per the guidelines issued by the PUC Board in Karnataka, he could drop either of the two language courses and instead choose the automobile skills course. Praveen chose to drop English because he was finding the course tough and he had anyway studied in English medium till the tenth standard. Upon completion of the second PUC/automotive service technician level 4, he decided to write the state's entrance examination for seeking admission in engineering courses. Subsequently, he was informed by the relevant examination board that as an English medium student, the eligibility criteria required him to have also taken the English language course in the absence of which he was disqualified from seeking admission in any engineering college. What further compounded Praveen's agony is that unlike ITI graduates who have an option to directly seek admission to the second year of the diploma under the lateral entry scheme, Praveen had to seek admission to the first year of the diploma course, something which he

could have done two years earlier, upon completion of his 10th standard itself. Praveen ended up losing two full academic years (personal communication, January 16, 2018).

Another case study is that of Madhukar who, like Praveen, enrolled in PUC but opted for the commerce stream. He was very keen to pursue a vocational degree course (B.Voc) in automobile servicing after completing the four levels of the skills course (personal communication, January 16, 2018). All students pursuing either the arts or the commerce stream are ineligible to pursue engineering courses (open only for students from the science stream). A B.Voc degree course becomes their only option for vertical mobility if they wish to continue on the automobile servicing skilling pathway. Under the VSHSE scheme, the percentage of students belonging to arts and commerce streams is significantly higher than the science stream because most of them are unable to obtain the cut-off marks required to pursue the science steam. However, in smaller towns, there aren't many colleges in the vicinity which offer relevant B.Voc degree courses for vertical mobility, and the few that do charge prohibitive tuition fees. The lack of feasible options leads students such as Madhukar to drop out from the vocational skilling pathway altogether and pursue a mainstream education degree. In this scenario, the onus of figuring out the various possible mobility pathways completely falls upon the student and, in some cases, it has also led to loss of precious academic years, additional financial burden or altogether dropping out from the skilling pathway.

All of these mobility failures stem from two main reasons: one, the lack of adequate information and preparation of the state level machinery (which includes state departments, schools, colleges, etc.) to implement the scheme in its entirety and a lack of foresight, and two, planning that can pre-empt hurdles or entry level barriers that one could face while navigating the various intersecting pathways between vocational courses and mainstream general education.

Conclusion

Our ethnography-based study of the automobile service technician skills course currently being taught under VSHSE has revealed that the scheme neither prepares students for entering the world of work nor provides them with seamless academic mobility to pursue a vocational stream after completion of their higher secondary education.

Challenges such as establishing or equipping laboratories for practical skills development and allocation of financial resources for effective delivery in schools persist. In the absence of lab infrastructure that is in line with the latest industry standards, students tend to acquire only a superficial theoretical knowledge of automobiles and their functioning without building a practical understanding of different failure modes, repair technologies and servicing procedures. Thus, most employers continue to have their own in-house and customized training courses to skill fresh recruits irrespective of the vocational/educational background they come from.

The skilled labor demands of the automobile service industry can instead be met by enhancing the lab infrastructure in the existing ITIs. In parallel, the current ITI curriculum could also be transformed to include mainstream academic subjects such as a language and another subject from arts, science or commerce streams so that it better aligns with the holistic skilling requirements of the automobile service industry.

It is clear from the study that the VSHSE scheme neither provides employment to youth nor meets the exact skilling needs of the employers in the automobile industry. This might be true for other industries of similar nature as well. This raises questions about the need to reconsider whether these courses need to be continued or dropped altogether as part of the VSHSE.

In our opinion, in the context of secondary education, the government should concentrate on providing quality general education up to the secondary schooling level and only include vocational guidance by sensitizing students about dignity of labor, work ethics and vocation-based career options so that they are more equipped to plan their future pathways upon completion of secondary education. Skills training cannot be at the cost of providing quality elementary and secondary education especially at a time when there have been massive budget cuts in general education. The first 10 years of schooling should focus on building a strong foundation that revolves around reading, writing and arithmetic skills on which vocational education and training can subsequently be built. If students do not acquire these basic skills during their schooling years, they will not be able to acquire these later, however skilled they might eventually become.

References

KPMG. (2013). *Human Resource and Skill Requirements in the Auto and Auto Components Sector.* National Skills Development Corporation (NSDC).

Lave, C. (1992). Cars and Demographics.

MHRD. (2014). Revision of the Scheme of Vocationalisation of Higher Secondary Education (F. No. – 10-4/2012-VE (pt).

Pai, M. (2010). Retrieved from http://www.embarq.org/en/india-transport-indicators

Pai, M. (2010). *India Urban Transport Indicators.* EMBARQ.

Ravi, A. (2011). Urban India 2011: Evidence. *India Urban Conference.* New Delhi.

Society of Indian Automobile Manufacturers. (2016). Retrieved from http://www.siamindia.com/uploads/filemanager/47AUTOMOTIVEMISSIONPLAN.pdf

Chapter 5: Marginalizing youth through skilling - Understanding the vocational subject of healthcare

Anusha Iyer

The Healthcare Sector Skills Council (HSSC) is a not-for-profit body financially supported by the National Skills Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship (MSDE) that was created with the objective of promoting vocational education and skill development in the healthcare space (Healthcare Sector Skill Council, 2013). In 2015, HSSC mapped the entire healthcare industry from the demand as well as the supply side by drawing inputs from multiple stakeholders such as representatives from the government, healthcare industry associations, skill training institutions, academia, non-governmental organizations, etc. An analytical report was prepared as an outcome of this exercise by KPMG in collaboration with the NSDC and the MSDE that forecasts the demand and supply patterns of the healthcare industry for the next five years and also indicates the various skill gaps existing in the health sector (henceforth referred to as the HSSC report). The findings from this report would form the contextual background for the current chapter against which evidences from the field shall be posited questioning the introduction of skilling as a concept into the higher education system.

As mentioned earlier, under VSHSE, the education department at the state government level was expected to identify the priority sectors for their respective states and the corresponding skill sets required in those sector areas. Accordingly, the state of Karnataka identified five trade areas namely healthcare, IT, retail, beauty and wellness, and automobile. The sector chosen for this chapter is the healthcare sector under which the students of government schools in the state of Karnataka are prepared for a job role known as the General Duty Assistant (GDA). This chapter is an output of the year-long field study involving a series of classroom observations and interactions with students, teachers, skills trainers, vocational training partners and potential employers from the healthcare industry. The chapter attempts to question the choice of GDA as a job role as selected by RMSA Karnataka while also examining the preparedness of the students for the said job role.

After providing a context of the healthcare sector in general, the chapter begins by drawing a picture of the healthcare scenario specific to India to understand the current demand patterns and skills gaps in the sector. The second section then tries to unpack the role

of GDAs while also shedding light on the precarious and decontextualised nature of GDA as a job role in the Indian context. This section aims to establish GDA as a poorly defined job role with lower technical precision and lower career mobility, hence questioning its choice by RMSA Karnataka. The second section illustrates that even within the limited understanding of GDAs as gathered from the field and secondary sources, the students are not being prepared to be employed as GDAs in the Indian healthcare industry. The third and the final section tries to understand the implications of the VSHSE on the lives of the students. Given the uncertain role of GDA in the market on one hand and the unpreparedness of the students on the other hand, the chapter concludes that the introduction of this kind of skilling courses in the secondary schooling system ultimately reproduces the existing caste, class and gender connotations associated with the workforce of the healthcare industry.

Context

The HSSC report positively states that the healthcare sector in India is a burgeoning industry with a projected increase in the demand for a strong workforce. In 2015, the Indian healthcare sector became the fifth largest employer in the country (KPMG, 2015). There has also been a notable investment made by the central government into the healthcare sector to assure its rapid growth. Healthcare had been made the focus area of the 12th Five Year Plan and was allocated USD 83 billion under the same. An additional budget of INR 4727 Crores had also been budgeted for medical education, training and research as well for the purpose of promoting institutions for medical advancement by the Ministry of Health and Family Welfare at the union level (KPMG, 2015). Various initiatives have been undertaken by the central government that include opening of medical colleges, increasing the number of institutes for vocational training, setting up of regulatory authorities and developing training infrastructure. The introduction of the NSQF subject as an optional subject into the secondary education system in the state of Karnataka is one such initiative to ensure that students are prepared for job roles within the healthcare industry.

For the understanding of this chapter, it is first essential to understand the nature of job roles currently existing in the healthcare sector. While there are various typologies of categorization of the job positions within the healthcare space; the current chapter would stick to the one determined on the basis of application of medical knowledge. The first category of services involves treatment of the patients and curing their illnesses that directly translates into provisioning of healthcare-based services. These services include diagnosis,

treatment, provision of medicines, pharmaceutical services, laboratory services, etc. The second category of services do not directly involve the application of medical knowledge but are used for making the lives of the people more comfortable. These kinds of services are more an outcome of changing lifestyles, demographic patterns and increasing purchasing power of the population in recent times as has been stated in the HSSC report. Interactions with potential employers from the field also revealed that there has been a change in the way people perceive healthcare that does not arise from the need for treatments but is fueled by lifestyles and increasing purchasing power of the Indian population.

While stating the obvious fact that the size of the healthcare would constantly keep expanding with the increasing population size, it was also critically pointed out in these interviews that "nowadays people rush to the hospital for the smallest of the things." This has given a rise to the need for a non-medical workforce as well that focuses on the comfort, safety and protection of the patient, rather than the treatment of the patient. These services include aspects like caregiving, advice on healthy living and/or services related to monitoring of health status. This distinction of job roles was made clearer in an interview with the head of human resources at a large-scale multi-specialty private hospital in Mysore who coined these two categories as 'medical' and 'non-medical' job roles (personal communication, March 1, 2018). According to him, the medical side of the hospitals included the positions of doctors, paramedics, nurses and technicians while the non-medical side includes the positions of caretakers, receptionists, security, etc. In order to understand the position of GDA within this broader categorization of healthcare services, let us first understand the current demand patterns of the medical and non-medical jobs of the healthcare sector.

Overview of demand trends of healthcare sector

The type of job roles that are demanded of the healthcare sector, in today's time are largely the mainstream and high-skilled jobs that includes doctors, nurses and midwives (refer to Table 9 below)(KPMG, 2015). As explained earlier, these positions mainly fall under the medical side of the industry thus pointing towards the need for a workforce engaged in direct medical practice. Another report brought out by the NSDC showed that among the various sectors within Karnataka, the requirement for 'highly skilled' workers was the highest in the healthcare sector and the requirement for skilled workers was the second highest in the healthcare sector (ICRA Management Consulting Services Limited, 2013). Further, healthcare was one of the three sectors that had zero requirement of minimally

skilled workers in Karnataka. Not only is the demand projected for 'highly skilled work' higher within human power planning documents such as the HSSC report, but field informants also corroborated the greater need for highly skilled, rather than minimally skilled workers within the health industry.

The administrative medical officer of a Community Health Centre (CHC) in urban Mysore mentioned that there are more vacancies for doctors in his center than paramedics and nurses and thus the need for GDAs was completely out of question hinting towards the fact that GDAs are on a lower rung than even the nurses (personal communication, March 1, 2017). He said that the lower rung of their staff was 'full and has more than enough workers.' Although there is very little clarity on the kind of job roles that fit into each of these categories of skilled, highly skilled, and minimally skilled; it can be reasonably hypothesized that doctors, nurses, technicians, and medical researchers, who mostly require formal post-secondary education, fall under the highly skilled job category. Hence, most of the jobs on the medical side are understood to be the skilled category jobs while the non-medical jobs that involve no direct application of medical knowledge fall under the minimally skilled jobs. Thus, positions such as GDA under the non-medical job list require limited technical knowledge with more emphasis on soft skills and a minimum educational requirement of completion of secondary schooling and are thus not much in demand.

It is also important to highlight that while the healthcare industry involves various tiers of jobs, the HSSC report has limited its analysis to a sub-category of occupations known as the Allied Health Professionals (AHPs). The HSSC report describes AHPs to be a group of job roles that provides supportive healthcare services pertaining to the mainstream services of diagnostic, treatment, counselling, dietary, rehabilitation, and health management system. AHPs are also alternatively known as the paramedical staff (Health Sector Skills Council, 2013). As defined by the American Medical Association, they are 'health related personnel who fulfil necessary roles in the healthcare system including assisting, facilitating and complementing the work of physicians and other healthcare specialists' (Douglas, 2004). Since AHPs are largely understood to be supportive staff to the mainstream healthcare system, there are certain job roles within the AHPs that are on the medical side and certain job roles that are on the non-medical side. It has been clearly stated in the report that GDAs are a distinct job role within AHPs and (as will be explained in subsequent sections), it falls within the non-medical side of the healthcare sector.

What is clear from the table below is that although the occupational category of AHPs is largely in demand, there is no distinct data available for each of these job roles within the larger category. The category of AHPs is a mixed bag of several supportive job roles that collectively function as a supporting mechanism for the mainstream healthcare services. There is no demarcated data or figures available for each of these various job roles within the AHP category, and hence it is difficult to determine whether GDAs, in particular, are in huge demand or not.

Table 9: Demand for health professionals in India. Source: (KPMG, 2015)

Sub-Category	Employment in Thousands		
	2013-17	2017-22	2013-22
Doctors (Allopathic)	60	127	187
Specialists*	30	64	94
Dentists	11	23	33
Nurses and Midwives	781	1892	2672
Pharmacists	36	77	114
Allied & Other Healthcare Professionals	225	477	702
Total	**1143**	**2659**	**3803**

The HSSC report also points out noticeably that even within the category of AHPs, more technical and high-precision jobs such as diagnostic service persons and laboratory technicians were needed in large numbers as opposed to the other job roles. This means that even within the AHP category, the medical job roles are higher in demand than that of the non-medical jobs. The HSSC report also clarified that while attrition is a major problem in the case of administrative/caregiving positions such as GDA, record keeper, receptionist, etc.; the same is not the case with respect to the technician positions. The biggest challenge in case of diagnostic services is the initial recruitment of candidates because there is a lack of awareness for these professions and there is a dearth of specialized training courses offered by education/training facilities (KPMG, 2015). Interviews from the field also resonated with the fact that medical roles are more in need than the non-medical roles within the healthcare industry. It was found from the employers that there is more scope for innovation in recent times pointing towards the fact that the demand was larger in terms of medical research and development – areas that require more years of training and higher education.

Thus, the secondary sources as well as evidences from the field point towards the fact that there is a larger demand for the medical workforce versus the non-medical workforce at

the macro level. Even within the category of AHPs, there is a dearth of individuals in technical i.e. medical positions as opposed to the non-medical positions. In the given context, why has RMSA Karnataka selected a job role that is lesser in demand as opposed to the mainstream medical job roles? It actually seems prudent for the higher education system to introduce these technical courses as subjects instead of choosing a subject like GDA that does not even cater to the need of the hour in India.

Besides, evidences from secondary sources also indicate the precarious nature of GDAs in India that is depicted through three distinct trends. Firstly, there is no clear term or definition for GDAs, and it is very difficult to determine what are the exact duties expected of a GDA, as shall be made clear in the next section. Secondly, in India, there is no regulatory body for the entire AHP category because of which there is no scope of unionization of AHPs that may have helped in improving their bargaining position. Thirdly, there is no charted-out career progression for GDAs in India (as shown in Figure 3) (Health Sector Skills Council, 2013). The highest level one can reach is a housekeeping supervisor in the area of GDA, which is odd, since the tasks of housekeeping are significantly different from that of a GDA.

Figure 3: Occupational Trajectory of GDA

The question still remains why RMSA Karnataka has chosen a job role that is not only poorly defined but also has limited career mobility and unregulated markets. When the state chooses GDA as a job role as a skills subject, it automatically blocks the other pathways for higher education that would have otherwise allowed the students to pursue mainstream careers of medicine. This was made clear in an interview with a well-established Vocational Training Partner (VTP) in the city of Bengaluru. The head of the training institute mentioned that the four levels of NSQF training program only prepares the students for the role of a GDA (personal communication, November 3, 2017). These four levels of training (within or outside the realm of government schooling) does not serve as a launching pad for any related professions in the field such as that of Auxiliary Nurse and Midwife (ANM), General

Nursing and Midwife (GNM) or even nursing. This clearly shows that the unskilled work that translated into the non-medical job roles in the industry are left to be incorporated into the secondary education system of the government schools while the job roles requiring technical expertise i.e. the medical job roles are left for the mainstream education system to pursue.

GDA – a grey job role

GDA, also alternatively called as nursing associates, and Patient Care Assistants (PCAs) or orderlies fall under the category of AHPs, which is a minor occupation type within the healthcare sector. The Occupational Mapping Report defines the work of GDAs as "having a great deal of contact with patients and providing personal care such as bathing, feeding and dressing. They also perform support functions such as transporting patients, taking vital signs, making beds, helping patients become ambulatory and answering patient calls. They might also be called upon to set up equipment such as X-ray machines and overhead irrigation bottles." (Health Sector Skills Council, 2013). In summation, the Occupational Mapping Report holds GDAs responsible for 'observing and reporting how

Figure 4: Tasks of GDA. Source: Occupational Mapping Report, Health Sector Skills Council, 2013

Box 1: TASKS OF GDA (as per Occupational Mapping Report)

- Assist Nurses in looking after the patients
- Transport the patients to the various areas of the Hospitals as or when asked
- Run errands and carry messages
- Clean and dusts beds doors windows and other furniture
- Render first aid to the patients when required
- Prepare dead bodies, arrange their transportations to the mortuary and assist in terminal disinfections

(Health Sector Skills Council, 2013)

patients respond to the care that is being given.' In an attempt to justify the role of GDA on the field, a managerial representative from a multi-specialty private hospital in Mysore positioned the role of a GDA vaguely between the designations of a nurse and a housekeeper (personal communication, March 1, 2018). According to him, the housekeeping staff is involved in making life comfortable for the patient but is 'not allowed to touch a patient' and the nurse is allowed to administer medicines and injections and can take medical histories of the patient. The role of the GDA is somewhere in between both these positions where they

are allowed to make the patient comfortable by helping the patient in and out of the ward, making their bed, dressing them, and is allowed to perform certain basic procedures like checking of temperature or blood pressure but cannot administer medicines. Largely, it seems that the main role of the GDA is to make the life of the patients comfortable through direct contact with the patients but does not include direct involvement with the medical treatment of the patients. These descriptions indicate that GDA clearly falls on the non-medical side of the healthcare industry as their role is merely limited to the *comfort* of the patients and is not related to the *treatment* of the patients.

Both evidences from the field and the description of the job role in the Occupational Mapping Report point towards the fact that direct/indirect contact with the patient or the absence of it seems to be a defining element for distinguishing the roles of housekeepers, nurses and GDAs. But nowhere is it clear as to what level of technical precision or medical knowledge is crucial for the GDAs to enter the healthcare sector. In response to the demand for GDAs in their healthcare establishment, the nursing superintendent shared that the tasks as enlisted under GDAs are already being performed by the nurse and the paramedics in their hospital and there is no need for a separate caretaker position. This was further substantiated in an interview with the NSQF trainer at one of the government schools in Mysore who stated that most of the tasks demarcated for the care assistants are best handled by the nurses themselves and hence there is no need for such separate positions. He added that the position of care assistants does not largely exist in the industry (personal communication, March 1, 2018).

Hence, there seems to be lacking a proper and well-defined understanding of the role of GDA across various field interactions and from the background document of this chapter i.e. HSSC report. Currently, there is a unanimous cognizance that there is a limited set of tasks overlapping between the nurse and the housekeeper that *could* be taken on by the GDA. As furtherance to this point, the secretary of AHP stated that the scope of GDAs *may* increase in the market if it helps in reducing the workload of the nurses. The head of human resources at a private hospital also shared that the kind of establishments that require GDAs in India are in mental health wards, old age homes, disability centers, etc. In this sense, it would be useful to understand if the training received by the students under VSHSE even equip them with the right set of skills to be employed as GDAs.

Juxtaposing in-school learning and employer demands

Inclusion of repetitive and irrelevant topics

Many lessons found in the syllabus and a number of concepts taught in the classrooms, as observed on the field, were extremely unrelated to the tasks of a GDA. As has been mentioned in the Occupational Mapping Report, the tasks of a GDA are merely limited to making the 'life of the patient comfortable' and in assisting the nurses in certain basic procedures. The topics covered within the classroom sessions were aspects like the definition of healthcare, origin of the word hospital, classification of hospitals, components of hospitals, information on diseases such as back pain and asthma, and human anatomy to name a few. Simultaneously, certain lessons within the syllabus also seemed to be overlapping with other general subject matter such as that of science. For instance, a number of concepts as mentioned in the syllabus were common concepts on human anatomy, human body, body systems, functions of the body, nutrition, etc. During most of the classroom observations, it was found that the skills teachers taught these subjects at great length to their students.

Instances of these were explicitly witnessed during particular sessions at the higher levels of the school i.e. at level 3 and level 4. For instance, it was found during a level 4 healthcare class at a government school in Mysore that the skills teacher spent an entire hour teaching physiotherapy to the students (personal communication, February 19, 2018). The session covered various aspects pertaining to physiotherapy such as the definition of physiotherapy, conditions leading to physiotherapy, techniques of physiotherapy, etc. at the end of which the teacher said - "As a GDA you do not have to do physiotherapy but you should know everything in general." This statement raises the question as to why are the students expected to understand in so much length and depth about a subject that they would not even be expected to engage in, as a GDA? A similar instance was observed at a government high school in rural Bangalore where the students were asked to prepare an immunization schedule by the skills teacher (personal communication, November 1, 2017). As part of this 'activity' class, the students were expected to understand the various rounds of immunization necessary for a new-born baby till the completion of 18 years of age. While this topic seemed relevant for an ANM who would be expected to assist pregnant and lactating women in their community, it had no connection whatsoever to the job expectations of a GDA.

While on the one hand, some of the topics seemed complex and beyond the comprehension level of the students, on the other hand, employers on the field felt that the knowledge level of the students was very basic and minimal. When asked if the students from the government school could be employed at the CHC in urban Mysore, the doctor in-charge

stated that the best use of the learning provided under this subject could be in a community/family setting to provide knowledge to the public and to their parents, neighbors or friends. He added that the knowledge and skills imparted to the RMSA students, was only a form of awareness since students are taught about basic things such as infections and its causes and this does not equip them to work at hospitals, especially not with the patients (personal communication, March 1, 2018).

Hence, there seems to be a huge mismatch between the expectations of the employers within the healthcare setup and the Occupational Mapping Report versus the skills teachers and the healthcare syllabus as a result of which the students are rendered unemployable in the market. Because of the already vague nature of the GDA job role, there also exists a confusion as to what kind of skills should the students be equipped with. As a result of this, the students are taught certain concepts too loosely and certain other concepts in an unnecessarily elaborate fashion. Resultantly, the students have either rudimentary or redundant knowledge of topics that are immaterial for a GDA position.

Imbalanced theory and practical proportion

As has been discussed earlier, the role of a GDA involves many hands-on tasks related to grooming, cleaning, and bathing a patient and providing basic assistance to the nurse in certain procedures. The Occupational Mapping Report released by the HSSC states that potential GDA candidates usually need a secondary school certificate and learn their skills on the job (Health Sector Skills Council, 2013). Field respondents such as the nursing superintendent in a private hospital in Mysore further clarified that prospective candidates for GDA positions are initially hired on a probation basis where they are mostly advised to observe and assess the procedures from a distance (personal communication, March 1, 2018). With time, they are allowed to contribute in the procedures with constant supervision and repeated warnings after which they are appointed on a permanent basis. Employer interviews as these clearly indicated that more weightage was given to the experiential knowledge of the students as opposed to their course certificates or degrees. On the contrary, it was found on the field that the students are not being given the requisite practical skills that are related to the tasks expected of GDAs as enlisted in the Occupational Mapping Report. Not only is there a lop-sidedness in the theory versus practical proportions of the syllabus, but the classroom interactions also revealed that the skills teachers resort to a theoretical way of teaching even during the practical sessions.

As per one of the tasks enlisted for a GDA, he/she is expected to "assist nurse in measuring patient parameters accurately" and "assist nurse in observing and reporting change in patient condition."' Hence, the syllabus includes a lesson on vital signs where students are expected to learn how to measure body temperature, pulse rate and blood pressure. In the absence of proper resources and inefficiency in lessons imparted, the students are equipped with very few skills to perform these tasks as a GDA. Detailed observations of a practical session of measuring body temperatures at one of the well-equipped schools in a government school in urban Bangalore revealed that the teacher is imparting very little practical knowledge to the students (personal communication, September 26, 2017) During this session, the skills trainer was witnessed providing a lot of information on surrounding knowledge such as providing privacy to the patient and maintaining cleanliness in the surrounding of the patients, leaving very little scope for the students to get a hands-on experience of measuring body temperature. There was also a lot of theoretical information provided during the session such as information on the normal human body temperature, time taken to measure body temperature and the parts of a thermometer. Within a real-life situation it is the reading of the mercury level that ultimately determines the temperature of the body. Not only did the skills teacher spend the least amount of time on imparting this skill but the session was only limited to demonstrating the process to the rest of the class. In the due course of the session, merely two students had the chance to measure the body temperatures practically for each other. Even their understanding of body temperatures came from a strictly theoretical standpoint where instead of measuring temperatures from the reading of the mercury level, the students resorted to their memorized answers of the body temperatures instead.

