

1. Background

India needs to sharply increase the productivity of its labour force and invest in enhancing the skill levels of its working age population to achieve the goal of “Viksit Bharat” by 2047. The insufficient and poor engagement of the working-age population, combined with increasing capital deepening across sectors, highlights pressing challenges on both the supply and demand sides of the labour market (Afridi et al., 2025). These dual constraints, including the limited supply of skilled labour and the economy's insufficient capacity to productively absorb the workforce, need to be addressed urgently.

Imparting Vocational Education and Training (VET) plays a vital role in improving the productivity of the labour force by equipping individuals with job-ready skills and facilitating smoother education-to-work transitions. However, improving the productivity of India's workforce entails dealing with the twin challenges of augmenting both the number of formally skilled workers and the quality of skill training. As per the PLFS, though the proportion of the unskilled workforce has been falling steadily since 2017, the proportion of the employed workforce equipped with formal training continues to stagnate. At the same time, notwithstanding the positive growth in India's labour productivity alongside the growth in per capita income, this growth has been relatively slow. Cross-country analysis suggests that the quality of skill training in India may not be adequate enough to translate into high-skilled employment (Afridi et al., 2025).

What are the key factors that explain the low level and low quality of skilling in India? And what lessons can we learn from the international experience that would help reform India's skilling ecosystem? These questions and the possible avenues of addressing the challenges therein have been discussed in this Policy Brief.

2. INDIA'S VET LANDSCAPE

2.1. Key Features

In India, VET is primarily imparted at the post-secondary level through Industrial Training Institutes (ITIs) and Polytechnics. ITIs, which fall under the aegis of the Ministry of Skill Development and Entrepreneurship (MSDE), admit students after Class VIII or X for short-term courses (ranging from six months to two years). Polytechnics, falling under the aegis of the Ministry of Education (MoE), Government of India, admit students after Class X and offer three-year diploma programmes.

While the institutional coverage of these institutions is extensive, with over 14,000 ITIs and 25 lakh sanctioned seats, the actual enrolment is only around 12 lakhs, implying a seat utilisation of just 48 per cent of the total capacity. Further, the overall placement rate of students was only 0.09 per cent, and even lower in many states and across trades (NITI Aayog, 2023). Additionally, VET graduates from ITIs and Polytechnics often end up in informal and low-paying jobs.

Table 1 outlines the structural features and associated challenges that contribute to the low uptake and employment rates in India's VET system.

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Table 1: Key Features and Challenges of India's VET System

Features of the Indian VET System	Key Issues
Perceptions	<ul style="list-style-type: none"> The national and state-level branding for vocational education is weak. There is lack of demand mapping of courses with local industry or youth aspirations, thereby lowering their perceived value. Credit transfer or academic progression opportunities to mainstream higher education are non-portable.
Industry Linkages	<ul style="list-style-type: none"> Micro, Small and Medium Enterprises (MSMEs) drive local jobs but do not engage with ITIs due to the latter's low capacity. Sector Skill Councils (SSCs) lack state-level presence and integration with ITIs/Polytechnics. ITIs depend heavily on government funding, with minimal private sector inputs in funding infrastructure or bearing training costs.
Quality	<ul style="list-style-type: none"> Over one-third of the ITI instructor posts are vacant as there are limited National Skill Training Institutes (NSTIs). Limited financial autonomy restricts routine operational decisions at ITIs/Polytechnics. The absence of a regular monitoring system hinders quality checks. The ITI grading system lacks trainee feedback, is not institutionalised annually, and relies on inexperienced evaluators.
Public Investment	<ul style="list-style-type: none"> Government ITIs are funded mainly through state government budgets, with additional support through Central Government schemes. The Centre allocates only about 3 per cent of its education budget to training while states allocate around 2 per cent.
Financial Viability	<ul style="list-style-type: none"> Low student fees in publicly-funded ITIs reduces financial viability whereas under-utilised seats lead to high per-student cost. The prevalence of uniform funding to public VET institutions ignores differences in their individual performance or local demand for seats. VET institutions lack autonomy for generating revenue.

Source: NITI Aayog, 2023; Ministry of Education, Government of India, 2022.

Note: The allocation figures of 3 per cent of the Centre's education budget and 2 percent of the states' education budgets to VET are based on the share of training within the total education and training budgets, as reported in the Ministry of Education's *Analysis of Budgeted Expenditure on Education* (2022).

2.2. Reforming India's VET System

2.2.1 Overview of International VET Models

The design, implementation, and

outcomes of VET systems vary widely across countries. We compare and contrast three models of VET across three countries to garner the best practices and key take-aways for India.

