ISAS Working Paper

No. 207 – 22 July 2015

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Skills Development in India:

Prospects of Partnership with Singapore and Japan

Much has been said about the opportunities for economic and employment growth arising from India's demographic dividend, with Modi's "Make In India" programme taking centre stage in the discussion. However, the country faces the challenges of a lack of technical skills among its youth population. If India is to capitalise on the economic and productive potential of its burgeoning youth population, it will need to look to both Singapore and Japan in order to effectively impart technical skills to its youthful students and to those who are already employed.

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Introduction

Every year, India produces 2.5 million college graduates. Out of these, the country has 100,000 more specialising in the sciences and 60,000 more in engineering than the United States.² On the strength of this one can assume that India contains the foundations for a strong manufacturing core. To add to this, Prime Minister Narendra Modi's vision for India could signal a change of pace for the country's flagging industrial growth given his

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² Cheney, Gretchen Rhines. 2005. *India: Education Report*. Washington D.C.: National Centre on Education and the Economy, p.15.

impressive track record in Gujarat, where the annual growth rate of the manufacturing sector was 10.89 per cent between the years 2004/2005 and 2011/2012 - far higher than the national average of 8.96 per cent during this same period. Speaking on 25 September 2014 in Delhi to a group of diplomats, businessmen, journalists and politicians, Modi emphasized the "urgent need for skills development as far too many of India's youngsters are poorly prepared for globally competitive work". The strengthening of ties with both Singapore and Japan under the Modi government presents several opportunities for India to improve both the economic and employment growth rates of its manufacturing sector through seeking much needed expertise on the delivery of technical education and skill development.

The growing recognition of Singapore as a global leader in technical education is evident from the strong focus on technical training that emerges from its universities. Out of Singapore's universities, at least half contains an approach to education that is technical, and while not entirely vocational, certainly one that gears its students specifically towards entering the workforce. These include the Singapore Institute of Technology (SIT), the Singapore University of Technology and Design (SUTD) and Nanyang Technological University (NTU).

In addition to a strong technical focus, the universities are highly international in their approaches to education. For example, SUTD was established in collaboration with the Massachusetts Institute of Technology (which helped design the SUTD curriculum and also "holds mentoring, career development programmes and joint research projects" at the SUTD campus) as well as Zheijang University (which offers courses and "holds research and student and faculty exchanges" with SUTD).⁴ NTU, the second oldest university in Singapore, is proving to be equally global in its outlook and is impressively ambitious in its plans to expand overseas. Slated to open campuses in London, "San Francisco, Chicago, Stockholm and Shanghai" within the next two to three years, NTU's expansion plans, along with SUTD's partnerships, convey Singapore's impressive credentials as an international collaborator in the higher education sector.

A.R. 2014. India's big manufacturing push: Time to make in India? *The Economist* [online]. Available from World Wide Web: http://www.economist.com/blogs/banyan/2014/09/india-s-big-manufacturing-push>.

⁴ Zacharia, Natasha Ann. 2015. *Learning Curves*. The Straits Times Life! (May 9 2015), p.11.

Davie, Sandra. 2015. NTU to set up satellite campuses abroad. *The Straits Times* [online]. Available from World Wide Web: http://www.straitstimes.com/news/singapore/education/story/ntu-set-satellite-campuses-abroad-20150504.

Japan's strong tradition of high-quality manufacturing and employers providing skill development training to employees too can be a boon. This phenomenon is not completely alien to India, as evident from India's IT giant, Infosys, which "plans to train 45,000 new employees a year, including 14,000 at a time at its main campus in Mysore". However, in order to capitalise on the large pool of technical manpower available in India, such skill upgrading initiatives of this kind need to take place on a wider level and spread to industries outside the rapidly growing and high paying but slow hiring corporate sector, including manufacturing and construction, both of which contain the potential to far more realistic employment possibilities for the millions of graduates that wait each year to enter the workforce.

India and Japan

Modi's official visit to Japan from 30th August to 3rd September 2014 ended with him meeting Japan's Prime Minister Shinzo Abe. The two leaders discussed opportunities for cooperation and collaboration. Among the other areas for collaboration that were discussed including infrastructure, energy, agriculture and investment, both leaders talked about "the importance of skill development as an important tool" for promoting skills among local youth. This was in particular reference to young people living in the industrial corridors currently being developed in India. These consist of a total of twenty-four cities in states such as Uttar Pradesh, Haryana, Rajasthan, Gujarat, Madhya Pradesh and Maharashtra, among others, which are planned to become major manufacturing hubs. The intention behind creating smart cities is not only to develop the infrastructure landscape and liveability of India's cities, but also to generate employment in the construction sector for middle and lower-middle class youth.

