Bridging the gap: Integrating skilling into Telangana's education system

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EY Parthenon

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Telangana

Foreword

As the world faces an era of rapid transformation driven by technology, globalization, and shifting socio-economic landscapes, the education sector must evolve in tandem to equip students with the skills, knowledge, and resilience necessary to thrive in an increasingly complex world.

The CII Telangana's Bridging the Gap: Integrating Skilling into Telangana's Education System Report, prepared by EY-Parthenon, presents a comprehensive analysis of the current state of the education sector, highlighting emerging trends, challenges, and opportunities. This report not only reflects the collective efforts of policymakers, educators, and business leaders, but also underscores the crucial role that education plays in building a sustainable and prosperous future for all.

In a world where access to quality education is more critical than ever, this report offers valuable insights into how we can address the gaps in education delivery, enhance learning outcomes, and foster an environment that encourages innovation and lifelong learning. It also explores how collaboration between the public and private sectors can drive meaningful reforms, ensuring that education systems are adaptable, inclusive, and aligned with the evolving demands of the global economy.

As we look ahead, it is imperative that we reimagine education systems that cater to diverse learning needs, promote equity, and empower individuals to become leaders and change-makers in their respective fields. The recommendations within this report serve as a roadmap for achieving these ambitious goals, and we hope they inspire action and dialogue among all stakeholders committed to creating a brighter and more inclusive future for learners everywhere.

We extend our gratitude to Dr Avantika Tomar and her team at EY-Parthenon for their in-depth research, strategic foresight, and invaluable contributions to this critical work. Together, we can continue to build the foundations of a strong, dynamic, and future-ready education system.

I also want to thank Dr Ravi P Reddy, Convenor, Education & Skills Panel, CII Telangana & Director, MEIL Ltd., Mr. R Ravi Chandran, Co-Convenor, Education & Skills Panel, CII Telangana and Ms. G Srividya Reddy, Co-Convenor, Education & Skills Panel, CII Telangana & Vice Chairperson, G Pullareddy Educational Society for their leadership and Education & Skills Panel members of CII Telangana for making this report a reality.

Sai D Prasad

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Foreword

Integrating skill education and vocational training into traditional education models is crucial for the growth and competitiveness of any nation, including India. As industry standards evolve and technology advances, the skilling ecosystem has made significant progress, evidenced by an increasing number of skill development initiatives launched nationwide.

India, as one of the world's fastest-growing economies, requires a highly skilled workforce equipped with practical, workplace-ready skills. Strengthening employability through targeted skill development enables individuals to pursue specific career pathways, aligning talent with industry needs and driving economic growth.

The Government of India demonstrated a firm commitment to expanding access to quality education, aligning with Sustainable Development Goal 4 (SDG 4). Key initiatives, including the National Education Policy (NEP) 2020, emphasize elevating educational outcomes, advancing vocational training, and ensuring inclusive learning opportunities, particularly for marginalized communities.

Telangana has recorded the highest growth in real GSDP among all states in FY24, outpacing the national GDP growth. The state has also made substantial strides in expanding educational access beyond the national average, driven by a range of impactful initiatives and reforms led by the state government.

Despite these achievements, Telangana has several opportunity areas in higher and skill education, including aligning academic curricula with industry skill demands, strengthening industry partnerships for internships, enhancing the focus on soft skills, and developing more structured course groupings.

To tap into these opportunities, the state is implementing several initiatives, including establishing a Young India Skills University, integrating vocational programs into the school curriculum and training educators in emerging technologies.

This report delves into these challenges and opportunities for skills education, outlining a strategic path forward for the coming years. It aims to guide stakeholders by highlighting the need for robust infrastructure, a modernized curriculum and stronger industry partnerships to fully realize Telangana's skilling potential.

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Introduction

Telangana's economic growth: Transforming education and skilling to meet industry demands and future workforce needs

1.1: Introduction:

- Telangana is rapidly emerging as an economic powerhouse in India, with a US$187 billion economy in 2023-24, projected to double by 2030. With the highest year-on-year real GDP growth (9.2%) among Indian states, this momentum is driven by strategic investments in education, infrastructure and skilling initiatives.
- There is a significant opportunity to realign Telangana's education and skilling ecosystem to meet its evolving industry demands, global trends and workforce aspirations. The state is focusing on skill development for youth to make them globally competitive.
- The core opportunity lies in shifting from traditional, knowledge-heavy education models to skill-oriented systems that prepare youth with industry-relevant capabilities. This transformation demands a collaborative approach, involving both private and government sectors to strengthen foundational education, vocational training and higher education frameworks.
- This report explores the current scope and scale of skilling and vocational education across Telangana's educational continuum. It aims to identify actionable strategies to strengthen vocational education and skills orientation within schools, higher education institutions and skilling entities. The desired outcomes include enhanced skill acquisition and employability to meet the rising demand for a skilled workforce at the state and national levels.
- By focusing on high-growth sectors and the escalating demand for skilled human capital, the report highlights existing initiatives, key opportunities in Telangana's skilling ecosystem, and global and Indian best practices. It concludes with action-oriented recommendations, including specific timelines, to improve employability and workforce readiness.

1.2: Key insights (1/2):

The gaps observed in the benchmarking of Telangana's current education and skilling assessment helped identify the following parameters and opportunity areas in the state. These include:

Parameters	Insights	Opportunity
School education		
Access to education and equity	High dropout rates, particularly at the upper primary level (3.1%) and secondary level (13.7%)	▪ Addressing the shortage of trained teachers and delays in implementing educational initiatives can help reduce inequities ▪ Targeted interventions can enhance enrolment and ensure equitable access to education, particularly for underrepresented communities
Infrastructure deficits impact learning outcomes	Poor infrastructure at the school level compared with best states in India, including inadequate classroom spaces, limits student attendance and engagement	▪ Addressing insufficient resource allocation for educational infrastructure can enhance scalability and improve overall quality ▪ Strategic investments in modern infrastructure have the potential to significantly improve the learning environment, leading to better participation and outcomes
Retention and transition bottlenecks	Decline in student retention across the school education occurs during transitions from upper primary to secondary and secondary to higher education	▪ Developing targeted retention programs and support systems for at-risk students can help reduce dropout rates ▪ Implementing retention-focused policies, mentorship programs, and incentives can enhance student progression through key educational stages

By integrating global best practices, Telangana can enhance its skilling model and tap into opportunities across the education continuum

Key insights (2/2):

Parameters	Insights	Opportunity
Higher education and skilling		
Misalignment between education and in-demand skills	Despite increased higher education enrollments, unemployment remains high due to a persistent mismatch between graduate skills and market demands	▪ There is an opportunity to improve alignment between academic curricula and industry requirements, which can enhance employability ▪ Strengthening academia-industry collaborations can help ensure that curricula are regularly updated with work-based learning and advanced skill modules
Underutilized skilling infrastructure	Capacity utilization in ITIs in Telangana is 50% lower compared to leading states, primarily due to poor quality of trainers and outdated equipment	▪ Opportunity to enhance the quality of training and market linkages to ensure it aligns with market needs, improving workforce readiness

1.3: Integrating real-life hands-on experience either in the classroom or industry

Telangana can adopt proven strategies from global leaders to build a robust skilling and education model, focusing on practical, hands-on experience either in the classroom or in industry. A few examples are:

- Australia's Work Integrated Learning (WIL): Combines academic learning with hands-on industry training to produce job-ready graduates.
- Germany's Dual Education System: Integrates classroom learning with apprenticeships, offering real-world experience to bridge the skills gap.
- Singapore's Factory School Model: Establishes workplace-like training environments to strengthen academia-industry collaboration and enhance practical learning. Integrated career cluster curriculum, which has several career pathways, facilitates lifelong learning, cross-training and alternative pathways for progression.

1.4: By adapting and contextualizing these approaches, Telangana can create a scalable, sustainable and globally competitive model for skill-oriented education:

Telangana's robust economic growth presents an unparalleled opportunity to reimagine its education and skilling ecosystem. Addressing challenges in access, infrastructure, retention and employability will enable the state to emerge as a national leader in workforce development. By aligning local initiatives with global best practices and fostering public-private collaboration, Telangana can unlock the potential of its youth, ensuring they are equipped to drive sustained economic progress in a competitive global landscape.

