

# A View from the Outside: India's School to Work Transition Challenge – Strengths and Weakness

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## 1 Introduction

School to work transition and the preparation for the world of work are highly important aspects in India's education and training policy (King 2012).

India has a huge potential which does not only manifest itself in the growing population and the huge number of youths who stream into the education and labour market system; its economic and geostrategic position at the interface between Asia and the Arab region is of high relevance for economic growth and future developments.

The concluding chapter takes up the issue of 'transition from school to work in India' in a comprehensive way. In order to structure the different aspects, it seems to be useful to take advantage of a popular approach in international educational governance theory (Gonon 2008), according to which three levels within an education system are differentiated. At the macro-level, elements of the education system are focalised in their entirety. Moreover, socio-cultural, economic, and other interdependencies are considered. At the meso-level, the focus is on the curriculum and individual institutions of the education system, whereas at the micro-level, the focus is on the specific teaching-learning process.

For each of these three levels, some particularly relevant aspects from the articles in this volume are selected and analysed in more detail in the subsections. These aspects will be dealt with in terms of the tension between strengths and weaknesses in order to map the spectrum of findings and tendencies in a comprehensive way. This method has already proven to be fruitful during other country analysis (cf. Pilz 2002, 2011).

Hence, the subsequent structure that evolves for our discussion comprises of the following subsections as highlighted in the table below (see tab. 1).

<b>Macro-level</b>	Educated versus uneducated population
	General versus vocational education
	Formal versus informal education
	Structure versus chaos of programmes
	Supply versus demand-driven approaches
<b>Meso-level</b>	Public versus private (company and/or individual) financing
	Adequate versus inappropriate curricula
	Short versus long duration of programmes
	Competent versus unqualified teachers/trainers
<b>Micro-level</b>	Theory-driven versus practical experience
	Teacher versus learner-centred approaches

*Table 1:* Three levels approach of discussion

## 2 Macro-Level Analysis

In the following paragraphs, the particularly relevant aspects will be analysed at the macro-level.

### 2.1 *Educated versus Uneducated Population*

At all levels, the Indian education system is characterised by outstanding educational institutions which excel in motivated and well-qualified teaching staff, great infrastructure, and, thus, brilliant learning and examination results of their students. However, these institutions usually demand high tuition fees which can only be afforded by a small part of the population. Moreover, there is a huge number of youths who either only attend some primary school or who leave before completing secondary school. In the article by S. Nayana Tara (see chapter 2), the situation of drop-outs and illiterates is documented in detail. For this section of the population, which makes up a big proportion of the total population, the transition from the education system to the labour market happens in a quite a diffuse and unorganised way. These youths generally start their working life in the informal sector where the predominant labour and income conditions are usually considerably worse compared to the formal sector (see chapter 10 and 12).

Several initiatives for the improvement of quality in low-fee paying schools and for increasing the motivation of pupils as well as of parents to send their children to school have shown to be successful (see chapter 7 and 12). However, such initiatives need to be further intensified so that the drop-out rate is reduced and the aim in education policy for pupils to complete at least class eight is achieved (see chapter 3). However this challenge can only be a lengthy process to be dealt with in the long run. It has to be taken into account that India is at once a

culturally heterogeneous country and a big country with a quantitative problem of high numbers of students.

## 2.2 *General versus Vocational Education*

The preceding chapters have clearly shown that education in India is associated in the first place with general education and, better still, with academic education. Parents of all social classes are prepared to invest lots of money in the education of their children to pave the way for them to preferably have a good professional career and social standing. Like in many Asian countries and in the Anglo-Saxon world, too, careers are primarily defined through the attendance of reputed education institutions in the general education sector (Shavit and Müller 2000; Müller and Shavit 1998). The special meaning assigned to final exams as well as to entrance tests in such institutions is manifested in the meritocracy logic to which each student has to submit (Goldthorpe 1997). In contrast to the prominent position enjoyed by general education, vocational education is of only minor importance and seen as marginal or even inferior. Especially participants of vocational training courses are stigmatized and often considered as education losers. The reasons for the low standing of vocational training courses in society and in the Indian labour market can be traced to several socio-cultural and historical factors. In addition to the widespread assumption prevalent in Asia that only the highest educational degrees contribute to a high social standing in society and provide the highest return of investment in education. In India, the historical development also plays an important role. It cannot be denied that the influence of the British colonial influence shaped the Indian education system significantly. Until today, academic education in India orients itself strongly towards the Anglo-Saxon model (see chapter 15) perpetuating even to this day the colonial legacy (Singh 2001).