One of the other plans that was laid out during the meeting is for young Indian researchers and students to visit Japan through the Japan Society for the Promotion of Science (JSPS) Fellowship Program and Japan-Asia Youth. Another similar initiative that was declared

The Economist. 2013. Generation Jobless. *The Economist* [online].http://www.economist.com/news/international/21576657-around-world-almost-300m-15-24-year-olds-are-not-working-what-has-caused.

LaRouche Political Action Committee. 2014. India and Japan Push for Closer Collaboration and Youth Development. *LaRouche Pac* [online]. Available from World Wide Web: http://archive.larouchepac.com/node/31665>.

during the meeting was an "exchange of approximately 1,300 youth between the two countries under JENESYS 2.0 program". ⁸ This short term (ten-day) programme would involve young Indians visiting high schools and universities in Japan while staying with Japanese families. The programme's activity of visiting Japanese industrial factories provides an opportunity for Indian youth to learn about manufacturing processes and working conditions which they can hopefully apply when they return back home. However, the vast bulk of the programme's itinerary, consisting of partaking in cultural activities and meeting with other young people, suggest that the initiative is little more than a symbolic gesture. The implementation of the programme simply conveys a desire on the part of India and Japan to reaffirm their friendly relations with each other, making it clear where their allegiances lie as India enters into a new and seemingly uncertain phase of foreign relations under the Modi administration.

That the exchange programme seems more like a diplomatic gesture than anything else is made further evident from the fact that its desired outcome, according to a report by Japan's Ministry of Foreign Affairs, is to promote 'understanding and friendship' between Indians and Japanese students and local residents. Such programmes as a result may not achieve anything concrete. However, what they may be able to do is provide the foundations for a new kind of partnership between Japan and India in the field of skill development. These programmes could potentially act as a starting point for the development of more intensive and long-lasting programmes that directly target the issue of skill acquisition and technical training for young people in India.

Japan's economy, once hailed as a model of efficiency and growth during the late 1980s and 1990s, today is sluggish. Its manufacturing sector, previously one of the most commercially successful in the world, now lags behind other players in the global marketplace as "Japanese products appear to have lost competitiveness". Part of this is due to "poor product development, especially in consumer electronics which along with cars drove Japan's earlier export miracle". Its planned efforts to engage with India's flailing manufacturing sector may seem ill-informed considering the problems Japan is facing with its own. Japan's slowdown in innovation has meant that technology companies from the US (Apple, for example), China (Huawei, Xiaomi, etc.) and Korea (Samsung, LG, etc.) have overtaken the previously Japan-

Ministry of Foreign Affairs of Japan. 2014. Factsheet: India and Japan – Partners for Common Development. MOFA [online]. Available from World Wide Web: http://www.mofa.go.jp/files/000050627.pdf>.

T.B. 2014. The mystery of Japan's sluggish exports. *The Economist* [online]. Available from World Wide Web: http://www.economist.com/blogs/economist-explains/2014/10/economist-explains-5.

dominated electronics market. Nevertheless, the country's emphasis on high-quality manufacturing remains unparalleled.¹⁰

One area in which both countries face similar problems within the irrespective labour markets is that of youth unemployment. Since the economic recession of the late 1990s, the overall unemployment rate in Japan has dropped steadily to a rate of 3.6 per cent, yet youth unemployment and underemployment have remained high. A survey by Japan's Ministry of Health, Welfare and Labour which was directed at Japanese aged 15 to 34, found that "40.3 per cent" declared their main source of income to come from their parents. India similarly has experienced rising levels of youth unemployment, which is "three to four times higher than the unemployment rate of adults", 12 with educated youth particularly afflicted.

