

**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

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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,¹ 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:

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,

¹'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).

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 responsabilization, 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; Olszen & 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).² 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).

Thus, too, through our investigations into the field of the various actors who hold vastly different

²By '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.

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.

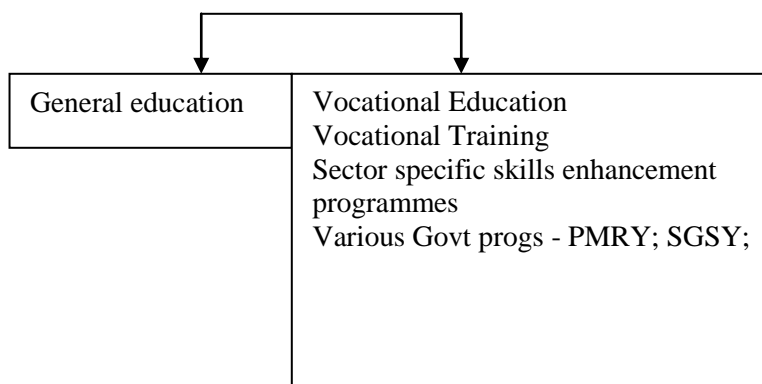
Put together, the methodological approach to the six month preliminary study aimed at helping us understand the key actors in the institutional and policy framework that was the focus of our study. The methodology was planned and undertaken to identify and map out the ways in which the skills policy 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 India³

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

³ **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

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).

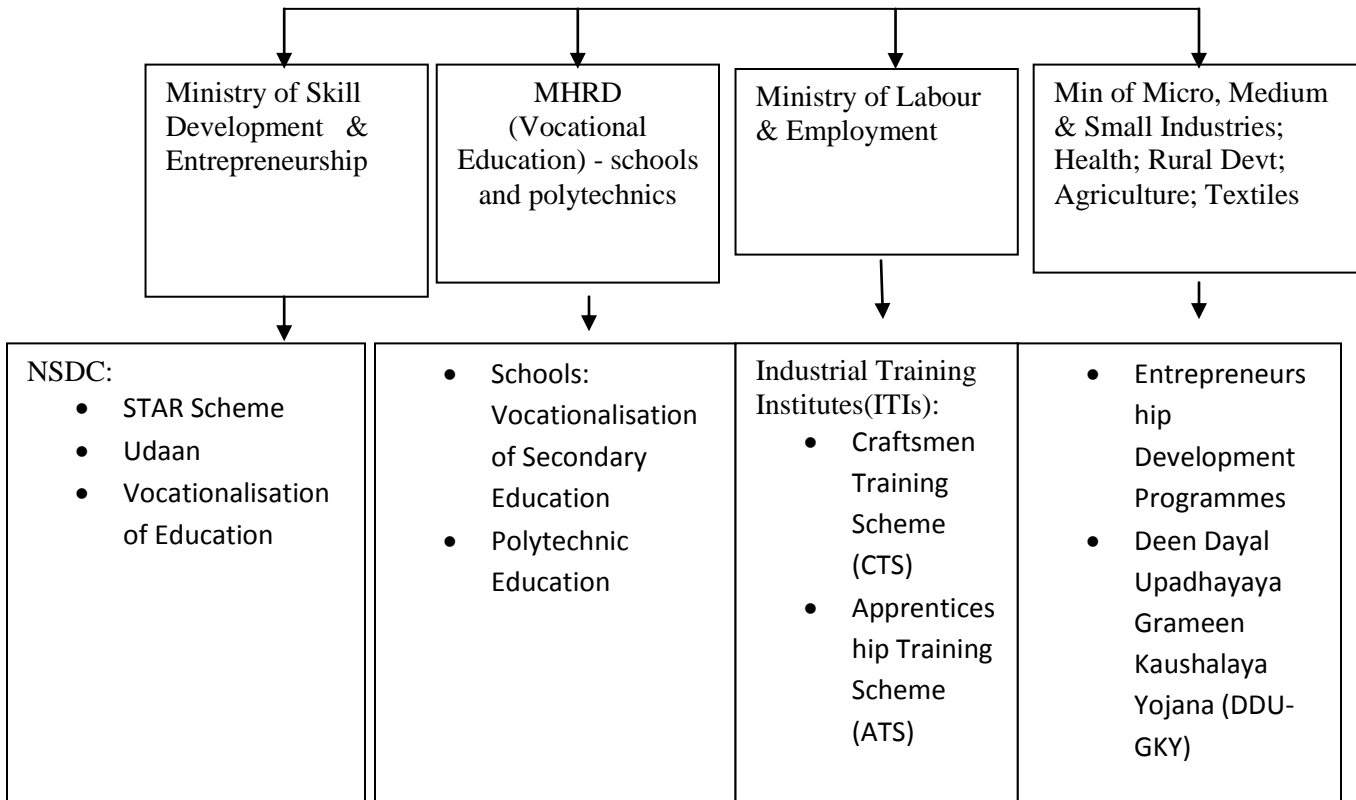
By 2024, the global shortage of skilled manpower would be around 56.7 million (FICCI, 2012). With about 12 million persons expected to join the workforce every year and an existing skill development capacity of 3.4 million, skilling and technical education capacity has to be improved to around 15 million 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 Craftsmen 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) ⁴	
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 and FS	200
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

⁴ Source: Indiatat:
<http://ecaccess.tiss.edu:2086/table/labourandworkforce/380987/training/283/698383/data.aspx>

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 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.