- Redesign curricula and integrate vocational course:
  - Redesign curricula to include skills training and introduce market-oriented degree and vocational programs.
  - Vocational courses to be integrated from Class 6 onwards to equip students with in-demand industry skills.
- Teacher training:
  - Provide teachers with training to teach various emerging technologies.
- Counseling:
  - Counseling should be provided from an early age to build competency, aptitude and attitude.
- Industry partnerships:
  - Collaborate with the industry to promote experiential learning through internships and apprenticeships.
- Micro-entrepreneurship support:
  - Offer incubators, mentorship and real-world projects to equip students with the skills needed to create start-ups.

The report presents the Pathways Accelerator Framework, which enhances access to quality higher education, boosts employment opportunities, and fosters entrepreneurship in Telangana. Key enablers, including industry partnerships, teacher training, skill assessments, content development, and employability frameworks, support this initiative.

2

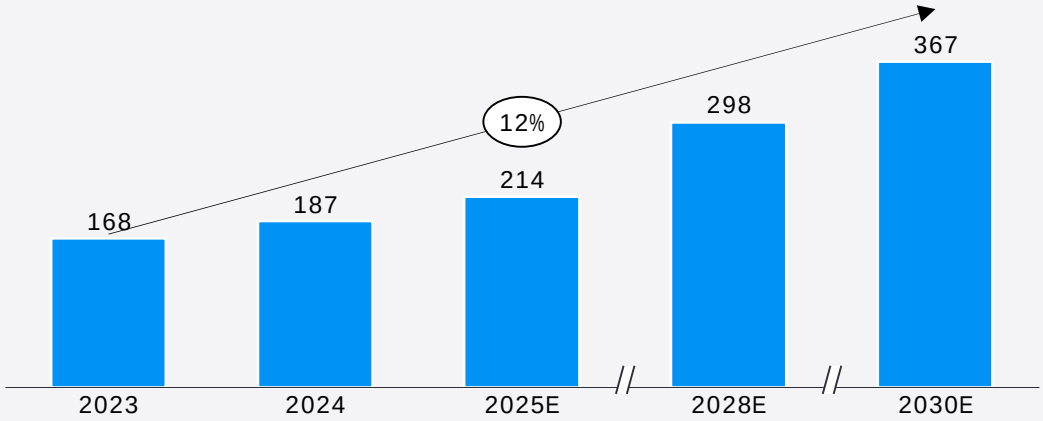
Telangana's economic landscape and workforce dynamics

Telangana's GDP is set to double in the coming years, necessitating investment in its human capital

2.1 Robust economic growth

The economy of the state of Telangana is poised to double in the next six years

Figure 1: Telangana GDP growth (2023-2030E, US$ billion, current prices)



Source: Oxford Economics

- With a strong foundation laid by the state government, across education, infrastructure and social well-being, the State of Telangana has grown to become a US$187 billion economy in 2023-24 at current prices.[1]
- The state's per capita income (PCI), a testament to the average earnings of individuals, is a source of pride, ranking number one among all states with PCI of US$4,160 in 2023-24.[2]

GDP CAGR of 12% from 2024 to 2030E can only be driven and sustained by a skilled workforce

Figure 2: GDP per capita and students enrolled in vocational programs across the countries

Country				
GDP per capita (2023, US$)[3]	2,485	64,712	52,746	33,834
Upper secondary students enrolled in vocational programs (2022, %)[4]	6.5	52.3	46.6	21.5

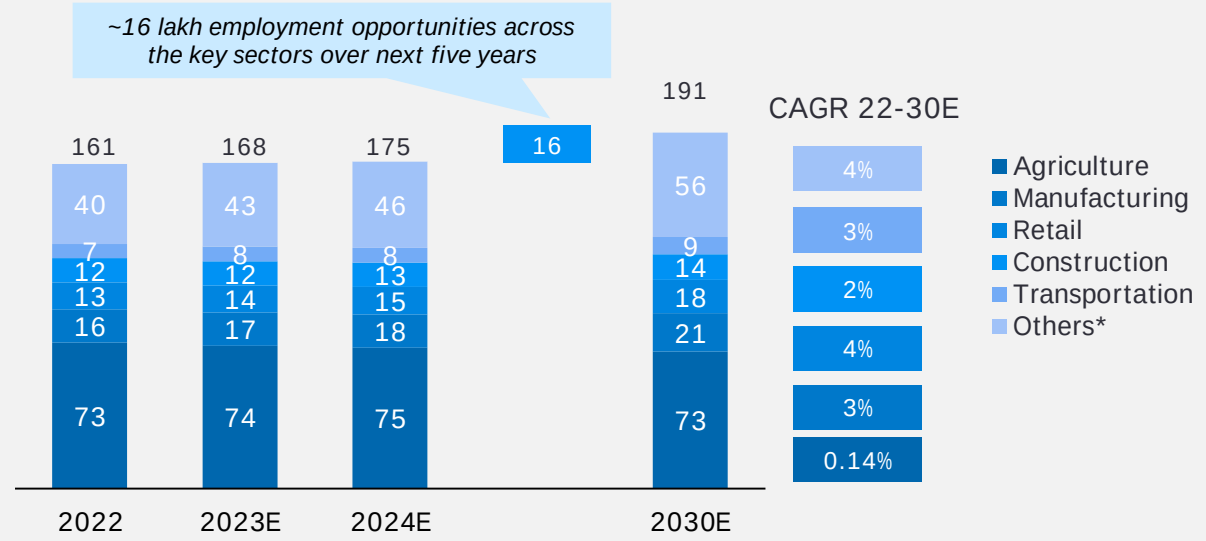
- Although India lags in vocational education, effectively leveraging its demographic dividend–especially in Telangana–can enhance employability, drive economic growth, and reduce skill mismatches. Developed nations like Germany, Japan and Australia, with their highly skilled vocational workforce, demonstrate how a strong emphasis on skills development prepares economies for the future.

Source: 1. Oxford Economics, 2. Telangana's Growth Story Report , 3. World Bank, 4. OECD Database

Traditional and emerging sectors in Telangana are set to grow, with ~16 lakh new jobs expected by 2030, highlighting the need for skills orientation in these sectors

2.2 Job creation in emerging sectors

Figure 3: Employment across sectors – Telangana (2022 – 2030E, lakh)



* Others include Business Services (incl. ICT) and (excl. ICT), IT, Education, Financial and insurance, among others.

Source: Oxford Economics Database

State government is taking steps toward formal job creation and skills development

- Telangana is attracting significant investments to enhance formal job creation and skill development.
- By 2030, 16 lakh job opportunities are anticipated across sectors, with ~5 lakh jobs in emerging sectors like life sciences, IT, renewable energy, electric mobility, and defense.

Sectors	Key drivers: State government support for traditional sectors
Agriculture	▪ Telangana government is waiving crop loans up to INR2 lakh for nearly 40 lakh farmers.[1] ▪ It has also introduced two initiatives, such as AI for Agriculture Innovation and Food Innovation Hubs, to enhance the agriculture sector with agritech.[2]
Manufacturing	▪ The government is supporting various companies to set up manufacturing facility in Telangana through policies such as State Industrial Policy, which would create more jobs and help the youth develop manufacturing-related skills. ▪ The state government offers various financial schemes under its T-IDEA to support traditional manufacturing sectors, including subsidies and grants for small and medium enterprises (SMEs).
Retail	▪ Telangana is boosting retail growth by simplifying regulations, promoting entrepreneurship, investing in technology, developing infrastructure and creating new retail formats like rural malls, thereby enhancing employment.

Source: 1. ET Times, 2. WEF article 1, 3. Invest Telangana

Emerging sectors like renewable energy, life sciences and electric mobility have the potential to shape a future of skilling and employment in India and Telangana

Telangana's rapid growth across sectors like renewable energy, life sciences, IT, EVs, and defense and aerospace is driving a high demand for specialized skills.