However, it is uncertain as to whether Japan will be able to offer any advice to India that could substantively improve unemployment rates considering that the youth unemployment problem differs vastly in nature across the two countries. Unlike in Japan where many young people choose to remain unemployed by choice, India's problem of educated unemployed youth boils down largely to the perceived lack of skills among young graduates, making them unable to satisfy the basic requirements of employers. Youth unemployment in India is not due to a limited number of jobs and an oversupply of qualified graduates (as is the case in Japan), but rather, quite the opposite – there are too many graduates deemed 'unemployable' and too many employers frustrated at their inability to successfully fill vacant positions. In Japan, however, the reduction of the regular labour market has meant that "most jobs youth can find are those at small and more unstable companies". ¹³ As a result, many choose to remain out of employment rather than take up such jobs.

The growing number of Japanese youth who reject the idea of "belonging to a company as a regular member" often do so because of their desire for jobs that "require special talents and skills and are usually pursued not in the form of full-time employed workers but of liberal

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Wakabayashi, Daisuke and Inada, Miho. 2010. Questions Grow on Japanese Manufacturing Quality. *The Wall Street Journal* [online]. Available from World Wide Web: http://www.wsj.com/articles/SB10001424052748704194504575030940407310052.

KK Miller. 2014. 40.3% of Japanese youth depend on parents for income: survey. *Japan Today* [online]. Available from World Wide Web: http://www.japantoday.com/category/national/view/40-3-of-japanese-youth-depend-on-parents-for-income-survey.

Schmid, Günther. 2015. Youth Unemployment in India: From a European and Transitional Labour Market Point of View. Berlin Social Science Centre: IZA Policy Paper Series, p.2.

Honda, Yuki. 2004. 'Freeters': Young Atypical Workers in Japan. *Institute of Social Science, University of Tokyo* [online]. Available from World Wide Web: https://webspace.yale.edu/anth254/restricted/Honda_nd.pdf>.

professions". ¹⁴ This sense of individuality that characterises today's generation of Japanese youth is partly a response to and a rejection of the culture of the baby boomer generation "who graduated and slotted into steady careers in the 1960s and 1970s". ¹⁵ In Japan, up until the 1990s, "the act of finding employment upon graduation was a major event", not only because it "could determine the whole of one's life", but also because the workplace was seen as a space containing "opportunities to find a marriage partner". ¹⁶ Today's youth see employment less as a determinant of their social and economic prospects and more as potential avenue to fulfil their individual desire for happiness.

To tackle the problem of youth unemployment in India, it is essential to improve the development of critical skills among young Indians in higher education, hoping to swiftly transition them to skill-intensive and knowledge-intensive employment. The finding that "as many as 47 per cent of graduates in India are not employable for any industry role", ¹⁷ with their insufficient knowledge of English and poor cognitive skills cited as the main reasons by employers, is revealing of the fundamental problems that exist within India's higher education system. These become even more glaring when the employability of India's graduates reduces drastically for exactly the kinds of skill-intensive jobs that university degree holders ought to be qualified for. For example, graduate employability reduces to as low as "2.2 per cent" for corporate communications roles and "2.59 per cent" in accounting jobs. ¹⁸

The focus that many politicians and policy-makers often place on India's burgeoning Business Process Outsourcing (BPO) sector as 'the solution' to the aspirations of India's young graduates is highly problematic. This is because of the sector's inability to accommodate the large numbers of job seekers that graduate from college every year. It is not simply that there is a limited supply of jobs causing the sector's low absorption rate, as is often believed, but rather that there is a limited supply of suitable graduates. In fact, the percentage of India's graduates who were found to possess the types of skills needed for call

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¹⁸ Ibio

¹⁴ Ibid

Kremer, William and Hammond, Claudia. 2013. Hikikomori: Why are so many Japanese men refusing to leave their rooms? *BBC World Service* [online]. Available from World Wide Web: http://www.bbc.com/news/magazine-23182523>.

Kosugi, Reiko. 2006. Youth Employment in Japan's Economic Recovery: 'Freeters' and 'NEETs'. *Japan Focus* [online]. Available from World Wide Web: http://www.japanfocus.org/-Kosugi-Reiko/2022/article.html.