Table 2: Key Features of International VET Systems

VET Level (ISCED)	Country	Key Features	Stakeholder Roles	Government Spending	Skill Portability
Upper Secondary (ISCED 3)	Germany	Hybrid system: This covers both the school and the workplace.	- Government funds schools. - Employers pay apprentices and bear training costs. - Employers co-design the curriculum.	12% of the total education expenditure incurred on upper secondary VET institutions (2020).	Skills are recognised under the National Skills Qualification Framework and are hence portable.
Post-secondary Non-tertiary and Short-cycle Tertiary	Canada	Hybrid system: Applied programmes offer vocational certificates/ diplomas along	- Government funds community colleges that offer vocational certificates/ diplomas. - Employers provide	10% of the total education expenditure incurred on short-cycle	Since the system is characterised by provincially governed credentials,

VET Level (ISCED)	Country	Key Features	Stakeholder Roles	Government Spending	Skill Portability
(ISCED 5)		with general programmes.	opportunities for Work-based Learning.	tertiary VET institutions (2020).	portability varies across provinces.
Post-secondary non-tertiary (ISCED 4) & Short-cycle Tertiary (ISCED 5)	Singapore	Dual system: There are separate vocational tracks (ITEs and Polytechnics) + SkillsFuture and academic programmes.	- Government funds ITEs/Polytechnics and gives SkillsFuture credits. - Employers provide internships/placements.	13% of the total education expenditure incurred on post-secondary VET institutions (2020).	The pathways to higher education are clearly defined as follows: ITE → Polytechnic → University. Clear pathways thus ensure skill portability.

Source: UNESCO Institute for Statistics, n.d.; OECD, 2023; Ministry of Manpower, Singapore, 2024.

Note: ISCED refers to International Standard Classification of Education.

2.2.2 Early-hybrid VET Programme: Germany's Model

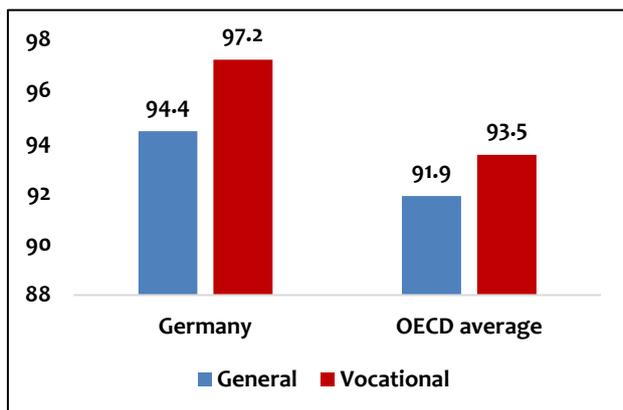
Following are the characteristics of Germany's VET model:

- **Level at which VET is offered:** It is offered to the upper secondary school students (ISCED 3). It has been found that 23 per cent of those aged 25–34 years have upper secondary vocational qualification as their highest level of qualification, which is above the OECD average of 20 per cent (OECD, 2023).
- **VET model:** Students typically spend part of the week at a vocational school (Berufsschule), and the remaining days gaining hands-on experience at a company (BIBB, 2020). There is a high Work-based Learning (WBL) component in the model, as over 90 per cent of Germany's VET students are engaged in structured WBL (including 89 per cent apprenticeships + 3.5 per cent in long internships).
- **Funding structure:** The system operates according to a well-balanced funding framework. The public sector finances vocational schools, teacher salaries, curricula, and institutional infrastructure. It has been found that 12 per cent of all government educational institution funding went to vocational upper secondary institutions in Germany in 2020. Firms contribute by providing training infrastructure, mentors, and stipends during on-the-job training.
- **Employer engagement:** Employers play a central role in the design and delivery of vocational training by: a) recruiting and training apprentices based on company needs; b) providing structured on-the-job learning under the supervision of skilled trainers; c) offering monthly stipends to apprentices, thereby sharing training costs with the state; and d) engaging actively in setting training content to ensure relevance to industry standards (CEDEFOP, 2019).
- **Skill portability:** Germany's VET qualifications are built on nationally standardised curricula developed jointly by the government, employers, and trade unions. This partnership ensures that consistent

training is imparted across the country and that the qualifications are portable nationwide. At the end of the training, final exams are organised by the local Chambers of Industry and Commerce, ensuring objectivity and quality assurance (BIBB, 2020; CEDEFOP, 2019).

Figure 1 compares the employment rates (defined among the labour force) of adults aged 25–34 years in Germany who have completed vocational upper-secondary or post-secondary non-tertiary programmes with those who have attained general qualifications at the same level. Vocational graduates exhibit a noticeably higher employment rate than their peers from the general education tracks, reflecting strong labour-market demand for VET skills in Germany. Across the OECD countries, vocational graduates also tend to fare better than those with general education, but the gap between the two is more

Figure 1: Employment Rate for Adults (Aged 25-34 Years) among the Labour Force at the Upper Secondary Level by Programme Orientation (2021)



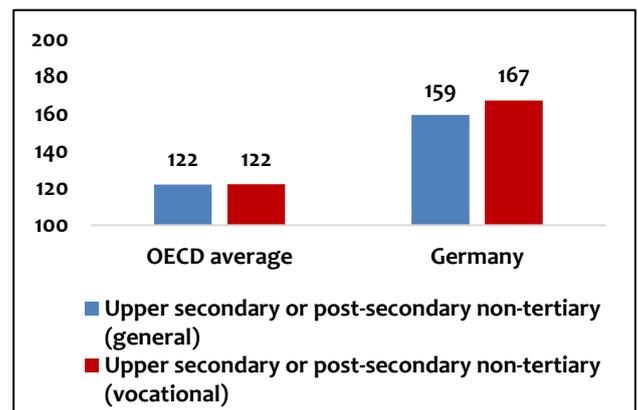
Source: OECD, 2023; Authors' calculations.