In addition, specifically in India, vocational education is usually associated with physical or rather craft work. So-called blue-collar jobs are not highly rated among the Indian population. Manual or rather physical work does not have a high reputation. The reason for this fact can be found in the caste system which traditionally assigns physical and dirty work to the lower castes (Singh 2001 and see chapter 4 and 15). In this respect, the tendency towards the increase in academisation through cultural and colonial influences together with factors relating to religious and social underpinnings has led to the deep-rooted image problems of vocational education. A general solution to this problem – also that more and more skilled workers are needed – is currently not foreseeable.

Partial approaches as, for example, the upgradation of ITIs through better equipment and higher teaching capacities (see chapter 4 and 13) could be one approach to reach a qualitative improvement of vocational education processes. In contrast to this state-driven approach, the initiatives for a stronger involvement of employers have been mostly without success (see chapter 8, 11 and 14).

The foundation of interest groups and associations for vocational education (Sector Skill Councils) (see chapter 13) did not lead to a stronger activation of employers in vocational education processes so far. Moreover, the present remuneration system shows that the value of vocational education on the labour market compared to academic education is estimated to be lower (see chapter 15). Lately, vocational education represents a dead end since a connection or linkage of vocational and general education does not exist in India. Thus, the change from vocational education courses into general education courses later is not possible.

Consequently, various interrelated problems areas arise and which deserve a holistic approach for a solution.

### 2.3 *Formal versus Informal Education*

The Indian education system and the transition from school to work cannot be adequately analysed without underlining the special role of the informal sector. Still, about 95% of the Indian population works in this sector (see chapter 10 and 12). Formal educational degrees and certificates only play a minor or even no role in this field. However, it needs to be taken into account that also in this sector a variety of skills are generated. Informal learning in particular plays a special role for the informal sector (see chapter 12). It is through informal learning that individuals learn complex and sector-specific knowledge and skills. (Pilz et al. 2015; Pilz and Wilmshöfer 2015). Hence, this sector should not per se be characterised as inferior or dispensable; on the contrary, the flexibility and the specific nature of informal learning should be made visible and recognised (Singh 2000) The development of a national skills qualification framework (NSQF) as well as first approaches for certification of informally acquired skills can represent an important future potential.

However, it can also be assumed that through increasing industrialisation, the share of the formal sector in the economy will grow and that consequently also the demand for formally qualified workers will rise. Therefore, the formalisation of the informal economy should be considered, especially at the interface between the formal and the informal sector without causing greater frictions or upheavals in the economic and labour system (see below).

## 2.4 *Structure versus Chaos of Programmes*

At first sight, the Indian education system is characterised by a clear and well-coordinated governance system (see figure 1 in the first chapter). The education institutions, the courses as well as the transitions and educational pathways are structured and clearly evident for all participants involved in education. Consequently, the Indian education system offers a great number of different educational careers.

However, as the articles by Mona Khare and Narendra M. Agrawal show the individual education institutions differ significantly at every education level. Thus, there are on the one hand high-quality schools in the bigger cities and on the other hand partially insufficiently-equipped schools in the rural areas. The coexistence of public and private education institutions intensifies this heterogeneity. The consequential lack of transparency is at least to some extent compensated by nationally-regulated final exams. Through the high importance of these exams (see paragraphs 2.1 and 2.2), boosting effects occur. Good schools can choose good students whereas bad schools get weaker students. This effect can be intensified once more through very different rates of tuition fees (see article by Venkatraman Badrinath).