Bose, Raktima. 2013. Nearly 47 per cent graduates in India unemployable, says report. *The Hindu* [online]. Available from World Wide Web: http://www.thehindu.com/news/cities/Delhi/nearly-47-per-cent-graduates-in-india-unemployable-says-report/article4850167.ece>.

centre jobs was only 21.37 per cent. The seriousness of the situation is evident in the story of 24/7 Customer Pvt. Ltd. – a call centre company based in Bangalore. The increasing difficulty in finding graduates in India who are fluent in English "has forced the company to expand its search to the Philippines and Nicaragua". ¹⁹

An area of skill development where Japan may be able to offer advice to India lies in attracting and training women in the workforce. Since the 1990s, Japan's economy has fallen victim to "sluggish growth"²⁰ and its demography has aged significantly, leading to a steadily shrinking workforce. As a result, "many Japanese companies are now forced to consider the effective utilization of female workers". ²¹On 26th September 2014, Abe spoke of his intention at the United Nations General Assembly to rethink Japan's employment policies in a way that would ease the process of entering and staying in the workforce for women. In his speech, he "clearly laid out how important it is to encourage female participation in the economy". 22 In 2012, they made up 77 per cent of Japan's part-time and temporary workforce. India faces a similar problem when it comes to absorbing skilled women into the workforce. The National Sample Survey Office numbers for 2011-2012 reveal a worrying employment rate for India's "young urban female graduates, with almost one fourth of them unemployed". This is far higher than compared to their male counterparts – "almost one in every six" is unemployed. Japan is planning to implement several reforms to increase female participation in the workforce, such as improving childcare options and creating a neutral tax and social benefits system. When it comes to furthering the incorporation of women into the labour market, both Indian and Japanese policy makers face similar obstacles of deeply entrenched patriarchal social norms in their respective societies where attitudes towards formal labour and family incomes are typically structured around the male breadwinner model of livelihood security. In light of these similarities, Japan's intended reforms could be a point of reference during

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Yuasa, Masae. 2006. Japanese Women in Management: Getting Closer to 'Realities' in Japan. In:Yukongdi, Vimolwan and Benson, John (eds.) *Women in Asian Management*. Abingdon: Routledge, p.67.

Anand, Geeta. 2011. India Graduates Millions, but Too Few Are Fit to Hire. The Wall Street Journal [online]. Available from World Wide Web:

http://www.wsj.com/articles/SB10001424052748703515504576142092863219826>.

The Economist. Reform in Japan: The Third Arrow. *The Economist* [online]. Available from World Wide Web: http://www.economist.com/news/leaders/21605905-shinzo-abe-has-best-chance-decades-changing-japan-better-he-seems-poised.

Beech, Hannah. 2013. 'You Mean Women Deserve Careers?' Patriarchal Japan Has Breakthrough Moment. *TIME Magazine* [online]. Available from World Wide Web: http://world.time.com/2013/09/30/you-mean-women-deserve-careers-patriarchal-japan-has-breakthrough-moment/.

Chakravarty, Manas. 2014. The youth unemployment conundrum. *Live Mint* [online]. Available from World Wide Web: http://www.livemint.com/Opinion/xDm2iBx0MFCZLnKUwmkefN/The-youth-unemployment-conundrum.html>.

discussions between Japanese and Indian officials as a way to increase the number of young female workers in India's formal sector.

The unique style of training that is often employed by Japanese firms for cultivating skills and knowledge among their employees is an area where Indian policy makers and leaders of industry could collaborate with Japanese companies. According to Koike (1995, 1997) and Keizer (2010), the efficiency and productivity of Japanese manufacturing companies is partly the product of how "the basic skills expected of Japanese blue-collar workers are similar to those of white-collar workers". ²⁴ Their training often involves undergoing "frequent job rotations" and being exposed to "unusual operations when working on mass production assembly lines". ²⁵ These are some of the practices that contribute to the efficiency of Japanese production. The cultivation of such skills during the employee training process "increases the number of workers that can deal with problems and the speed at which problems are dealt with". ²⁶ Furthermore, the opportunities provided to young employees in Japanese firms to directly handle challenges face on, such as "mechanical failures and defective productions", provide them with "a wide knowledge of the production process". ²⁷ It also improves their versatility, confidence and sense of value within the company, contributing "to their motivation and the further development of skills".

India and Singapore

Singapore too, has much to offer by way of skill development training. Several educational institutes in Singapore, including the Institute of Technical Education (ITE) and Singapore University of Technology and Design (SUTD), have been modelled specifically to provide a more vocational style of education. Such institutes run programmes that are more streamlined than the general humanities, arts and science degrees that most non-specialised universities offer. The end result of general degrees is that students are able to broaden their knowledge and develop skills that are often transferable across industries. These include being able to research independently, think critically, consume large amounts of content in a relatively

²⁴ Koike, Kazuo. 1995. *The Economics of Work in Japan*. Tokyo: LTCB International Library, p.66.