Note: The Y-axis shows the employment rate for adults aged 25–34 years with the highest level of upper secondary or post-secondary tertiary education by programme orientation (general or vocational).

pronounced in the case of Germany, underscoring the effectiveness of its VET model.

Figure 2 shows the earnings of adults aged 25–34 years whose highest qualification is at the upper secondary or post-secondary non-tertiary level, expressed relative to those with below upper secondary education (baseline = 100). On average across the OECD countries, adults with vocational and general qualifications at the upper secondary level earn 22 per cent more than those with below upper secondary education (both at 122). In Germany, the earnings premium is higher for vocational qualifications as adults with general qualifications earn 59 per cent more (159), and those with vocational qualifications earn 67 per cent more (167). This points to a strong labour market advantage for vocational education in Germany as compared to the OECD average.

Figure 2: Relative Earnings of Adults (Aged 25-34 Years) at the Upper Secondary Level by Programme Orientation (2021)



Source: OECD, 2023; Authors' calculations.

Note: The Y-axis shows the earnings of adults aged 25–34 years with highest qualification at the upper secondary or post-secondary non-tertiary level, expressed relative to those with below upper secondary education (baseline = 100).

2.2.3 Tertiary-hybrid VET Model: Canada's VET Model

Following are the characteristics of Canada's VET model:

- **Level at which VET is offered:** It is offered at post-secondary non-tertiary (ISCED 4) and short-cycle tertiary (ISCED 5) levels, through public community colleges, polytechnics, cégeps, and institutes of technology, which provide vocational certificates and advanced vocational diplomas. It has been found that 30 per cent of the adults aged 25–34 years in Canada hold a post-secondary non-tertiary or short-cycle tertiary vocational qualification, which more than double the OECD average of 12 per cent (OECD, 2023).
- **VET model:** Vocational certificates/diplomas offered by Canada's post-secondary non-tertiary and short-cycle tertiary institutions are designed for direct labour-market entry (Skolnik, 2021). These programmes emphasise applied, hands-on training in areas such as first aid, baking and pastry-making, electronic systems engineering technology, and child- and youth-care. Work-integrated learning, implying vocational training including co-op terms (credit-bearing periods of paid work) and internships within regular academic degrees, is widely embedded in these programmes (Co-operative Education and Work-Integrated Learning, Canada, n.d.).
- **Funding structure:** Colleges, polytechnics, cégeps, and institutes of technology are publicly funded and regulated by provincial governments. According to the Education at a Glance, 2023, Report, 10 per cent of the total education

expenditure incurred by the Canadian government in 2020 was on short-cycle tertiary VET institutions.

- **Employer engagement:** Employers engage with VET institutions mainly through work-integrated learning arrangements, such as providing student placements and cooperative education opportunities. They may also offer labour-market inputs that help institutions align their programmes with industry skill needs.
- **Skill portability:** The credentials offered by colleges and polytechnics are widely recognised by local employers. However, since education governance is provincial, the national portability of these credentials may not be seamless.

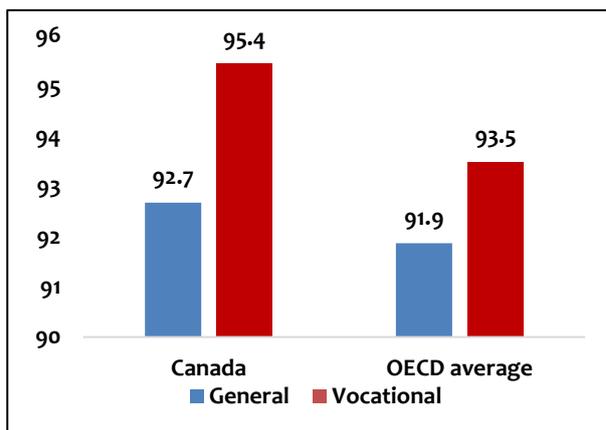
As per Figure 3, both the figures for Canada and the OECD average show that vocational graduates aged 25–34 years with post-secondary education at the non-tertiary level have a higher employment rate (among the labour force) than those from the general programmes. Figure 4 further indicates that comparison of employment rates at the short-cycle tertiary level (which is predominantly vocational) with the average employment rate at the upper-secondary/post-secondary non-tertiary level points to distinct employment-rate gains for short-cycle tertiary graduates with regard to both Canada and the OECD average.