Another major limitation under this argument is that of infrastructural and time constraints with the skills teacher. Many of the schools within the study did not even have a proper healthcare lab to carry out the practical sessions. An urban government high school in Bangalore at least had a separate room allocated that was referred to as the 'healthcare lab'. But the room appeared to be no less than a classroom and had very little elements of a practical lab in it. There was a shelf in the corner of the room with all the practical equipment such as temperature tray, gloves, thermometer, BP machine, stethoscope, etc. that were occasionally taken out to demonstrate the procedures. In addition to this, the time constraints add to the delimiting practical component of the session (as is clear from the above anecdotal evidence). Within this limited period, it becomes extremely difficult for the students to grasp

the nuances of the procedures, especially when they are related to complex concepts such as that of measuring of blood pressure. At a rural government high school in Bangalore, the practical equipment for the healthcare was kept in one cupboard in the staff room while the healthcare classes are conducted in the regular classrooms itself. The first practical session in the course of the academic year was held a month before the annual exams which clearly meant that all the previous sessions were solely focused on theory (personal communication, October 27, 2017). This particular practical session involved merely showing (not even demonstrating) the various equipment such as the thermometer, first-aid box, stethoscope, urinary bag, etc. for the rest of the class to see.

Since the students are neither well-equipped to work with instruments nor are they trained enough to work with patients, there is a high sense of reservation among the employers as well for employing these students in a healthcare setup. This was rightly explained in a single sentence by the nursing superintendent in Mysore, "We are not working with machines here; we are working with humans". (personal communication, March 1, 2018) He focused on the fact that working in a healthcare setup requires a high level of precision and focus and years of experience and the RMSA students have neither of these qualities. The objective of building a vocation-based education system thus fails as the students do not possess the right balance of theory and practical knowledge necessary to work as a GDA. Additionally, the vocational course coordinator at a private-aided medical college in Mysore questioned the level of comprehension and seriousness of the RMSA students to even understand the importance and the content of complex topics (personal communication, March 1, 2018). She demarcated the 'what' and 'why' aspects of the lessons in the syllabus by stating that if students do not even understand why blood pressure is measured, or what are the implications of high or low blood pressure then what is the point of teaching them the technique of measuring blood pressure?

Mismatched skill gap

As mentioned earlier, the HSSC report also identifies the specific skills that are lacking within the healthcare industry. The report mentions that the lower-rung jobs within AHPs are especially deficient in communication skills, empathy towards patients, computer/IT related skills and patient bedside manners (KPMG, 2015). This sub-section would highlight how there is an unnecessary expectation from the students to behave in a certain manner so as to fit into the healthcare establishments instead of specifically focusing on the skills mentioned as above. Both the classroom interactions and the components of the

syllabus showed that there is an implicit enforcement of ideas on the students so as to make them ‘employable’ in the market. These ideas are not only classist in nature but also carry with them certain preconceived notions regarding the students of the government schools.

For instance, the students are introduced to complicated medical and technical terms that are difficult to pronounce as well as memorize and reproduce in their GDA position with no further explanations or clarifications about these words. Some of the words used during these sessions are ‘sterilization’, disinfection, epidemiological triangle and also names of viruses and diseases such as EBOLA and Salmonella Typhi. In addition to this, the teachers also tend to use very complex and complicated words from the English language that have no Kannada equivalent making it all the more difficult for the students to follow any concept. This is especially true in case of guest lecturers who explain all the concepts by translating the complex words from English to Kannada instead of explaining the concept itself. For instance, instead of explaining to the students what healthcare is, the students are told that healthcare means *aarogya*, which is a translation of the word and not an explanation of the word (personal communication, December 1, 2017).

While all the field respondents from the employers’ side concurred that a secondary school certificate is a minimum educational requirement for a GDA, they differed on their opinion of different soft skills required for hiring of GDAs. For instance, the managerial representative at a large-scale multi-specialty hospital in Mysore stated that the single most important criteria for the position of care assistants are values of ‘willingness to work’ and ‘no egos’(personal communication, March 1, 2018) He strongly believed that GDAs must be humble and compassionate people and they must ‘throw their egos out’ before handling the patients. While there is a strong agreement that the healthcare industry needs GDAs equipped with soft skills, the syllabus and classroom transactions tend to be discriminatory in nature. There is a lot of focus as to how GDAs must ‘groom’ themselves so that they are employable in the industry. Hence, there are various units in the syllabus that are solely meant for developing such qualities among the students such as public relations in a hospital, communication at a workplace, grooming the self, etc. The usage of certain phrases within these units echoes the fact that these students need to be schooled as to how to arrive to the workplace. For instance, the unit on grooming techniques teaches the students not to dress up in a ‘similar’ or ‘uninspiring outfit’ and to ‘not wear white socks with dark shoes and vice versa’. Such lessons are based on a prejudice that the students of government schools are not familiar with the working environment of these healthcare establishments and hence need to

be given separate lessons on the same. Even the skills teachers repeatedly point towards the fact that the privacy of the patient is of utmost importance and that students must talk slowly and calmly around patients. Even though, most medical institutions have one lesson on handwashing, the lengthy and repeated sessions on the mentioned topic were witnessed across all the schools. This was a prominent example of the presumption that the students in government schools needed to learn how to wash their hands at the very least. This is not only true of the skills teachers but also of the guest lecturers who usually spend a quarter of their session teaching aspects of social etiquette to the students.

The socio-economic profile of the students studying in the government hailed from lower caste groups such as the Scheduled Castes and most of their parents had little to no education. Most of the families are engaged in precarious and vulnerable occupations such as labor work, tailoring, garment industry, etc. Given this context, many of the students are not well-versed with the English language and in most cases, they are first-generation learners. There is an unnecessary imposition of the English language and presentation skills that are quite contradictory from the lived realities of these children. While most government hospitals are struggling with regular supply of water and the distribution of water as a resource is political, then what is the use of teaching these students handwashing in such detail? This fact was admitted by one of the doctors working at a government hospital who visited one of the urban schools in Bangalore as a guest lecturer. Hence, neither the syllabus nor the teaching practices are equipping them with the skill sets that have actually been identified as necessary in the job market. Instead, the students are taught on how to be 'well-groomed' and 'well-behaved' that may make them employable in certain kinds of healthcare establishment but do not make them skilled individuals for the GDA role.

Implications of NSQF program

The state in its attempt of addressing its welfare commitments of education has narrowly interpreted the demand for trained workers in healthcare, and thus, has adopted a convenient approach of investing in youth's development. Instead of investing in technical positions of doctors and nurses that may translate into direct treatment of illnesses and diseases, there are marked investments towards creating job roles that are not only lesser in demand but are also ill-defined and precarious in nature. Hence there has been a clear trade-off between the medical and the non-medical jobs that not only limits the opportunities for further mobility but also fails to meet the aspirational needs of the children of the government

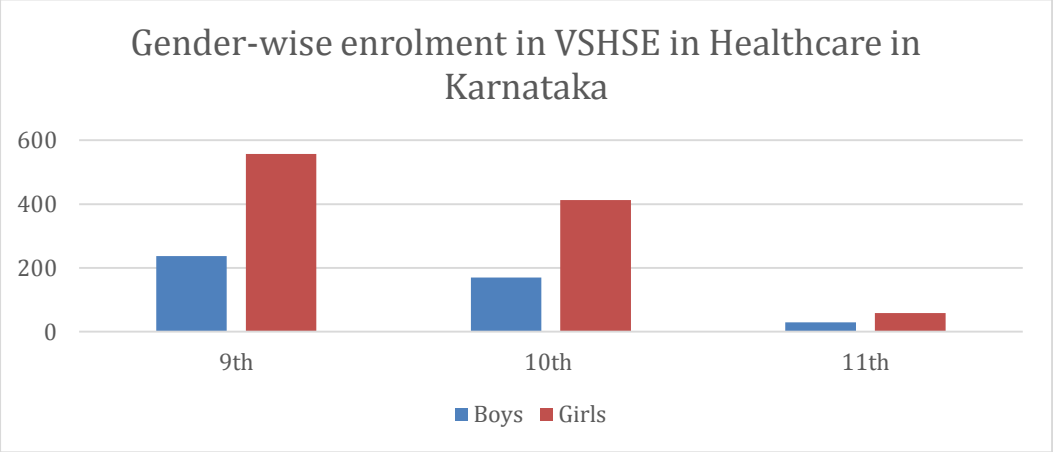
schools.[19] What is important is to understand in such a context is what ramifications it has on the lives of the students opting for the skills subject under RMSA Karnataka.

As was explained earlier, GDA as a job role is vaguely positioned between the designations of a nurse and a housekeeper. Both these job roles have traditionally been associated with notions of pollution (Shelby L. Garner, 2015). Nursing has been looked down upon as a menial job and restricted for people belonging to low castes and classes of the population as the associated type of work was considered to be 'polluting' (Shelby L. Garner, 2015). This is because nursing involves tasks that are generally perceived to be 'dirty' such as cleaning of dead bodies, clearing the excreta of patients, changing the beds and clothes of patients, etc. This is further proven from the interview with a doctor at a private hospital in Mysore where he discussed the perception of nursing as a profession in the state of Karnataka (personal communication, March 1, 2018). According to him, there is a lot of social stigma associated with the job of a nurse or a paramedic in Karnataka as the position was equated to that of a ward boy. GDA, being a low-skilled profession on the non-medical side of the industry positions itself at a scale lower than that of nursing itself. As demonstrated in an earlier section, the work tasks of GDA are duplicating those of nursing and housekeeping and hence the caste/class association of those two jobs would be represented by GDAs as well.

Besides, the job roles at the lower end of the healthcare industry that has been represented as the non-medical side also consist of a highly feminized labor force. Secondary sources point this to be true especially in the category of nursing assistants as 80% of the workforce are females (KPMG, 2015). This gendered distribution of students across the skills subject has already been noted across the government schools in Karnataka. A quick analysis of the Student Database 2016-17 under RMSA Karnataka showed that the number of girls who had taken up the healthcare subject was more than double the number of boys who had chosen the healthcare subject (407 boys versus 970 girls across all selected government schools in Karnataka).

[19] Refer to chapter 3 in this report for information on student's aspirations

Figure 5: Gender-wise enrolment in VSHSE in Healthcare in Karnataka



Subsequently, even with the sketchy description of the GDA role, the students are not being equipped with the requisite set of skills as outlined in the HSSC report and as shared by the potential employers from the field. The syllabus and the classroom transactions between the skills teachers and the students have molded the students into a storehouse of theoretical knowledge and unrelated information with very little hands-on practical knowledge. Further, even if the students manage to be employed as GDAs in certain kinds of healthcare establishments, the imposition of value systems based on certain prejudiced notions would aggravate the caste/class divide between those who avail the GDA services and the GDA themselves.

With the introduction of healthcare as a subject in secondary and higher secondary education, the students have been indirectly pushed towards a career stream that seem to have no further avenues for higher education nor does it seem to have a higher demand in the industry. Further, unpacking the role of GDA revealed that the nature of work involved would remain at the lower end of the non-medical side. As a result, the students pursuing these subjects would be stuck in job roles that are ‘dirty’ and ‘polluting’ and consisting of a large proportion of females. The nursing superintendent at a private hospital in Mysore aptly summarized the NSQF subject as actually “breaking their (students’) career”. Thus, the VSHSE that aimed to create an education stream for making the students employable and inclusive has, on the contrary, either rendered them jobless or pushed them into job roles that reproduce the class, caste and gender identities traditionally associated with the healthcare sector.

References

Douglas, H. E. (2004, November). *Allied Health Professionals.* Retrieved from Bahai Studies: http://www.bahaistudies.net/asma/alliedhealthprofessions.pdf

Health Sector Skills Council. (2013). *Occupational Mapping Report: Allied Health and Paramedic Sector.* Health Sector Skills Council.

Healthcare Sector Skill Council. (n.d.). HSSC Introduction. New Delhi, India. Retrieved 5 6, 2019, from http://www.healthcare-ssc.in/hssc-introduction-page-88

ICRA Management Consulting Services Limited. (2013). *District wise skill gap study for the State of Karnataka.* New Delhi: National Skills Development Corporation.

KPMG. (2015). *Human Resource and Skill requirements in the Healthcare Sector.* New Delhi: National Skills Development Corporation.

Ministry of Human Resource Development, Department of School Education & Literacy. (2014, March 12). Revision of the scheme of "Vocationalisation of Higher Secondary. New Delhi, India. Retrieved from https://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/REVISED-SCHEME-VHSE.pdf

Shelby L. Garner, S. F. (2015). Nurse migration from India: A literature review. *International Journal of Nursing Studies*, 12.

Chapter 6: Conclusion

R. Maithreyi

Globally, employability training and education for youth have become central concerns of governments and policy makers. Neo-classical economic analyses showing vocational and skills-based training to be effective in poverty reduction, and as central to growth and employment strategies, have pushed national governments to invest more strongly in skilling its populations. While neoliberal reforms in education have contributed to budget cuts for general education, a variety of market-based options for short-term, flexible, employment-oriented, on-demand, modular courses have been made available in its place, under the guise of providing more "choice" to consumers, who have increasingly been made responsible for their own educational investments (Keep & Mayhew, 1999; Jackson & Jordan, 1999).

The present study aimed at understanding the outcomes and implications of India's national skills policy and program within this international context of reforms within education. With skills development and training identified as the "educational plan" for India, representing the largest-ever expansion in higher education (King, 2012), our analysis was specifically focused on understanding the implications of greater investments made in further vocationalizing secondary and higher secondary education. Adopting an ethnographic approach to study the Vocationalisation of Secondary and Higher Secondary Education Scheme (VSHSE) in Karnataka, examining policy and curricular perspectives, industry trends and expectations, and students' and families' aspirations, our aim was to examine the implications of the program for students from economically and socially disadvantaged communities in government schools, and see whether they offered opportunities for economic and/or educational mobilities.

Findings from our study show that far from enabling opportunities, the minimal vocational training provided by the VSHSE program may in fact constitute a break in career, and higher education.[20] A primary reason for this, as explained through the four analytical chapters presented in the report, is the narrowed vision for students' futures envisioned through the VSHSE (and larger skills program), complicit with the demands of a capitalistic industry and consumerist society, rather than students' or families' needs, aspirations or

[20] This was stated by a respondent from the healthcare industry. See chapter 5 on the healthcare industry in this report for more details.

expectations. The emphasis within the program is thus on creating a pool of labor at the lowest rung of the urban service economy to provide value-added services used by the industry to create personalized experiences for the conspicuously consumptive elite customer (Veblen, n.d.).[21] However, these are far removed from the immediate and local demands of industry as well as real contexts of students' lives.

This is evident, for example, from interviews with representatives from, and secondary analyses of the health industry, which showed that the demands for GDAs at the bottom-rung of the health industry exists elsewhere (i.e., the international market). Within the Indian context, while unskilled labor with the right attitudes is seen as sufficient to fill these positions, the immediate need, as expressed by industry representatives, is for skilled labor at the higher rungs of the industry to meet the shortages in doctors and nurses available in the country. While the State through its vocational and skills programs remains focused on creating a large labor pool of semi-skilled workers, the need for highly trained workers with academic and professional knowledges remains largely unaddressed, and restricted to just the elite sections of society due to the lack of adequate state support and subsidies to pursue these courses, and a high degree of privatization of professional and higher education.

An examination of the automobile industry shows similar trends. The focus of the VSHSE automobile course remains on creating a pool of labor at the bottom-most rung to address the high rates of attrition of service technicians. However, as discussions with industry personnel, trainers and students showed, aspirations for better working conditions and jobs are in fact the real reason for this attrition that cannot be addressed through further training in basic skills for these roles. Thus, respondents from the automobile industry stated that preferred candidates are those with interest and motivation, rather than basic skills, which can easily be picked up on the job.

Such accounts by respondents from both industries only ratified how the programs fail to meet students' aspirations and needs, and also fail to address the immediate challenges of the industry. These observations also show how the VSHSE program provides little guarantees for conversion of training into jobs within these select industries, both of which have articulated a preference for unskilled labor with the right attitudes as sufficient criteria for these job roles.

[21] Veblen used the term to indicate non-utilitarian forms of consumption that serve to mark status.

The fact that these programs fail to meet the local expectations and needs of these industries is ironic, considering that the skills policy, its initiatives and specific courses have been designed through involvement of the industry. However, this is unsurprising considering the vast literature which shows that traditionally, over 98% of labor in India has been informally skilled, and that there has been a long-standing preference for this practice as it has helped in keeping costs down for employers while also ensuring steady economic growth over the past decades (see King, 2012). Significantly, this also implies that the training that neither enables jobs nor guarantees formalization (Saraf, 2015) also fails students and their families who, through education, are seeking to escape the long histories of their marginalization based on these informally-organized exploitative relations of training for manual/menial unskilled work that also largely lies within the informal or unorganized industry.

Under these circumstances, the question that then begs to be asked is, "What does the skills program really prepare students for?" An in-depth analysis of the curriculum in chapter 1 shows how training up to level 4 seeks to prepare the generic 'predictable' and 'responsible' worker at the lowest end of the neoliberal service economy, who can apply a limited set of skills in a 'narrow, repetitive and routine' manner (see Table 3 in chapter 2), to produce value-additions for the demanding customer. This is opposed to the skilled, independent, technically-qualified labor whose technical skills, which have usually been the focus of traditional vocational systems of education, can guarantee the bargaining power to determine better work conditions (Jackson & Jordan, 1999). While the practical-vocational component of the program is inadequately conceptualized and there is a poor correlation between the theoretical components taught within the classroom and the job roles students are required to perform, what is evident is the emphasis placed on students to remake themselves through the appropriate knowledges, appearances and mannerisms that will be demanded of them by elite customers. For example, such forms of remaking include learning about cars, cosmetics or retail brands familiar to the elite customer; understanding the multiple specialized, institutional options for healthcare or beauty available to them; by adopting new/unfamiliar languages (particularly English) for certain jobs as in the case of the IT service-desk attendant or even for jobs within the beauty and health industry; and gathering information about the products, lifestyle, diet and health related to them, in order to be able to cater appropriately to their needs. Above all, the self-work envisaged in preparing students for their job roles not just entails adopting the mannerisms, dress and appearances that meet

customers' expectations, but it also entails a form of self-discipline and responsibility to constantly update oneself with the latest consumer trends and practices (which may however not be accessible or available to these poor students from government schools), in order to serve the customer better.

What is perhaps the most disturbing aspect of this learning in not just that students are taught to perform appropriately for customers by learning about their preferences and lifestyles, but more significant is the discursive conditioning of the student-as-consumer, through exposure to culture, lifestyle and products that they had little knowledge of prior to these courses. Through the exposure to these new cultural standards of dress, behavior and practices, what the courses in fact do is tie students up more deeply into the networks of neoliberal consumerism. Though the courses offer little hope to students to be able to apply this cultural knowledge for work appropriately owing to the testable and rote format in which these topics are taught, and decontextualized information provided about these various products, services or mannerisms, what is clearly observable through the classes, particularly on beauty and health is how students are encouraged to apply some of these practices upon themselves and imbibe these practices, thus discursively being conditioned to become conspicuous consumers. In a subtle blurring of the lines between the self, self as worker and self as consumer,, what the skills curriculum emphasizes is the individual investments to be made in reshaping the body, behavior and capacities, with skills, knowledges and consumptive practices to escape one's social context (of poverty or cultural status), that may however be removed from one's collective history and communal roots. These new relations to the self and body may in fact even been in direct contention with the lifestyles and daily routines of students belonging to lower caste/class backgrounds, as was seen within the beauty classroom. As the chapter showed, the lessons not just problematically re-establish gendered, racist, and casteist ideas of beauty within the classroom, but have deeper implications for how they individualize students-as-consumers from their collective histories and communal roots by establishing new standards for work, appearance and health (with the beauty routines positioned as "therapeutic").

Individualization and responsibalization have been identified as the archetypical values through which neoliberalism reproduces itself. What we see through the collective accounts across the chapters is also how the neoliberal policy thrust of the program, emphasizing individual development and responsibility for gaining employment, and the creation of individuated job roles and decontextualized training for this, allows for the state to leave

unaddressed the collective, historical struggles of students from these marginalized communities to use education as a vehicle to overcome their marginalization. As Ketaki's chapter on students' aspiration and lives shows, despite the tenuous relationships shared with education, most students view education, even skills-based education, as the hope to secure a better future through access it can provide to professional or white-collar jobs. While the skills gained through the VSHSE program are seen as a back-up for, or aid (as it allows for easy marks to be scored) to secure higher-education, few aspire to the low-end menial / manual jobs offered by these courses, but mistakenly understand some of the courses to enable white-collar jobs such as that of nurses or doctors.

Considering these aspirations among students, and how families collectively labor to keep at least one child within education, or secure higher education for their children, the large investments made by the state in vocationalizing secondary education, not only directly contradicts with families and students' aspirations, but limits students to roles that reproduced caste/class histories of labor. Not only does it fail to prepare students adequately for the kinds of work that they desire, but in fact fails to prepare them for any work, and at times, also closes off routes to further education due to the lack of alignment of the VSHSE program with other higher courses and option.

References

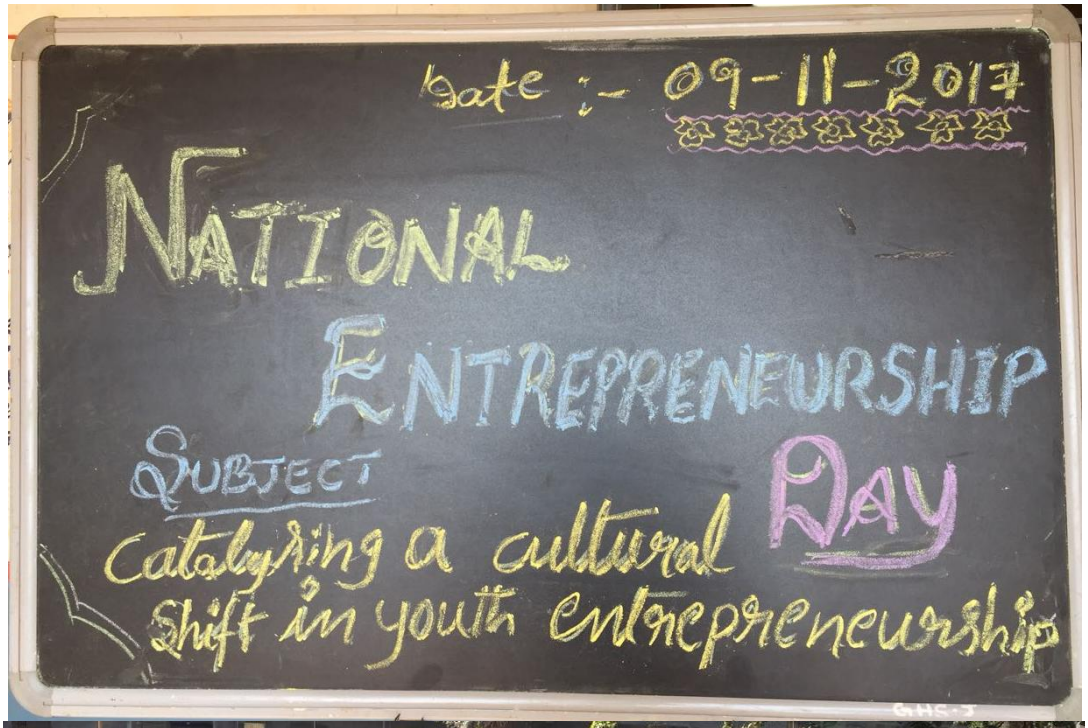
Jackson, N. and Jordan, S.S. (1999). *Skills training: Who benefits? Training matters*. (Working Paper Series 04). Centre for Research on Work and Society, Ontario: York University. Retrieved fromhttp://www.yorku.ca/crws/network/ members/Jackson-Jordan.pdf

Keep, E., and Mayhew, K. (2010). Moving beyond skills as a social and economic panacea. *Work, Employment and Society*, 24,3,565-577. doi: 10.1177/095001701037166

King, K. (2012). The geopolitics and meanings of India's massive skills development ambitions. *International Journal of Educational Development*, 32, 665-673. doi:10.1016/j.ijedudev.2012.02.001

Saraf, R. (2016). Skill training or nipping potential in the bud. *Economic and Political Weekly*, 51, 18, 16-19.

Veblen, T. (n.d.). *The Theory of the Leisure Class*. Retrieved from http://moglen.law.columbia.edu/LCS/theoryleisureclass.pdf


Date :- 09-11-2017
NATIONAL
ENTREPRENEURSHIP
DAY
SUBJECT
Catalysing a cultural
shift in youth entrepreneurship

Annexures

Annexure I

RMSA-NSQF Stakeholder Workshop Report

June 28, 2019

Towards the end of the research period, Centre for Budget and Policy Studies (CBPS) conducted a one-day workshop involving all the major stakeholders of the Vocationalisation of Secondary and Higher Secondary Education (VSHSE) scheme – students, skills trainers, vocational training partners (VTPs), and government officials from the education department. The objective of the workshop was twofold. Firstly, to bring all these key stakeholders on a common platform to discuss and debate about the VSHSE scheme especially from the children's perspective and secondly, to share our research findings and solicit their feedback on the same. Twelve students and six skills trainers from six different schools and representing all the four NSQF levels (L1 to L4) and five skills sectors (automobile, healthcare, information technology-IT, beauty & wellness, and retail) participated in the workshop. Along with them, representatives from three VTPs and four government representatives from the offices of the Rashtriya Madhyamik Shiksha Abhiyaan and the Deputy Director of Public Instruction also participated in this workshop.[22]

The morning session of the workshop was limited to only students and the skills trainers. The first session in the morning was about building

[22] Students, trainers, and VTP representatives who participated in the workshop were drawn from some of the schools and organisations covered in the ethnographic research. Hence, their names and specific affiliations have been removed in order to avoid compromising their identity.

dreams and the facilitator encouraged the participants to dream big by giving the example of John Goddard and his *Life List* of 127 audacious goals. Then, the facilitator asked the participants to similarly list down their six dreams/goals out of which three needed to be career oriented. This was conducted as an individual exercise. This was followed by the facilitator asking a few participants to share their dreams/goals and also elaborate on what made them think about these goals. The second session in the morning was a brainstorming exercise to try and link their dreams to the current skills program. This involved diving deeper into possible linkages, motivation for choosing the skills course and trying to identify gaps between their career dreams and what the skills course trains them for. The last session of the morning half was a group activity that involved a SWOT analysis (Strengths, Weaknesses Opportunities, Threats) of the skills program. The participants not only deliberated on the strength and weaknesses of the program but also focused on the various ways in which the program could be further improved.