A further aspect leading to an increasing chaos of programmes is the fact that every state enjoys autonomy in regard to education policy, as a result of which there is to some extent a very big difference in structures and rules between the different states. As a result national curricula often gets amended or replaced by state curricula. At the same time, different ministries at national and state levels act in parallel. Besides the Ministry of Higher Education, the Ministry of Human Resource Development, the Ministry of Labour & Employment, as well as the new Ministry of Skill Development & Entrepreneurship play an important role at national level. But also other ministries as, for example, the Ministry of Agriculture are engaged in education. This does not only lead to disputes over roles and responsibilities but also leads to duplication or even competing offers (see article by Ganapathy Palanithurai). The lack of transparency becomes further exacerbated by education providers from the private sector and NGOs providing manifold training offers (see chapter 7 and 10). The result of this, especially in the vocational education system, is a conglomeration of different degrees and qualifications which is quite difficult to understand for employers. Moreover, the individuals demanding education (students and their parents) are confronted with this lack of transparency.

It is therefore necessary to have a clear division of roles and responsibilities among individual ministries as well as between national and state levels. The standardisation of training programmes through stronger outcome orientation

could also mitigate this problem (see article by Vinay Swarup Mehrotra). In addition, there is the question of the implementation of the national qualification framework in India. If its acceptance in society, education and the labour market progresses well, this framework can also lead to a better structuring of educational provision and hence, to more transparency among training providers and individuals looking for training (see chapter 13 or Singh 2012).

### *2.5 Supply versus Demand Driven Approaches*

In the last decades, the Indian Government at national and state level made impressive efforts to increase skills among the population. This applies to youths as well as to adults, especially in rural areas (see chapter 7, 11, 12 and 13). Through these efforts, a very high number of persons could already get involved in educational activities. However, the sustainability of learning success could not be documented for many of these actions. Besides the measurement problem, findings also point to another problem. A great number of the programmes have a clear supply-driven focus. Educational initiatives are planned at the national level and they are oriented towards governmental planning requirements. These supply approaches can be found in many countries worldwide and, thus, also in India (cf. e.g. Ziderman 2003; Mehrotra et al. 2013). Such approaches disregard the demands of the participants and those of the employers. The demand side is considered the key to success, especially in the context of further and continuing training (Billett 2000). A high participation rate in educational programmes along with the respective motivation of the individuals as well as the subsequent utilisation of the acquired skills in working life can be expected only if educational activities can be designed in a way that they meet the needs of the labour market as well as those of the individual participants (see chapter 9 and 15).

The development and delivery of supply-driven offers requires a rethink from all stakeholders involved in education. Qualification requirements (both inputs and outputs) have to be assessed prior to the development of training measures. They represent the basis for the development of educational programmes. Such additional expenditure seems to be rewarding if an improved sustainability of the education programmes can be achieved later on.

### *2.6 Public versus Private (Company and/or Individual) Financing*

Financing of education systems plays a crucial role in all countries of the world. Thus it is not only a matter of the amount of financing but also the accompanying

engagement of stakeholders and their roles and responsibilities in the development of training courses. As already indicated several times above, the Indian education system is characterised by mixed financing. Besides a significant national financing, the individual or rather family financing of educational activities plays a great role in India. In this respect, it can be called a market-liberal system (Busemeyer and Trampusch 2012). Consequently, a private education sector has evolved in India which constitutes an integral part of the country's economic performance (see chapter 8 and 14). If education is considered an investment, then it is understandable that parents and students expect a return from the investment. From an economics of education perspective, this is achieved later through the income earned in the labour market system which takes the educational background appropriately into account. As the article by Narendra M. Agrawal et al. shows, the realisation of the returns of education, when compared internationally, is achieved by the fact that Indian employees show a lower level loyalty towards their employers and change their job very quickly if better payment is offered elsewhere. The high turnover is fostered by a liberal labour market which is determined through other factors (see chapter 14).

At this point, it is important to mention that the employers are usually not interested in larger investments in the training of their staff. Due to the high turnover, these investments are not considered to be profitable (poaching problem). Through the absence of employer commitment in training, only very limited financing possibilities of governmental bodies, as well as the focus of parents on general education courses, a skill gap arises at the middle qualification segment (see chapter 7). If the Indian formal sector continues to grow and industrial as well as service-oriented companies want to succeed on the global market, qualitatively competitive products can only be produced by an adequately trained workforce. Thus, a fundamental issue to be tackled in future will be, as Mehrotra et al. (2014) suggests, the development of public private partnerships in vocational training. The stronger involvement of employers in political issues of vocational education which is pushed by the government goes into the same direction. The implementation of sector skills councils is one initiative in this direction. However, many companies currently still do not seem to be convinced of a stronger engagement (see chapter 8).