In terms of earnings, post-secondary non-tertiary vocational graduates earn more than graduates with general education, with this premium being larger for Canada than the OECD average (Figure 5). The earnings of short-cycle tertiary graduates are almost the same as the average earnings at the upper-

secondary/post-secondary non-tertiary level for Canada (Figure 6). However, while short-cycle tertiary earnings roughly match the overall upper-secondary/post-secondary non-tertiary

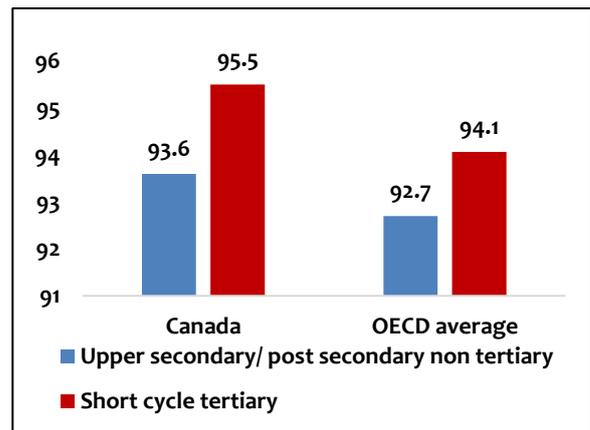
average, comparisons of the former with general post-secondary graduates show clear gains in earnings associated with vocational education at the short-cycle tertiary level.

Figure 3: Employment Rate for Adults (Aged 25-34 Years) among the Labour Force at the Upper Secondary/Post-Secondary Non-Tertiary Level by Programme Orientation (2022)



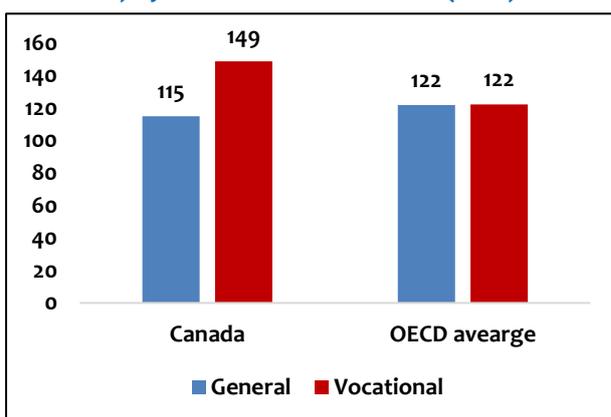
Source: OECD, 2023; Authors' calculations.
Note: The Y-axis shows the employment rate for adults aged 25–34 years whose highest level of qualification is at the upper secondary or post-secondary tertiary education by programme orientation (general or vocational).

Figure 4: Employment Rates for Adults (Aged 25–34 Years) among the Labour Force by Educational Attainment (2022)



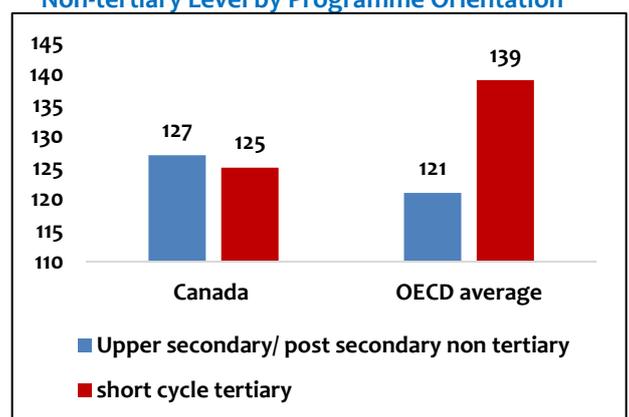
Source: OECD, 2023; Authors' calculations.
Note: The Y-axis shows the employment rate for adults aged 25–34 years whose highest level of qualification is upper secondary or post-secondary tertiary education (overall) level and at the short cycle tertiary level.

Figure 5: Relative Earnings of Adults (Aged 25-34 Years) by Educational Attainment (2022)



Source: OECD, 2023; Authors' calculations.
Note: The Y-axis shows the earnings of adults aged 25–34 years, whose highest qualification is at the upper secondary or post-secondary non-tertiary level by programme orientation, expressed relative to those with below upper secondary education (baseline = 100).

Figure 6: Relative Earnings of Adults (Aged 25-34 Years) at the Upper Secondary/Post-Secondary Non-tertiary Level by Programme Orientation



Source: OECD, 2023; Authors' calculations.
Note: The Y-axis shows the earnings of adults aged 25–34 years, whose highest qualification is at the upper secondary or post-secondary non-tertiary level and at short cycle tertiary level, expressed relative to those with below upper secondary education (baseline = 100).

2.2.4 Tertiary VET Model: Singapore's VET model

Following are the characteristics of Singapore's VET model:

1. **Level at which VET is offered:** Singapore's VET spans both post-secondary non-tertiary (ISCED 4), offered by the Institute of Technical Education (ITE), and short-cycle tertiary (ISCED 5), offered by the Polytechnics. In 2022, around one-quarter of the students entering post-secondary education enrolled in ITE programmes while nearly half entered publicly-funded polytechnic diploma programmes (Ministry of Education, Singapore, 2024).
2. **VET model:** In Singapore, the VET system offers two parallel full-time pathways—at the Institute of Technical Education (ITE) and at the Polytechnics—allowing students from different academic backgrounds to undergo vocational and applied education. These parallel tracks provide multiple flexible entry points into vocational education in Singapore.
3. **Funding structure:** The government directly funds ITEs and Polytechnics. Adult learners are additionally supported through SkillsFuture Credit, which can be used for lifelong learning and upskilling by every Singapore citizen aged 25 years and above. In 2020, about 13 per cent of the