²⁵ Keizer, Arjan. 2010. *Changes in Japanese Employment Practices: Beyond the Japanese model.* Abingdon: Routledge, p.30.

²⁶ Ibid

²⁷ Ibid

²⁸ Ibid

short space of time and deliver presentations. Courses at technical institutes on the other hand are designed to provide the student with a direct link to the industry that he or she intends to enter upon graduating through the delivery of skill development programmes, industry-specific content and internships. For example, most universities have limited involvement in the internships that their students undertake. The student is often left to his or her own devices to decide how to go about searching and applying for internships. Other than bringing in companies for recruitment and internship fairs, many universities do not guarantee students with internships, monitor the progress of their students during the internship, or find a way in which the student's internship experience can subsequently be incorporated into, or made relevant to, the university curriculum.

The approach that Singapore's technical institutes have taken to increasing the relevance and experience of their students regarding employment differs tremendously from the norm and could be applied to the India context. In the case of Singapore's Institutes of Technical Education "which have long been at the forefront of providing quality vocational technical education"29, all students are required to "undergo on-the-job training while studying to further their qualifications". ³⁰ This includes "learning resume writing and interview skills as well as making visits to workplaces". ³¹For 60 per cent of its courses, internships are not only compulsory, but highly structured with clear specifications from ITE regarding "what is required for the student to learn as well as to do in the company". 32 This pro-active approach to liaising with companies and introducing monitoring measures prevents the possibility of internships becoming an unsatisfactory and unhelpful process for students who may end up being given a lack of work and no platform to seek mentorship and guidance. SUTD, a relatively new university in Singapore which opened in April 2012, places emphasis on technical training and developing innovation amongst its students. Not only does it include internships as a compulsory component of its undergraduate programmes, it even organizes a series of structured training courses designed to prepare the student for their internship.

²⁹ Singh, Sinderpal and Rahman, Syeda Sana. 2010. India-Singapore Relations: Constructing a "New" Bilateral Relationship. *Contemporary Southeast Asia*. **32** (1), p.85.

Davie, Sandra. 2014. Skills Future: ITE, poly grads, get a chance to learn, earn and work. *The Straits Times* [online]. Available from World Wide Web:

< http://www.straitstimes.com/news/singapore/education/story/ite-poly-grads-get-chance-learn-earn-and-work-20150226>.

Lee, Pearl. 2015. ITE aims to ensure students are career-ready. *The Straits Times* [online]. Available from World Wide Web: http://www.straitstimes.com/news/singapore/education/story/ite-aims-ensure-students-are-career-ready-20150217.

Siong, Olivia. 2015. ITE students to benefit from more structured internships. *Channel NewsAsia* [online]. Available from World Wide Web: http://www.channelnewsasia.com/news/singapore/ite-students-to-benefit/1677930.html.

Curriculums which include training and internship elements such as these allow for closer collaborations between education and industry, and to a certain extent, help bridge the gap that often exists between the intentions of the university faculty and the expectations of employers. Not only does this facilitate the process of students navigating the recruitment process by landing jobs, there is also a long-term effect of making them career-ready. While the experience of employment for most students is often limited to summer internships, those enrolled in programmes that include employment training and industrial placements become better placed to adapt smoothly to working life once they begin employment. Such students would get a head start in work by being able to avoid many of the hurdles that fresh graduates typically face during the early stages of their working life. These include understanding the culture of their firm, following corporate practices and codes of conduct, understanding how to apply theoretical knowledge to practical working problems, and learning to handle situations with colleagues and clients professionally.

This Singapore-style approach to vocational education may soon become a reality in India. During President Tony Tan's recent 4-day state visit to India from 8th to 11th of February 2015, he announced, among other planned collaborations taking place between the two countries, that ITE would offer its expertise in skill development to Delhi in the city's effort to build a skills centre within two years. While the key areas in which Singapore will provide assistance are yet to be identified, Dr Tan stated that Singapore could provide the Indian partners with "information on polytechnics or ITEs or skills development centres" and that "ITE will help with curriculum development and teacher training", ³³ much in the same way that MIT assisted in devising the curriculum of Singapore's SUTD. The opening of such an institute would be a welcome addition to India's higher education sector for several reasons.