The representatives from the various VTPs and the education department joined the afternoon session. This session kicked off with a presentation from CBPS where we shared the main findings from our ethnography-based research study. This presentation provided a much-needed field insight to all the stakeholders, especially the VTPs and government officials. The last session of the workshop was termed as *Thinking Hats* in which all the different groups of stakeholders (students, trainers, VTPs & government) had to anonymously share their individual perspectives on four critical questions that had emerged from our research study. The following four questions were posed:

Q1: What are the most critical skills that students need to achieve their goals and full potential?

Q2: What forms of education will be most useful to students in the current context? Should it be general education, vocational education, skills-based education, language education, all of it, none of it, or a combination of it?

Q3: What should be the best teaching methods to acquire skills-based learning?

Q4: Do the current job roles enable the students to overcome their existing socio-economic circumstances or reinforce them? How can it be further improved?'

Both these afternoon sessions were followed by a reflection session with the participants.

In the dream building session, when the students were asked to list down and share three to five career dreams that they would like to develop, the most prominent ones were profession based such as becoming a doctor, teacher/lecturer, engineer or an Indian Police Service (IPS) officer. However, a few students also shared near term aspirations such as obtaining good marks in the 10th grade, broad behavioral goals such as studying well and bringing a good reputation to their parents, or specific goals such as designing a solar based vehicle for the disabled. When the students were asked to share their personal dreams, a few enterprising goals were expressed as "becoming the next Usain Bolt" or "becoming part of the Royal Challengers, Bangalore Cricket Team". On the other hand, the skills trainers when asked to state their personal goals, tended to prioritize the well-being of their students over their own aspirations. Many of the trainers shared their goals of serving the society as well like assisting senior citizens, orphans, transgender, widows, etc. It was also observed that most trainers expressed their career dreams in a linear, sequential and stage-wise manner. They moved from concrete smaller goals such as *becoming a Team Leader in Research and Development* to larger obscure goals such as *being a good educator*.

The session on linking dreams to the skills program started with the students listing down all the subjects being taught to them across arts, commerce and science streams. When pointedly asked about how the skills subjects would help them in realizing their dreams, interestingly a few students *calibrated* their stated goals to reflect the need for the skills subject. For e.g., while one of the level 4 students had mentioned becoming a yoga instructor as her topmost career goal in the dream building session, she shifted her goal post to becoming a doctor through the General Duty Assistant/Healthcare skills pathway offered by the VSHSE. Many of the students also viewed the skills course as building general awareness on the subject, irrespective of the fact that it was designed towards a specific job role. This was strongly expressed with regard to the healthcare skills course which was largely seen as a means to understanding personal hygiene and responding to home-based medical emergencies. This also led to a larger discussion on whether such skills courses should hence

be made available to all the students instead of targeting a select few. Trainers also highlighted that the skills course exposed the students to various industry sectors, job roles, career pathways which was otherwise lacking earlier. When it was highlighted to the trainers that students could achieve their dream careers even without pursuing the skills course, they justified that these courses not only train students towards the targeted job roles (sales executive/service technician), but also provide a strong foundation to achieving their dream careers (chartered accountant/automobile engineer). The points raised during this discussion, reiterated the findings of our study about how the children's aspirations are fairly disconnected from the skills course they have chosen.

The focus of the SWOT analysis session largely got confined to discussions on how to improve the current VSHSE scheme. According to the trainers, better implementation of the VSHSE scheme was the need of the hour. They highlighted some of the known implementation issues such as lack of proper infrastructure, lesser weightage given to practical skills and delayed provisioning of resources such as textbooks and tools/equipment. There was a strong suggestion to introduce different job roles (e.g., junior software developer) with higher skills under the IT sector since the skills taught under the current job role (IT service desk attendant) is neither teaching the basics of IT nor aspirational for the students. This also highlighted the need for updation of the syllabus with the changing needs of the industry. In response to one of the questions that was raised in the discussion as to why these skills courses are being offered only in government schools, one of the trainers clarified that even students from private schools were being skilled for the same job roles. Another concern raised was the repetition of concepts at each level within some subjects, for example the beauty and wellness syllabus. In some sectors, trainers also emphasized the need to strengthen certain theoretical concepts□—for example, immunization schedule in the healthcare subject. The trainers were also apprehensive about the introduction of the Multi-Skills Foundation Course (MSFC) since it does not train the students on specialized skills.

In the reflection session that followed our presentation, VTP representatives contributed to the discussion by responding to some of our findings. For example, with respect to the Duty Assistant (GDA) job role, which we argued is still unrecognized in the Indian context, a representative from the VTPs stated that the GDA role exists in multi-specialty hospitals but not in government hospitals. She also added that GDAs could progress to take on more important roles than just be limited to becoming a housekeeping supervisor. Her opinion was contrary to our findings. With regard to our larger question on the choice of

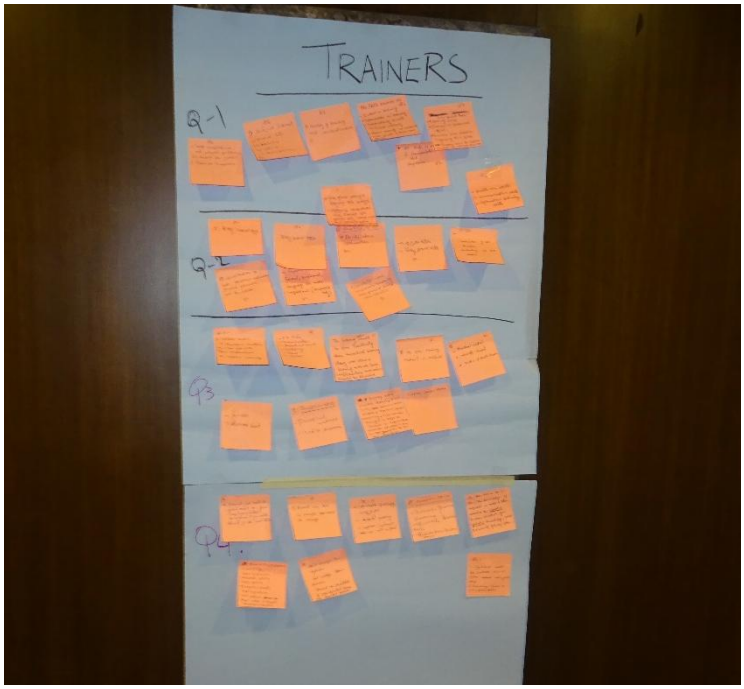
job roles and the curriculum, both the representatives from VTPs and the government stated that it was the Sector Skills Council (SSC) that played a major role in planning these while their focus is on implementation of the scheme. One of the government officials also emphasized that the choice of job roles should be relevant to the local context and that the curriculum should be regularly updated. For instance, she questioned the choice of offering retail as a skills course in remote areas like Gulbarga and Bidar. One of the government officials expressed the fact that the chosen job roles were blue collared in nature and hence no aspirational desires needed to be factored in when planning for vocational courses for students from disadvantaged circumstances.

In the *Thinking hats* session, in response to Q1, the students largely highlighted the need for inculcating behavioral attributes such as dedication, hard work, attention to detail, positive thinking, curiosity etc. Apart from emphasizing on the behavioral attributes, the trainers and VTPs also included other aspects such as parental support, quality of teaching, communication skills, IT skills and basic healthcare skills. On the other hand, government officials came up with suggestions such as improving basic education, learning environment and exposure to experts from the respective sectors.

In response to Q2, all the stakeholders agreed that a combination of different forms of education is most preferred. A few other responses were the importance of language education and personality development. One of the responses from the government official was about providing only general education up to the primary level and introducing skills-based education for the higher levels.

In response to Q3, all the stakeholders emphasized on imparting practical training through industry visits, demonstration sessions and on-the-job. The use of audio-visual aids and digital learning was strongly recommended as an effective mode of teaching skills courses. Additionally, trainers felt that providing motivation to students is key to acquiring skills-based learning while students highlighted the interpersonal relations with the trainers as also being critical. One of the government officials shared that skills-based learning should be taught in such a way that it is also marketable.

With regard to Q4, none of the respondents specifically addressed if the skills subject helped in either overcoming or reinforcing the existing socio-economic circumstances. However, all the responses were focused towards improving the program. The students expressed a strong desire on clear pathways for career mobility to be provided beyond Level 4 and guidance towards pursuing the same. Except the beauty and wellness trainer, the remaining trainers wanted the current job roles to remain unchanged and rather focus on fixing the implementation issues. The response to change in syllabus was mixed and hence, perhaps was dependent on the specific sector. The government officials reiterated the earlier points stated during the first reflection session — choosing job roles specific to the local context and job roles that not only pay the students better but also provide a higher standing in society.



While the stakeholder workshop could not go deeper in terms of the social dynamics of class, caste, gender and its impact, it however brought to light issues of program implementation and ways to improve the same. Also, the choice of job roles and need for updating the syllabus was specific to certain sectors only. The role of VTPs and the state government being limited only to implementation, and not towards planning the program, came to the fore.

Annexure II

Interview and Observation Schedules

A. School Profile

a. Name:

b. How old is the school?

c. Sections (e.g., primary, secondary, PUC, etc)

d. Physical Description of the school (e.g., size, playground size, physical condition of school, availability of water, toilets, etc; presence of labs; number of buildings, etc)

e. School strength (secondary)

Total school strength	No. of boys	No. of girls

f. Break-up by social category (secondary)

No. of SC students	No. of ST students	Minorities (specify type)	Others

g. No. of students in NSQF programme years wise (Enter name of subjects)

	Subject 1:				Subject 2:			
	Level 1		Level 2		Level 1		Level 2	
	Enrolled	Dropped out	Enrolled	Dropped out	Enrolled	Dropped out	Enrolled	Dropped out
2014-15								

2015-16								
2016-17								
2017-18								

Also probe reasons for drop-out

h. Category wise enrolled

	Subject 1:				Subject 2:			
	Level 1		Level 2		Level 1		Level 2	
	SC/ST/Minorities	Others	SC/ST/Minorities	Others	SC/ST/ Minorities	Others	SC/ST/ Minorities	Others
2014-15								
2015-16								
2016-17								
2017-18								

i. No. of students who cleared the subject/final exams

	Subject 1:	Subject 2:

	Level 1	Level 2	Level 1	Level 2
2014-15				
2015-16				
2016-17				
2017-18				

j. No. of teachers and teacher vacancy (for secondary):

k. Provisions for skills

SCHOOL					
	IT	Retail	Beauty	Automobile	Healthcare
Room/Lab (availability/ description)					
Equipment (what is available / numbers)					
Funds how much had been received, when and how it has been utilised					

B. Observation Schedule for Schools

1. Make note of attendance - how many children attend each time you attend class? Are there regular absentees? Reasons why full strength isn't present, etc
2. Describe trainers command over English
3. Trainer-teachers' in school relationships

4. Continued issues with timetable
5. How practicals are conducted (space / sharing of computers / having practicals in batches; what material is available for practicals; how often students able to do / use the practical material)
6. Observe students during the class - whether they pay attention / don't; what kinds of questions do they ask? How is their relationship with the trainers; their interest in the skills class
7. General student dynamics in school - their relationship to school / academics; interest; ability to perform in school; economic constraints affecting school performance / attendance
8. Other school dynamics - who is powerful, who is not (and why, or how he/she holds this power); how are decisions made? Relations between school and Education dept (e.g., BEOs) - implications of all this for the skills programme if any
9. Relationship between trainers and education dept; relationship between the trainers in school and with trainers from other schools - implications of all this for the skills programme if any

C. Questions and Themes to be explored with the Skills Trainers

I. General Profile & Programme Implementation

1. Name:
2. School:
3. NSQF Sector:
4. Affiliated with training partner or not? If yes, name of training partner:
5. Qualifications (specify from which educational institution; do an educational history if possible):
6. Work experience. If yes, then the details.
7. Age:
8. Caste/ Religion:
9. Hometown:
10. Current residence:
11. Parent's background (Education and Work):

12. Marital Status. If married, then details about the husband and his family (education and work of husband and other members of the family)

13. General profile of trainers in terms of their interests, ambitions, aspirations, long term plans, attitude in life, attitude towards work / school / children

11. How the trainers manage their everyday life (conditions of work and pay; how they tide by in case of delays in payments; other affiliations they may have; how they manage everyday life under such precarious circumstances)

14. Discuss how the students were selected for the skills programme? Were they given any guidelines from anyone on how to select? Did the school / training partner involve themselves in this process? If yes, then in what ways?

15. Discuss the projects / activities done for internal assessment for both levels. How did they decide upon these topics?

II. Theme 1: Employment and Employability

1. What are the job roles that the programme prepares the students for?

2. Do they think that in the long run there would be enough scope for these students?

3. Could something different have been done as part of the course to increase their employability? If yes, then what are these ways?

4. Do they keep track of students once they have graduated from level II? ·

5. If yes, then how many to their knowledge have dropped out of school or have taken jobs after Level II?

6. Do they feel that the course after level IV makes the students more employable? In other words, does it give them more bargaining power, improved employability in terms of salary for a job?

7. Since so many batches have passed without certificates and only level 2 qualifications, do you feel that the knowledge they have gained so far will help them gain employment after completing PU (which is supposed to be level IV)? Is the L1 and L2 knowledge and practical training sufficient?

8. If a student seeks employment after level 2, say at the age of 16, will the skills acquired sufficient to get a job?

III. Theme 2: Students' and Parents' related questions

Sub-theme 1: Perceptions and knowledge of children and their future - Discuss trainers' ideas about different students - who they considered 'bright', who they did not consider as bright; what was their conception of brightness? Who they felt might be able to benefit from the skills programme / who wouldn't etc.; what are the kinds of opportunities that children take up after 10th standard; what kinds of schools/education do they prefer and why; what are the various influences on their decisions; what kinds of barriers do they face in pursuing these opportunities; does the presence of a PUC on campus affect their decision?

Sub-theme 2: Perceptions on the skills programme - How has the introduction of the skills programme affected the above trends, if at all; do they feel the skills programme is beneficial to these students; how would they benefit from it; what is their idea of the syllabus-its relevance, content and practical component, what is their general opinion on the skills programme

IV. Theme 3: Nature of contracts related to the skills programme

This theme can be explored by using *observation method* as well as *asking questions* to the skills trainers/

Observations:

1) Identification of the role and duties of the skills teachers in the school *vis-a vis* that of the permanent teachers

2) Authority of the skills trainers *vis-a vis* the permanent teachers in the schools with regard to:

a) the students

b) other teachers

c) staffs of the school

d) head mistress/master

g) parents

2) To observe instances whether the success of the NSQF programme is put on the shoulders of the skills teachers by the school (e.g., running errands for the programme, doing all the

clerical jobs for the programme, updating the passbook of the school in the bank to check whether funds have been transferred by the RMSA to the school account etc.)

3) Instances showing that the skills trainers are made to do work which are outside the purview of the NSQF

Questions:

Sub-theme 1: Relationships between the private VTPs and the trainers

1) What is the hiring process of the trainers?
2) How did the trainers come to know about the VTP and also the NSQF programme?
3) What is their overall experience of the whole process of training? Do they think that this led to value addition of their existing knowledge base?
4) Did the VTPs help them in finding jobs? If yes, in what ways? If not, then how did they come to know about this job?
5) What kind of connections do they maintain with the VTPs after they start their work in the schools?
6) Do they receive appointment letters for their jobs? If yes, then from whom-VTP, school or RMSA? (Try to see a copy of the appointment letter)
7) Do they have to undergo training from the VTP every year for the current position? (in case of trainers who have been working at least since the last academic year). If yes, from whom and what kind of training (describe no. of days / pedagogy, who trained, etc). If no, discuss how he managed his job role, how he/she learnt about what has to be done, how to train children, etc.
8) How are they being paid by the VTPs? Is this a one-time payment or a monthly payment? How do they collect the amount? Do the VTPs charge anything from the trainers for the courses/training?

Sub-theme II: Relationships between the trainers and the School

1) What are the challenges faced by the trainers to carry forward the programme at the school level?

2) How do they deal/negotiate with these challenges?

Sub theme III: Relationship between the trainers and the State

1) How the trainers are kept in dark about the various decisions/programmes/policies of the RMSA? [e.g. Karnataka School Quality Assessment (**KSQA**) programme about which the skills teachers have no prior information]

2) What is their idea of the tendering process?

D. Questionnaire for Students

1. Name:
2. School:
3. Skills subject taken / Level:
4. Caste /Religion:
5. Parental education and occupation:
6. Locality of Residence:
7. Aspirations - what they would like to become, do they want to study further? What routes do they intend to pursue? How would they access these opportunities (educational or employment related)?
8. Why did they take the skills subject? Why did they take up that particular skills subject? Was it (skills subject in the first place and then that particular skills subject that they have opted for) their decision or decisions by the parents/school or anyone else? How do they see it helping them? Will they be able to continue in the same line post-10th? What would they have to do to ensure continuity? (If the aspirations are not in line with the skills subject, then probe how they see the two fitting together?)
9. What forms of support (parental or otherwise) do they have to follow their aspirations / ambitions / or the skills subject? Do their parents or others support them with this? If yes how, if no then why not?
10. What are their parents' opinions regarding the skills course? Why did they allow them / want them to take it up? How do they see it benefitting them?
11. Are they worried about not taking the third language? Are their parents worried? Do they think they will lose out on certain opportunities if they do not have third language?
12. How have the skills classes been so far? Probe in terms of the difficulties of the subject, the lack of adequate provisions to conduct the classes, the language expected to be learnt for the subject, delays in appointment of trainers and if this affected learning in any ways; the

lack of knowledge about the exam pattern, opinions about the guest lectures, industry visit etc. Other anxieties related to the subject?

E. Questions for Headmasters/Trainers at vocational educational schools

1. When did the programme start in the school?
2. How are schools selected for the programme?
3. What is the difference between the old vocational education programme and the new one? (For HM)
4. When will it start for the current academic year?
5. How many levels does the school offer?
6. How many batches have passed out?
7. Do you have a list of students who have passed out/moved to other colleges for PUC?
8. How many students does each batch have?
9. What is the timetable for these subjects?
10. How are the subjects offered? (For example, in lieu of a third language, optional, etc)
11. How are students informed about the subjects? / What is the orientation programme?
12. How are parents informed about the classes?
13. How do students sign up/get selected for the course?
14. Is there an entrance test? If yes, what kind of entrance tests?
15. Is there any language criteria for opting for subjects?
16. What is the examination pattern for the subjects?
17. Have the previous batches received certificates?
18. Have the previous batches given exams for the course? (If yes, please share exam question papers)
19. Who conducts practicals for the exams?
20. When/how are funds sent to the schools? What is the breakdown of allocation (For Headmasters)
21. What are your views on the vocational education programme? (Can be asked to HMs, trainers and students)

F. Questionnaire for RMSA officials

1. Which year did the programme start in schools?
2. What was the process of selection for the 100 schools?
3. Is there a collaboration between the RMSA and the PU board for implementation of NSQF? If yes, what is the reporting mechanism?
4. How many batches have completed level 3?
5. Do they have records of students who have transferred to other schools?
6. What is the selection/tendering process for VTPs?
7. How do they track the programmes? Is there a committee in place for monitoring and evaluation? Does feedback to go the centre?
8. What is the process of certification?
9. How do they envision this translating into job opportunities?
10. What is the examination pattern? Who conducts the practical exams?
11. What role does RMSA play in the promotion of the V.Ed programme?
12. What is the response/feedback from headmasters and teachers in the schools?
13. How do they see these levels/certifications translating into job opportunities for the students?
14. How are the funds allocated to the schools? What is the monitoring process for the same?

For PU Board

1. Are there any linkages between the PU Board and RMSA for implementation of the programme? If yes, what is the reporting structure?
2. Has level 3 begun in any of the 100 schools? If yes, when and in which schools/regions?
3. When will the memo/order be released to start level 3 in schools where it is supposed to begin? Who issues the memo? RMSA or PU Board?
4. Are there any collaborations/linkages between the PU Board and ITIs/Polytechnics for implementation of NSQF?
5. The PU Board and the NSDC are to jointly certify the subjects. What are the roles each plays with respect to certification?
6. What is their understanding of the policy? What in their view is the future for students once they finish level 4?

G. Questionnaire for Vocational Training Providers

1. Name of Organisation
2. Name of person interviewed & designation
3. Organisation background- details about services they provide
4. Number of training centres and their geographical spread
5. Are they offering independent skilling programmes apart from NSDC affiliation?
6. If yes, how many students have been skilled? Are they given certification for the same? Who are the certifying bodies?
7. Do these students pay a fee? If yes, what is the fee amount for the training period? Details on revenue model.
8. Are they given employment opportunities post-skilling? (This question should be asked in the context of independent skilling programmes as well as for nsqf affiliation)

Information about organisation related to NSQF affiliation

9. Why did the organisation choose to partner with NSDC? How does it benefit the organisation?
10. How long have they been affiliated with NSDC?
11. What is the funding pattern with respect to the NSQF programme? How do they allocate funds for the NSQF programme specifically?

Tender Process

12. How does the tendering process take place?
13. What is the current status of the tender? Have they competed this year for the tender?
14. In the academic year 2016-17, trainers were appointed only in the month of August and in the current year, trainers were appointed/are to be appointed as late as October. What is the cause of the delay in appointment?
15. What are the challenges that they have faced over the year? What are the challenges they have faced in this particular year with respect to the **tender** process?
16. What motivates/demotivates them to bid?
17. What suggestions do they have for improving the tender process?

Trainers

18. Is the recruitment process for NSQF trainers different from the process used for their other trainers? If yes, please explain how.

19. What is the nature of training and frequency of training in an academic year? What is the duration of training for new trainers? Are teachers re-trained before a new academic year starts?

20. Who conducts the training in the organisation?

21. Are NSQF trainers trained in a specific set of skills to teach in the schools?

22. What is the minimum qualification required for the NSQF trainer position? Who decides the criteria? The organisation or RMSA?

23. Are trainers further screened by RMSA/school staff post-training, before they start teaching?

24. What is the nature of the contract with the trainers? (Terms, duration, etc)

25. Is there a mechanism to address trainer grievances? Here we can say: for example, issues with teachers, school management, salary payment. Etc.

Perspectives on NSQF

26. What are the industry demands for the skill(s) you are offering? Please elaborate in terms of numbers required and the expected quality of the skilled individuals. Are you able to fulfill this demand?

27. The skills ministry has come under the radar this year for not meeting target which has led to an upheaval in the cabinet. What are the implications of these changes to the organisation and its role in skilling? Has private sector involvement been affected? If yes, how?

28. What is the yearly target of skilling that you need to fulfill? Who fulfills the remaining? (ensure the question is sector specific).

29. Is the course curriculum similar to that which is taught in other independent vocational training centres? For example, beautician course diplomas, ITI training, etc.

30. What are the learning opportunities post level 1 and 2. For example: If level 3 or 4 do not begin, what sort of opportunities are available to the students?

31. How do they perceive the skilling for students translating into job opportunities? What kind of job opportunities are these? How do they match up with jobs of students who graduate with mainstream degrees? (engineering, nursing, IT professional)

32. What are the job opportunities for students after each level of training? (Give examples- for e.g., after level 1 and 2, what kind of jobs will they get)

33. What are the kind of job opportunities for students who have been given certificates? After completion of levels, what additional courses/skills will be required for them to compete in the job market on par with someone with professional degrees. What are the various kinds of investments expected of the students to compete?

34. To your knowledge, have any of the batches been certified as yet? If no, how will they be able to get better jobs with no certificate?

35. Would they provide/arrange for employment opportunities for the students?

36. Have there been any changes in the nature of involvement with the government over the past year?

37. What would you list as the main challenges you have faced as part of the NSQF programme?

38. What changes/recommendations do you have for the programme to improve it?

39. Explore their involvement in skilling from an economic perspective ...what are the industry demands (numbers) for skilled youth? how will they cater to this? How many students are they able to get for this yearly?Is there a demand -supply fit, etc

H. Questionnaire for Skills Trainers (Mysore)

I. General Profile & Programme Implementation

1. Name:
2. School:
3. NSQF Sector:
4. Affiliated with training partner or not? If yes, name of training partner:
5. Qualifications (specify from which educational institution; do an educational history if possible):
6. Work experience. If yes, then the details.
7. Age:
8. Caste/ Religion:
9. Hometown:
10. Current residence:
11. Parent's background (Education and Work):

12. Marital Status. If married, then details about the husband and his family (education and work of husband and other members of the family)

13. General profile of trainers in terms of their interests, ambitions, aspirations, long term plans, attitude in life, attitude towards work / school / children

11. Working conditions: Salary (on time?); workload; whether happy / unhappy with their current positions and why (and based on this we can decide whether we need to probe regarding managing everyday lives)

14. How were the students were selected for the skills programme? Were they given any guidelines from anyone on how to select? Do you get new admissions in the middle at L3 or L4. What kind of strategies are used for the student to cope up with the subject then?

15. Discuss the projects / activities done for internal assessment for both all the levels. How did they decide upon these topics?

16. Have they faced any challenges in arranging field visits / guest lectures?

17 What are the unique challenges associated with regard to teaching Level 3 and Level 4 curriculum? (Probe if they are sufficiently equipped to handle the same in terms of internship/on the job training/ employment post level 4)

18. How have they planned / arranged for the 50 hours of "On the Job Training for Level 3 and 4 students? Any challenges faced?