Table 1: Key sectors with emerging trends and growth opportunities in India and Telangana

Sectors	Key trends[2]	Skills required[7]
Renewable Energy	▪ Telangana aims for energy self-reliance by 2030, utilizing its 20.41 GW solar and 4.2 GW wind potential.[1]	▪ Waste management ▪ Environment planning ▪ Wastewater and solid waste management ▪ Energy management ▪ Sustainable development
Life Sciences	▪ As a pharma and life sciences hub, Hyderabad is expected to grow to a US$100 billion business generator by 2028, leading to significant investments and job opportunities.[2]	▪ Drug preparation ▪ Dosage formulation ▪ Biotech proficiency and analysis ▪ Chemical management
IT/ITeS	▪ Telangana's IT exports grew by 17.9%, surpassing the national average, highlighting the sector's competitive edge.[3]	▪ AI and GenAI tools ▪ Coding ▪ Data analytics ▪ Software development ▪ Network security
EVs and Mobility	▪ The EV sector in Telangana is rapidly expanding, targeting US$4 billion in investments by 2030.[4]	▪ Advanced engineering ▪ Battery technology ▪ Auto components
Defence & Aerospace	▪ Telangana has the potential to become a defence manufacturing hub and a key investment destination for US aerospace firms.[5] ▪ The state has already attracted significant investments from US OEMs and over 1,000 MSME units in the precision engineering sector.[6]	▪ Avionics systems ▪ Aircraft systems and instruments ▪ Aerodynamics ▪ Aircraft components ▪ Thermodynamics

How does Telangana plan to align its educational offerings with the skills needed in key industries?

- To address this demand, the state's education continuum will need to focus on aligning with industry requirements by integrating skill development across all educational levels.
- Alongside technical skills, students are also encouraged to develop non-technical or soft skills throughout the educational continuum, from school to higher education.

Source: 1. Invest Telangana, 2. Invest India, 3. Invest Telangana, 4. Telangana EV Policy, 5. The Hindu, 6. Invest Telangana, 7. EYP Analysis

In addition to emerging sectors, Telangana is also focusing on key sectors like food processing, textiles and FMCG, which hold significant growth potential in the state

Table 2: Other focus sectors in Telangana

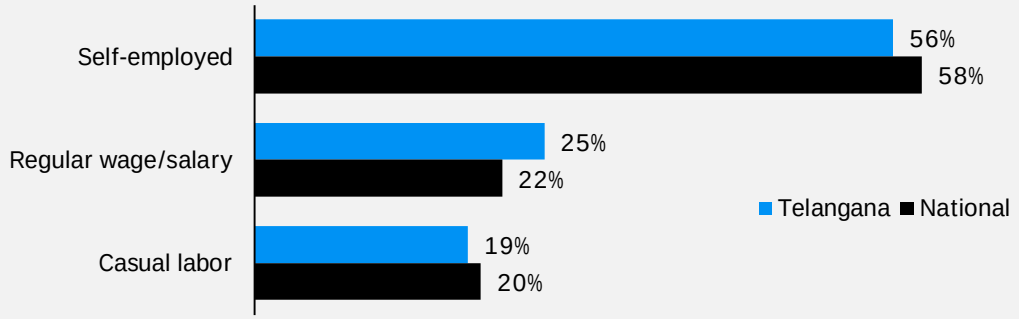
Sectors	Growth opportunities in Telangana	Skills required
Food processing and nutrition products	▪ Telangana is a market leader in the poultry and seed business and has a potential to expand into greenhouse and exotic vegetable cultivation.[1] ▪ The food processing industry in Telangana processes approximately 25% of the state's agricultural and allied output by value and adds 12.5% in value to the processed goods.[2]	▪ Food technology ▪ Nutritional science ▪ Food safety
Textiles and apparel	▪ Telangana, the third largest cotton producer in India with 5 million bales annually and is an ideal location for textiles due to its strategic geography and resource accessibility.[3]	▪ Textile engineering ▪ Printing technology ▪ Fabric and yarn production
Plastics and polymers	▪ The plastics, polymers and downstream petrochemical industries are primarily part of the MSME sector, offering significant employment potential.[1]	▪ Polymer science ▪ Plastic moulding techniques ▪ Recycling techniques ▪ Waste management
FMCG and domestic appliances	▪ Telangana's central location offers a strategic edge, reducing transportation costs and boosting growth for FMCG and domestic appliances sectors.[1]	▪ Inventory management ▪ Distribution
Engineering and capital goods	▪ The sector is key to capturing the full value chain across automobiles, aerospace, petrochemicals, domestic appliances, and textiles, driving supply chain growth for these industries.[1]	▪ Mechanical and electrical engineering ▪ Equipment manufacturing ▪ Industrial automation
Gems and jewelry	▪ Telangana is emerging as a growth center for the gems and jewelry industry, attracting manufacturers and entrepreneurs in both gold and diamonds.[1]	▪ Gemology ▪ Casting techniques ▪ Diamond cutting
Waste management and green technologies	▪ The sector is poised to become essential for all industries, with green initiatives proving to be profitable. Telangana has functional models of SPV/JV waste management efforts, showcasing its commitment to sustainability.[1]	▪ Environmental engineering ▪ Circular economy ▪ Sustainability ▪ Green building tech
Mineral-based and wood-based Industries	▪ With abundant mineral resources, Telangana aims to enhance processing capabilities, focusing on sustainable practices to boost growth.[1]	▪ Mineral processing ▪ Woodworking techniques
Transportation/ logistics hub/ inland port/ container depot	▪ Telangana's strategic location positions it as a key logistics hub. Investments in infrastructure are anticipated to improve transportation efficiency, facilitating trade connectivity and attracting further investments in logistics services.[1]	▪ Port operations ▪ Transport management ▪ Warehouse management ▪ Container handling

Source: 1. Telangana Industrial Infrastructure Corporation, 2. Invest Telangana – Food processing, 3. Invest Telangana – Textile

Across emerging and focus sectors, Telangana's push for more formal jobs to ensure financial stability and security will require formal skill education

2.3 Shift towards formal employment

Figure 4: % distribution of workers by employment status in India and Telangana, 2023-24



Note: The values are considered for urban+rural (persons)

Source: Periodic Labour Force Survey, 2023-24

Distribution of workers by employment status:

- While jobs are being generated, many are informal and unstable. Telangana needs more formal employment opportunities with regular wages to support this job growth.
- Approximately 30% of the regular wage/ salaried employees in Telangana are not eligible for paid leave, without written job contract and any specified social security benefit (SSB).

Telangana aims to transition casual laborers to regular wage/salary jobs and self-employed by creating formal employment opportunities and supporting self-employed workers

Initiatives supporting self-employed workers:

- Innovation and entrepreneurship are boosting Telangana's growth, especially in agriculture, IT, healthcare, and retail, with government support for small businesses.
- Several key initiatives and policies are supporting self-employment, including:
  - Prime Ministers Employment Generation Programme (PMEGP) provides financial assistance Banking Institute of Rural and Entrepreneurship Development (BIRED) offers free self-employment training courses.[1,2]
  - Telangana has also launched several state-level initiatives, such as the Women Entrepreneurship Platform and the TS-PRIDE initiative (Telangana State Program for the Rapid Incubation of Dalit Entrepreneurs).
- Entrepreneurs can generate more job opportunities in the future.

Enhancing employability in formal sectors through skill development:

- The state government has launched initiatives like Telangana Skill Hub, TASK and T-SAT to offer vocational training that meets industry needs and boosts employment.
- These initiatives are ensuring that the workforce can take advantage of the new job opportunities being created in both traditional and emerging sectors.

Source: 1. Telangana Government, 2. Telangana Today

While 72% of Telangana's working-age population is active, many lack the required industry skills

- The integration of skill-based education into traditional models is essential, as rapid technological advancements and industry shifts demand adaptable, job-ready graduates.
- Many students currently lack the practical skills employers require, making skill-based training vital to workforce preparedness.