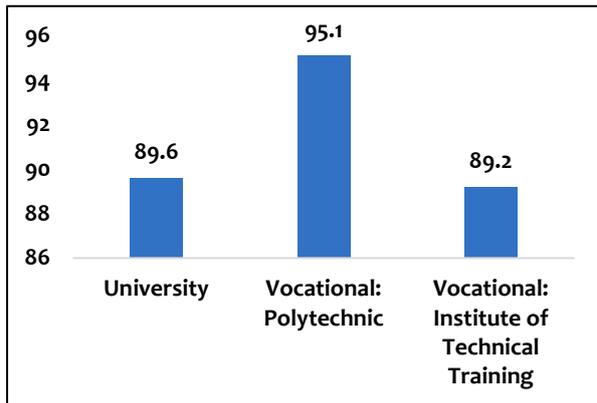
total public education expenditure was allocated to post-secondary VET institutions.

4. **Employer engagement:** Employers participate in Industry Advisory Committees for ITE and Polytechnic programmes, providing feedback on emerging skill needs and industry relevance. Employers also offer structured internships and work-study placements, which form a key component of workplace learning for students in both ITE and Polytechnic pathways.
5. **Skill portability pathways:** Skills acquired through VET are portable because progression from ITE to a Polytechnic and from a Polytechnic to a University is structured into the national education system. The SkillsFuture programme also ensures portability across the lifecycle, as adults can return to education at any stage with government-funded credits.

Figure 7 shows that the employment rate among labour-force participants is at par for vocational graduates with, and in some cases even higher than that of, university graduates. This reflects the robustness of the Singapore's VET system.

As per Figure 8, the median gross monthly starting salaries show that diploma-holders from Polytechnics earn less than university graduates, but substantially more than ITE graduates, indicating strong internal returns within vocational pathways.

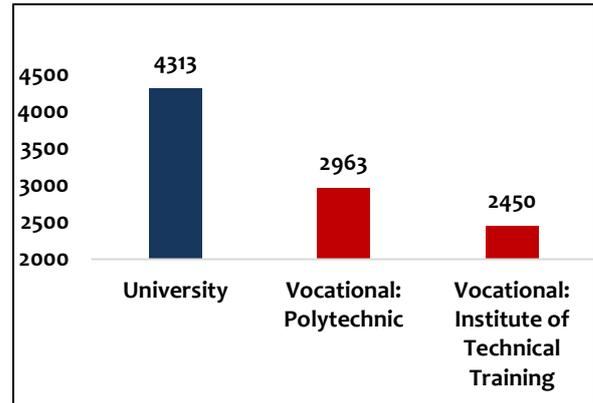
Figure 7: Employment Rate among the Labour Force by Vocational and Non-Vocational Education Tracks within Singapore (2023)



Source: Ministry of Manpower, Singapore, 2024; Authors' calculations.

Note: The Y-axis shows the employment rate for adults aged 25–34 years, with the highest level of upper secondary or post-secondary non-tertiary education, disaggregated by programme orientation (general or vocational).

Figure 8: Median Gross Monthly Earnings of Graduates by Education Track in Singapore (2023)



Source: Ministry of Manpower, Singapore, 2024.

Note: 1) The gross monthly starting salary comprises the basic salary, fixed allowances, overtime pay and commissions. Bonuses are excluded; 2) For vocational tracks, graduates include those who have completed National Service; 3) For Singapore, median earnings are available as starting salaries for Polytechnic graduates and can, therefore, only be roughly attributed to represent earnings for adults in the 25–34-year age

2.2.5 Cost-Benefit Analysis of International VET Programmes

Despite differences in their timing and key features, the international VET systems converge on three pillars: strong public investment, deep employer engagement, and frameworks that ensure the portability of skills. These commonalities make VET a valuable proposition in Germany, Canada, and Singapore—the countries whose VET programmes have been analysed above. This is also evident in the strong benefit–cost ratios (BCRs) per person observed for VET programmes in these three countries, based on benefit measured by the average earnings measured over the first ten working years (ages 25–34) of an individual with vocational training versus the cost of the VET programme.

Table 3: Benefit–Cost Ratios (BCRs) per Person for VET Programmes in Germany, Canada, and Singapore (Ages 25–34), Assuming no annual earnings Growth (Based on Most Recent Data Available, 2020-22)

Country	Dominant VET level used for BCR calculation	Annual earnings at dominant VET level in first working year (PPP adjusted USD)	Employment rate at dominant VET level	Expected earnings at dominant VET level in first working year (PPP adjusted USD)	NPV of earnings in PPP at age 34 (assuming no growth in annual earnings)			Annual Cost (PPP adjusted USD)	Total Cost (PPP adjusted USD)	Duration of programme	Benefit to Cost Ratio		
					Discount factor=0.02	Discount factor=0.03	Discount factor=0.05						
Germany	Early-hybrid VET	56493	0.97	54911	493246	468405	424011	23761	71283	3	6.9	6.6	5.9
Canada	Tertiary-hybrid VET	26875	0.96	25666	230544	218933	198183	18716	46790	2.5	4.9	4.7	4.2
Singapore	Tertiary VET	36897	0.93	34203	307232	291759	264107	17596	60676	3	5.1	4.8	4.4

Sources:

- Eurostat, 2025 data is used for absolute earnings in Germany; Statistics Canada (2023) is used for earnings in Canada. World Bank, 2025 purchasing power parity (PPP) conversion factors are used to convert local currency values into PPP-adjusted US dollars for the respective years.
- Relative earnings for individuals aged 25–34 years in Germany and Canada as well as employment rates among the labour force for the same age group are sourced from OECD, 2023.
- Cost data for Germany and Canada are obtained from OECD, 2023.
- For Singapore, earnings data is sourced from Ministry of Manpower, Singapore, 2024 and cost data is sourced from the Ministry of Education, Singapore, 2024.