To Automobile Trainer

1. The Level 4 curriculum emphasizes on gaining knowledge about inspection, repair, replacement and maintenance of various engine and other vehicle components. How is this taught to the students? (Probe Theoretical versus Practical / Hands-on training being imparted). Can such practical skills be effectively taught by using only ppt, animation videos, sketches and pictures?
2. Is 50 hours of on the job training sufficient to gain the required practical / hands-on experience on the above?

For healthcare trainer

1 Does healthcare also have 50 hours of on-the-job training like automobile? or an equivalent of it? Do you think it would be better for the healthcare sector to have one as well?

2 L3 and L4 courses involve a lot more work with the patients as compared to L1 and L2. In that case, are the students ready immediately after +2 to be working with patients in hospitals,

as the lives of individuals are at stake. (give examples of how breathing exercises, recording case files, etc. involve high level of precision and training) How is this ensured through the course?

II. Theme 1: Employment and Employability

1.What are the job roles that the programme prepares the students for? Do they know of opportunities that students can take up after level 4? Have employers approached them or have they been in contact with employers?
2.In their opinion have the four levels of training been planned sufficiently to make students employment ready? Is level 3-4 training planned adequately enough to ensure employability? What else is needed?
3.Are there a separate set of skills be given that makes them more employable or what kind of personal investments are expected of the child?
4. Do they keep track of students once they have graduated/ from level II but are not pursuing PUC in their institution?
5. If yes, then how many to their knowledge have dropped out of school or have taken up jobs after Level II and if any have discontinued and have taken up jobs after Level III? What are the reasons for drop out? Are students able to get jobs in the automobile/health sector itself after level 2 if they drop out?
6.Since so many batches have passed without certificates and only level 2 qualifications, do you feel that the knowledge they have gained so far will help them gain employment after completing PU (which is supposed to be level IV)? Is the L1 and L2 knowledge and practical training sufficient?
7.After the 10^{th} grade, what are their comparative thoughts on students pursuing ITI versus Diploma/nursing diploma versus PUC (along with L3 and L4) especially with regard to employability and future prospects?

III. Theme 2: Students' and Parents' related questions

Sub-theme 1: Perceptions and knowledge of children and their future - Do they feel students who are employable after the four levels of training have any specific characteristics? Or does the skills programme make all students employable?

What kinds of courses do students prefer to take up after 10th? (i.e., PUC, ITI, Skills subjects versus other subjects)

Sub-theme 2: Perceptions on the skills programme - How has the introduction of the skills programme affected trends at school (i.e., pass percentages, continuing education and reduction in drop outs, etc?)

In what ways has it benefited students?

Observations (if possible)**:**

1) Identification of the role and duties of the skills teachers in the school *vis-a vis* that of the permanent teachers

2) Authority of the skills trainers *vis-a vis* the permanent teachers in the schools with regard to:

a) the students

b) other teachers

c) staffs of the school

d) head mistress/master

g) parents

3) Instances showing that the skills trainers are made to do work which are outside the purview of the NSQF

Questions:

Sub-theme 1: Relationships between the private VTPs and the trainers

1.How did the trainers come to know about the VTP and also the NSQF programme?
2. What is their overall experience of the whole process of training? Do they think that this led to value addition of their existing knowledge base?
3. What kind of connections do they maintain with the VTPs after they start their work in the schools? Are they required to attend any meetings at the VTPs HQ / regional office? How frequently and what is the agenda?

4. Do they receive appointment letters for their jobs? If yes, then from whom-VTP, school or RMSA? (Try to see a copy of the appointment letter) and what is the duration of the contract and the salary assured (given that there are 4 levels to the subject and hence so many classes)
5.Do they undergo any advanced training courses for teaching Level 3 and 4 courses? If yes, from whom and what kind of training? Any refresher or recurring training sessions?

Sub-theme II: Relationships between the trainers and the School

1) What are the challenges faced by the trainers to carry forward the programme at the school level?

2) How do they deal/negotiate with these challenges?

3) Are the trainers assigned any additional administrative responsibilities? What kind?

4. How do they manage the teaching workload across all the 4 levels?

5) Are the trainers responsible to manage the NSQF budget and its related spending?

Sub theme III: Relationship between the trainers and the State

1) Do they receive regular updates / notifications / circulars from RMSA about the NSQF program? If yes, how frequently?

2) Are they invited to participate in any RMSA-NSQF related meetings in Bangalore? If yes, how frequently and what is the agenda?

3) Other states are expected to conduct job fairs at cluster levels and also career counselling sessions at the school level for employment of the students after level 4. Have you received any circulars from RMSA regarding the same? If yes then please tell us more about these two events specifically, the preparations made, the processes involved and thereby challenges faced and of course the outcomes of the same?

4) In the tender, under the scope of services to be provided by the VTP, 70% of the students need to be placed at the end of Level 4 (only interested candidates). What is the process followed for job placements? Are there any student criteria (marks cut-off)? What is the current status with regard to the job placements and are there any challenges associated with it?

I. Questionnaire for Students (Mysore)

1. Name:
2. School:
3. Skills subject taken / Level:
4. Caste /Religion:
5. Parental education and occupation:
6. Locality of Residence:
7. Hometown/place of origin:
8. Educational and employment context of extended family / community
9. Home context (economic circumstances, family expectation on them regarding work, marriage, support for education - e.g., tuitions)
10. Ambition / aspiration and how they were inspired in this direction (How will they pursue this further?)
11. Plans for the future (if Level I/II students probe for after 10th; if level III/IV probe for after 12th)

12. How are the future plans linked to ambitions / home contexts (financial, parental desires and support) / skills training?
13. What are their sources of guidance / information regarding future course of action related to education and employment?
14. Interest in the skills programme (why they opted for it, and what they expect from it? Why did they specifically pursue Level 3/ 4 instead of ITI or other courses; or if Level 1/ 2, if and why they will pursue Level 3 / 4 instead of other avenues)
15. Opinion about the course (its relevance, difficulty, how classes are taught or conducted; whether there are specific shortages that affect the course; their opinion about the on-the-job training component)
16. What jobs will the course train them for? Do they think they require any other additional training? Do they feel they can pursue further education in this line? If yes, how?
17. Do they have any sense of the job market (regarding job availability in what sectors; what jobs may be easy to get; what kinds of training required for it)

J. Questionnaire for Employers (Mysore)

1. Name:
2. Organization:
3. How old is the organization
4. Age:
5. Caste / Religion:
6. Designation:
7. Educational Background:
8. Family Background (Native town, family & educational background, financial conditions)
9. Work Experience (all positions held in current and other organizations):
10. What are the various entry level positions in your organization?
11. What are the qualifications / experience / skills / knowledge required for these entry level positions?
12. Are there any pre-screening criteria for these positions (Minimum marks, Minimum Grades, Minimum Years of Practical Experience, Preferred Institutions, Preferred Degrees etc...)?
13. What are the sources for potential candidate resumes? (Newspaper Ad's, Online job portals, Referrals, Existing tie-ups with Training Institutes, internal apprenticeship programs) From which source do you receive the most candidate profiles? From which source do you typically hire the most?
14. Is there any scarcity of potential resumes / candidate applications in your sector? (Probe both quantity and quality) What specific skills do they lack in?
15. Is there enough demand for the said entry level positions in the sector? Where do these demands exist largely? Rural/urban? Private/public sector? Local garage versus service centre for automobile?
16. What is your hiring process for an entry level position?
17. For which entry level positions / job profiles is there the highest requirement in your sector?
18. What are the possible positions available at promotional levels after the entry level position? Is there a preference for these promotions on the basis of specific qualifications/degrees/skills? What are the opportunities for lateral career mobility as well?
19. Are you aware of the NSQF program? Do you have any idea about the curriculum of the NSQF course and what is your opinion on the same?

20. Would you hire students who have completed the NSQF course? What level should they have completed to be eligible for any of the entry level positions? Are there any other set of skills (e.g., soft skills, English language, etc.) that they look for while hiring?
21. How would you compare NSQF graduates with other vocational training graduates (ITI, Diploma etc.)?
22. Would you offer the same entry level salary across NSQF / ITI / Diploma / Only 10^{th} / 2^{nd} PUC? What would be the difference in entry level salaries across these graduates?
23. Do you provide on the job training (OJT) to new hires? If yes, what is the nature and duration of the OJT?
24. Do you also provide structured, classroom training for new hires? If yes, what is the nature and duration of these classroom trainings?
25. If the candidate is an NSQF / ITI / Diploma graduate, is OJT/classroom training still mandatory?
26. If yes, is the type and duration of training for NSQF / ITI / Diploma graduate the same as those without (Only 10^{th} / 2^{nd} PUC)?
27. Has the NSQF program solved or helped with this process of having to retrain? What else in your opinion needs to be a part of the NSQF program?
28. What are the major skills gaps you see in NSQF / ITI / Diploma graduates when compared with your sector needs?
29. CURRENT STAFF DETAILS

Job Designation	Minimum Qualification / Degree	Minimum Years of Work Experience Required (Avg.)	Key Skills / Knowledge / Experience needed	Average Monthly Salary	Lateral movement possible with a higher Qualification / Degree

K. Questionnaire for Vice Principals/Headmasters (Mysore)

Name:

School:

Experience (years of service / whether in same school or different schools)

1. Overall Information on the socio-economic background of the students (kind of jobs parents are mostly engaged in, if there is a concentration of students belonging to particular caste/religion, in and out migration patterns if any, are children engaged in work as well parallelly, etc.)

2. What do the children usually end up doing after class 10? Do they join the same PUC? Or do they join another PUC (any one in particular)? Do they start working? If yes, what kind of jobs do they engage in?

3. What kinds of opportunities are available for the students post PUC in the vicinity? In terms of further studies or for other jobs? And what kind of career streams or jobs do the children end up taking? Explain if the opportunities are different for boys and girls.

4. Perception of the skills subject – prospects it offers students, its usefulness in the long run, views on dropping the third language, employability potential of the skills subject, benefits of completing four levels of the subject, benefits of completing two levels of the subject and then changing PUCs, challenges faced in pursuing a job emerging from the skills subject, other perceived benefits of the NSQF program, interest level of the students in skills,

5. Interface with the department - access to notifications and circulars, access to budget funds, issues with utilization of funds, tender process of the current year and thus how they managed budgets, support needed from the department for smoother implementation, how did they take the decision to implement Level 3 and 4 (did they have any meetings / circulars for this?)

6. Interface with the VTP/trainers – how were the trainers appointed to the school, relations of the HM and the trainer, nature of contract with trainers, other responsibilities expected of the trainer, etc.

7. Any other challenges faced in the roll out of the NSQF program, any suggestion on improving the program to make it more relevant for the students,

8. Changes observed within school / in children's performance / futures / parental attitudes as a result of the NSQF programmes

Annexure III

Skills Development, Social Mobility and Educational Change: A Sociological Analysis of the Effects of the National Policy on Skills Development in India

DRAFT REPORT

AND

PROPOSAL FOR EXTENSION

TEAM

R. Maithreyi, Shruti Padmanabhan, Niveditha Menon & Jyotsna Jha

Centre for Budget and Policy Studies, Bangalore

ACKNOWLEDGEMENT

This study would not have been accomplished without the assistance of a number of people. First, we would like to thank Azim Premji Foundation for providing financial assistance for this study.

Our colleagues at the Centre for Budget and Policy Studies (CBPS) have supported us in various capacities to complete this study. We also place on record thanks to Thyagarajan R and Inisa Guha for their help, at crucial times with regard to support in the field. Mrinalika Pandit, Usha P V and Ramesh K A extended all required administrative support, throughout.

We sincerely thank Mr Patrick and Mr. Tejas from BREADS who extended their help and facilitated our site visits. We would also like to thank all our respondents; students, government officials, ITI/Polytechnic/school principals and administrators, teachers, Vocational Training Partners and trainers who willingly participated in this study and shared their information, views and pertinent experiences with the study team.

LIST OF TABLES

LIST OF FIGURES

1. INTRODUCTION

In the recent times, skills education and training have come to occupy a centre-stage within macro-economic policy and educational frameworks of both the developed and developing worlds. There is a distinctive urgency (Crouch, Finegold & Sako, 2004) with which it has been positioned as a solution to a range of diverse issues from welfare dependency, widening income inequalities, anti-social behaviour, low levels of intergenerational social mobility, regional differences in economic performance, improvements in productivity, insufficient innovations by firms and for remaining globally competitive (Keep and Mayhew, 2010). While the specific nature of proposed skill development programmes and projects differ,[23] in the current global economic environment they are ubiquitously seen as the key drivers of economic prosperity and social mobility (Gibb and Walker, 2011; Keep and Mayhew, 2010; Nikson, Warhurst Cullen and Watt, 2003).

Skills training have, in fact, in the recent decades come to occupy a new status within national policies - from earlier having been considered short term solutions to address youth and adult employment, to now being seen as central drivers of economic growth and progress in the present times. This new importance given to skills training has earned it the epithet of the "training gospel" (Jackson & Jordan, 1999; Swift, 1995) - signifying also the unquestioning acceptance of this approach to macro-economic planning by national governments and international development agencies and aid organisations.

In contrast with this, the present project attempts to critically evaluate the skills discourse, the national policy on skills development (i.e., National Policy on Skills development [NPSD 2009], as well as National Policy on Skills Development and Entrepreneurship [NPSDE 2015]). Examining the impact of the policy and the skills discourse both in relation to the national and global visions and framework for education, as well as in relation to its impact on youth, particularly from disadvantaged circumstances (that are the prime targets of such discourse and policies [see Ainley & Corbett, 1994; Gibb and Walker, 2011; Saraf, 2016]), we attempt to critically make sense of its implications and outcomes. Specifically we sought to examine the national skills policy for India in relation to the following questions:

[23]'Skills' in fact is a broad term used to refer to any form of training, from basic literacy to technical and vocational skills, from personal and social skills to skills for life-long learning, or 'learning to learn' (King, 2008).

1. How is the new framework for skills education different from earlier practices of vocational and technical education in the country, and the practices of the extensive, informal, demand-driven, on-the-job apprenticeship and training that has been a long-standing practice?

2. What impact does the policy supporting a highly privatised, demand-driven skills economy have on the education system? How does this framework restructure the vision for post-primary education in the country?

3. How does the national skills development policy and framework, conceived as additional to and outside of the existing structures of school and higher education fit in and link up with these existing institutional frameworks?

4. What are the implications of the selective linkage of school education with alternate employment-oriented educational routes? What implications does this have in terms of choices for students?

5. Has social inclusion been afforded by the programme? How has it altered the educational levels, employment opportunities and economic and social participation of marginalised groups?

6. What kinds of new linkages are being established between schools, training programmes, industry and market in operationalising this vision for education and economic development in the country?

Analysing the policy and its implementation through these lenses, while also simultaneously contextualising its plan, approach and outcomes in relation to global discourses and practices of skilling, we attempt to fill a key gap in literature - this being the absence of critical, qualitative, sociological literature and micro studies based on field level observations of everyday processes and practices associated with the policy.

While the present report offers one of the first micro-sociological analyses of the skills policy, we state up front that these are just preliminary findings that perhaps do not address all the questions raised above. The report is based on a short-term six month qualitative pilot study that was funded by the Azim Premji Foundation, and presents certain critical insights identified in the first phase, mainly to make a case for a longer, in depth, qualitative micro-study that examines the policy from the perspectives of actors on the field.

Before going into the details of these findings however, we first present a review of literature in the next chapter, in order to contextualise the development of the skilling agenda both internationally and nationally. We then present the methodology adopted for the pilot study in chapter 3, and follow this up with a description of the skills landscape and policy in India through an analysis of secondary data and literature. The final chapters present the preliminary insights gained from the qualitative fieldwork, and then builds a proposal for a larger study that can further explore these preliminary insights.

2. LITERATURE REVIEW

Before proceeding any further in examining the 'training and skills gospel' and its current status within development policies, it is first important to examine the idea of 'skills' itself. While the idea of 'skills' has often been simplistically presented as "learned abilities to do something well"(University of Waterloo Career Services, n.d.; as cited in Urciuoli, 2008, p.211), or as “the competencies that are necessary for effective living” (Larson,1984, p. 4), these definitions in fact defy the multiplicity of associations captured by the term and the complex socio-political history of its polysemy. As Urciuoli (2008, p.212), states, the term 'skills' covers a wide range of "disparate practices, knowledge, and ways of acting and being", and the term itself is "denotationally indeterminate", and gains its meaning from the contexts and ends to which it is applied. The term 'skills' has been used to refer to specific learning outcomes (e.g., such as reading skills, or mathematical skills) to certain practical or manual skills (e.g., driving skills, welding skills, etc.); to certain craft skills (e.g., weaving a carpet); technical / higher order cognitive skills (e.g., composing an argument; planning and decision making skills); and even to certain personal and social skills (e.g., skills to make individuals responsible, punctual, or work effectively in teams).

However, despite these disparate senses in which the term can be used, what appears to unite the various ways in which it is used (and the various ends to which it is put) is the sense that skills denote something that is quantitatively measurable, as opposed to knowledge or learning (Johnson, 1994; Urciuoli, 2008). Skills provide schools, governments and donors, certain specific, simple and routinised targets for training, as well as allow them to demonstrate certain concrete outcomes of the learning process (Johnson, 1998; Levesque, 2011; Urciuoli, 2008). In this they are closely aligned with outcome-based or competency based qualification frameworks, which seek to measure qualifications as a set of skills (Allais, 2012).

As several scholars note (e.g., Allais, 2012; Johnson, 1994; Livingston & Sawchuck, 2000; Urciuoli, 2008), the cumulative skills discourse and its benefits have been produced via education and economic and business models, which together have sought to gain control over the outcomes of education by reducing the variability that emerge among individual learners, due to differences in individual backgrounds and experiences, by constructing them as a "bundle of skills". Further, as they explain this desire to control the outcomes of the educational process derive from the close alignment of education with the economy and

industry (Allais, 2012; Gibb & Walker, 2011; Johnson, 1994). For example, Urciuoli (2008, p.212) states that

> These skills discourses operate in and index (indicate the existence of) the history and conditions of capitalist production, particularly since the 1970s, variously called "post-Fordism," "late capitalism," "flexible accumulation," and, ..."neoliberalism," in which all possible forms of sociality and being are treated as market exchanges (Harvey 2005). (Urciuoli, 2008)

While measurable outcomes of learning (i.e., learning outcomes) have a longer history within education (since the 1920-30s), and had resulted from a desire to link education to certain market-based outcomes (Allais, 2014), the idea of education as preparing individuals in sets of skills is of more recent origin, and can perhaps be attributed to certain key shifts in the economy and society. One factor of influence can be attributed to the failures of liberalism and free market economics, and a realisation of its limits, particularly across the advanced industrialised countries of the West. Within a context of growing unemployment, social unrest and 'stagflation' in the 1970-80s in countries such as the United States of America (USA) and Britain, there emerged a change in discourse regarding the role of the state and the functioning of markets (Olssen & Peters, 2005). Popularly known as 'neoliberalism' this political and economic doctrine presented a 'positive conception' of the state in creating the institutional and legal frameworks for markets to operate efficiently. As Allais (2012) explains:

Neoliberalism ‘‘represents a new modality of government predicated on interventions to create the organizational and subjective conditions for entrepreneurship—not only in terms of extending the ‘enterprise model’ to schools, hospitals, housing estates, and so forth, but also in inciting individuals to become entrepreneurs themselves’’ (Marais, 2011, pp.137–138, citing Hart 2006).

In this, specific forms of education have a critical role to play. Education is seen as a key tool in ensuring the 'disciplined inclusion' of those excluded from the market (i.e., the poor and the marginalised) and in ensuring that they have the right tools to adjust to market demands and fluctuations (Craig & Porter, 2003). Thus, in contrast with the tenets of liberalism, which called for a roll back of the state based on the premise that markets provided the best means for 'rational, self-interested individuals' to maximise their outcomes, under neoliberalism there was a recognition of the need to " artificially arranged or contrived forms of free,

entrepreneurial and competitive conduct of economic-rational individuals" (Burchell, 1996, p.23-24), in order for markets to operate efficiently. Further, Allais (2012, p.639) argues that

In a neoliberal policy environment focused on self-help and responsibilization, education, and particularly vocational education and skills, becomes part of how policy makers avoid addressing structural problems in the economy (Allais, 2012)

While the increased focus on skilling can be attributed partly to the changing rationalities of state in response to certain economic demands, the second factor that can be seen to have influenced the skilling discourse is the changing nature of businesses that emerged from the rapid technological revolutions during the period, most importantly through the development of the personal computer and internet, that allowed businesses to shed their 'Fordist assembly line' system of production, and adopt a flat, flexible, globally distributed business model and allowed for capital to find cheap labour across the globe (Lauder, 2013). As labour power in China, Brazil and India could be exploited to increase profitability of corporations in highly industrialised countries, this also necessitated the training /re-training and skilling of surplus labour in the former countries in order to fit in with the requirements of global capital (Brown & Lauder, 2010).

At the same time that low-end jobs are being outsourced to these countries with more flexible labour laws and cheaper labour, the nature of work itself has transformed with routine mechanical/manual work being undertaken by advanced technology and machinery. In this context, what labour then has to be trained for (especially in the advanced industrialised countries) is in 'knowledge work' - that is premised upon innovation, creativity and use of 'knowledge products' (e.g., software) for back office processes (Lauder, 2013). At the lower end 'knowledge work' also constitutes the knowledge and use of advanced technology and software in performing assembly line jobs.

'Knowledge work', however, is also expensive as it is premised upon long years of general education and training. In this context, Brown and Lauder (2010, p.234) have argued that earlier forms of 'mechanical Taylorism' have been replaced by 'digital Taylorism' - which is the "routinisation of production platforms and processes in both offices and factories."Mechanical Taylorism (introduced into American schools and education as early as the 1920s) sought to prepare children through a 'scientifically planned' curriculum with a set of specified behavioural objectives, demanded by society, and that could be broken down into a set of skills and its constituent elements (Allais, 2014). In the same vein, 'digital Taylorism'

is looking at ways in which intellectual work can be standardised and routinised, and broken down into a set of constituent, mechanical skills so as to enable reduction in costs of production of knowledge work (Brown & Lauder, 2010). This has also led to the growing importance paid to National Qualification Frameworks (NQFs; Lauder, 2013), with Allais (2014) noting that almost 120 countries are in the process of preparing NQFs now.

This has certain significant implications, as world over these frameworks have come to be used to restructure vocational education and training systems too, in ways that highlight employer specifications of competencies to ensure 'relevance' (Allais, 2011).What such frameworks serve to do is in fact reduce the broader concept of vocational education (as seen within the German system, wherein vocational education aims at developing vocational competence and identity, and develops a high level of autonomy in students), into discrete work processes for the job at hand (Allais, 2012). Further, in this system education is conceived as individual portfolios based on a set of various qualifications that students can freely choose from in order to improve their outcomes on the job market (Allais, 2012), thus in fact 'responsibilising' the individual to become 'employable', and shifting attention away from the state's responsibility towards creating jobs (Allais, 2014; Olssen & Peters, 2005; Peters, 2001). Summarising this shift, McGrath (2010) points out that the "toolkit for reform for vocational education in developing countries"

> starts from the premise that improving individual's 'employability' is a better way to bring the poor into the social and economic mainstream than is the redistribution of wealth. It includes systemic reform focused on: giving more power to employers in the shaping of policy directions, often through qualifications frameworks; quality assurance systems; outcomes-based and 'institutionally-neutral' funding (such as voucher type systems); and managed autonomy for public providers. (as cited in Allais, 2014, p. 98).

Critiquing these trends Allais (2014, p.113) states that " this approach to policy reform ignores the ways in which notions of skill as well as skill formation systems are deeply embedded in different ways of organizing economies and societies. Further, she states that " There is a strong contrast between bundles of 'skills', usually called competences, which are frequently descriptions of task-related activities and processes, and the skill and knowledge associated with regulated occupations and professions" (Allais, 2012, p.636). Inclusive development policies, she argues, are ones that focus on

> general and specific skills, especially at the bottom end of the skill distribution, which in turn reinforces social equality. Specific and general skills at the bottom of the distribution are strongly linked to employment protection and unemployment replacement rates. General skills at this level are also strongly related to active labour market policy spending and day care spending, as well as to vocational education. (Allais, 2011, p.23)

With India having ventured recently into a programme to develop a national qualification skills framework that aims at integrating the different forms of knowledge systems and training in the country under one umbrella, in the next few chapters we seek to review these developments in the light of the critical evaluations of skilling projects presented within literature. Commenting about previous attempts in the country to strengthen vocational education and training, Krishna Kumar (2011, p.35) has stated that

> the idea that a substantial proportion of high school graduates could be lured into vocational courses at the higher secondary stage just did not work. The stigma that the caste system places on manual work, including skilled work, meant that no one—not even the sons of highly skilled craftsmen—wanted to join the vocational stream.

He has further stated that while much is expected to happen in terms of reform to the vocational education and training systems under the "new banner of skill development... What continues to be missing in current debates is the acknowledgement that those coming to vocational programmes are mostly from poorer backgrounds, that they need as holistic an education as anyone else" (Kumar, 2011, p.35). We review the skills policy against these larger national and international dynamics and examine what seeks to / achieve (s).

3. METHODOLOGY

As stated earlier, the present study primarily aimed at undertaking a critical micro-sociological study of the national skills policy and the qualifications frameworks and its operationalisation on the field. Unlike other studies that have been conducted in relation with skills policy, that have largely focused on analysing targets and numbers, or on critical policy analysis, our study aimed primarily at understanding the "social and material practices through which... [the policy] was being constantly constituted and reconstituted by various actors and institutions" (Maithreyi, 2015, p.46).

This entailed examining the linkages between stated policy intentions and how this is being negotiated on the field by various actors and institutions. That is, rather than examining policy texts in isolation as a historically-produced, rational documents, with a final authority and say, we aimed at examining policy as 'discourse' - that is as a set of statements that are not a faithful representation of 'reality-as-it-is-out-there', but as an act of selection, categorisation and imposition of meaning by situated human subjects (Jørgesen & Phillips, 2002; Maithreyi, 2015). By examining policy discourses as such, what we sought to highlight is its character as 'social action', composed by certain implicit and deeper connections such as with the structures of knowledge that inform our understanding of human beings and society, and the social processes through which these connections are shaped.