Table 3: Need for skilling programs to be integrated in Telangana's education system

Parameters	India overview	Telangana scenario
 Skill Gap Challenge	▪ Only 51% of youth is deemed employable in India[1] ▪ While the government has implemented various schemes, most efforts are input-focused rather than outcome-focused	Ranks **first** in employability for the 18-21 age group but lags in other age group[2]
 Demographic Dividend	▪ ~67% of India's population is from 15 to 59 years of age[3] ▪ There is a rising focus on skills-oriented education to leverage the benefits of a young population	**72%** of Telangana's population falls within the 15 to 59 employable age range[3]
 Emerging Technologies Literacy	▪ India will need ~1 Mn AI professionals by 2026, facing a supply gap of 60%-73% for key roles[1] ▪ Government is bridging the gap through collaborations, reskilling, expanding training, and policy support	**5 lakh** people to be trained by Telangana government aged 18 to 45 by 2027[4]
 Startup Ecosystem	▪ India's technology start-up ecosystem is expected to grow 2.6 times by 2030[5] ▪ To support this growth, technical (coding, AI) and non-technical (management, business) skills will be needed	**6,145** start-ups registered with the DPIIT since 2016 (Department for Promotion of Industry and Internal Trade)[6]
 Shift to Non-Farm sectors	▪ India's workforce of 56.5 crore employs 45% in agriculture, with the service sector being the primary job creator, leading to a focus on skills in IT, finance and healthcare.[4]	**65.7%** is contributed by the service sector to Telangana's GSVA, followed by industries and agriculture[7]

- Telangana is aligning with global trends by introducing initiatives to expand skill education and boost employability.
- Telangana and Indian education regulatory bodies have initiated programs to enhance training and expand vocational courses, programs like AICTE's industry-specific engineering courses.
- Students are encouraged to develop both technical and soft skills throughout the educational continuum, from school to higher education.

Source: 1. Economic Survey, 2. India Skill Report 2024, 3. IndiaStat Database, 4. Telangana State Portal, 5. Ministry of External Affairs, 6. The Hindu, 7. Telangana Socio-Economic Outlook 2024

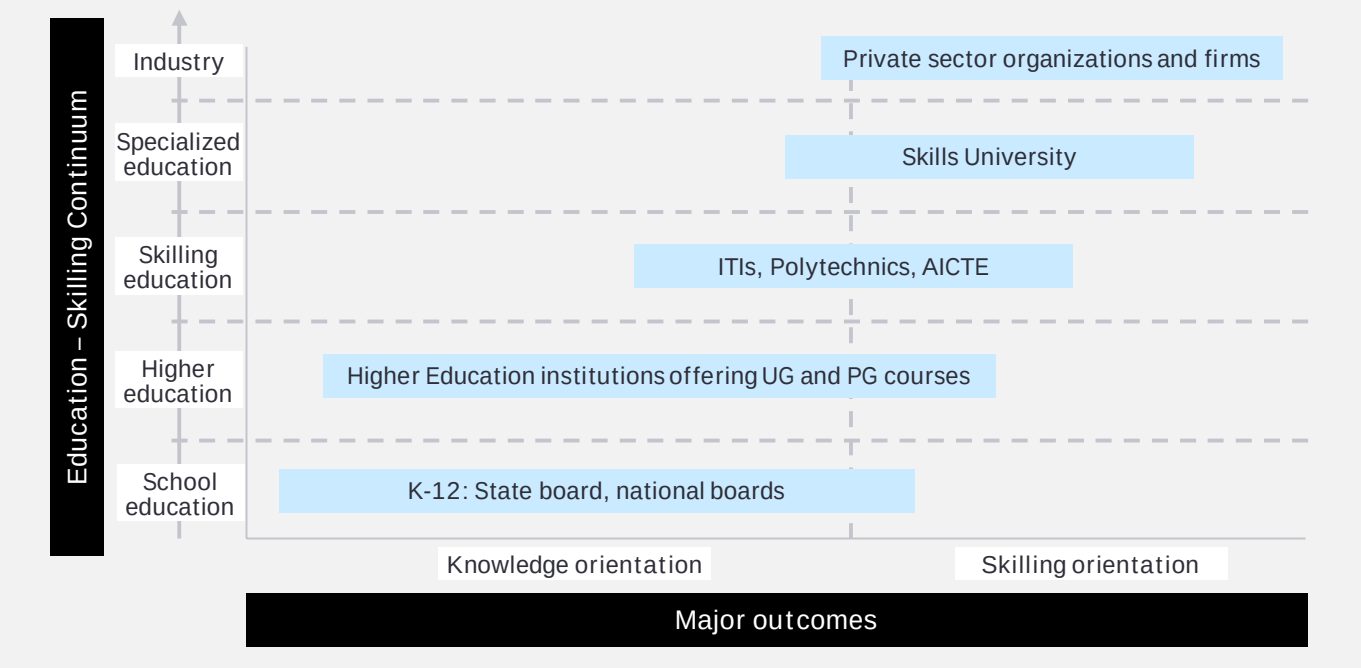
3

Current state of education and skilling in Telangana

The education and skilling system in Telangana and India is shifting from being knowledge-oriented to emphasizing skills development

3.1. Telangana's shift to skill-centric education

Figure 5: Illustrative of current orientation of education and skill development across all levels



3.1.1: Transitioning education from knowledge to skills in Telangana

Education in Telangana is being catered to across the continuum of education and skilling. Along the continuum, the orientation transitions from being more knowledge oriented (i.e., providing exposure to topics, awareness, etc.) to skilling orientation that focuses on providing tangible skills to work in emerging industries.

Table 4: Current state of the educational system in Telangana

Education Levels	Level of School Education	Count of Schools and Colleges in Telangana
School education[1]	Elementary school (Class 1 to 8)	▪ 28,399 schools
	Secondary level (Class 9 and 10)	▪ Telangana State Board: 12,045 schools ▪ CBSE: 12,551 schools ▪ Both CBSE and State: 385 schools ▪ Affiliation applicable for higher secondary only: 1,714
	Higher Secondary level (Class 11 and 12)	▪ Telangana State Board: 2,549 schools ▪ CBSE: 82 schools ▪ ICSE: 8 schools
Higher education[2]	UG and PG courses	▪ Universities: 31 (Government: 15)[3] ▪ Colleges: 2,083 ▪ Stand-alone institutes: 459
Skilling education	ITI, Polytechnic, AICTE, NSQF	▪ ITI: 283 (Government: 66 and private: 236)[4] ▪ Polytechnic: 258 (Government: 58, Aided:2, and private: 198)[5] ▪ AICTE: 654 institutes[6]

Source: 1. UDISE 2021-22, 2. AISHE 2021-22, 3. TSCHE , 4. PIB, 5. Dept of Technical Education, 6. AICTE,

Various initiatives by the education institutions and state government support the advancement of skill development in Telangana

3.1.2: Major initiatives adopted by Telangana's education continuum aim to integrate skill development

The education continuum is introducing skill development initiatives to enhance training and expand vocational courses. These programs aim to address skill gaps and meet the growing demands of emerging industries.

Table 5: School-level initiatives to adopt skill education in Telangana

Education Level	Regulatory Body	Initiatives and Policies
School education	CBSE	▪ CBSE's 'Skill Hub,' part of PMKVY 3.0, targets school dropouts, out-of-school children, and unemployed youth aged 15-45, offering industry-linked courses to aid their career pursuits.[1] ▪ The board added vocational courses for middle (classes 6-8), secondary school (classes 9-10), and higher secondary (classes 11-12) to develop specialized knowledge and practical skills for various professions.[2] ▪ CBSE has mandated 'Composite Skill Labs' in schools for students in classes 6 to 12, blending theory with practical applications to prepare students for dynamic job markets.[3] ▪ The board introduces essential life and employability skills in schools to help students cover up the pandemic-induced learning gaps.[4]
Higher education	TGCHE	▪ TGCHE and State Universities are launching skill development courses in collaboration with sector skill councils to help students secure paid internships during their studies and guaranteed jobs after graduation.[5]
	TGCHE	▪ TGCHE has partnered with the BFSI Consortium to enhance undergraduate programs with industry-specific knowledge of IT and ITES professionals in the BFSI sector.[6]
Skilling education	ITIs	▪ The Telangana government is upgrading ITIs by introducing employability-focused courses with Tata Technologies Ltd as part of its skill development program.[7]
Specialized education	Young India Skills University	▪ The State Government has launched a Young India Skills University to provide job opportunities through industry-aligned skills development training. The University will be established in partnership with private companies (in PPP model).[8] ▪ The university plans to train 2,000 people in the first year, with plans to expand capacity to 20,000 annually in phases.[8]

3.1.3: Key State Government initiatives to support skill development

The state government has launched skill development programs to improve training and employment opportunities.

State government	TASK	▪ Telangana Academy for Skill and Knowledge (TASK) is focused on skilling the state's youth to enhance employability, offering modules to improve their technology, personal, and organizational skills.[9]
	T-SAT	▪ Society for Telangana State Network (SoFTNET) was launched to deliver quality education using satellite communications and Information Technology.[10]

Telangana's initiatives to boost skill development and vocational training aim to address skill gaps and meet industry demands. With the successful implementation of these initiatives, the state is positioning itself to compete with top-performing states across various parameters in the education ecosystem.