### **3 Meso-Level Analysis**

This section analyses the structural and curricular issues at the level of individual educational institutions including the related structural and curricular characteristics.

### 3.1 *Adequate versus Inappropriate Curricula*

The curricular framework conditions constitute for all education institutions a decisive guideline for their didactic-pedagogic action (Kelly 2004). On the one hand, there are modern and updated curricula in the field of secondary education in India. One example in this respect is the curriculum in the area of pre-vocational education (see chapter 3). Furthermore, in the field of vocational courses at general education schools great efforts have been made to introduce an attractive and modern learning environment (see chapter 9). On the other hand, especially in the field of the Apprenticeship Training Scheme (ATS) outdated curriculum from the 1960s is still used. Even in the area of ITI training, the number modern curriculum is still relatively limited (see chapter 4).

This leads to problems because young people who are trained in this manner do not have the skills profile that matches the requirements of the companies. This explains to some extent the reasons for the poor transition of ITI students onto the labour market (see chapter 13 and 15). With the help of appropriate institutions, which are specialised on curriculum development (like PSS Bhopal or Kolkata), it should be possible to put an end to this deplorable situation quite quickly. It should then be the task of the individual education institutions to see that their teaching staff has the appropriate qualifications to push the implementation of new curricula in the courses (see chapter 4).

### 3.2 *Short versus Long Duration of Programmes*

In the preceding chapters, particular attention was paid to education levels, wherein it was also pointed out that at each education level education programmes have certain duration. Thus secondary education is created to last over many years. Similarly, higher education also comprises studies over several years.

Vocational education courses, however, are offered for a duration lasting from few weeks to usually a maximum of two years (see chapter 3, 4, 5 and 6). How might comprehensive skills be taught and practiced in training measures when the course lasts only a few weeks, however? If comprehensive skills are to be learned, the training phases should be planned in a sufficiently long and intensive manner (see various articles in Fuller and Unwin 2013). It is not surprising when employers complain about the insufficient qualifications of young people who get trained in short-term training courses. It is interesting that in the informal sector, in which learning takes place mostly non-formally and informally, the learning process is created to last over several years until the professionalisation is completed (Pilz et al. 2015).

Therefore, in the long run, it is necessary to strive for the extension and standardisation of training periods also in the professional/vocational area. This applies primarily to the initial training of youths, where equivalencies with the general education system could be made. Such standardisation might be problematic and not sufficient enough for the informal sector. However, by means of informal apprenticeships (ILO 2011; Barber 2004) as well as a corresponding certification of the informally acquired skills, a special type of vocational education could be established at least to some extent for this central sector of the Indian economy.

For the field of further and continuing training (see chapter 11), however, other solutions have to be found oftentimes. Here, training programmes have to be designed in a flexible manner in order to enable the participants to receive an income besides the training measure.

### 3.3 *Competent versus Unqualified Teachers/Trainers*

It is known from international studies that teaching staff has a very crucial importance in an education system (Hattie 2009). Thus, special attention has to be paid to a high-quality training of teachers, to their selection, as well as to their appropriate salary. All in all, these requirements are met in the general school sector and especially in higher education in India (see chapter 6). Bigger problems especially occur in rural areas in which it is difficult for public schools to find well-qualified teaching staff due to low attractiveness (see chapter 9).

The situation in the field of vocational education is totally different. Whereas the quality of teaching staff at polytechnics and colleges can still be described as good to satisfactory (see chapter 5), the situation at ITIs is frequently precarious. If teaching staff and trainers themselves often only completed training at an ITI as highest educational degree, the training cannot meet high quality requirements (see chapter 4 and Mathur et al. 2014). At this point, training for vocational school teachers needs to be urgently implemented. This training has to include both, a professional qualification in the respective subject and an explicit didactic-pedagogic perspective. Usually, this can only be reached through studying at a university. To make the teaching profession more attractive, it will also be necessary to pay an appropriate salary to these well-qualified teachers.