Thus, then policies represent for us 'educational objects' that need to be examined not just in terms of their cognitive frameworks that allow us to see how they 'succeed' or 'fail', but also in relation to how as 'discourse', they are in fact social-material objects that frame thinking, acting, and also who can do this thinking, acting and saying (Kumar, 2014; Maithreyi, 2015). Approaching policies as such, we then have attempted to understand how "…subjects find meaningful threads in the worlds which they inhabit" (Madsen & Carney, 2011,p.117), within the context of authority and power imposed from above.

Thus, in this context, 'field' for us has meant more than the physical space of the field as composed of the schools and the organisations that were connected with the skilling programmes, and that we visited. 'Field', within this mode of enquiry represents discourse, and therefore all forms of 'textual' production, as represented by narratives of key stakeholders and field actors as well as by the realm of educational and economic policy documents, programmatic visions for the skilling, the curricula, and the globally circulating canon of knowledge on skilling. For without an understanding of the global and national

economic and educational discourse and knowledge on skilling, its social history and cultural practices that shape it and are produced by it, societal expectations, the availability and accessibility of labour, the dominant discourse and expectations of the industry, and the cultural practices of socialisation, field level data on numbers skilled, programmes unfolded, individuals empowered, etc. present but only a partial picture that represent only one side of the discourse.

This, then, implied for us the need to give up certain 'clarity-and closure- seeking', scientific approaches and experimental techniques (Madsen & Carney, 2011), of forecasting, macroeconomic modelling, or controlled processes such as surveys that cannot provide the tools with which to examine the "...complexity, confusion and incompleteness of ... experience ... in the global periphery" (Madsen and Carney, 2011, p.117), which is infiltrated and shaped by the discourses produced elsewhere, while these discourses and actions are also constantly negotiated and contextualised within the field.

Thus, the specific approaches we undertook in order to be able to capture the complexity embedded within such everyday negotiations of discourses is that of 'ethnography' combined with the method of critical policy analysis. Ethnography, as stated by Hammersly & Atkinson (2007), allows the researcher to "...study people's actions and accounts in everyday contexts in a fairly unstructured manner, over an extended period of time (Hammersly & Atkinson, 2007; as cited in Maithreyi, 2015, p.48).[24] More specifically, it allows to "...see how people's actions are actually situated within larger frameworks and processes, such as that of globalisation of education systems and schooling, particularly in developing contexts such as ours" (Madsen &

Carney, 2011; as cited in Maithreyi, 2015, p.48). This further allows for the possibility of examining the "…empirical linkages among local settings of everyday life, organisations, and translocal processes of administration and governance" (DeVault and McCoy, 2006, p.15).

[24]By 'unstructured', Hammersly and Atkinson (2007) refer, both, to the flexibility allowed in research design, as well as in the categories used for interpretation of data, which can undergo a process of recursive and reflexive reformulation as the research proceeds.

Thus, too, through our investigations into the field of the various actors who hold vastly different points of interest and power, such as the training partners, the government agencies, the trainers, head masters and teachers in schools, and the students themselves, we were also able to systematically document the deeper practices and discourses that are actually connected to both local and global systems (presented later in the report). Thus, we were able to understand the embeddedness of the institutional practices that define the implementation of the skilling policy.

Specifically, we used a number of methods: observations of school and other institutional contexts (e.g., polytechnic colleges, Industrial Training Institutes [ITI], private skills programmes) within which the skills programme is being implemented; interviews with key actors involved with the skills frameworks which include officials of the Department of Labour and Education; Head Masters, teachers, and skills instructors; Focus Group Discussions with students from government schools, ITIs, polytechnics, etc. (Detailed account of these field visits are given in the appendix.)

In addition, we coupled this with techniques of critical policy analysis which seeks to "... delve deeper into policy formation and process, exposing the nature, scope and distribution of policies" (Gibb & Walker, 2011, p.386). This essentially entails an examination of policy to understand it in terms of its "...'interests, discontinuities, omissions, compromises, and exceptions' (Ball 1990, 3)" (as cited in Gibb & Walker, 2011). This then makes clear that policies are not neutral and apolitical instruments, but in fact are related to specific social contexts, economics and politics (Ball, 1990; Gibb & Walker, 2011; Whitty, 2002)

To take a specific example of what we mean by this, our conversations with different skills partners provided us an understanding that 'skilling' per se is interpreted in different ways by different actors. As we attempt to show later in the report, the concept of skilling from the point of Education and of Labour too is vastly different. Therefore, given that these conversations or discourses around skilling are not being produced in isolation (as was evident to us from the inherent conflict of interest between the different actors in the skilling landscape), policy analysis in relation to the ethnography allowed us to understand the material ways in which the policy is giving rise to its specific process and produces (in some sense) certain forms of realities for its intended recipients.

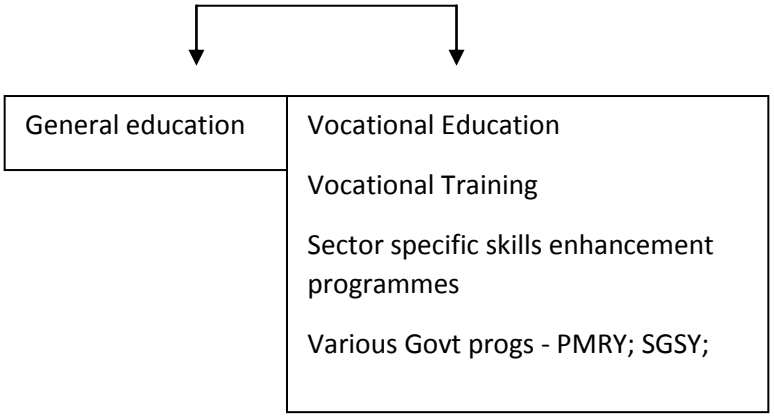
Put together, the methodological approach to the six month preliminary study aimed at helping us understand the key actors in the institutional and policy framework that was the

focus of our study. The methodology was planned and undertaken to identify and map out the ways in which the skills policy and frameworks are operationalised on the field. The preliminary study sought to identify these key actors, institutions and processes that need further exploration in order to understand the sociological implications of the skills policy and programmes. By engaging with the different actors who interact and implement the skilling programme, we were able to get a sense of not only the complexities inherent in this policy space, but were able to ascertain the ways in which these can be deconstructed for analysis.

4. SKILLING LANDSCAPE

Understanding the skilling landscape in India requires coming to terms with the large numbers and the past frameworks for skilling that have already existed in the country prior to the introduction of the new national policies on skills development (further discussed below); as well as the manner in which this landscape has been distributed across several ministries, departments and training institutions.

Figure 1: Kinds of training programmes available in India



A quick glance at India's education system presents two broad streams of available training - general and vocational.

Table 1: Age-Appropriate Population and Enrolment in General Education for India[25]

	Total Population	Enrolment	% Enrolled	% Out of School
Primary (6 to 10 years)	131,426,003	129,122,784	98.25	1.75

[25] **Source:** Enrolment data: NUEPA (2015-16) School Education in India: Flash Statistics 2015-16 (Provisional) National University for Educational Planning and Administration, New Delhi (Table 3.2)
Population data: Calculated using Census (2011) Table C-13 Single Age Year Returns by Residence and Sex

Upper Primary (11 to 14 years)	102,157,105	67,593,727	66.17	33.83
Secondary (15 to 16 years)	50,491,747	39,145,052	77.53	22.47
Higher Secondary (17 to 18 years)	49,175,614	24,735,397	50.30	49.70
Total	**333,250,469**	**260,596,960**	**78.20**	**21.80**

General education caters to 131,426,003 children at the primary level, out of which 98.25% are enrolled in schools. It caters to 102,157,105 children at upper primary level, out of which 66.17% are enrolled and 50,491,747 children in secondary education, out of which 77.53% are enrolled. (NUEPA 2015-16 ; Census, 2011). Higher education data suggests that 291.84 lakh persons are enrolled in higher education institutions as of 2011-12. (All India Survey on Higher Education, MHRD, 2014-15). According to the Twelfth Plan, less than one-fifth of the potential students are enrolled in higher education institutions (Planning Commission, GoI, 2013).

Efforts to introduce vocational education and training began as early as 1882. In 1929, the Hartog Committee pushed for the provision of alternative courses to impart special instruction in technical and industrial schools. The Wood-Abbott Commission report (1936) examined the education system and suggested a hierarchy of vocational institutes parallel to those providing general education. These recommendations led to the set-up of polytechnics and other commercial and agricultural institutions. The Second Education Commission in 1952-53 recommended the implementation of vocational courses at the higher secondary level. The Central Advisory Board of Education (CABE) introduced vocational education courses at the higher secondary level in 1988. In 1950s, the All India Council for Technical Education (AICTE) was set up and technical training was offered at Junior Technical Schools

and Industrial Training Institutes. Vocational Education currently comes under the purview of the Ministry of Human Resource Development and Vocational Training comes under the Ministry of Labour and Employment. While formal skilling institutions exist, a large proportion of the population still remains unskilled. Further, those who undergo formal skilling are not considered fit for the industry. It is against this context that we attempt to make sense of the new push for skilling.

The challenge of introducing a national skills development and policy framework for a country like India becomes immediately visible when we look at the conflicting numbers and estimates of workers to be skilled, and the difficulties that such estimation entails due to the manner in which jobs within the economy are organised. Estimates suggest that nearly three-fourth of the workforce population is unskilled (Ramasamy and Mani, 2016). Only 5% of the total workforce in India has undergone vocational and other forms of technical education and training in India whereas the same is more than 60% in developed countries. (Planning Commission, 2008). As per the United Nation's (UN) India Labour and Employment Report 2014, less than one-tenth of the total workforce has received vocational training (Ramasamy and Mani, 2016). Two percent of the total workforce was formally skilled and a further 8% was skilled non-formally indicating that 90% of the population remains unskilled. Other estimates have suggested that in India, only about 5% of the workforce has marketable skills, as compared to 50% to 60% in other countries (Ernst & Young, 2012).

These numbers further become even more fuzzy when we examine it in relation to the workforce that is employed within the informal sector, which is hard to track and estimate due to the lack of formality that characterise these industries and employees, and the under-reporting or non-reporting of workforce within this sector. Of the current workforce, which has been estimated to be about 450 million, only about 8%-9% are engaged in the organized/formal sector (FICCI, 2010). Over 90% of the workforce is employed within the informal sector, and this large informal workforce, comprising self-employed and casual workers generate a large proportion of the national income also (50%; CII, 2015). As per the National Council of Applied Economic Research estimates, they also generate about 62% of GDP, 50% of national savings and 40% of national exports (ILO 2002 ; Sodhi and Wessels 2016).

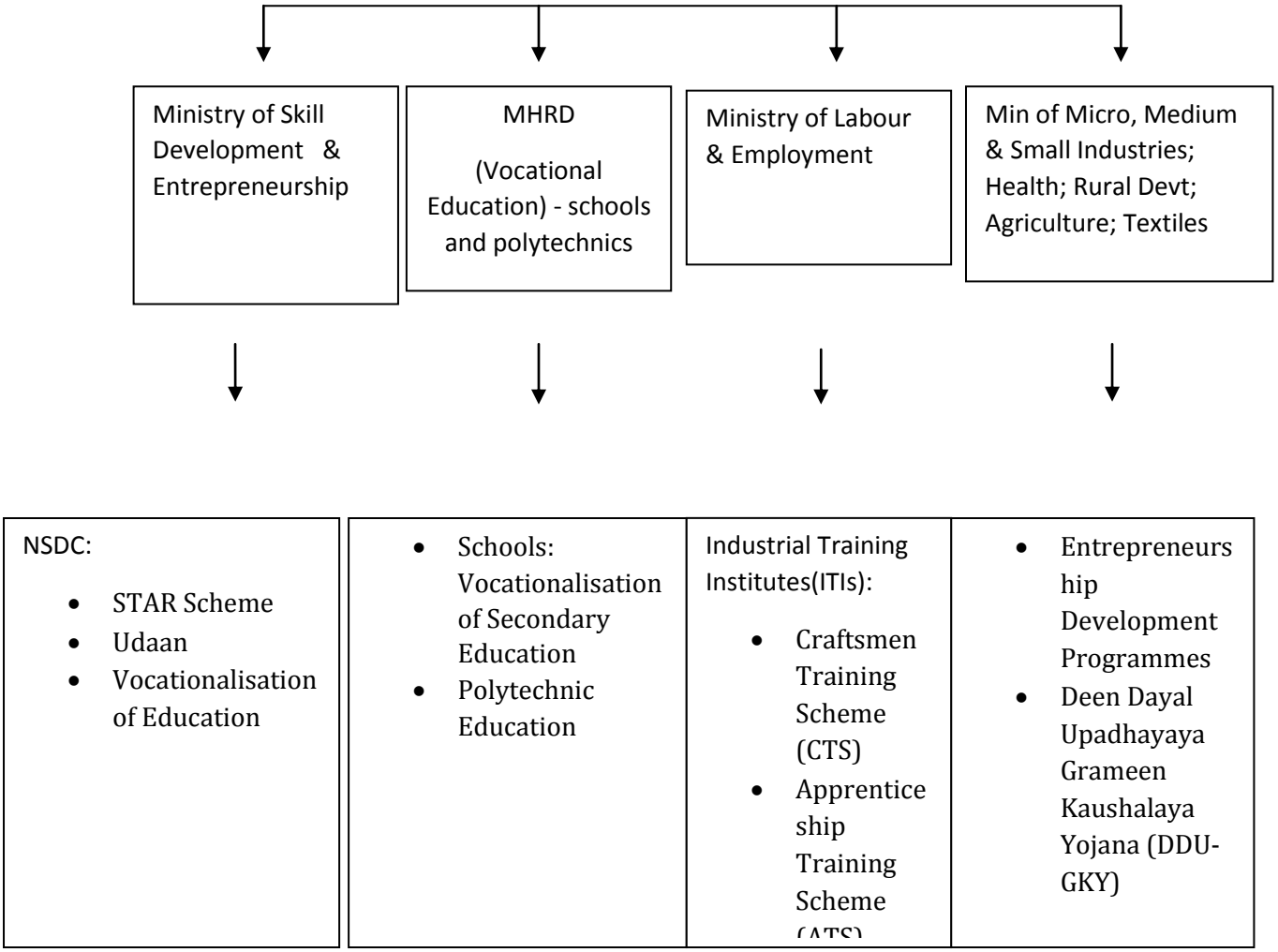
By 2024, the global shortage of skilled manpower would be around 56.7 million (FICCI, 2012). With about 12 million persons expected to join the workforce every year and an existing skill development capacity of 3.4 million, skilling and technical education capacity has to be improved to around 15 million in India. (FICCI, 2012).

Global discourses on skill development, circulated by national and international development organisations, governments and academia posit skill education and training as the solution to address this, and as important in stimulating sustainable development process. Further, skills training has been seen as a key strategy for transitioning from an informal to formal economy, especially for developing economies. It has also been considered essential to address the opportunities and challenges to meet new demands of changing economies and new technologies in the context of globalization. (International Labour Organisation, 2006).

In line with such international thinking, India too has rushed to join the bandwagon of skilling, particularly responding to international and national calls to harness its 'demographic dividend'(Ministry of Finance, Government of India, 2015). More than half of India's population is below 25, and more than 65 per cent below 35. By 2020, the average age of an Indian will be 29 years. Further, 37 million people are graduate and above, including 2.6 million engineers. Deepak Kapoor, Chairman of Pricewaterhouse Coopers (PwC) suggests that the country can capitalize on the demographic dividend by creating a skill ecosystem that trains the youth to meet transnational standards to fulfill the global demand for skilled resources. He also suggests that courses should be introduced at the school level itself and that they should provide market-relevant skills to create a more skilled workforce (The Economic Times, 2016).

A National Policy on Skill Development (NPSD) was introduced in 2009, which sought to enhance individual's employability through rapid and inclusive growth (Ministry of Labour and Employment, 2009). It set a target of skilling 500 million workers by 2022. The policy was superseded by the National Policy for Skill Development and Entrepreneurship (2015), which similarly aimed to develop a comprehensive skills education and training programme to meet the target of skilling 402 million workers by 2022. The aim of the policy is to cater to the growing demand for skilled and semi-skilled workers, particularly in the unorganised sector.

Figure 2: Ministries and Departments undertaking Skilling in India



The 402 million skilling target has been divided amongst 20+ ministries and organisations, each of which has been allocated a skills target. In attempting to standardise vocational and technical qualifications training across the various departments and align it with industry requirements, a key component of the skilling policy framework has also been the introduction of the National Skills Qualification Framework. The MHRD has 50 million, MoLE has 100 million, Agriculture and Rural Development have 20 million each, etc. The largest chunk of 150 million has been allocated to the National Skill Development Corporation (Sharma, 2011; King, 2012). The MHRD through its vocational education programmes, vocationalisation of secondary education at the school level and polytechnic education at graduation level has a skilling target of 50 million. The MoLe through the

Crafstment Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) offered at Industrial Training Institutes (ITIs) has a skilling target of 100 million persons.

The main skilling programme under the Ministry of Rural Development is Deen Dayal Upadhaya Grameen Kaushal Vikas Yojana which was launched in 2014. The scheme that comes under the National Rural Livelihood Mission (NRLM) seeks to improve employment opportunities for the rural youth and to enhance the competencies of stakeholders and functionaries in the effective implementation of placement linked skills programs for the benefit of the rural youth in India (National Institute of Rural Development and Panchayati Raj, 2016).

Table 2: Ministry/Department/Organisation-wise Target/Projected Number of Trained Persons under Skill Development Initiative (SDI) in India (2022)

Ministry/Department/Organisation-wise Target/Projected Number of Trained Persons under Skill Development Initiative (SDI) in India (2022)[26]	
Ministries/Departments/Organizations	**Target/Projected No. of Trained Persons (In Lakh)**
National Skill Development Corporation	1500
Labour and Employment	1000
Tourism	50
Textiles	100
Transport	300
Tribal Affairs	-
Rural Development (RUDSETI) and IL	200

[26] Source: Indiastat: http://ecaccess.tiss.edu:2086/table/labourandworkforce/380987/training/283/698383/data.aspx

and FS	
Women and Child Welfare	100
Agriculture	200
HRD Higher Education, HRD Vocational Education	500
Dept of Heavy Industry	100
Urban Development	150
Department of Information Technology	100
Food Processing Industries	50
Construction Industry Development Council (Under Planning Commission)	200
Health and Family Welfare	100
Micro Small Medium Enterprise	150
Social Justice and Empowerment	50
Overseas Indian Affairs	50
Finance-Insurance/Banking	100
Consumer Affairs	100
Chemicals and Fertilizers	50
Others (Power, Petroleum etc.)	150
Total	**5300**

The Government of India also set up a full-fledged Ministry of Skill Development and Entrepreneurship in 2014 to coordinate and manage all skill development activities ; skill upgradation, building of new skills, vocational and technical training framework and to bring

about innovative changes not just for existing jobs but also for jobs that are yet to be created. The MSDE has four skill development schemes; Pradhan Mantri Kaushal Vikas Yojana, STAR, UDAAN and Vocationalisation of Education. These schemes are implemented by MSDE nodal agencies. Pradhan Mantri Kaushal Vikas Yojana is the flagship scheme of the MSDE funded by the Government of India that seeks to skill over 24 lakh youth in 2015-2016. Much of the training done under the MSDE is carried out by private sector training providers. (Ministry of Skill Development and Entrepreneurship, 2015).

A national qualifications framework was also introduced by the Government of India in order to standardise the training programmes provided through different ministries, departments and institutions. Termed as the 'National Skills Qualification Framework' (NSQF), this is a quality assurance, nationally integrated education and competency based framework that will provide for multiple pathways, horizontal as well as vertical, both within vocation education and vocational training, and among vocational education, training, general education and technical education, thereby linking one level of learning to a higher level. (Ministry of Finance, 2013). A standardized framework was established to ensure that teaching and training would be based on National Occupational Standards for each level.

The NSQF has made provision for a system which would allow vocational pass-outs from schools, ITI's and Polytechnics to enter higher education programmes in vocational/technical/general education courses, including degree level courses such as Bachelor of Vocational Education which is now being offered in colleges across the country. The University Grants Commission (UGC) has launched the three-year employability linked B.Voc programme from 2014-2015 in 125 colleges and universities. (V.S. Mehrotra 2016). At higher education levels, education programmes are being redesigned to incorporate a more vocationally- oriented content for providing opportunities for internships and work-based learning. (Mehrotra, 2014).

Further, under the Ministry of Skill Development and Entrepreneurship (MSDE), there are three nodal agencies, that provide the supportive infrastructure for skilling:

1) National Skill Development Corporation (NSDC)

2) National Skill Development Fund (NSDF)

3) National Skill Development Agency (NSDA)

The **National Skill Development Agency** (NSDA) was created to coordinate and facilitate skill development activities in the country. The NSDA, an autonomous body is involved in development and rationalisation of skill development schemes to the Government of India; creation of an integrated Labour Market Information System; engagement with states to plan and help develop skill development schemes/programmes; promotion of a skill development initiative that encourages innovative ideas, practices and concepts related to skill development. (MSDE, 2014).

The **National Skill Development Fund** (NSDF) is a wholly government owned trust, which was set up in 2009 to raise funds for government and private sector skill development across the country (NSDC,2015) The fund is contributed by several government sources, donors/contributors etc. A public Trust set up by the Government of India is the custodian of the Fund. (Ministry of Skill Development and Entrepreneurship, 2014).

The **National Skill Development Corporation** (NSDC) was created to as a Public Private Partnership (PPP) between the central government and private industry bodies such as FICCI and CII in 2008, to facilitate skill development initiatives, fund and support Vocational Training Partners by providing capital in the form of loans and equity, encourage and facilitate building of support systems for overall skill development. (Mehrotra, 2014). Additionally, the NSDC is involved in the setting up and funding of Sector Skill Councils (SSCs), engaging with various stakeholders and coordinating advocacy campaigns.

The NSDC was set up as a as a not for profit public company under section 25 of the Companies Act, 1956 with an equity base of Rs. 10 crore, of which the private sector holds 51%, while the Government of India controls 49%. In 2011, it was converted into a private limited company. Till the 31st of March 2015, NSDF had released Rs. 2333 crore to NSDC towards skill development programmes including National Skill Certification and Monetary Reward Scheme (STAR) and UDAAN Scheme (J&K oriented).

A live ticker on the NSDC website indicates that with the help of 290 training partners and 4,526 training centres across the country, 91,91, 675 persons have been skilled and 35,77,444

persons have been placed after their training. The goal of the NSDC is to skill 150 million persons by 2022. (NSDC, 2016).

Sector Skill Councils (SSCs) are set up by the NSDC to create Occupational Standards and Qualification bodies, conduct skill gap studies, develop competency frameworks, conduct training for trainers and assess and certify trainees based on standards created by them. They hold the responsibility of conducting the NSQF exams. The SSCs have been formed by bringing together all stakeholders such as the industry, academia and training institutions. They are also involved in establishing a sector specific Labour Management Information System (Kumar,2016).

SSCs are to develop sectoral frameworks to map out existing skills and qualifications held by the current workforce, analyse future training and skill requirements relevant to sectors and to design clear cut progression pathways and provisions for seamless vertical and horizontal mobility of students. (MHRD, 2012). The governing council for SSC's consists of over 450 corporate representatives which highlights the extent of private sector involvement. As of 2011, there were 6,500 Vocational Training Providers (VTP's) across the country which provided training in 59 sectors. 1.3 million persons were trained and tested, with a total expenditure of Rs. 165.41 crores. (Mehrotra, 2014)Vocational Training Partners affiliated with the NSDC have trained over 9 million people across 31 different sectors in over 550 districts across the country. VTPs consist of for-profit and not-for-profit organisations that conduct courses. The two types of affiliated courses are:

- Courses conducted by NSDC approved training partners which should be certified by Sector Skill Councils (SSCs) as well as courses that may not be certified by SSCs as no SSC exists in that area.
- Courses certified by SSCs which are not provided by NSDC funded training partners. (NSDC, 2015).

Skill Knowledge Providers (SKPs) provide hands on training in specific sectors. For example, in the Automobile sector, a SKP shall be the service centre of authorized automobile manufacturer located preferably all over the Country, (AICTE, 2012). Skill Knowledge Providers under the NSQF tie up with vocational training and education centres to provide skilling support and to help organize qualifications.

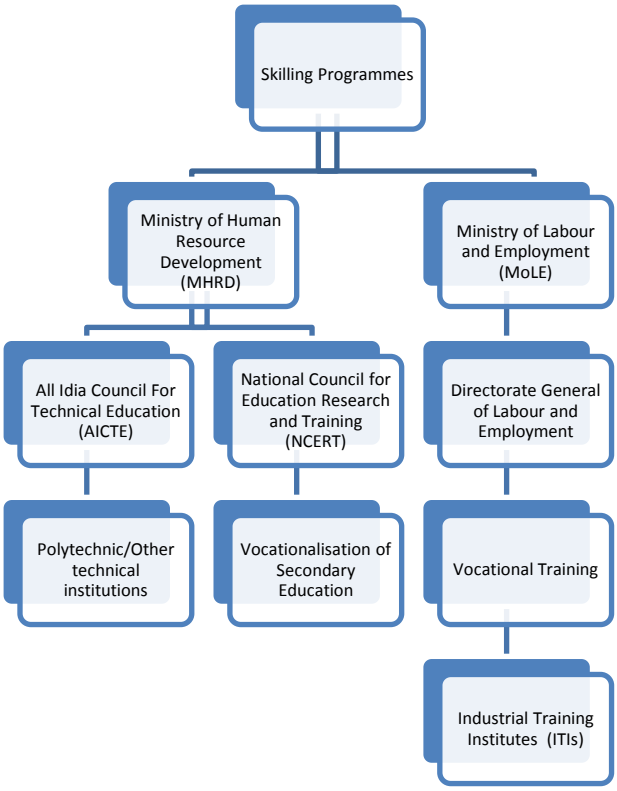
To deal with the massive task of skilling and training, the government has roped in private sector support and encouraged the development of Public Private Partnerships (PPPs). The increased role of private agencies can be seen in 1896 government-run ITIs that have been sought to be remodelled through PPP mode since 2007; in the growth of the number of private ITIs from 2000 in 2007 to 6498 in 2011; in the promotion of for profit skills development companies by NSDC since 2010; and the involvement of private vocational training providers in providing vocational education under the Vocationalisation of Secondary and Higher Secondary Education Scheme by the MHRD (Mehrotra, 2011).