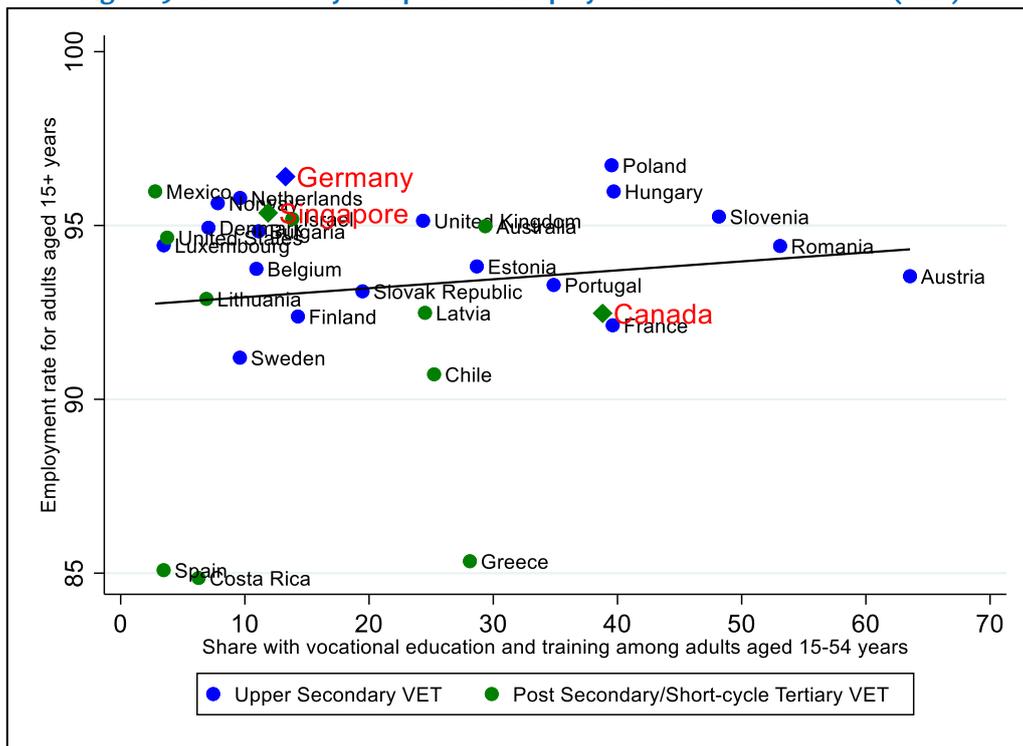
Notes:

- Median wages at the below–upper-secondary level for Germany are reported on an hourly basis in local currency for year 2022 and these are converted to annual wages by multiplying by 38 hours per week and 52 weeks per year, with adjustments made for the 25–34-year age group using relative earnings indices. For Canada, median wages for below–upper-secondary education for 2020 are directly reported for adults aged 25–34 years in local currency. Earnings for above–upper-secondary for Germany and short-cycle tertiary levels for Canada are derived by applying OECD relative-earnings ratios in year 2022. For Singapore, median earnings are available as starting salaries for Polytechnic graduates for year 2023 and these are assumed to represent earnings for the 25–34-year age group.
- For all the three countries, median earnings in local currency are converted to PPP-adjusted USD given for year 2023, and expected annual earnings are calculated by multiplying annual earnings by the employment rate among the labour force aged 25–34 years for year 2021.
- Net Present Values (NPVs) of earnings are estimated assuming no annual real growth and applying discount rates of 2%, 3%, and 5% over ages 25 to 34 years.
- Per-student education costs are obtained in PPP-adjusted USD for Canada and Germany for year 2021, and from Singapore’s Ministry of Education for year 2022 in local currency (converted to PPP USD), with programme durations assumed to be 3 years for upper-secondary VET in Germany, 2.5 years for short-cycle tertiary programmes in Canada, and 3 years for Polytechnic programmes in Singapore.

The benefit–cost ratios range from 4.2 for Canada to 6.9 for Germany under conservative assumptions of no growth in earnings (Table 3) and vary between 4.6 and 7.6 when assuming a modest annual earnings growth rate of 2 per cent. The benefit-cost ratios demonstrate that VET is a viable proposition at the level at which it is dominant in Germany, Canada,

and Singapore, but has the highest return when introduced early in the education system. Differences across these VET systems, particularly with regard to the level at which VET is introduced (upper-secondary versus post-secondary levels), may also translate into variations in overall employment rates and productivity within countries.