Source: 1. CBSE Article, 2. TOI, 3. The Stempedia, 4. Education Times, 5. Telangana Today, 6. Telangana Today , 7. The Hindu, 8. Telangana Government, 9. TASK, 10. Telangana Outlook 2024

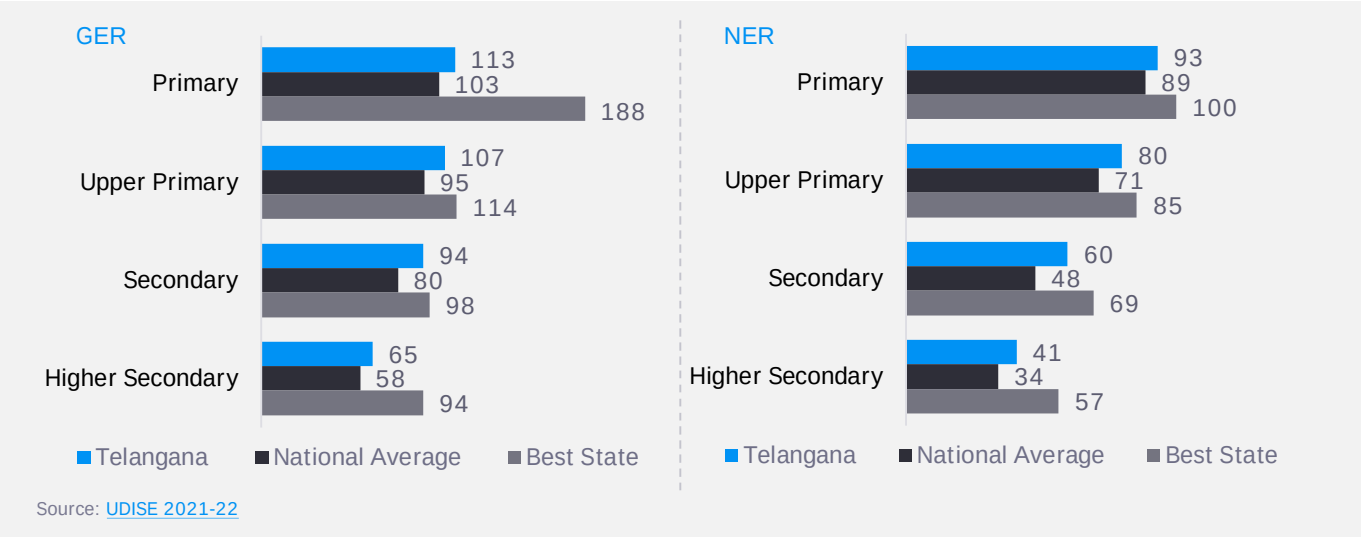
High enrollment rates in higher education, driven by inclusive policies, have increased educational access in Telangana, particularly for rural and marginalized groups (1/2)

3.2 Accessibility to school and higher education

3.2.1: GER and NER at school education level in Telangana

Telangana has higher GER and NER levels than the national average across all education levels but still lags behind the best states

Figure 6: GER and NER at school level (%)



Source: UDISE 2021-22

Key government initiatives supporting the access to school education in Telangana:

- Telangana's Gross Enrolment Ratio (GER) and Net Enrolment Ratio (NER) in school education exceed the national average but fall short of the leading states. Key initiatives enhancing educational access include:
  - Samagra Shiksha Abhiyan (SSA): Focuses on improving school education quality from primary to higher secondary, with funding for teacher training, transport and infrastructure.[1]
  - Scholarship programs: Initiatives like the Ambedkar Overseas Vidya Nidhi, Chief Minister's Overseas Scholarship Scheme for Minorities, Mahatma Jyothiba Phule Overseas Vidya Nidhi for BC and EBC students, promote equity by providing opportunities for students from diverse economic backgrounds.[2]
- The state aims for 100% youth literacy by 2030, reflecting strong commitment to access to education.[3]

Case in point - GER

Several states are the top performers in education levels across India, including:

- Primary and upper primary – Meghalaya: High GER is supported by Sarva Shiksha Abhiyan, which aims to provide quality elementary education for children aged between 6 and 14.[4]
- Secondary – Kerala: The "Pothuvidyabyasa Samrakshana Yajnam" (Education Mission) was launched to revitalize public education and reverse declining enrolment trends, successfully attracting over 9.34 lakh additional students back to public schools from 2017 to 2022.[5]
- Higher Secondary – Himachal Pradesh: The state has initiatives like the Kalpana Chawla Chatravriti Yojana, which provides financial assistance to girls, and the Swami Vivekananda Utkrisht Chhatravriti Yojna, supporting meritorious students in higher education.[6,7]

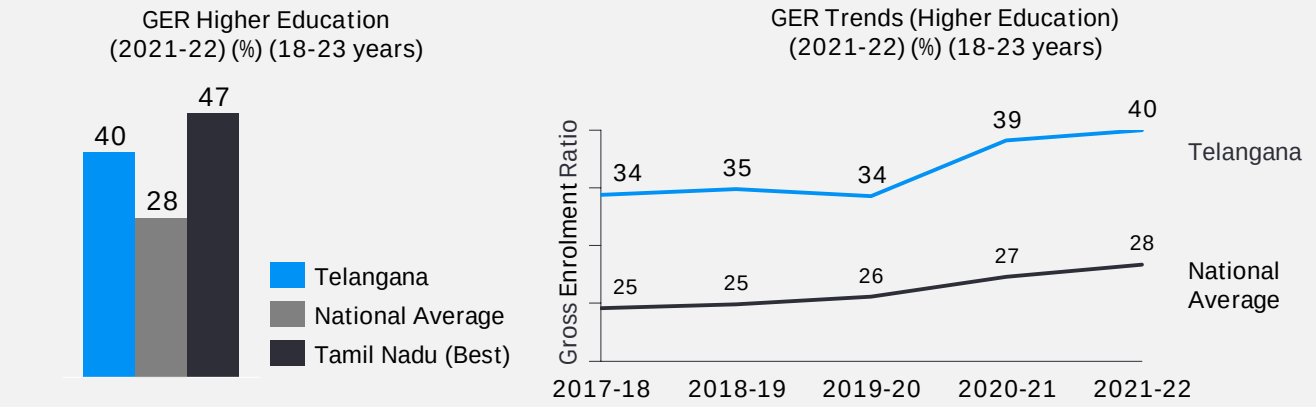
Source: 1. Indian Express, 2. Telangana Govt , 3. Telangana Socio-Economic Outlook 2024, 4. Meghalaya Education, 5. Govt. of Kerala, 6. Swami Vivekananda Utkrisht Chhatravriti Yojna, 7. Kalpana Chawla Chatravriti Yojana

High enrollment rates in higher education, driven by inclusive policies, have increased educational access in Telangana, particularly for rural and marginalized groups (2/2)

3.2.2: GER at higher education level in Telangana

Telangana stands at fifth position among states in terms of GER, well above national average[1]

Figure 7: GER at the higher education level



Source: AISHE

Telangana's GER of 40, above the national average, places it among the top five states for education access, with Tamil Nadu leading at 47.

Key government initiatives supporting the access to higher education in Telangana are:

- Sammakka Sarakka Central Tribal University: Established by the Central Universities (Amendment) Bill, the university aims to improve access and quality of higher education.[2]
- Establishment of public institutions: The state government is setting up public institutions, from junior colleges to technical schools, to promote equitable, free education for students from rural areas.[3]
- Increased budget allocation for education: Telangana's education budget for 2024-25 was increased by 11.5% and aims to provide equal educational opportunities for all.
- Degree college in every assembly constituency: Establishment of higher education institutions to ensure accessible education at the local level.

Case in point

Tamil Nadu consistently leads the GER for higher education (colleges and universities) among other states for five academic years between 2017-18 and 2021-22, supported through policy-driven programs like:

- Providing students in rural engineering colleges access to 20,000 e-books and 3,000 e-journals through Anna University.[4]
- Covering all educational expenses for transgender students in higher education.[5]
- Introducing the Uyarvukku Padi program to encourage higher secondary students to pursue college education and secure better jobs.[6]
- Committing to cover higher education costs for students from state government schools admitted to prestigious institutions nationwide.[7]

Continued policy-driven improvements in educational access will boost enrolment across all levels, especially in higher secondary and tertiary education, paving the way for a more skilled and inclusive workforce in Telangana.