Having discussed the targets to be skilled and the new institutions that have been introduced to undertake this massive task, in the next section we review the existing infrastructure and tradition of skilling that has previously existed in the country, prior to the introduction of the skills policy in 2009.

4.1 EXISTING INFRASTRUCTURE FOR SKILLING

The figure given below presents a diagrammatic representation of the division of skills training across the two ministries of labour and education.

Figure 3: Skilling programmes of MHRD and MoLE



Formal skilling in the country has been taking place for the last several decades through vocational training institutes, vocational education institutes, private skilling organisations and in-company vocational training.

4.2 Vocational Training Programmes in India

Historically, vocational training in India has been provided by Industrial Training Institutes since the 1950's. The ITIs fall under the Directorate General of Employment and Training (DGET) of the Ministry of Labour and Employment (MoLE). There are two kinds of ITIs - government owned and private. In the 1980's a distinction was made between government

funded and managed institutions which came to be known as Industrial Training Institutes (ITIs) and private owned, managed and funded institutions known as Industrial Training Centres (ITCs). Currently, the institutions are referred to as ITI's and Government or Private is added to the name to indicate if the institution is state owned or privately owned. (Government of India 2014). A study conducted by Joshi et al. (2014), reveals that amongst educational institutions, while ITIs have much better capacity utilization; they have a very high dropout rate. The dropout rate within government ITIs is as high as 15.5% whereas for private ITIs, it is 6.4%. One of the reasons understood for lower dropouts in private institutes was that the fees for the private institutions were taken all at once in advance. These fees are extremely high as compared with the fees charged by government run ITIs, and thus, it parents and students appear to take the courses more seriously.

In addition to the ITIs, through which training in skills is provided, there are also Advanced Training Institutes, Regional Training Institutes (RVTIs) and other central institutes, which fall under the purview of the DGET, and that provide vocational training (MSDE, 2014).

The Craftsmen Training Scheme (CTS), which was introduced in 1950, is mainly the course provided by the ITIs Under the CTS, students are trained in crafts to ensure they can find employment. The curriculum for CTS is standardized and designed by the National Council for Vocational Training (NCVT) and it is implemented under the direction of the State Council for Vocational Training (SCVT). ITIs cater to school dropouts providing training in 133 different trades out of which 70 are engineering related and 63 non-engineering trades. Students with varying qualifications (8^{th}, 10^{th}, and 12^{th}) can join depending on the type of trade. The course duration ranges from anywhere between six months to three years. (Government of India, 2014)

Advanced Training Institutes (ATIs) provide training to instructors and two ATIs offer long-term and short-term courses for training of skilled personnel at the technician level. This is in the fields of Medical, Industrial, Consumer Electronics and Process Instrumentation. (Mehrotra, 2014).

Table 3: ITIs in India[27]

ITIs in India				
Year		Government ITIs	Private ITIs	Total
2007	Number	1,896	3,218	5,114
	Capacity (million)	0.400	0.342	0.742
2010	Number	2,133	5,906	8,039
	Capacity (million)	0.432	0.683	1.115
2011	Number	2,244	7,160	9,404
	Capacity (million)	NA	Na	1.321
2014	Number	2,275	8,475	10,750
	Capacity (million)	0.490	1.033	1.523

As of 2014, the institutions together carry a seating capacity of over 1.523 million. The number of ITI's has increased substantially in the last few years. What started off as 54 institutions in 1953 has grown to 10,750 in 2014 (Kumar. K, 2016). A central and "...common feature across all these initiatives is the strong involvement of the private sector in the spirit of Public-Private Partnership (PPP)" (Kumar, 2016). Under the 12th Five Year Plan, a target has been set to open 3000 new ITIs under PPP mode (Kumar, 2016). This, as Kumar (2016) argues, has led to the visible shift towards more private ITIs, while in comparison there has just been a marginal increase in the number of ITIs in the government category during 2007-2014 (Kumar, 2016). Further it has also been proposed to develop and upgrade 500 existing ITIs, and convert them into 'Centres of Excellence' (of which 100 are to be upgraded with government funds, and 400 with World Bank assistance). Courses at these 'Centres of Excellence' are proposed to be revised to provide one year of Broad Based Basic

[27] Source: GoI (2010, 2011, 2014), Kumar.K (2016)

Training (BBBT), followed by six months of modular advanced training within industry, to better align vocational training with the needs of the industry (Kumar, 2016).

Table 4: State-wise number of trainees in ITIs[28]

States/UTs	Trainees Admitted in Year 2014-15	Trainees Admitted in Year 2015-16
Andaman and Nicobar Islands	186	240
Andhra Pradesh	56425	35178
Arunachal Pradesh	356	441
Assam	2765	2991
Bihar	65415	79056
Chandigarh	662	1029
Chhattisgarh	12342	13503
Dadra and Nagar Haveli	108	112
Daman and Diu	156	223
Delhi	6044	7865
Goa	1247	1795
Gujarat	43454	55069
Haryana	26797	26141
Himachal Pradesh	16596	15234
Jammu and Kashmir	2343	2528
Jharkhand	26729	28422

[28] Source : Indiastat: www.indiastat.com/labourandworkforce/380987/training/283/stats.aspx

Karnataka	69579	67467
Kerala	29724	28619
Lakshadweep	94	90
Madhya Pradesh	38871	59654
Maharashtra	104040	90960
Manipur	48	94
Meghalaya	546	335
Mizoram	523	316
Nagaland	171	73
Odisha	47729	47190
Puducherry	843	870
Punjab	33808	42351
Rajasthan	121039	127272
Sikkim	267	218
Tamil Nadu	38714	38242
Telangana	33727	32455
Tripura	1066	1128
Uttar Pradesh	147679	143175
Uttarakhand	7444	10147
West Bengal	11687	15082
India	**949224**	**975565**

The expansion of private ITIs instead of investing in government ITIs has certain implications. Despite better utilization of student intake capacity at government ITIs, private ITIs appear to be having a greater demand. A study by Mehrotra and Saxena (2014) shows that several new private ITIs have been opened due to the demand for them, but these are severely short on infrastructure (having only one or two rooms), offering a small number of professional trades. Further, they have pointed out to lack of qualified trainers at these institutes and the poor quality of training. With the target population for technical training and education in ITIs belonging to economically disadvantaged backgrounds, these findings point to a situation in which they find themselves paying higher fees in the hope of getting better training and opportunities for employment, but in reality being short-changed.

4.3 Vocational Education Programmes in India

Vocationalisation of education which is designed to prepare students for the world of work could provide them the opportunity to develop competencies required to find a job. It is considered to be better than academic education. (Maclean and Pavlova, 2013). Pavlova (2005) had identified three components of vocationalisation: learning for work (work-related knowledge, practices), learning about work (settings and conditions) and understanding the nature of work (socio-cultural, economic and political factors that influence work). (V.S. Mehrotra, 2016).

Vocational education was introduced in India to address the needs of those who would be forced to enter the workforce earlier than those who would enter the professional world via traditional academic streams. (NCERT, 2005). The foundation for education for students at this stage is crucial. Students could either choose job-oriented vocational courses to enter the world of work or specialized academic courses for their higher education. Their training thus should equip them with the required basic skills and knowledge needed for them to contribute effectively to their field of choice. (NCERT 2005).

Vocationalisation of secondary education was launched by the MHRD in 1988. The centrally sponsored scheme was launched with the aim to provide vocational education in secondary school. (Gupta et al, 2016). Vocational Education was offered to students of class XI and XII to help them develop competencies (knowledge, skills and attitude) required by a specific occupation or a group of occupations, through diversified vocational courses to prepare students for the world of work, especially for self -employment (Goel, 2011).

Table 5: Number of Technical Institutes and Student intake.[29]

Number of Technical Institutes and Student Intake						
	2006-2007			2013-2014		
Levels	Number of institutions	Number of student intake	Intake per institute	Number of institutions	Number of Student Intake	Intake per Institute
UG	2,322	746,672	322	4,599	1,736,174	378
PG	5,735	388,071	68	7,929	560,226	71
Diploma	2,511	633,983	252	4,037	1,172,868	291
Total	10,568	1,768,726	167	16,565	3,469,268	209
% Change in 2013-13 over 2006-2007				56.75	96.15	25.13

NSSO 66th Round data indicates that vocational education has been accessed by 1% and 5% of the rural and urban educated population respectively. One percent and 7% of males in rural and urban areas, respectively had undergone vocational education and training but for females, it was 1% and 3% in rural and urban areas, respectively. (NSSO, 2010).

Prior to the new skill development initiatives, vocational education in India was offered through vocational courses offered in classes XI-XII and as diplomas in polytechnics. Students can join polytechnics post completion of the 10th grade. The polytechnic graduates are usually the ones who manage shop floor operations. The diploma course includes programmes for engineering and technology, vocational fields (library science, beauty), applied arts/crafts. After completion of a diploma programme at polytechnics, students via lateral entry can go directly to a third-year engineering course or a second-year BA/BCom programme.

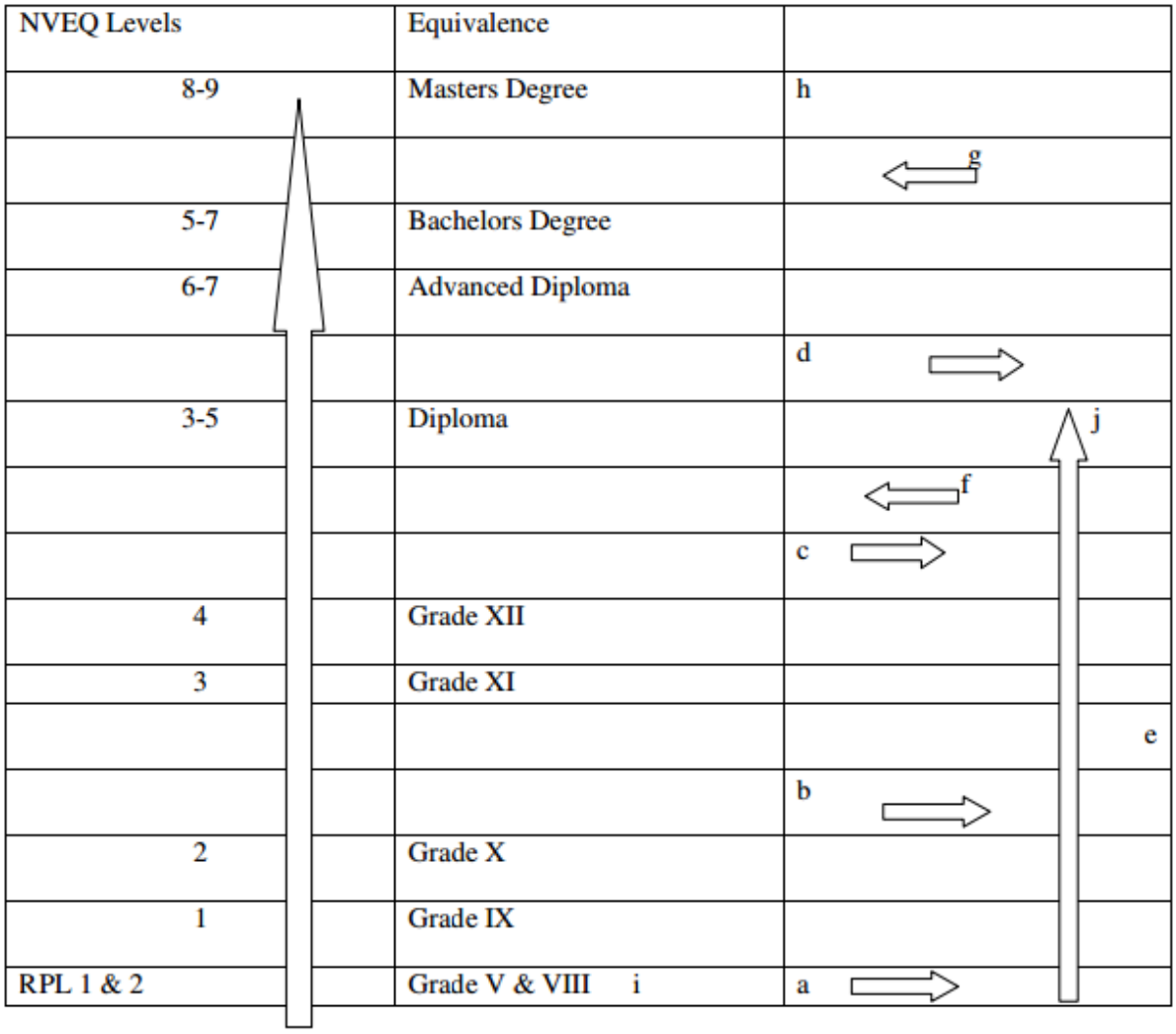
[29] Source AICTE (2014), Venkatram. R (2016)

Following the introduction of the new skills policy in 2015, the previous centrally sponsored scheme of 'Vocationalisation of Higher Secondary Education' (providing vocational education in classes XI and XII) has been subsumed under the Rashtriya Madhyamik Shiksha Abhiyan (RMSA) scheme and has been renamed Vocationalisation of Secondary and Higher Secondary Education from the 1st of April, 2013. Under this new scheme vocational education has been introduced from class IX onwards and is structured as four levels to be completed between classes IX-XII.

Following the introduction of the skills policy, efforts were also made to develop a National Vocational Educational Qualification Framework (NVEQF) to bring a uniformity to training. the NVEQF is a descriptive framework that organises qualifications according to a series of levels of knowledge along with skills. The levels are described in terms of learning outcomes which are competencies which the learners must possess regardless of whether they were acquired through formal, non-formal or informal education and training (MHRD,2012). The NVEQF was introduced to enable a seamless transition from a vocational to formal education system. The implementation of NVEQF was handed over to the NSDC and the respective SSCs.

Figure 4: Illustrative Pathways within NVEQF[30]

Illustrative Pathways within NVEQF



As per the illustrative pathway presented in the NVEQF:

. Persons having acquired skills through the non-formal and informal mode can bridge literacy and numeracy and get certification from NIOS and State Open Schools to move either into Class IX and further or into ITIs or exit to the work place in the context of adult learners.

b. candidate undergoing vocational education upto Grade X moves to general stream and goes on to complete a degree

[30] Source: MHRD, 2012

c. candidate undergoing vocational education upto Grade XII moves to general stream and goes on to complete a conventional degree

d. candidate acquiring a vocational diploma moves to general stream and goes on to complete a degree or continue two levels more and complete advanced Diploma in vocational

e. candidate who has passed Grade X in general stream can join vocational stream at level 3 after passing a test of NVEQ level attained i.e. acquire skills required at NVEQF level 1, 2

f. candidate undergoing general education up to Grade XII moves to vocational stream at level 5 after passing a test of NVEQ level attained and goes on to complete a vocational degree provided he acquires skills of NVEQF level 1, 2, 3, 4

g. candidate acquiring a general degree on certification of NVEQF Level 7 can receive a post graduate diploma in vocational education h. candidate acquiring a general degree on certification of NVEQF Level 9 can receive a post graduate degree in vocational education i. Students pursuing vocational education have an option of vertical mobility. Students passing Class VIII and X also have the option to join ITIs. With assessment of prior learning a candidate could progress towards a community skill diploma in a community college/polytechnic in a special flexible curriculum determined by UGC and AICTE. (MHRD, 2012).

(However, during field work, key staff from RMSA, Karnataka told us that this process of multiple pathways of entry does not exist. Perhaps, it is still in the conceptualisation stage and is yet to be implemented. Further research and exploration is needed to better understand the process.)

NVEQF that was first piloted in Haryana and Assam was accepted by the central government and state governments across the country. It was then replicated in over 1000 schools across the country. Under PPP, the private sector involvement increased wherein the Sector Skills Councils play an active role in decision making and planning of target domains.

Table 6: **State-wise distribution of sectoral trainings offered under the vocationalisation of secondary and higher secondary education programme.**[31]

State/Board	Schools (In 2014-15)	Sectors	Expected Number 2014-15
Haryana	240	Auto, Healthcare, Retail, Security, IT-ITeS, Beauty and Wellness and Sports	23,000
Himachal Pradesh	200	Auto, Healthcare, Retail, Security, IT-ITeS, Agriculture	18,000
Uttarakhand	44	Auto, Healthcare, Retail, IT-ITeS	5,000
Madhya Pradesh	50	Auto, IT-ITeS	2,500
Punjab	100	Auto, Retail, IT/ITES, Security, B&W and Healthcare	5,000
Rajasthan	70	Automotive, Gems &Jewellery, Healthcare, Travel & Tourism and Beauty	3,500

[31] Source: Indiastat: http://www.indiastat.com/

		& Wellness	
Maharashtra	350	Auto, Healthcare, IT-ITeS, Construction, Capital Goods	15,000
Nagaland	6	IT-ITeS	300
Karnataka	**100**	**Auto, Healthcare, IT-ITeS, Retail**	**15,000**
Chhattisgarh	30	Automotive, Retail and IT-ITES	2,000

In Karnataka, the programme has been implemented in 100 schools. The domains that have been selected for Karnataka are IT, Automobile, Retail and Beauty and Wellness. Trainers on the field suggested that the school selection was done carefully and strategically to ensure that all the selected schools have a Pre-University (PU) college in the same campus. These schools are distributed across urban and rural parts of Karnataka. Most schools have two of the domains and each domain for each level can accommodate 25 students. The schools visited in Bangalore urban region during the preliminary study conduct tests for each domain to select the 25 students as more students apply. This indicates that some students who are also genuinely interested will be left out due to the number of seats.

When the programme was launched in 2014, vocational subjects were introduced in the 9th grade as optional subjects. Students who opted for the subject would stay back after their regular classes were over to attend the vocational classes. From 2016 onwards, students can opt for the vocational education subjects in lieu of a third language. In Karnataka, for students whose first language is Kannada, the third language is Hindi and for those whose first language is Sanskrit, the third language is Kannada.

The NVEQF which was launched in 2012 became NSQF following a declaration made by the Ministry of Finance in 2013. NSQF was developed by the Ministry of Labour and Employment (MoLE) and the MHRD with assistance from the India-EU Skill Development Project.

With the emphasis on standardization of material, the curriculum for vocational education is currently being prepared by Pandit Sundarlal Sharma Central Institute of Vocational Education (PSSCIVE), under the National Council of Education Research and Training, and has been aligned to the NSQF.

Under the Vocationalisation of Secondary and Higher Secondary Education scheme, each school is supposed to be provided with a budget of Rs. 14.5 lakh per annum to bring in resource persons, and conduct the vocational education training (Saraf, 2016 ;MHRD 2014). Data from the field in Karnataka suggests that schools are given a fund of 1 lakh per annum to run two courses. More evidence from the field suggests that problems with fund flow and use. However, in this preliminary study, we are unable to ascertain what the nature of this misuse is or if it happens at all.

4.4 Skilling in the informal sector

Over 90 percent of employment in India is in the 'informal' sector, with employees working in relatively low productivity jobs. In the informal sector, where informal skilling already takes place, there is a massive need to ensure training, certification and thereby upward mobility. Those in the informal sector are unaware of the need for certification and formal training as they either do not have the funds or access to skilling programmes.

The schemes and programmes in place to promote and support skill development in the informal sector are Community Polytechnics, Jan Shikshan Sasthan, National Institute of Open Schooling (NIOS), Pradhan Mantri Kaushal Vikas Yojana (PMKVY) and Modular Employable Skills (MES). (World Bank, 2007).

A World Bank study (2007) indicates that public training institutions have played a limited role in provision of skills to the informal sector. While one of the mandates is to train workers in the informal sector, it rarely takes place. The share of ITI graduates who opt for self-employment or those who go back to the informal sector remains low.

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development and Entrepreneurship (MSDE) launched in 2015.This scheme aims to encourage a large number of Indian youth to take up industry-relevant skill training to help them access gainful employment. Training and assessment fees are entirely paid by the government under this scheme. The scheme is implemented through NSDC. (Ministry of Skill Development and Entrepreneurship, 2015).

Key Components of the Scheme:

1. **Short Term Training**

    a. The training provided at PMKVY training centres is imparted to those who are school/college dropouts or unemployed. The training is provided as per the NSQF and the centres train persons in soft skills, entrepreneurship, financial and digital literacy. The NSQF training provided is for Level 5 and below. The fees for the training is paid entirely by the government and placement assistance is assured by the training partners.

2. **Recognition of Prior Learning (RPL)**

    a. Persons who have acquired skills, or learning experience can be assessed and certified under this component of the scheme. The aim is to align skills/competencies of the 'unregulated workforce' to the NSQF. Agencies such as the SSC's, and other appointed agencies by the NSDC/MSDE will be incentivized to implement these RPL projects in RPL camps, RPL at employers' premises and RPL centres.

    b. While the official estimate of the percentage of skilled workers in the overall workforce is around 2 per cent, there are lakhs of people who are illiterate or semi-literate but are adept in the art of craftsmanship or skilling for generations. Varanasi or Kancheepuram weavers, gold and jewellery workers of Jaipur, diamond workers of Surat, plumbers from Odisha and many more. These people are skilled and working, they need to be certified. A skill development official suggested that the (RPL) programme is an attempt to bring people formally to the skilling list, starting with the construction sector (Indian Express, 2016).

From the preliminary study, there was no mention of Recognition of Prior Learning or how exactly the unregulated workforce in the organized/unorganized sector can apply/benefit from this scheme.

3. **Special Projects**: Creation of a platform to facilitate training in specific area and/or premises of Government bodies, Corporates or Industry bodies, and trainings in special job roles not defined under the available Qualification Packs (QPs)/National Occupational Standards (NOSs).

4. **Kaushal and Rozgar Mela**: Training partners shall conduct Kaushal and Rozgarmelas to foster a spirit of community mobilization and active participation. These will be conducted every six months and beneficiaries should be encouraged to actively participate in National Career Service Melas. (Ministry of Skill Development and Entrepreneurship, 2015).

4.5 Issues with the existing Skilling Landscape:

Based on our primary data and secondary data analysis, we identified the following issues within the skilling framework in the country. The skill gap between demand and supply can be looked at from two angles:

a) There is a shortage of persons trained in a trade

b) The trained persons do not possess the skills required by the industry. Employment vs Employability: As of 2011, the number of persons receiving VT in both government and private ITI's was around 1.33 million. Given that the workforce in 2010 was 460 million, this figure is extremely low. Compounding these problems of low numbers is research done by the World Bank (2007), which suggests that a large number of ITI graduates find it difficult to get placed immediately after the course. Despite the presence of the Apprenticeship Training Scheme through which they work in the industry, they are unable to secure jobs. (World Bank, 2007). Trainers on the field mentioned that ITI graduates are not considered 'industry ready'. Respondents highlighted the lack of communication and team work skills required to work in the industries. Addressing these industry- requirements, the current policy places a lot of importance on what has come to be known as 'soft skills'. This is also reflected in a World Bank study on Vocational Training in India (2007), which highlighted the need for reforms within vocational education and training systems as employers were not happy with the lack of skills amongst hired employees. The Skill gap

study conducted by the NSDC indicated that the industry was not happy with the quality of curriculum taught at technical institutions. According to NSDC representatives, students are not prepared for the industry and are largely referred to as as 'unemployable'. The industry repeatedly refers to students as 'unemployable' and unable to cope with shop-floor work. (NSDC, 2014). A common theme that emerges from primary and secondary data is that the target of skilling 500 million by the year 2022 is then not necessarily to address the manpower shortage, rather to produce more employable persons to suit the needs of the industry. Poor quality of training- A study conducted on in-company vocational training indicates that most companies overcome the skill gap faced by providing in-company training and on-the job training for fresh employees. (Mehrotra et al, 2013). Private sector investment in the NSDC is 51%. Most employees go through an initial training process once they join an organisation, if the gap can be overcome within the company itself, why does the need arise for public investment in external training programmes? The larger question then emerges if whether there is a need for massive reforms within the vocational training and education system to ensure quality in order to meet both demand and supply needs.

Combined with these, we also review some other issues with the skilling policy and landscape in the following chapter, and draw out an analysis of certain implications this has with respect to social outcomes.

5. ANALYSIS

In the previous sections, having contextualised the rise of skills education in a global, historical and political context, and having then described the macro-economic scenario of skilling in the country, in this section we attempt to present certain preliminary, yet critical insights that have emerged from the field, through the short-term ethnographic study we undertook on the implementation and outcomes of the skills policy and skill development framework in India. As stated before, there is a dearth of critical sociological studies on the impact of the skills development policy, and almost no study that has attempted to provide a worm's eye view of how the policy has been translated onto the field.