Figure 9: Cross-country Comparisons: Employment Rate and VET Share (2021)



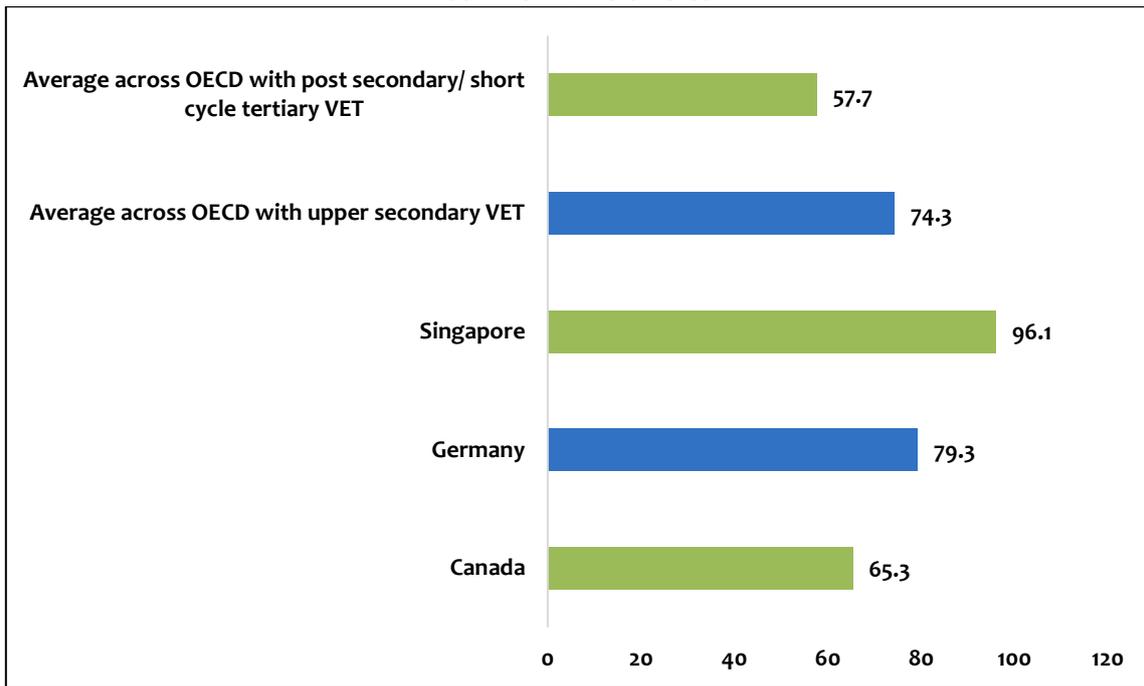
Source: Data on the share of adults with vocational education or training and employment rates are taken from ILOSTAT, n.d. and VET classification is based on OECD, 2023. Authors’ calculations.

Notes: 1) ILOSTAT provides data on the working-age population (ages 15+ years) with vocational education or training, along with data on the total working-age population disaggregated by age group. This allows for the computation of the share of youth (ages 15–54 years) with vocational education or training across countries for 2021. 2) ILOSTAT also reports the unemployment rate for ages 15+ years, which is used to calculate employment rates for 2021. 3) Countries are classified by the dominant VET level among adults aged 25–34 years, based on the OECD’s *Education at a Glance* report. The dominant level is defined as the level (upper secondary vocational or post-secondary/short-cycle tertiary vocational) where the majority of vocationally educated adults are concentrated. 4) Sample size includes 29 OECD countries, along with Singapore.

Figure 9 shows countries with a higher share of VET adults are associated with high employment rates. Germany and Singapore combine high VET participation with high employment rates and are above the fitted line. Canada, despite recording higher VET levels, falls

below the trend line. Notably, countries where VET is concentrated at the upper secondary level lie above the fitted line. This indicates that vocational training integrated into early school education may be associated with higher employment rates.

Figure 10: Average Labour Productivity across Countries at the Dominant Level at which VET Is Offered



Source: Data on productivity is from ILOSTAT, n.d, and VET classification is based on OECD, 2023. Authors' calculations.

Notes: 1) Labour productivity is measured as the output per hour worked, expressed in GDP at constant 2021 international dollars adjusted for purchasing power parity, using ILO modelled estimates. 2) The blue bars in the figure show the average productivity level for countries where vocational education is dominant at the upper-secondary level (VET Level 1) whereas the green bars show the average productivity levels for countries where vocational education is dominant at the post-secondary/short-cycle tertiary level (VET Level 2).

Figure 10 compares labour productivity (GDP per hour worked, PPP) for Germany, Canada, and Singapore, with the average productivity of OECD countries whose dominant VET provision is either at the upper-secondary level (Early VET) or at the post-secondary/short-cycle tertiary level (Tertiary VET). Upper-secondary VET countries are associated with higher productivity, on average (74.3) than those where VET is mainly post-secondary (57.7). Germany, Singapore, and Canada all record higher labour productivity than the average for countries with similar dominant VET levels, underscoring the robustness of their VET systems.