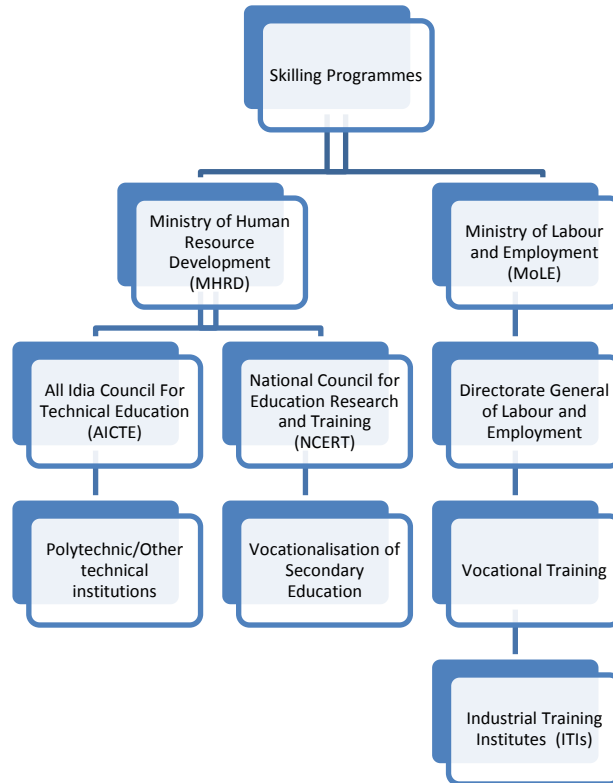
To deal with the massive task of skilling and training, the government has roped in private sector support and encouraged the development of Public Private Partnerships (PPPs). The increased role of private agencies can be seen in 1896 government-run ITIs that have been sought to be remodelled through 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 (8th, 10th, and 12th) 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 India⁵

ITIs in India				
Year		Government ITIs	Private ITIs	Total
2007	Number	1,896	3,218	5,114

⁵ Source: GoI (2010, 2011, 2014), Kumar.K (2016)

	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 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 ITIs⁶

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

⁶ Source : Indiatat: www.indiatat.com/labourandworkforce/380987/training/283/stats.aspx

Jammu and Kashmir	2343	2528
Jharkhand	26729	28422
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.⁷

Number of Technical Institutes and Student Intake						
Levels	2006-2007			2013-2014		
	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

⁷ Source AICTE (2014), Venkatram. R (2016)

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.

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 NVEQF⁸

Illustrative Pathways within NVEQF

NVEQ Levels	Equivalence	
8-9	Masters Degree	h
		← g
5-7	Bachelors Degree	
6-7	Advanced Diploma	
		d →
3-5	Diploma	
		← f
		c →
4	Grade XII	
3	Grade XI	
		e
		b →
2	Grade X	
1	Grade IX	
RPL 1 & 2	Grade V & VIII i	a →

As per the illustrative pathway presented in the NVEQF:

. Persons having acquired skills through the non-formal and informal mode can bridge literacy and

⁸ Source: MHRD, 2012

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

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.⁹			
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,	3,500

⁹ Source: Indiatat: <http://www.indiastat.com/>

		Healthcare, Travel & Tourism and Beauty & Wellness	
Maharashtra	350	Auto, Healthcare, IT-ITeS, Construction, Capital Goods	15,000
Nagaland	6	IT-ITeS	300
<u>Karnataka</u>	<u>100</u>	<u>Auto, Healthcare, IT-ITeS, Retail</u>	<u>15,000</u>
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 '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 company¹⁰) to promote skills development by providing

¹⁰ Refer NSDC, 2015b.

"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.¹¹ 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.¹² The 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

¹¹ 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.

¹² 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).

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 NSQF¹³ 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 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)".¹⁴ 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

¹³ 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.

¹⁴ Note: Names in the report have been changed in order to maintain the confidentiality of the respondent.

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".)

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)¹⁵ complained that students of the previous batches had not

¹⁵ 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

yet been certified.¹⁶ 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.

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

pension. In the context of uncertainty 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.

¹⁶Currently the third batch of students are being trained under the RMSA-NSQF vocational education programme.

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.¹⁷ 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 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

¹⁷ 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.

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,¹⁸ 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.

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

¹⁸ i.e., having multiple sections per class, and having over 4000 students

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,¹⁹ 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.

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.

¹⁹ 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.

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 casualisation 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. In Dale Larson (Ed.), *Teaching Psychological Skills. Models for Giving Psychology Away* (pp. 1-18). California: Brooks/Cole Publishing Company

Levesque, D. (2011). Capability as well as employability in TVET approaches in secondary 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 uncertainty: 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?status=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 knowledge 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 Deskillling 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.