Only a handful number of studies have been conducted within the Indian context that examine the skills development policy and the national frameworks, and its implications for educational and economic development and progress. These in fact can be broadly classified into two groups: the first set comprising studies that are largely in favour of the skilling paradigm, and that have sought to identify the gaps in skill development/distribution and

policy that need to be addressed in order to attend to current imbalances in education, employment and development. For example, the most recent of such studies that we were able to identify is by Bajar (2016), who has undertaken a macro-economic analysis of census data at the district-level. Based on this data she identifies the mismatch between the locus of the skills training initiatives/interventions, and the patterns of urban-rural and sectoral transitions in employment. Arguing that transition from agricultural to non-agricultural sector employment is not complemented by similar rates of transition from the rural to the urban economy, Bajar (2016) points to a gap in policy and the need to correct the focus of training from preparation of workers for an exclusively urban economy, to preparation for new roles within the rural economy.

Another study by Aring (2012), which was again based on an analysis of secondary data and meta-review of existing studies, has similarly identified other ways in which the skills policy and training initiatives could be strengthened. The key findings of the study showed the importance of 'employability' or 'soft' skills as the chief skills that were sought by employers, followed by certain professional / engineering skills and communications skills. The key conclusion of the study was regarding the relative similarity of these key skills that employers looked for across several industries, and the need to focus on these to make India's workforce competitive.

Several others, including National Skills Development Corporation's (NSDC) own skill gap reports (NSDC, 2012), and other studies by World Bank (2008), Agarwal (2012), Singh (2012), etc. have all focused on identifying the mismatch in demand and supply of skilled workers, sector-wise and the geographical gaps in the availability of a skilled workforce, India's skilling infrastructure and capacity, and significant challenges that India faces in operationalising its skills initiative.

In contrast with these first set of studies, we have been able to identify just three studies that fall under the second group of 'critical sociological' analysis of the skills policy. Among these, Saraf's (2016) study is based on a critical policy analysis, which shows how the new skills policy does not address the question of formalisation of employment, which has been identified as a key factor for economic development. (Economic progress and development have been projected as significant outcomes of the skills policy and initiative). Rather, she argues, the skills policy and framework contributes to intensifying the persisting inequalities in educational access and income, by targeting marginalised youth for low-level blue collar

jobs and also feeding into the informal sector. Further, she also points out that the investment in training for low-level blue collar jobs significantly takes away from investments in quality elementary and secondary education which are witnessing budget cuts.

The other critical analysis of the national skills policy and framework has been undertaken by Sadagopal (2016), who interprets the policy in relation to other developments such as the New Education Policy (2016) and Right to Education Act (2009). Putting the two sets of policy literatures together, he argues that there is a narrowing of the vision for education towards creating 'employability' for the global market. Closely analysing the provisions within the RTE and New Education Policy (2016), Sadagopal (2016) makes a case for how these may work in tandem with the skills policy and result in as many as two-thirds of the student population within the academic stream being shifted into the vocational stream, with the introduction of vocational education even at the elementary education level.

The third critical study by King (2012), weds macro-economic data such as the targets set for skilling across different ministries, financing and funding of the programmes and the increased reliance on public private partnerships (PPPs) with policy history and vision, and raises certain critical questions such as the need for formal skilling programmes in a context of large-scale informality; its contribution to economic development against a history of double digit growth in the last several decades without a skilling programme in place; the significance of replacing the existing 'shadow' infrastructure of skilling through kin networks and employer participation by creating a new formal infrastructure for skilling in its place; and the unequal distribution of skilling targets across ministries, with the largest sectors (agriculture and rural development) receiving smaller numbers than urban sectors which have a smaller population of the workforce.

While these different studies make a valuable contribution in understanding the urgency, demand, and implications of the skills policy, from both sides (that is, in terms of its positive as well as negative effects), all of them are based on macro-level data and/or focus on certain projected outcomes. In contrast with these studies, our study attempted to examine the translation of policy intentions and projections on field, by undertaking a short ethnographic survey of the processes and outcomes of the skills policy since its inception in 2009. Based on the preliminary insights obtained through qualitative fieldwork in Bangalore, covering a range of key institutions and actors, in the next section we present certain critical insights into

the policy. These include observations on the circulation, interpretation, uptake, implementation, and outcomes of the policy.

5.1 POLICY IMPLEMENTATION - A WORM'S EYE VIEW FROM THE FIELD

The current section presents the data gathered through the qualitative fieldwork that was undertaken over a period of three months in Bangalore, using a combination of interviews, observations and focus groups discussions with critical actors such as state officials, teachers and other staff, and students of government schools, polytechnic colleges, Industrial Training Institutes (ITIs), and finally management and trainers of the private agencies that have been identified as Vocational Training Partners (VTPs) or Skill Knowledge Providers (SKP) by NSDC.

Before we present an account of the translation of the national skills development policy on field, within these select sites in Bangalore, we first review the structure of policy (2009 / 2015) in order to contextualise the findings in relation to policy articulations.

As discussed earlier, the National Policy on Skill Development and Entrepreneurship (NPSDE, 2015, which supersedes the skill development policy of 2009) is a central policy conceived with the primary objective of " ...meet[ing] the challenge of skilling at scale with speed, standard (quality) and sustainability". It aims to "...provide an umbrella framework to all skilling activities being carried out within the country, to align them to common standards and link skilling with demand centres" (MSDE, GOI, 2015, p. 3). The NPSDE (2015) also states that "In addition to laying down the objectives and expected outcomes, the policy also identifies the overall institutional framework which will act as a vehicle to reach the expected outcomes" (MSDE, 2015, p. 3).

As discussed in the NSDPE, the skills policy and initiative of 2009 and 2015 build on the existing infrastructure of skilling that already exists in the country, and that have over the years been undertaken across 20 central government ministries and departments. The policy document further points out that these various programmes have largely remained independent, lacking coordination and monitoring. Similarly, it also states that programmes on skilling across the different states have also similarly lacked coordination or convergence, and this has largely resulted in a scenario of multiplicity and fragmentation of training, lack of standardisation of curricula, norms, procedures and certification, and delinked from demand (MSDE, 2015).

A significant feature however introduced to the landscape of skilling in the country, since the development of the skills policy (in 2009, and intensified with the policy of 2015) has been the greater centralisation and privatisation of skill development efforts and programmes, through the establishment of certain key instruments, such as the National Skills Development Corporation (NSDC), the National Skills Qualification Framework (NSQF), and the National Skills Development Agency.

The first of these, the NSDC was started as a public private partnership (PPP) between the central government and private industry bodies such as FICCI and CII in 2008 (and was subsequently converted into a for-profit private limited company[32]) to promote skills development by providing "funding to build scalable, for-profit vocational training initiatives" (NSDC, 2015a). NSDC was started with funding of Rs. 995.10 crores from the Government of India (GoI). While the agenda for skilling (i.e., 500 million by 2022) will continue to be operationalised through the existing mechanisms across the various ministries, King (2012) notes that the lion's share of the skilling target has been allocated to the NSDC (i.e., of ensuring 150 million skilled workers, as against 100 million through the Ministry of Labour [MOLE], 50 million through the Ministry of Human Resource Development [MHRD], and 20 million each through the Ministries of Agriculture and Rural Development).

Further the NSDC has also been given a critical role to play in the skilling plan, positioned as it is as a certifier of curricula, outcomes, as well as other private training partners. The curricula and standards for skilling and certification are further designed by NSDCs affiliates or partners called 'Sector Skill Councils' (SSCs), which are independent for-profit or not-for profit bodies with a focus on specific sectors such as automobile, IT, agriculture, retail, beauty and wellness, etc.[33] Currently there are 40 SSCs which set the standards for curriculum and evaluation for their respective sectors.

Second, the NSQF is a "nationally integrated education and competency based skills framework" (Government of India, 2013, p.2) that seeks to bring into a single framework all forms of qualification, from general education to vocational education and training.[34] The

[32] Refer NSDC, 2015b.

[33] While NSDC and SSC develop curricula and learning outcomes for programmes of MSDE and MOLE mainly, as the main body that represents industry, they play a big role in policy direction and determining the overall standards for skilling and training in the country.

[34] The notification on the NSQF states that it integrates and supersedes the National Vocational Qualification Framework (NVQF) introduced by the MOLE and the National Vocational Education Qualification Framework (NVEQF) introduced by the MHRD following the introduction of the policy (Ministry of Finance, 2013).

NSQF seeks to shift the change from input oriented education and training system in the country, towards an outcome-based approach that defines different competency levels for each level of learning, specified by industry involvement through the Sector Skill Councils (SSCs; Ministry of Finance, 2013). The NSQF seeks to bring about horizontal and vertical integration by linking the different kinds of education (i.e., general, technical, vocational education, and vocational training programmes) through certain well-specified outcomes or criteria recognised as 'competency levels', in order to allow for horizontal and vertical mobility across the branches.

The final instrument, the NSDA was created in 2013 in order to allow the centre to work with the states in rejuvenating and synergising skilling efforts in the States (MSDE, 2015). Together with the creation of a Ministry of Skill Development and Entrepreneurship (MSDE), which was set up in 2014 to coordinate skill development efforts in the country and notify the "...norms for inputs/output, funding/cost norms, third party certification and assessment cost etc across the various skill development programmes" (MSDE, 2015, p.24), the three instruments represent the increasing efforts at developing a centralised framework for skilling in the country.

Having presented an overview of the central framework for implementation of the policy, we now turn to certain important observations we made with respect to implementation on field.

5.1.1 Centralised control and lack of involvement of state governments

An important feature of the policy that became visible on field was the high degree of centralisation, and the large role played by private partners, within a context of relative absence of the state governments in decision making and planning of the policy role out. Two prime ways in which this became evident was firstly as a lack of knowledge among critical stakeholders such as colleges and schools, trainers, and state departments through whom the programme was to be implemented. The second manner in which this was observable was with respect to the lack of involvement and control over the skills initiatives felt by these various stakeholders.

Across the different sites visited we found stakeholders demonstrating a lack of knowledge and control over the programmes. As a first site, we identify the labour department and its skills training programmes undertaken through the Industrial training Institutes (ITIs). While data on this is sparse, and is based on a few meetings with few senior labour department

officials in Karnataka, visit to a Government Girls' ITI and a private ITI in Bangalore, the overwhelming sense we got from these visits was that the state departments had not yet been involved in the planning of the skills programme. During an interview with a senior official of the labour department, we were candidly asked, "Why have you come to me? We have nothing to do with the skills programme." The official further went on to explain that until recently the planning and implementation of the policy for South India operations had been given to the National Institute of Rural Development and Panchayati Raj (NIRD), Hyderabad, an autonomous organisation under the Union Ministry of Rural Development. He also pointed out that state governments had been involved only in the last two years.

This observation was in fact reinforced by other observations on the field - such as during a brief meeting another senior official of the labour department, who we visited in order to procure data regarding the skills targets reached thus far. Here, we were again told that such data was unavailable as programmes were still not in place, as they had just been recently intimated of the programmes that were to be undertaken as part of the skills policy and initiative. Our visit to a Government Girls' ITI also bore similar results, with both the training officer and the principal stating that they were unsure how the new skills programmes were linked up or tied up to the ITI programmes. (During an interview with an official of the education department too, we were told that the ITI training had still not been aligned with the NSQF).

Complementing these findings, literature also suggests that there is some confusion with respect to the implementation of the National Vocational Qualifications Framework (NVQF), which was developed by the Ministry of Labour and Employment (MOLE) in 2010, and which is supposed to guide the changes in the relation to the ITIs. A similar qualifications framework has also been introduced by the Ministry for Human Resources Development (MHRD) - the National Vocational Education Qualifications Framework (NVEQF) (King, 2012; Singh, 2012). As Singh (2012, p.184) has noted, "With the announcement of the NVEQF, it is unclear whether MOLE and NVQF are going ahead with the project and whether on-going implementation assistance will be available from donors for the NVQF." This lack of clarity at the central / macro level is thus perhaps also reflected in the narratives of actors on the field, and is perhaps a reason for the delay in implementation of changes at the field level.

Further, presenting evidence for the disconnects between centre and state in planning, on the one hand, and for the predominance of industry in planning in comparison to the states, the senior labour department official (referred to earlier) also pointed out to the flaws in planning using Karnataka as an illustration. He pointed out that the NSDC skills gap survey had projected a target of 14 lakh individuals to be skilled by 2022, while the cohort that joined the workforce each year in Karnataka was 11 lakhs. Presenting this as an ill-informed projection, and arguing that "the demographic dividend means that we have to plan for everyone", he stated that the NSDC had no understanding of the state market, and had no relevance to the state's requirements of manpower planning.

A similar lack of coordination and involvement of the state could be seen at the second site - the education department of Karnataka, and its associated schools and colleges. Unlike the case with the labour department institutions, we found that schools under the education department had begun implementing the NSQF aligned training programmes. However, even here we found that the government secondary schools in which the skills programme had been introduced (for classes IX-X), also had little understanding of or control over the programme.

This was perhaps most starkly demonstrated by how we were immediately directed to the external skills trainers, rather than the head master/mistress (HM) when we visited some of the government schools in Bangalore. These skills trainers came from private companies and agencies such as BREADS, Team Lease, Labournet, etc. who had been certified as 'Vocational Training Partners' (VTPs) by the respective SSCs and NSDC. In fact, in the schools that we visited with the VTPs, we completely bypassed the HM, and were taken directly to meet the trainers and students - a clear sign of how these programmes seemed to be superimposed onto the state schools. Even in the schools in which we met the HM or the school in-charge, we largely found them to be having little knowledge about the programme itself, except with respect to certain administrative challenges and inefficiencies this was posing, which we elaborate further below.

This was also true for the polytechnic college visited, which falls under the department of higher education, and is in charge of providing vocational education post secondary schooling. An interview with the principal of a private polytechnic college in South Bangalore revealed that she too had no clear understanding of the new skills policy and initiative. When asked about it, she mainly alluded to 'soft skills' training as the main change

that was sought to be provided by the introduction of the policy, in order to meet 'industry requirements'. Further, she also seemed to give us an impression that the changes that were sought to be implemented by the new policy were largely external, with several external private training companies having approached them for soft skills training since the inception of the policy. Within the college itself, in relation to the courses offered by them, she argued that no changes had been made so far (though plans to introduce some new courses had been proposed). Further, she pointed out that they had received no notice so far of the changes to be introduced by the Board of Technical Education (Department of Technical Education, a subsidiary of the MHRD), which must approve all changes in curriculum, assessment and evaluation in polytechnic colleges. Thus, she seemed to suggest that the changes that were to be implemented as a result of the policy were largely only by external actors, which however also had not been so far implemented as students were busy with their regular courses, and the college had been unable to find time to schedule these additional courses.

Finally, even at the state level we found that while changes were sought to be made to elementary education through involvement of the state education department and Rashtriya Madhyamik Shiksha Abhiyaan (RMSA), there was a similar lack of clarity on the operational aspects of the new skills programme and its outcome even among officers of education department. In discussions with a senior official of the state education department, we found that he too had several pending questions regarding the new plan for introducing vocational education in secondary school (i.e., classes IX and X) under the 'Vocationalisation of Secondary and Higher Secondary Education' scheme (MHRD, 2014) - an outcome of the new skilling policy and initiative.

In response to a question put to him about the difference brought to education by the new policy, he tentatively offered the argument that the NSQF[35] presented a completely different vision for education, one that was based on the 'employability' of students. Explaining how the NSQF was different as it envisaged high industry participation and involved industry in all stages, from framing of the syllabus and design of the curriculum, to their involvement in

[35] An important point to note here is that the SPD-RMSA kept referring to the NSQF, as the qualification framework to which high school vocational education programmes would be aligned to, while the government notification on 'Vocationalisation of Secondary and Higher Secondary Education' by the MHRD dated March 2014 refers to the NVEQF (MHRD, 2014). While the notification on NSQF states that the NSQF was introduced to bring about a commonality in the context of the existence of two qualification frameworks - NVQF and NVEQF, this is an earlier notification circulated by the Ministry of Finance, dated December 2013. The point we we raise here is the with respect to the multiplicity of government orders, and confusion this has created at the field level with respect to which of the qualification frameworks apply to which of the programmes.

the process of certification, in order to ensure that the "products coming out would be more employable", he sought to confirm his ideas with his programme officer, who was present at the meeting. Presenting to his officer the argument that "Profession is nothing but skills", he sought to confirm this with him, stating "Correct no Mahesh? This is the definition... (We will adopt)".[36] This discussion between the senior official and his programme officer gave us an impression that they had themselves been struggling to articulate the vision of the skills programme, and the expectations from it.

Further, the official was candid in admitting the difficulties that he too had in following certain aspects of the policy, such as the horizontal and vertical mobility and integration envisaged by it across all forms of education and training, and stated that this only existed on paper. He stated to us that he had himself been trying to get more clarity about this from the centre, and had been constantly raising questions about its possibility. Further, he pointed out that this was also being resisted by the Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent unit of the NCERT, which is in charge of vocational education planning for the country, as they were unclear about how equivalence in stages could be ensured between very different systems of training - general education, vocational training by ITIs and vocational education by polytechnics, as these different systems were geared to different forms of knowledge.

Thus, one of the first insights we got from the field was regarding the difficulties that individual actors at the state level were facing in making sense of the programme. This seemed to stem both, as a result of the lack of adequate information and preparation of the state level machinery (which includes state departments as well as individual institutions, schools, colleges, etc) to implement the programme; as well as their lack of involvement in the process of planning and decision making in designing the skills policy and initiatives.

(In contrast with this, we found actors within the third site - private training institutes and companies to be having such more clarity with regards to the mechanisms of implementation of the programme. Actors such as managerial staff of IF&LS were able to clearly articulate their roles and targets and describe the "value chain of skilling".)

[36] Note: Names in the report have been changed in order to maintain the confidentiality of the respondent.

In the next section, we elaborate on these observations further by describing some of the challenges this created for planning and implementation at the state level.

5.1.2 Planning inefficiencies, delays, and challenges on the field

One of the first ways in which these planning inefficiencies and delays came to our notice was with respect to the certification of the students trained in vocational subjects in schools. Across the four schools we visited, trainers (from the external training agencies, which are NSDC and SSC certified agencies appointed to undertake skills training under the 'Vocationalisation of Secondary and Higher Secondary Education' Scheme)[37] complained that students of the previous batches had not yet been certified.[38] This they argued was also delaying the introduction of the next levels of the courses.

When asked why certification had not been conducted still, they pointed to the failure by schools / RMSA in communicating the numbers who would take the vocational education exam to NSDC, which was in charge of setting the papers and conducting the examination for the vocational subjects introduced under RMSA. A discussion with the head masters (HMs) of some schools and the education department official revealed that this delay was further related to the problem of the vocational subjects not having been recognised and received approval as a subject within the regular stream by the Board of Studies. What this implied was that implementation of the vocational subjects as part of RMSA had not been undertaken in consultation with the states, and thus in states such as Karnataka, the implementation of the course had taken place even before the integration of the vocational courses within general education had been officially sanctioned by the state government. Having stated this, the education department official then also informed us that the approval from the government had finally come, and thus, efforts were currently underway in notifying NSDC of the numbers that would take up the NSQF examination from the previous batches.

[37] A discussion with the education department officials revealed that external private partners or NGOs had been appointed to undertake the skills training programmes in class IX and X. Arguing that these forms of training required different training and skills, that regular school teachers were not prepared for, the SPD also told us that the government had decided to adopt a 'hire and fire' policy, entering partnerships with these private agencies on a contractual basis. He argued that this rationalisation of teaching staff was done as appointing permanent staff for skilling would mean that they would have to be given benefits such as job protection and service benefits such as pension. In the context of uncertainity of the policy and its outcomes, he argued that this may be a waste of investment, and hence it would be better to enter contractual arrangements.

[38] Currently the third batch of students are being trained under the RMSA-NSQF vocational education programme.

An outcome of this approval in Karnataka has been that from the current academic year (2016-17) the vocational subject is being offered as an optional subject that can be taken instead of the third language. (Earlier, it was offered as an additional subject for the first two batches, and thus was not counted as part of the board examination results). The introduction of the vocational courses as optional subjects rather than additional subjects has, however, been met with doubt and anxiety at the school level for several reasons. As a result of the previous batches of students who had yet to be certified, schools expressed doubts regarding the current batch's fate, especially since the vocational subject was now to replace one of the regular subjects (i.e., third language) for the board examination. In the context of this uncertainty some schools had in fact chosen to prepare students in both subjects - third language as well as the vocational subject, informing students that must be prepared to face either one of the subjects in the board examination. Thus, at the field level this presented an instance of inefficient planning and operationalisation of the skills programmes in schools, which contributed to the duplicity of effort, inefficient allocation of sparse resources such as time and personnel available for teaching, and has contributed to the burden of students, teachers and school administrative staff, who must prefer for both contingencies.

An additional pay-off from this poor planning that has resulted in delays in receiving approval for and instituting provisions for the vocational courses, has been a failure to ensure a seamless continuity to the courses. With two batches of students who had taken up the vocational courses in classes IX and X having already passed out, provisions for continuation of the courses in higher secondary classes have still to be made in Karnataka. That is, while the third batch of students are being prepared for Level 1 & 2, it appears that Level 3 is still absent in most colleges that would allow students to complete the four-stage training which is required in order to obtain the entry level qualifications for the respective industries for which they are trained.

While the education department official informed us that level 3 training had been started in some schools, we were unable to identify these schools during the period of our limited fieldwork. Even attempts to identify these schools through the VTPs who are in charge of conducting these trainings in the schools proved to be futile. Part of the problem appeared to stem from the issue of notifying the Pre-University Board / RMSA of the number of students who had chosen to continue in these same schools after class X (which had the NSQF aligned skills training programmes), and who would be available to take up the Level 3 training if offered. (This is critical as we were given to understand by the skills trainers and VTPs that

students who had not taken up Level 1 & 2 training could not automatically start with level 3 training, which meant that the new cohort of students who may join these schools in Class XI and XII could not be offered the courses). However, the delays in certification, as well as the absence of the next level of training had meant that students had moved to other colleges to continue their education by taking up regular streams such as arts and commerce subjects in PUC, and few (less than 50%) had stayed back in the same schools, thus reducing the pool of students available for the courses if started.

Thus, the weak end-to-end planning with respect to the introduction of these new subjects into state schools has created a circular problem - one wherein the lack of certification had led to students moving out of the schools to pursue other educational opportunities; and the this lack of numbers having delayed the process of receiving approval from the board to start the next level of training.

An important question that this raises is regarding why the programme has been rolled out without planning for these subsequent levels before hand, when detailed specifications for levels and qualifications have already been laid down in the NSQF and NVEQF, and at what level has the planning chain broken down (i.e., centre or state; state or NSDC, which is in responsible for certification).

Further, the failure of planning for the proper roll out of the vocational courses and its incorporation into the general stream of education, was not just visible in these accounts of delay in receiving approval by state governments and the board of studies in regularising the subject, delays in the certification process and the lack of confidence among schools in preparing students from the vocational stream. It was also visible as a lack of adequate infrastructure and resources in schools to undertake vocational training itself.

For example, in all four schools visited we found that there was a single classroom shared by the two instructors teaching two very different trades such as IT and automobile, IT and beauty and wellness; IT and health, etc.[39] This has implications as within these classrooms equipment related to only one of the trades was visible or arranged and the classroom was appropriately equipped to provide training in only one of the trades. For example, in a large

[39] Each of the 100 schools identified to have the NSQF-aligned skills programme under RMSA, for class IX and X, could opt for two of the five sectors identified for skills development in Karnataka. These five sectors were IT, automotive, beauty and wellness, retail and health. In each school, 25 students were to be selected for each of the sectors in class IX. Thus, a total of 50 students per school are to be trained under the NSQF-RMSA programmes, amounting to a total of 5000 students per year across the 100 schools, in Karnataka.

co-educational government PU College in north Bangalore, which offered IT and automobile courses, the classroom, consisted only of computers and projectors, as required by the IT trainer. The automobile trainer at this school told us that he kept his teaching-learning material and equipment (which included items such as opened up engines, various tools required for repair, etc) in a cupboard. Due to lack of space to practically demonstrate concepts, he informed us that he used the computer and projector to teach concepts, rather than demonstrate them practically.

In another south Bangalore girls government PU college, the vocational education classroom again had equipment related to the IT course alone. The instructor for health (which was the other sectoral training offered at this school) told us that there were no provisions for a medical laboratory that was required for training students. Similarly, the beauty and wellness instructor at another government girl's PU college in North Bangalore pointed to the lack of specific infrastructure such as 'shampoo station', required to train students. She stated that due to this lack of facilities she was forced to take students out to salons in order to demonstrate certain practical skills.

More importantly she pointed out the very basic requirement for a course on Beauty - water - itself was absent at the school, and classes had to be planned in accordance with the timings of water at the school. This account presents a very important insight into the skills programme - namely that programmes have been introduced into the school without taking into account ground realities or school realities. Similarly, we found that across the schools that conducted the IT training, there were insufficient number of computers within the school to allow students to practice and gain practical computer handling skills. Schools had as few as three or seven computers for a batch of 25 students (which is the number of students that are to be enrolled for each class, for each trade, to reach the skilling target). In the context of such shortages, skill instructors worried about the fate of students who could not be given adequate practical training, especially after the regularisation of the vocational subject as a subject that will be tested for the SSLC exam, and that would be reflected in students' final marks cards.

While an annual budget of up to rupees 2.8 lakhs is sanctioned per school for procurement of raw materials, maintenance of tools and equipment, purchase of books and e-learning software, in addition to provisions of a non-recurring budget of rupees 10 lakhs per school for civil works, and procuring equipment, furniture and computers (MHRD, 2014), field level

delays in release of funds was reported by most schools, which is perhaps reflected in the inadequate provisions of space and equipment. Further, this has also resulted in suspension of industrial visits and guest lectures, which is part of the coursework.