Source: 1. AISHE 2021-22 Final Report , 2. NDTV, 3. Telangana Today, 4. TOI, 5. The Mook, 6. DT Next, 7. The Hindu

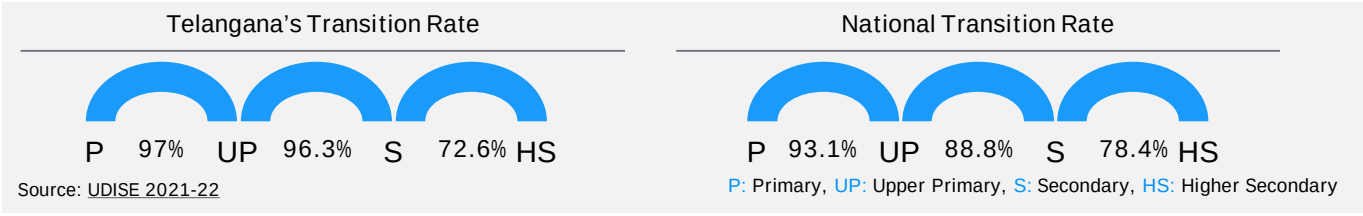
Telangana's education system has an opportunity to improve its higher secondary transition and promotion rates

3.3 Education access vs. outcome gaps

3.3.1: Transition rate across school education, ranging from primary to higher secondary level

Telangana excels in transition rates up to secondary education but falls behind the national average for higher secondary transition

Figure 8: Transition rate* (2021-22)



Source: UDISE 2021-22

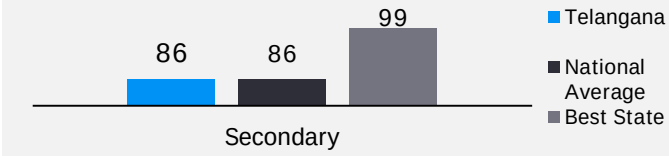
P: Primary, UP: Upper Primary, S: Secondary, HS: Higher Secondary

In Telangana, school transition rates surpass the national average. However, those lacking foundational skills, often from less affluent backgrounds, have lower advancement to higher secondary education. Girls outshine boys. Still, family support issues lead to over 40% of girls dropping out at the secondary level and over 55% at the higher secondary level.[1,2]

3.3.2: Promotion rate** across school education

Telangana outperforms the national average but struggles to match the best states in promotion rates, particularly in higher secondary education

Figure 9: Promotion Rate (2021-22) (%)



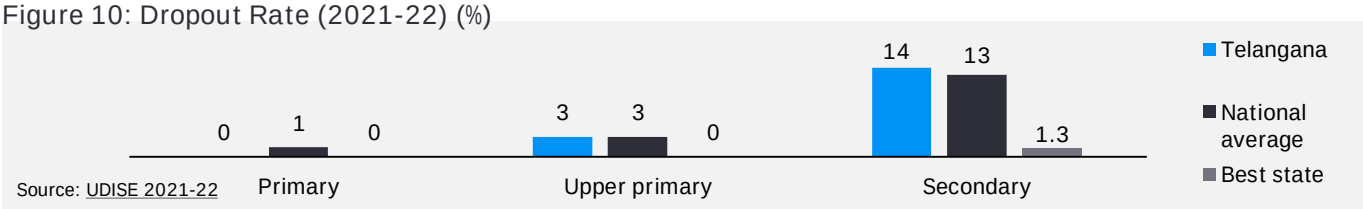
Source: UDISE 2021-22

Telangana has a better promotion rate compared to the national average and has recorded the highest rate along with 14 other states.

3.3.3: Dropout rate across school education

Dropout rate in Telangana is highest at the secondary school level

Figure 10: Dropout Rate (2021-22) (%)



Source: UDISE 2021-22

Telangana achieved a zero-dropout rate in primary education but experienced a slight increase in secondary education from 13.5% to 13.7% in the last four years. Efforts are underway to tackle gender gaps and enhance facilities, yet there is a need for focused strategies to keep girls and disadvantaged students in school during key transitions.[3]

Addressing retention challenges, especially at the higher secondary level, through targeted academic and socio-economic support can help Telangana reduce dropout rates and ensure that more students stay on course toward higher education and skill development.

*Transition Rate: The percentage of students moving from one level of education to the next.
**Promotion Rate: The percentage of students who advance to the next grade in the following school year.

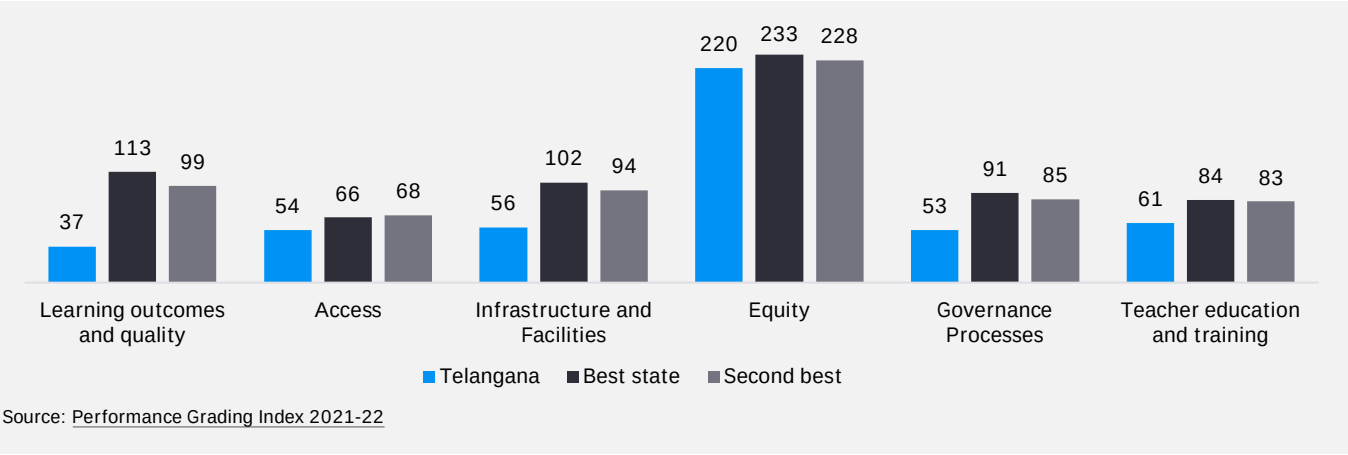
Source: 1. IJIRCT, 2. The Hindu, 3. Telangana Socio-economic outlook 2024

While Telangana has strong access to school education, it also has an opportunity to improve learning outcomes, infrastructure and governance compared to top-performing states

3.3.4: Performance grading index (PGI) across school education

Telangana lags in the Performance Grading Index (PGI) across critical domains, such as learning outcomes, governance and infrastructure

Figure 11: Performance grading index at school level



Source: Performance Grading Index 2021-22

Telangana is behind the well-performing states in all the domains and is currently focusing on improving their scores by adopting various initiatives.