2.3 Lessons for India

Given India's twin challenges of augmenting both the number of formally skilled worker and the quality of skill training, there is an urgent need for reforming India's education system and integrating well designed VET. In this context, India can learn from the experiences of other countries by adapting both unique features and common elements of successful VET models. The following lessons are particularly important:

- **Early integration of VET in the education system:** Figures 9 and 10 show that integrating VET with early schooling like that of Germany is associated with better labour market outcomes. The National Education

Policy (NEP) 2020 recommends such integration, but progress in this direction has been slow.

- **Enhancing perception and branding:** It is imperative to develop national and state-level branding campaigns to improve the social value of VET, as has been witnessed in Singapore. Additionally, courses need to be aligned with local demand and job opportunities to enhance the relevance and appeal of the VET institutions.
- **Allowing portability of existing vocational tracks:** There is a need to fast-track reforms under the National Council for Vocational Education and Training (NCVET) to implement the National Credit Framework that defines clear progression pathways. Over time, NCVET can evolve into a National Board for Skill Development that awards nationally recognised certifications similar to that of Germany.
- **Promoting public-private partnerships:** Leverage public infrastructure and private expertise to scale models like the private training partner approach. MSMEs and SSCs can be involved, and funding for Corporate Social Responsibility (CSR) ought to be used strategically to boost industry relevance. Countries like Germany, Singapore, and Canada have effectively used PPPs to align training with labour market needs.
- **Ensuring training quality:** Training quality can be ensured by expanding NSTIs and fast-tracking instructor recruitment. Further, the financial autonomy of VET institutions can be improved to manage operations; annual quality reviews can be

institutionalised, and ITI grading can be strengthened by incorporating trainee feedback and using qualified evaluators.

- **Increasing public spending on VET and ensuring the financial viability of VET institutions:** India allocates only around 3 per cent of its total education expenditure to VET, as compared to 10-13 per cent in countries like Germany, Singapore, and Canada. Public funding can be optimised through improved financial viability of ITIs by lowering the per-student costs of training and by allowing ITIs autonomy to generate their own revenue.

BOX 1: Recent Policy Developments in India and Its Alignment with Successful VET Systems

The government schemes recently announced in the Union Budget 2024-25, such as Employment Linked Incentive (ELI) Scheme, Parts A and B, the PM Internship Scheme, and the ITI Upgradation Initiative, reflect an increasing focus on improving employment outcomes. Most interventions focus on hiring incentives in the formal sector or improving infrastructure (Press Information Bureau, Government of India, 2024). Table B1 assesses how these schemes align with key VET policy directions, summarising their objectives, target beneficiaries, funding, and critical design gaps based on international experience.

Table B1: Assessment of New Schemes Against Key VET System Lessons

Scheme	What it Does	Target Sector	Target Beneficiaries	Duration of Benefit	Eligibility Criteria	Funding	Policy Gaps (International VET Lessons)
ELI Part A (Employee-focused)	Government provides a one-time incentive up to ₹15,000 to first-time EPFO-registered employees, paid in 2 parts: after 6 months and after 12 months, and after completion of a financial literacy programme.	All formal sectors	1.92 crore first-time formal workers	1 year	Employee must be a first-time entrant into EPFO; continuous employment for 12 months	99,466 crores (total allocation for ELI scheme including Parts A and B)	<ul style="list-style-type: none"> Financial literacy programme mandatory but no formal skilling May not ensure long-term retention after benefits end
ELI Part B (Employer-focused)	₹3,000/month incentive paid to employers for each new EPFO-registered employee they hire	All formal sectors (esp. manufacturing)	Additional employment for 2.60 crore	2 years (4 years for manufacturing)	Employer must be EPFO-registered and hire ≥2 (if staff <50) or ≥5 (if staff ≥50); employee must stay ≥6 months	99,466 crores (shared with Part A)	<ul style="list-style-type: none"> Incentivises hiring without ensuring formal training Incentive requires only 6-month retention and may not ensure stable jobs
Prime Minister Internship Scheme	Provides one-year internship to youth in top 500 companies over five years	All sectors	1 crore unemployed youth	1 year	Youth aged 21–24 years; not enrolled in full-time education	800 crores for pilot; shared cost by Government and Employers through CSR	<ul style="list-style-type: none"> No formal certification or clear pathways to jobs CSR-based funding may limit long-term scale and sustainability
ITI Upgradation Scheme	Hub-and-spoke model for ITI upgradation; upgrading 5 NSTIs	Industry-aligned vocational/technical trades (e.g., electronics, automotive, renewables)	20 lakh ITI students and 50,000 trainers	5 years	1,000 government ITIs	60,000 crore (30,000 crore Centre + ₹20,000 crore State+10,000 crore Industry)	<ul style="list-style-type: none"> Includes PPPs and industry-led infrastructure upgrades but excludes private ITIs Lacks credit-linked progression to higher education

Source: Press Information Bureau, Government of India (2024).

Notes: Details on the ELI Scheme, PM Internship Scheme, and ITI Upgradation Scheme are taken from the Press Information Bureau, Government of India, 2024.

Thus, despite renewed attention to employment outcomes, the current approach remains fragmented. Incentives for hiring and infrastructure upgrades are necessary but insufficient to align with the VET policy directions needed for India.

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