Firstly, it would help to improve the sector's inability to meet the growing demand for university places, considering "more than five million Indians enter the 15-to-24 age group every year" while "there are simply not enough colleges and universities to accommodate them". Secondly, its unique style of training would enable it to distinguish itself from many of its competitors, creating a new model of technical education that existing and future colleges could model themselves on. Finally, there is a clear gap in the higher education

Saad, Imelda. 2015. President Tony Tan hopeful for expanded ties with India. *Channel News Asia* [online]. Available from World Wide Web:

< http://newscentral.exsees.com/item/df8bd56c06490fe4374dd949510fa5fb-06eb95171dc6cc4f1147568f92953d49>.

Pushkar. 2013. Will Nalanda University Be a Success? *Asian Scientist* [online]. Available from World Wide Web: http://www.asianscientist.com/2013/02/features/will-nalanda-university-be-a-success-2013/>.

market that Indian universities have failed to fully address as "only 5 per cent of the workforce have undergone any kind of vocational training". In an education system such as India's which is "primarily of a generalist nature and is not connected to the labour market" such an institute would go beyond simply churning out degree holders by providing them with career paths through equipping them with employable skills as well as links to industry.

However, there are several challenges that may arise during the processes of setting up and running a technical institute of this kind in India. One is the low level of investment in educational infrastructure. While there "appears to be no shortage of funding for centrally-funded 'top-tier' institutions, such as the IITs, IIMs, and Institutes of National Importance", "state universities have been chronically underfunded over the past decade". This often results in many of India's institutes failing to attract their country's brightest educators and practitioners due to their inability to provide competitive salaries. The irregularity of teaching posts in Indian colleges further reduces the incentive for the provision of good quality teaching as 40 per cent of college teachers in the country "are non-regular, designated variously as temporary, contractual, ad hoc, guest or self-financing" and "usually get anything between Rs 4,000 and Rs 20,000 per month". In many instances, colleges hire non-regular teachers and even fresh post-graduate students to teach undergraduate classes on extremely low salaries as a way of cutting costs.

The widespread problem of inefficient and corrupt administration also plagues India's education system, posing a potential challenge to the functioning of the proposed Delhi technical centre once it is set up and open for enrolment. While the actual day to day operation of the centre does not lie strictly within the remit of the Singapore team's responsibilities, its continued success is certainly important for ensuring Singapore's global reputation as a leader in technical education, as well as the possibilities for the further strengthening the interest of Singapore in investing in India's education system. The vastly different demographics of Singapore and India, the resulting differences in the needs and desires of India's and Singapore's youth, and the different educational systems and teaching

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³⁵ Sinha, Pravin. 2013. Combating Youth Unemployment in India. Berlin: Friedrich-Ebert-Stiftung, p.6.

³⁶ Ibid

Heslop, Lynne. 2014. *Understanding India: The future of higher education and opportunities for international cooperation*. New Delhi: British Council India, p.24.

Varma, Subodh. 2013. Indian higher education: 40% of college teachers temporary, quality of learning badly hit. *The Times of India* [online]. Available from World Wide Web: http://timesofindia.indiatimes.com/india/Indian-higher-education-40-of-college-teachers-temporary-quality-of-learning-badly-hit/articleshow/25520250.cms>.

styles between the two countries will mean that in advising Delhi on the designing and implementing of its technical centre, ITE will need to adjust and tailor its advice to its Indian clients. While this new approach to the designing of educational institutions may be just what India needs if it is to maximise the potential of its intellectual capital, importing an entirely foreign system of education and training is bound to face challenges. However, the fact that ITE Education Services (a wholly-owned subsidiary of ITE) "has licensed its courses to be run at four private schools in China and Vietnam" may mean that they already have mechanisms in place for adapting its educational content to students from different cultural and economic contexts.

In addition to the obstacles of bureaucracy and poor infrastructure which threaten the ability of a brand new technical institute to function smoothly, there are wider problems that also must be taken into account. Developing and upgrading the skills of graduates aside, networks must be established to prevent such skills from going unnoticed by potential employees. Whereas firms in Singapore are more transparent in their recruitment policies as well as organised (in that graduate schemes have become increasingly commonplace and applications for jobs can often be made online and are typically followed up with tests and interview rounds), India's labour market operates in a far more complex manner. In many cases, the recruitment process is ambiguous and "mainly occurs through caste, family and community networks". 40

In spite of the increasing standardization of employment practices in India that has come about with the expansion of the corporate sector, including the holding of placement tests and interviews on college campuses where the playing field among competitors for vacancies is arguably more equal and more likely to be merit-based, outside factors continue to influence and complicate the process. For example, a study of corporate hiring managers in 2006 and 2007 found that candidates were "rarely judged on his or her formal qualification alone" but were often asked during the interview process about their "family background". The ways in which personal and familial relations are deeply entangled within the Indian workplace, and the economy as a whole, make may it difficult to establish an effective internship programme in India that is widespread. To counter this, direct links could be formed between the proposed institute and prospective employers in ways that allow students to obtain

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³⁹ Singh, Sinderpal and Rahman, Syeda Sana, above n 29, p.85.