Table 6: Best states by each PGI Parameter

Parameters	Best State	Initiatives
Learning Outcomes and Quality (LO)	Punjab	▪ Padho Punjab, Padhao Punjab is an initiative aimed at improving learning outcomes in primary, middle and secondary education.[1] ▪ The Punjab Smart Connect Scheme and Smart School Policy fulfilled the state's vision of effective digital education.[1] ▪ Punjab Edusat Society provides tech-enabled quality education.[1]
Access	Himachal Pradesh	▪ Plans to close schools with no students and merge under-enrolled schools to consolidate resources and improve access to better-equipped schools, enhancing education quality.[2] ▪ The state provides financial aid to support the education of children from widows, divorced women and disabled parents through Mukhya Mantri Sukh Shiksha Yojana.[3]
Infrastructure and facilities	Punjab	▪ Investing in quality education and infrastructure, submitted an INR3,000-crore action plan to the union government under Samagra Shiksha.[4]
Equity	Maharashtra	▪ Private schools reserves 25% of their seats for EWS students, regardless of nearby public schools, to ensure access to quality education for economically disadvantaged children.[5]
Governance processes	Gujarat	▪ Gujarat improved from a score of 320 to 331, largely due to low PTR, daily attendance and fewer single-teacher schools.[6]
Teacher education and training	Kerala	▪ Kerala is launching a three-day training program to equip teachers of classes 8 to 12 with essential AI skills by August 2024.[7]

Source: 1. Hindustan Times, 2. The News, 3. TOI, 4. Hindustan Times, 5. TOI, 6. Careers360, 7. IndiaAI

Telangana's higher education performs well in student-teacher ratios and college density but underperforms in quality metrics due to a lack of industry-aligned curriculum

3.3.5: Efficient student-teacher ratio and college access in higher education

Telangana performs better than the national average on STR and college density	
Student to teacher ratio	▪ Telangana has a STR ratio of 16, which suggests 1 teacher for every 16 students. This is better than the national average of 23, but Telangana lags behind states like Tamil Nadu and Kerala
College density	▪ Telangana has a college density of 53 per 1 lakh eligible population, higher than the national average of 31 and just behind Karnataka, i.e., 62. ▪ Significant regional disparities exist in access to higher education, with districts like Hyderabad and Rangareddy housing 40% of institutions.

3.3.6: Potential for Telangana HEIs to improve on quality metrics

NIRF Rankings	▪ Telangana has four NIRF-ranked institutes within the top 100, fewer than Tamil Nadu (18 institutes) and Maharashtra (11 institutes). ▪ Among the four NIRF-ranked institutes, three are public institutions (IIT, NIT, and the University of Hyderabad), and one is a PPP institution (IIIT).
NAAC accreditation	▪ Telangana has 304 NAAC accredited institutes of which 120 are A, A+, A++ (5% of total). ▪ Maharashtra, on the other hand with 1994 NAAC accredited institutes, is a top performer, with 398 of them being A, A+, A++.
Internships and apprenticeship	▪ Except in a few outcome-focused HEIs, most students have limited internship opportunities due to the lack of active internship cells, insufficient industry connections and inadequate soft skills and placement process preparation.

Case in point: NAAC and NIRF rankings

Maharashtra colleges and universities have the highest number of NAAC-accredited institutes and rank among the top in the NIRF rankings in India, serving as national hubs for academic excellence, skill development, innovation and R&D. Various progressive institutions in Maharashtra follow best practices such as:

- Curriculum is designed in a way to provide a wide range of subjects for students to major or minor vocational course, along with open electives to make the curriculum more comprehensive.
- The focus of the curriculum is to offer multi-disciplinary courses that will allow students to develop practical skills, thus increasing employability of candidates.
- To leverage the power of technology to drive innovation, areas such as AI, data science and digital technologies are included in the curriculum.
- Industry partnerships provide skills through internships and apprenticeships, offering valuable industry exposure.
- To promote green skilling, Maharashtra has partnered with UNICEF Mumbai. This initiative covers 3000 colleges and 2 million youths across 13 districts.

By addressing quality gaps, particularly in governance, teacher training, and infrastructure, Telangana can enhance educational outcomes, positioning its students to be more competitive both nationally and globally.

Telangana has an opportunity to improve its NSQF alignment and employment rate through outcome-focused interventions

3.4. Bridging education and employment

3.4.1: Vocational training integration

- Telangana has incorporated vocational programs into its education system, with Skill Universities, ITIs, and industry partnerships aligning curricula with sectors like life sciences, IT, renewable energy, and aerospace. Key initiatives include:
  - In the 2024-25 academic year, Telangana is enhancing its vocational offerings by introducing trades such as electronics, IT, apparel, agriculture, beauty, and tourism, to better prepare students for the job market.[3]

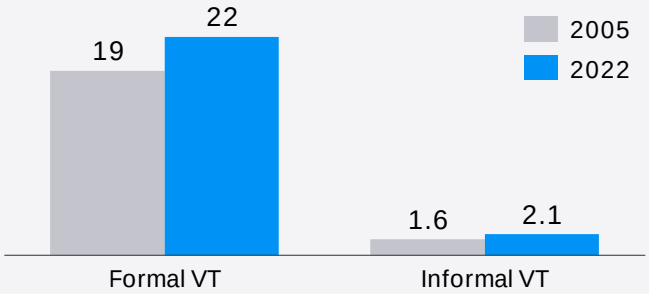
Vocational education coverage in government schools[2] remains low, even when compared with the national average:

States	Secondary and higher secondary government schools offering vocational education	NSQF alignment
Telangana	47%	~3%
National average	40%	11%

3.4.2: High unemployment rate among youths with technical or graduate diplomas

Despite the increase in vocational training coverage, unemployment levels remain high in India

Figure 12: Unemployment rate for youths in India, by level of vocational education (%)



Source: India Employment Report 2024

- The rise in unemployment rate among youths with formal vocational trainings can be due to multiple reasons, such as:
  - Lack of alignment between the skills acquired through formal trainings and demand for labor market.
  - Inadequate placement support in such programs.
  - Formally trained youth seeking formal sector jobs which require better workplace readiness compared to informal sector.
  - Compensation expectation of formally trained youth compared to informally trained youth, etc.

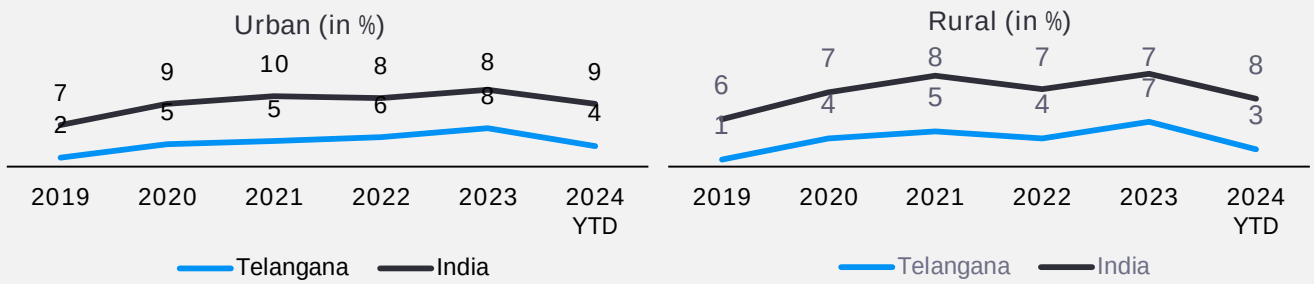
Source: 1. Telangana Today, 2. UDISE, 3.Telangana Today

Telangana's unemployment rate is declining in rural and urban areas; better quality and geographically aligned vocational training can further improve outcomes

3.4.3: Unemployment rate at the national and state level

Unemployment rate continues to decline in Telangana and at the India-level in the last five years

Figure 13: Unemployment rate - India and Telangana



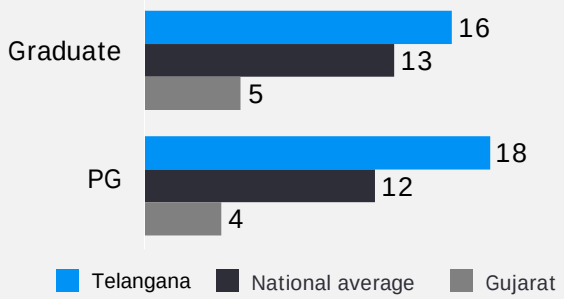
Source: CMIE Database (As of Jul'24)

- Telangana's unemployment rate continues to drop, in line with the national trend.
- However, the state can further reduce this rate by imparting in-demand industry skills to its unemployed workforce, similar to well-performing states like Delhi, Gujarat and Sikkim.
- Aligning educational and skill development programs with the specific needs of industries in different regions helps foster a skilled and adaptable workforce.