## 4 Micro-Level Analysis

At the micro-level, the specific teaching-learning process will be the focus of analysis.

### 4.1 *Theory-Driven versus Practical Experience*

The courses with vocational focus have the task to prepare the learner for the daily life in the labour system. This includes comprehensive theoretical knowledge which, however, has to be applied in practical settings.

Nevertheless, the articles Vishal Gupta and K. Kumar impressively document that formally organised vocational learning in India is too strongly rooted in theory. Practical phases and learning with a practical orientation are not at all or only marginally taken into account. Against this background, employability cannot be achieved and, moreover, the needs of the labour market cannot be adequately met. Once more, the reason for this fact could be that theoretical education has a better image in India and that teachers in the field of vocational education do not consider practical-oriented teaching (e.g. directly on machines within the production process) as appropriate for their own social standing. In addition, the training of teachers oftentimes does not consider and promote practical orientation in an adequate way (see chapter 9).

Once more, this problem needs to be solved through a new form of training for vocational school teachers (cf. above). Vocational school teachers have to become aware through their training that the acquisition of knowledge, skills and broader competencies in vocational training courses can only be realised through direct interlinkage of theory and practice (Evans et al. 2006; Fuller and Unwin 2013), whereby the physical activity genuinely serves the organisation of the learning process and should not be considered as negative stigma.

### 4.2 *Teacher versus Learner-Centred Approaches*

In the Indian context the teaching-learning process is still characterised by a strong dominance of teaching staff (see chapter 9).

Teaching staff primarily consider themselves as lecturers and not as learning guides or moderators within the learning process. In this respect, existing reality contradicts the findings of teaching-learning research (Bransford et al. 2000). Only if it works in the medium term to focus teaching at all school levels and also in the vocational education sector much more on the learners and to integrate them more actively in the learning processes, only then all kinds of skills can

be enhanced appropriately besides the merely receptive knowledge. Enhancing problem-solving skills; understanding, confidence and motivation, fostering aspirations and self-esteem as well as communication and, social competence, and other kinds of skills can only be promoted by taking part in activities and through the individual's own actions. Here again, it is the quality of the training of teachers that is central: In the initial teacher training, modern pedagogical and didactical concepts have to be integrated. Also in further training, corresponding programmes need to be provided in order to reach out to the already active teaching staff within the education system. This suggestion could be formally flanked through a stronger curricular definition of teaching-learning methods (cf. above) and it can become mandatory in the context of quality management of education institutions.

## 5 Conclusions

The Indian education system faces huge challenges in order to adequately realise the transition from school to work as well as the preparation of youths for the world of work.

The presentation of the three-level analysis surely does not deal with all strengths and weaknesses in a comprehensive way. Nevertheless, it should have already become clear by means of the examples highlighted in this chapter (and the many other ones in the preceding chapters) that the governance and development of the Indian education system can only take place in terms of and from a multi-dimension perspective and in an interconnected and coordinated way. Otherwise, there is the risk that single initiatives and partial modifications result in unexpected side effects and possibly negative reactions from other points of the education system. Thus, side effects already have to be taken into account appropriately during the planning of initiatives.

On the one hand, comprehensive knowledge of all parts of the education and labour system is required, that this book, it is our hope has especially contributed to. On the other hand, scientifically sound educational planning is indispensable. Especially research about the Indian education system, and here in particular vocational education, requires a comprehensive understanding. This fact has also emerged from the findings of chapters in this book. The promotion of young researchers is a crucial factor to ensure that in the future the development and implementation of scientific methods in Indian educational research is undertaken in accordance with internationally accepted standards. In addition, the establishment or rather the intensification of research networks can be a fruitful venture. The dissemination of scientifically relevant findings, the academic exchange, and the

joint elaboration of scientific topics can contribute to the growth of the scientific community. To this end, the collaborative production of this book by various researchers from different disciplines of the Indian education system could be perceived of as having provided a significant contribution – now and in the future.

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