⁴⁰ Basile, Elisabetta. 2013. *Capitalist Development in India's Informal Economy*. Abingdon: Routledge, p.69.

⁴¹ Jodhka, Surinder. 2008. Caste and the Corporate Sector. *Indian Journal of Industrial Relations*. **44** (2), p.191.

industry experience and contacts, thereby reducing the obstacles that many Indian youth face when trying to gain employment.

Nevertheless, the possibilities that could emerge out of Singapore and India's partnership in the field of skill development must be noted. Singapore's commitment to building institutional linkages with India in the education sector is already apparent from the role it has played in the revival of Bihar's Nalanda University, the first standalone international university in India. Nalanda's state-of-the-art library has been built, designed and donated by Singapore, while its international advisory board includes former foreign minister George Yeo and Professor Wang Gungwu from the National University of Singapore. In addition to helping build, govern and invest in the university, Singapore has played a proactive role in overseeing the process that the university has gone through since its initial conception to its final completion, as its Minister for Foreign Affairs and Minister for Law, K Shanmugam, visited the university in July 2013 while it was still being built.

In addition to developing the teaching of technical skills and upgrading the quality of higher education in India, Singapore can also play a critical role in upgrading the skills of India's youth already in the workforce. With 12 million people in India "expected to join the workforce every year over the next decade", 42 the importance of improving labour efficiency and productivity cannot be understated. Much focus is constantly placed on harnessing the untapped potential of those still yet to enter the workforce. Yet Singapore can play a vital role in upgrading the skills of youth in employment so as to not only improve industry productivity but also better enhance their career prospects. The manufacturing sector, for example, is one where the upgrading of skills is especially needed. According to the National Skill Development Corporation in India, "over 70 million manufacturing jobs in India over the next 15 years could go unfilled due to a skills gap", as many of these jobs are located in the "high-end manufacturing" sector. Skill upgrading programmes that target those already working in the industry would be more effective at filling up such jobs as they would build on the existing knowledge and experience of workers, allowing them to transition to more skill-intensive jobs. Similar programmes such as the Workfare Training Support (WTS) Scheme managed by the Singapore Workforce Development Agency, which provides

⁴² Singh, Didar and Das, Siddhartha. 2014. *Reaping India's promised demographic dividend – Industry in Driving Seat*. New Delhi: Ernst and Young, p.8.

Coleman, Gary. 2014. Manufacturing, innovation, and the youth of India. *Deloitte* [online]. Available from World Wide Web: http://globalblogs.deloitte.com/deloitteperspectives/2014/10/manufacturing-innovation-and-the-youth-of-india.html>.

"support for low-wage workers so they have the best chance to progress", 44 could act as a framework upon which Indian government agencies base their designs for developing skill upgrading initiatives.

Conclusion

The lessons that India can learn from Singapore and Japan in skill development are multi-fold. Several factors make Singapore and Japan promising partners for India. These include their geographical proximity to India, the signs of strengthening ties between them and India under the Modi government, and their specific expertise in developing and upgrading technical skills. Singapore's strong track record in technical education and Japan's global success as a high-quality manufacturer are both areas in which India could greatly benefit. This is because of India's large demographic of young people who graduate from college every year without acquiring the basic skills that are seen as necessary formal sector jobs, and the related problem of many manufacturing jobs going unfilled due to the lack of suitable graduates. India's recent engagements with Singapore and Japan show great promise of progress being made in creating platforms and institutions from which young Indians can both broaden and deepen their technical expertise, which in turn would fix the prevalent problem of the "mismatch between skills demanded by existing jobs and skills provided by the educational system". 45 For all the talk of India's "demographic dividend" representing a missed opportunity, perhaps such partnerships of this nature represent the opportunity that is finally being seized.

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