In addition our field work also showed delays and gaps in planning and implementation that cannot be attributed to delays in receiving state government approvals alone. Poor implementation, planning and monitoring was observed even in aspects such as delays in appointment of skills instructors by the private agencies in charge of skilling, and in the distribution of textbooks. In one South Bangalore school that we visited, we found that the skills instructor for one of the trades (retail) had not yet been appointed even in November, when half the school term was over. In other schools we similarly were told by the HM that the skills instructor had only been appointed to the school in August. In a government girls high school in North Bangalore, we were told by the skills instructor that students had still not been given textbooks for the subject, and that they were sharing her copy to prepare for the upcoming examination. These instances point to lack of accountability of the private agencies and the lack of monitoring on the part of the state government in ensuring the smooth functioning of the skills programme.

In addition to these lacunae and delays, we also observed that practical school level challenges had not even been factored into the planning process, which created another set of problems on field. One such factor was the size of school. We found that in large schools,[40] such as the co-educational institution offering IT and automobile in North Bangalore, discussed above, practical difficulties emerged in implementing the skills programme, as fitting it into the time-table became difficult. As the vocational courses catered to only 50 students in total in class IX and X each, who were selected from across the multiple sections, planning the timetable became difficult as it was not possible to have the language or vocational subject class for all sections at the same time. Thus, in such schools, students and instructors were forced to conduct and attend the skills training class during leisure time or after school.

[40] i.e., having multiple sections per class, and having over 4000 students

5.1.3 The economics of demand and supply and practices of selective inclusion/exclusion

A third set of observations we made were in relation to the mismatch between students own aspirations and the skilling courses, which students were being pushed to take up on the one hand, and were also being systematically excluded from on the other hand.

One of the first observations we made with respect to this was how students and parents actually had no idea or aspirations related to the skills offered as part of the vocational subjects. Skills instructors from the VTPs who we spoke to stated that the procedure followed was to first have a parents meeting, wherein parents were called and informed about these courses, along with the benefits this offered for employment. When we asked the instructors if parents and students welcomed these courses when introduced to them, most trainers reported that parents lacked the ability to understand the implications of these courses, and they would largely go with whatever advice was given to them by the teachers and HM. Discussions with HMs also revealed similar response to the courses, with one HM (as stated above) going so far as to say that he had personally requested students to take up the vocational subjects this year and save his face, but he would take no responsibility for ensuring that students took up these courses in the following year. Such responses by actors on the field seemed to show that there was little interest or demand from the student side itself for these courses.

Further, in the schools in which teacher support for the programme was not available, we also heard of cases wherein students had dropped out of the course. For example, in the north Bangalore government girls PU college referred to earlier, one of the skills instructor informed us that since the third language teacher was worried about losing students to the skills course (as he was worried that this may reflect badly on his performance and his pass results), he had told students that dropping the language subject may affect their chances of applying for government jobs. This had led to a decline in the strength of students in her class, with only 20 students in class IX and 19 in class X. She further told us that against this scenario that she faced at school, she "got" her students by telling them how useful these courses would be as it would allow them to 'study and work'.

Even during interaction with students at two of the schools we encountered similar kinds of responses. On the one hand students informed us that they had taken these courses as their teachers had told them that this would be useful to them in the future, but their own aspirations revealed different kinds of interest. For example, many of the students expressed

their interest in taking up IPS or joining the military. Several students in south Bangalore girls government PUC college hoped to pursue a commerce degree and then join a job. When we attempted to understand from the students how the skills courses would be useful to them in achieving their own ambitions, they were largely unable to explain the relevance of these courses to their own future plans.

Thus, the field work largely seemed to show that rather than there being a demand for these courses from parents and students, the demand in fact had to be stimulated. This was also evident in the narratives of the private skills providers, who were offering short term skilling courses outside government run schools and colleges. For example, during discussions with a member of the management from IF&LS Skill Development Corporation, an empanelled Skills Knowledge Partner of NSDC, she explained to us how NSDC set certain 'target numbers' for each partner, who was then responsible for reaching these numbers by finding students to meet these targets. She explained how the private skills agencies would then identify "catchment areas", and use community mobilisers to attract students towards these courses.

Further, what we also observed was how the inclusion of students into the courses was structured in ways that met with the requirements or stereotypical perceptions of industry. This is not just evident from the selection and inclusion of specific trades for training under the RMSA NSQF training programmes within school education that can cater to the growing demand for skilled workers in the urban service economy. The imbalance of such training agendas, at a macro level has already been pointed out by scholars such as King (2012), Saraf (2016) and was also reiterated in discussions on the field with actors such as senior officials from the Government of Karnataka. For example, King (2012) points to the inadequate targets of 40 million set for the rural / agriculture sector for training, when the combined workforce within this sector is estimated at 238 million. In contrast with this the majority of the skills training programmes and SSCs formed for this focus on the urban economy (see SSC-NASSCOM, 2015). Saraf (2016) has also pointed out to how the skills policy agenda seeks to create an urban, low-end blue collar workforce in line with industry demand. In a similar vein, the additional secretary pointed out to a gap of 5 lakh individuals each year, who will fall outside the purview of the skills framework and targets set, pointing thus to how these numbers only cater to the employable population that industry seeks.

In addition to these observations, we also point to certain observations made on the field that points to an agenda of selective inclusion, and selection of students who would fit in with the requirements of industry.

With only a small number of the available pool of students actually sought to be trained - for example just 25 students per sector in each class (i.e., IX and X) through RMSA, this has in fact resulted in competitive procedures such as entrance examinations to select students for the course, which has clearly not been planned for in the policy itself. (We make this point based on the fact that on enquiring we found that the entrance tests were not standardised, and in some cases trainers were left on their own to decide how to plan this. That is, even the VTPs who had appointed them were not involved in the design of this procedure. These entrance tests ranged in their nature from testing general knowledge to basic English language skills and aptitude; and in some cases also included questions from the first unit which was taught on a trial basis to the students.)

Not only does this go against the plan for providing all students an equal opportunity to pursue education / skills training that may offer them better future opportunities,[41] we also found certain other forms of selective inclusion practices also operating within school. For example, in certain schools we found that the automotive subject was not offered to girls as teachers and HM perceived them as not being capable of undertaking heavy manual work, such as lifting engine parts. In fact, of the five trades offered to the selected schools under RMSA, we found that considerations such as whether the school was an all boys/ girls school or co-educational institution mattered in subject selection. Thus, for example, automotive and retail courses were found only in all boys schools or co-educational schools, where it could be offered to the male student population. Courses on beauty and wellness and health are offered only in all girls schools, or co-educational schools for girl students. Thus, subject selection and allotment to schools itself reinforced certain existing gender stereotypes.

[41] This should be seen in relation to the abolishment of the practice of entrance tests under the Right to Education Act 2009 (RTE; Ministry of Law and Justice, 2009), for the very same reason that selection even before getting entry into certain formal educational institutions contributes to unequal opportunities for access, based on personal and social backgrounds of individuals. While the RTE 2009 does not apply to higher secondary schooling, we argue that any attempts to provide equity through education must respect these principles.

In addition to this, 'selective inclusion' was also seen in some schools where courses such as IT were offered to the English medium students alone, rather than leaving the choice to all students to choose from the two streams of vocational education available at the school. This seems to be because of the perception that the IT industry requires English language skills. (While the skills instructor in the school in which we observed this sought to explain this as a result of the overall small strength of class X students; and hence the decision to take all the English medium students, who composed one section into the same trade, i.e., IT, and all the Kannada medium students for the other trade - health, the respective selections also reveal how industry considerations do influence selection with IT being offered to English medium rather than Kannada medium students).

Overall then these observations suggested to us then the structuring of the policy in ways that did not pay attention to the needs of either state's own plans for manpower planning, as well as individuals' own aspirations in relation to their education, employment and lives. In fact, it also suggested little choice itself being afforded to students and parents, who were instead sought to be prepared keeping in mind industry needs.

We end this section on field observations with two anecdotes that represent the mood and responses of field level actors to the policy, and demonstrate the complete lack of bottom-up planning and control over the programmes by those who are most affected by it. The first is from the government girls college in South Bangalore. Having been directed right at the beginning of the visit to interact with the skills instructor, and having finished our discussion with her, when we were leaving, we were re-directed to the HM's office. The HM hoped to understand from us what we had learnt about the programme. We explained to her that we had got to understand issues such as lack of certification and continuation of the course, as with other schools. At this point the HM intervened with an urgent demand of us: she asked to present how this had caused confusion at the level of the schools, and asked us that we confirm with the education department officials regarding the government's plan to regularise the vocational subjects and make it a part of SSLC examination. Telling us that we were in a position of authority to press upon the officials of the education department, she compellingly argued with us that we must clarify this rule before the schools had to submit the final registration sheet with candidate names and the subjects they were appearing for.

The second anecdote we present is from the co-educational government PU college referred to above. In a brief encounter with the HM of the school, he first impatiently asked us what we had learnt from our study, before proceeding to present a strong critique of the highly privatised and centralised implementation of the programme. Stating that lakhs of rupees were being offered to NGOs and private skills companies to undertake this programme, and describing his concerns regarding the lack of accountability of these companies (evident in delays in appointing trainers, lack of concern with students' future outcomes, etc), and school level challenges in incorporating the programme, he concluded the brief meeting stating "Last year I asked my students to take up the course and save my face. But this year I won't force my students to take it up."

The two anecdotes serve to remind us of the lack of involvement of critical state-level government machinery and personnel in the decision making process and implementation of the skilling framework. It also vividly presents to us how state actors from the lowest rung upwards were increasingly trying to make sense of the policy through various sources. These instances, we argue, represent the variety of emotions and everyday effects of the national skills policy and initiative: the lack of serious consideration afforded to implementing personnel on field, who struggle to articulate and maintain a sense of continuity for those below them (i.e., personnel they further delegate these works to, students, parents, etc); the vulnerability and lack of control experienced by schools, teachers and most importantly students, who find themselves at the mercy of decisions taken at certain higher levels, and remain unsure till the end regarding the outcomes and effects of such decisions on their everyday lives, and lives of their students.

5.2 SIFTING THE CHAFF FROM THE GRAIN: RHETORIC AND REALITIES OF THE NATIONAL SKILLS DEVELOPMENT POLICY

Having presented the observations made on field, and accounts of various state-level actors, in this section we tentatively attempt to identify certain critical policy implications based on the limited time spent and data gathered on the implementation of the skills framework. We present these as initial analytical insights that call for a greater investment and attention to unpacking the skills policy and discourse within the country, through a long-term evaluation of the everyday processes, challenges and outcomes as presented above.

Overall, we argue that the policy presents critical characteristics of "policy borrowing", in the speed and urgency in which it has been implemented. Further, the high degree of

centralisation and lack of contextualisation of policy within field dynamics, by taking into account state actors in planning and implementation also stand testimony to the external pressures that have guided its formation, rather than internal supply-side dynamics that address inequalities of opportunity within education and employment within the highly diversified context of India. We argue that there is a need to further explore these trends of "policy borrowing" and how they serve the new economy, hinged upon expansion of urban service-oriented industries and knowledge capitalism .

Further, we argue that the preliminary insights suggest an intensification of the neoliberal governance of education, which needs further critical exploration in terms of the kinds of transformations in social relations and outcomes that it contributes to. This can be seen from a number of trends highlighted: the attempts to stimulate demand for certain kinds of training by the state and industry; the fragmentation of knowledge into specific skills, which has then been sought to be arranged in levels that are irreconcilable (according to the field level actors at least); and further, the onus placed on individuals to 'flexibly' acquire the right training and skills, to become "employable", etc. While our preliminary study identified certain pathways through which demand for courses is created, wherein industry and skills training providers together seek to create a demand for the skills courses, by both setting the criteria for 'employability', as well as by propagating among students the importance of these courses to become 'employable', this needs further exploration in understanding how these impacts current and long term outcomes for students, what kinds of mobilities these provide, and which groups have been able to benefit from these skills.

Apart from these observations, what is perhaps the biggest indicators of the neoliberal orientation of the policy is perhaps how in itself it seems to be contributing to a process of informalisation and casualisation. While macro level studies, based on review of literature, such as that by Saraf (2016) has sought to show how the policy institutionalises informality through focus on low-end blue collar jobs, that are largely concentrated within the informal economy, such as those of a beautician, gem cutter, mechanic or security guard, we argue that the process of informalisation runs much deeper.

As we discovered through field work, currently only Level 1 & 2 courses of NSQF have been started in the 100 selected schools in Karnataka. (While some schools are said to have started level 3 training, we were unable to find evidence of this during the preliminary

fieldwork. Even in Haryana, which is first state to have received the skills training programme through RMSA, only level 5 of the training is underway supposedly.)

The lack of continuity of the courses as yet, into levels 3 &4 has certain important implications as discussions with the VTPs revealed that Levels 1&2 of training were not sufficient to prepare students for jobs. On the one hand they argued that certain labour laws may prevent students from getting certain jobs after completion of SSLC. On the other hand the NSQF courses were planned such that entry level qualifications for formal employment within industry could only be obtained after Level 4. In the absence of the present continuity within the NSQF training programme, trainers pointed out that students who did not / could not continue higher secondary education could be informally appointed as 'helpers'. Thus, as a result at least in relation to the current and previous batches of students it can be argued that the programme has largely only prepared them for informal work. For without completion of the entire course, and the right certification / no certification (for the previous batches at least so far), students cannot hope to be more securely and profitably employed - as the policy itself envisages would be the outcome of the skilling initiatives.

In this the structure of the qualifications framework itself creates certain limitations for students. For currently, the levels are planned such that students have to undertake it along with their regular courses from classes IX-XII. Students who have not take levels 1&2 in classes IX and X respectively, can neither enter Level 3 in Class XI, nor do they have opportunities to take up Levels 1-4 independently outside the schooling system. Thus, for the first two batches of students who have completed class X in Karnataka, and have already entered classes XI and XII, the opportunity to get trained in Level 3&4 has already passed by. This means that they have no opportunity to complete the course in order to achieve the entry level certification in their respective trades.

Further, the positioning of the entry level qualification for formal jobs after class 12, and with close to 50% of the population not enrolled / not able to enrol for higher secondary education (MHRD, 2014), it does seem likely that for a large section of the youth the skills framework might necessarily lead to a future within the informal sector. Thus, a further analysis through field interviews and discussions is also needed in order to understand how the state hopes to resolve these contradictions in policy.

Further, the other important feature of neoliberal governance of education policy observed during the study was the central place given to public-private partnerships - seen in the largest targets for skilling to NSDC that hands over the function of skilling to other private for-profit companies that offer paid skills courses, based on bids. It is important to examine further how this PPP model is managed, what are the mechanisms of accountability instituted and how these impact and change outcomes for students further.

Finally, our observation of the neoliberal vision of policy making also stems from the observation that the state itself supports this kind of demand based, casualised economy in education through appointment of external agencies as trainers for these courses. The reasoning given by the education department officials who explained this is very similar to industry explanations about cutting long term expenditure and assurances to employees in the volatile flexible, economic structure post-globalisation. The causalisation of the skills trainers on the one hand is coupled with the anxieties and insecurities of regular teachers who worry that their jobs may be at stake if large number of students are turned toward the externally conducted skills courses, in this performance based culture of education as well. Thus, the tensions between the employment guarantees offered to one segment of the teaching staff on one hand and introduction of casualisation and externalisation with respect to another section of the teaching staff needs to be further explored as it plays out within government run educational institutions, also to understand their impacts on education itself.

These are lines of enquiry that we hope to pursue within an extended version of the study. Specifically, there is a need to explore the nexus between the state and private parties and interests and the volume and nature of these transactions that has currently not fully been disclosed within the public domain. Such an analysis will also need to highlight the critical implications at the macro level of a policy that appears to be increasingly investing state resources into private domains in the name of achieving public goods and ends.

REFERENCES:

Ainley, P. and Corbett, J. (1994). From Vocationalism to Enterprise: Social and Life Skills Become Personal and Transferable. British Journal of Sociology of Education, 15,3,365-374.

Allais, S. (2011). What are skills? Reflections on Policy in South Africa in the context of International Debates. Norrag News, 46,22-23.

Allais, S. (2012). Will skills save us? Rethinking the relationships between vocational education, skills development policies, and social policy in South Africa. International Journal of Educational Development, 32, 632-642. doi:10.1016/j.ijedudev.2012.01.001

Allais, S. (2014). Selling out education. National Qualifications Frameworks and the neglect of Knowledge. Rotterdam: Sense Publishers

Aring, M. (2012). Skills Gap in India: An Analysis for UNESCO Global Monitoring Report 2012.

Bajar, S. (2016). The 'where' of skill development. Paper presented at the NIAS Wednesday Discussion (October 26, 2016). Bangalore: NIAS

Ball, S.J. 1990. *Politics and policy making in education: Explorations in policy sociology.*

London/New York: Routledge.

Brown, P., and Lauder, H. (2010). Economic globalisation, skill formation and the consequences for higher education. In Michael Apple, Stephen J. Ball, and Luis Armando Gandin (Eds.), The Routledge International Handbook of the Sociology of Education (pp.229-240). Oxon: Routledge.

Burchell, G. (1996) Liberal Government and Techniques of the Self, in: A. Barry, T. Osborne & N. Rose (Eds) *Foucault and political reason* (Chicago, University of Chicago Press), 19–36.

Craig, D., and Porter, D. (2003). Poverty Reduction Strategy Papers: A New Convergence. *World Development*, 31, 1, 53-69. doi:10.1016/S0305-750X(02)00147-X

Crouch, C., Finegold, D., and Sako, M. (2004). Are Skills the Answer? The Political Economy of Skill Creation in Advanced Industrial Countries. Oxford: Oxford University Press

DeVault, M.L., and McCoy, L. (2006). Institutional ethnography: Using interviews to investigate ruling relations. In Dorothy E. Smith (Ed.)

Gautam, R. S. and Navin, T. (2014). 'Challenges in Promotion of Vocational Education among Rural Youth: A Study of Bihar and Rajasthan States of India'. In: Indian Journal of Vocational Education. Vol, 19, Issue 1, April-September 2013.

Gibb, T., and Walker, J. (2011). Educating for a High Skills Society? The Landscape of Federal Employment, Training and Lifelong Learning Policy in Canada. *Journal of Education Policy*, 26,3,381-398. doi:10.1080/02680939.2010.520744

Government of India. (2011). Census Data. Table C-13 Single Age Year Returns by Residence and Sex . Retrieved from: http://www.censusindia.gov.in/2011census/C-series/C-13.html

Government of India. (2016). Deen Dayal Upadhaya Grameen Kaushalaya Yojana. Retrieved from: http://ddugky.gov.in/

Gupta et al. (2016). 'Secondary (9-10) and Higher Secondary (11-12) Education in India. India: Preparation for the World of Work.

King, K. (2012). 'The Geopolitics and Meaning of India's Massive Skills Development Ambitions'. International Journal of Educational Development.

Institutional Ethnography as Practice (pp. 15-44). Maryland: Rowman and Littlefield Publishers, Inc.

Hammersly, M., and Atkinson, P. (2007). *Ethnography. Principles in practice*

(3rd ed.). Taylor & Francis e-library

Johnson, K. (1994). Skills, Socrates and the Sophists: Learning from History. British Journal of Educational Studies, 46,2,201-213. Retrieved from

http://www.jstor.org/stable/3121784

Jørgensen, M., and Phillips, L.J. (2002). *Discourse Analysis as Theory and*

Method. London: Sage Publications Limited

Keep, E., and Mayhew, K. (2010). Moving beyond skills as a social and economic panacea. *Work, Employment and Society*, 24,3,565-577. doi: 10.1177/0950017010371663

Kumar, N. (2014). The construction of the subaltern through education:

Historical failure of mass education in India. In Ashok K. Pankaj, and

Ajit K. Pandey, (Eds.), *Subalternity, Exclusion and Social Change in*

India (pp.149-170). New Delhi: Foundation Books

Larson, D. (1984). Giving psychology away: The skills training paradigm. InDale Larson (Ed.), Teaching Psychological Skills. Models for GivingPsychology Away (pp. 1-18). California: Brooks/Cole PublishingCompany

Levesque, D. (2011). Capability as well as employability in TVET approaches in secodnary schools. Norrag News, 46, 17-18.

Livingstone, D.W., and Sawchuk, P.H. (2000): Beyond Cultural Capital Theory: Hidden Dimensions of Working Class Learning. *Review of Education, Pedagogy, and Cultural Studies*, 22,2, 121-146.

Lauder, H. (2013). Education, economic globalisation, and national qualifications framework. In Michael Young and Stephanie Matseleng Allais (Eds.), Implementing National Qualifications Frameworks Across Five Continents (pp.3-6). Oxon: Routledge

Madsen, U.A., and Carney, S. (2011). Education in an age of radical uncertainity: youth and schooling in urban Nepal. Globalisation, Societies, and Education, 9, 1, 115-133. Doi: 10.1080/14767724.2010.51358

Maithreyi, R. (2015). *Reconceptualising life skills education: A critical analysis of ideas around childhood, 'risks', and 'success'*. (Unpublished Doctoral thesis). National Institute of Advanced Studies, Manipal University, Manipal.

Matthias, P. (2016). 'India: Preparation for the World of Work. Education System and School to Work Transition'. VS Verlag für Sozialwissenschaften

Mehrotra, S. (2014): India's Skills Challenge, Reforming Vocational Education and Training to Harness the Demographic Dividend. Oxford University Press 2014, New Delhi.

Mehrotra, S. (2011). Skill Development Initiatives: Private-Public Partnership and Private Initiatives in India. NORRAG News 46. http://www.norrag.org/fileadmin/Full%20Versions/NN46.pdf)

NUEPA (2015-16) School Education in India: Flash Statistics 2015-16 (Provisional) National University for Educational Planning and Administration, New Delhi (Table 3.2). Retrieved from: http://dise.in/Downloads/Publications/Documents/U-DISE-SchoolEducationInIndia-2015-16.pdf

NSSO (2012): NSS 69th Round (July 2012– December 2012. Ministry of Statistics and Programme Implementation, Government of India. URL: http://mospi.nic.in/Mospi_New/site/inner.aspx?sta-tus=3&menu_id=31.

Ministry of Skill Development and Entrepreneurship. (2015). National Policy for Skill Development and Entrepreneurship.

Ministry of Finance. (2013). Notification No.8/6/2013-Invt. Retrieved from http://www.nsdcindia.org/csec/wp-content/uploads/2016/01/NSQF-NOTIFICATION.pdf

MHRD. (2014a). F. No.–104/2012VE (pt). Revision of the scheme of "Vocationalisation of Higher Secondary Education." New Delhi: MHRD

Ministry of Finance, Government of India. (2015). Economic *Survey 2014-15 Volume II*. New Delhi: Ministry of Finance, Government of India.

MHRD. (2014b). Educational Statistics at a Glance. New Delhi: Bureau of Planning, Monitoring and Statistics, MHRD. Retrieved from http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/EAG2014.pdf

Ministry of Law and Justice. (2009). The Right of Children to Free and Compulsory Education Act, 2009. In The Gazette of India: Extraordinary, Part II, Section 1. New Delhi: Ministry of Law and Justice.

Ministry of Labour and Employment. (2009). National Skill Development Policy. Retrieved from: http://www.msde.gov.in/assets/images/NationalSkillDevelopmentPolicyMar09.pdf

NSDCa.(2015a). Organisational Profile. Retrieved from http://www.nsdcindia.org/organisation-profile

NSDC. (2015b). FAQs. Retrieved from http://www.nsdcindia.org/faqs/1

Nikson, D., Warhurst, C., Cullen, A.M., and Watt, A. (2003). Bringing in the excluded? Aesthetic labour, skills and training in the 'new' economy. *Journal of Work and Education*, 16,2,185-203. doi: 10.1080/1363908032000070684

Olssen, M., and Peters, M.A. (2005). Neoliberalism, higher education and the knoweldge economy: from the free market to knowledge capitalism. Journal of Education Policy, 20,3,313-345. doi: http://dx.doi.org/10.1080/02680930500108718

Peters, M. (2001). Education, enterprise culture and the entrepreneurial self: A

Foucauldian perspective. *Journal of Educational Enquiry*, 2, 2, 58-71.

Retrieved from http://www.ojs.unisa.edu.au/index.php /EDEQ/article

/view/558

Ramasamy, M and Mani, C. (2016). 'Company Training, Initial Training: Initial In-Company Vocational Training in India: Implications and Challenges for Indian Companies.

Sadagopal, A. (2016). 'Skilling India' or Deskilling India. An Agenda of Exclusion. Economic and Political Weekly, 51,35, 33-37.

Saraf, R. (2016). Skill training or nipping potential in the bud. Economic and Political Weekly, 51, 18, 16-19.

Sasi, A. (2016). Recognition of Prior Learning: Making them Industry-Ready. Retrieved from: http://indianexpress.com/article/india/india-news-india/recognition-of-prior-learning-making-them-industry-ready/

Singh, M. (2012). India's National Skill Development Policy and Implications for TVET and Lifelong Learning. In Mathias Pilz (Ed.), The Future of Vocational Education and Training in a Changing World (pp. 179-214). Springer VS. doi: 10.1007/978-3-531-18757-0

SSC-NASSCOM. (2015). List of National Sector Skills Councils. Retrieved from http://www.sscnasscom.com/ssc-list/list-national-sector-skill-councils/

Swift, J. (1995) *Wheel of Fortune: Work and life in the age of falling expectations*.

Toronto: Between the Lines Press.

Urciuoli, B. (2008). Skills and selves in the new workplace. American Ehtnologist, 35,2,211-228. DOI: 10.1111/j.2008.1548-1425.00031.x

World Bank. (2008). Skill Development in India. The Vocational Education and Training System. Human Development Unit, South Asia Region, World Bank.

Whitty, G. 2002. *Making sense of education policy: Studies in the sociology and politics of education.* London/Thousand Oaks, CA: Paul Chapman/Sage.

Young, M and Allais, S. (2011). 'Introduction'. Journal of Education and Work. Volume 24, Issue 3-4. Pp. 209-221.

Young, M and Allais, S. (2011). 'Briefing Paper and Options for Designing and Implementing an NVEQF for India'. World Bank.