3.4.4: Unemployment rate by education qualification

Percentage of people unemployed across different education level stands above national average

Figure 14: Unemployment rate by education qualification (%)



Source: PLFS Annual Report 2023-24

Unemployment rate among graduates and postgraduates in urban areas has been rising:

- Mismatch of skills: Many graduates lack market-relevant skills due to gaps in the education system.[1]
- Limited government jobs: Graduates often prefer stable government roles, leading to reluctance toward private sector positions.
- Gender disparities: Female unemployment is significantly higher (30.3%) than male (18.3%) due to social constraints like early marriage and family obligations.[2]

Key government initiatives to tackle the rising unemployment rate are:

- Recruitment drives: Government to fill 35,000 vacancies, addressing the backlog and creating job opportunities for graduates.[3]
- Young India Residential Schools: Residential schools in each assembly constituency to provide quality education and skill development for underprivileged children.[3]
- BFSI Skill Training Program: The BFSI Skill Training Program, a collaborative initiative with the financial sector, aims to equip job seekers with the specific skills needed by BFSI employers.[4]

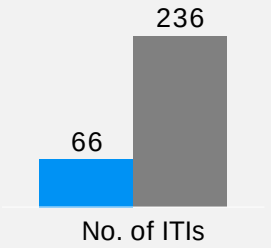
Source: 1. Deccan Chronicle, 2. TOI, 3. Deccan Chronicle, 4. Indian Express

Telangana is focusing on improving ITI quality, developing a Young India Skills University and an industrial hub to prepare its youth for in-demand skills

3.4.5: Number of ITIs and capacity utilization challenges in Telangana

Telangana has a total of 302 ITIs with a seating capacity of approximately 54,000

Figure 15: Number of ITIs (2021)



Government ITIs

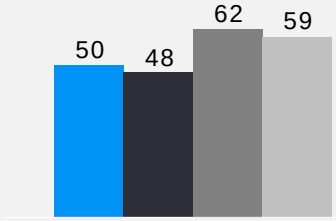
Private ITIs

- Industrial Training Institutes (ITIs) are government run training institutes in India aimed at providing vocational training to students after completing secondary education.

Source: PIB - Operational Of Industrial Training Institute

ITIs in Telangana are operating at ~50% capacity utilization[1]

Figure 16: Capacity utilization of ITIs, 2021



Telangana National Average Chattisgarh Gujarat

Source: PIB – Skilling Training in ITIs

- Average utilization at a national level is 48%
- Poor capacity utilization is driven by multiple factors, including:
  - Vacant staff positions
  - Poor quality of trainers
  - Out-dated and nonfunctional equipment
  - Perception of vocational education
  - Poor placement outcomes
  - Lack of in-demand courses
  - Poor placement and career services

Key initiatives promoting the vocational education ecosystem are:

- MoU with Tata Technologies: 10-year partnership to upgrade 25 ITIs into Advanced Training Centres (ATCs).[5]
- Young India Skills University: Public-private initiative launching with 2,000 students across 17 job-oriented courses.[6]
- District Skill Hubs: Plans for industrial hubs and skill centers in each district to create youth employment.[7]
- Vocational Education in Schools: New trades like electronics, IT and agriculture introduced in government schools from 2024 to 25.[8]

Expanding vocational training programs and aligning curricula with industry needs will enable Telangana to improve employability outcomes, equipping students for success in high-growth sectors.

Source: 1. MSDE, 2.Indian Express 1, 3. Indian Express 2, 4. Indian Express 3, 5. Telangana Govt. , 6. Telangana Govt, 7. Telangana Govt., 8. Telangana Today

Learning from the best practices in Tamil Nadu, Kerala, and Gujarat, Telangana would be able to enhance higher education outcomes by integrating practical training in the curriculum

3.5. Best practices across the globe

3.5.1: Best practices leveraged by Indian states

Case 1 — Tamil Nadu introduces mandatory skill-based learning for undergraduates[1,2]

- Vocational courses for Engineering, Arts and Science students have been introduced in collaboration with industry training partners.
- Around 1.5 lakh engineering students can enroll in 22 courses, such as blockchain, digital marketing, EV design and plant simulation. Arts and Science students can access eight courses, including medical coding and digital banking.
- All students are mandated to take language proficiency courses (Tamil and English) during their first year and digital skills in their second year, with a choice in the third year based on their field.
- Courses spanning 45 hours per semester offer two credits each and are delivered to a hybrid campus (combining traditional face-to-face classroom instruction with online learning activities) at no cost, focusing on practical skills for project and product development.

Case 2 — Additional Skill Acquisition Programme (ASAP) Kerala forms a bridge from college to careers with vocational courses[3,4]

- ASAP, by Kerala's Higher Education Department, focuses on youth employability through industry-relevant skills.
- ASAP has benefited lakhs of students entering emerging careers with career-oriented courses
- Courses adapt to new technologies, markets, job roles and international standards.
- An attempt is made to imbibe job-role readiness, desired social behavior, self-confidence and growth mindset necessary for college students to effectively enter the 21st century careers.
- Kerala excels in future skills and general knowledge of the overall curriculum, indicating a well-rounded educational approach that prepares students for the future job market.

Case 3 — Project Sankalp aims to develop Gujarat's skill ecosystem through industry-linked skilling[5]

- Project Sankalp encourages industries to become a training partner and provide sector specific practical training, apprenticeship and assure employment through government support.
- The vision is to create better employment for youth and support industries through an in-house trained workforce with government sponsored training cost.
- Fees are not charged from the youth/beneficiary and industry partners must place at least 80% of the freshers trained in each batch under the project.

Source: 1. Education Times, 2. Tamil Nadu Skill Development Corporation, 3. Indian Skills Report, 4. ASAP Kerala, 5. Gujarat Skill Development Mission (GSDM)

Global institutions promote industry partnerships, which help provide vocational training, on-the-job experience and employability in real-world work situations (1/2)

3.5.2: Best practices leveraged by other countries

Case 1 — Singapore is redefining education with industry collaboration and emerging technologies

- The "Factory school" model in Singapore promotes industry partnerships to create real-world training environments, equipping students with skills for the modern workforce.
- SMU, Singapore Polytechnic and a leading institute of technology in the country collaborated to co-create curricula focused on emerging technologies such as cloud computing and IoT, tailored to Singapore's context.
- Additionally, Singapore's higher education system is advancing edtech integration with a focus on lifelong learning, personalized education and government-backed innovation projects.

Case 2 — Australia's commitment to Work Integrated Learning (WIL)

- Work Integrated Learning is an educational approach that includes various activities integrating theoretical (academic) learning with hands-on training in the discipline in a real-world work situation.
- It provides university students with valuable practical work experience alongside their studies, and they can take credits from the WIL into their program, as it is a part of their course.
- Work Integrated Learning (WIL) is a crucial component of various professional courses, including nursing, pharmacy, public health, social work, engineering and business studies. This integration of WIL into the curriculum gives graduates from Australian universities a competitive edge in the job market.
- The focus is on aligning higher education teaching and learning with labor market forecasts for the future of jobs, thereby developing professional skills and ensuring students have the right skills to enter the job market.

Case 3 — Switzerland's flexible VET/PET system empowers students with career versatility

- Switzerland is widely recognized as a global frontrunner in vocational training, on-the-job training and employability, with its VET model highly regarded as a benchmark of excellence.
- The dual-track system combines classroom learning with practical training across 230 professions and strong job market alignment creates a skilled workforce in banking, healthcare and manufacturing.
- Swiss VET has close links with the job market, aligning education and training to the actual demand for vocational qualifications and the jobs available, resulting in one of the lowest youth unemployment rates internationally.
- Also characterized by a high degree of permeability, it allows students to pursue different directions during training and even change careers with relative ease.

Global institutions promote industry partnerships, which help provide vocational training, on-the-job experience and employability in real-world work situations (2/2)

3.5.3: Best practices leveraged by international institutes

Case 1 — High involvement of private companies and government to provide on-the-job training to students and helping them with job opportunities

ITE Singapore

~25,000
Students are trained annually

>350
Companies involved in the COJTC Scheme for on-the-job training model

- Operates in 29 countries across Asia, Latin America and the Middle East, offering consultancy and training.
- Offers full-time and part-time programs like National ITE Certificate (Nitec), Higher Nitec, Technical Diploma and Work-Study Diploma.
- Disciplines include Engineering, Business, Electronics, ICT, Nursing, Paramedic and Emergency Care.
- The career Cluster-based Curriculum Framework (CCF) prepares students for groups of related occupations.
- Provides internships to ~3,000 students in 25 countries for short-term global exposure. Offers Overseas Industrial Attachment Programme (OIAP), Overseas Student Exchange Program (OSEP) and Overseas Service and Development Program (OSDP).
- High placement rate due to strong industry tie-ups and collaborations with government bodies on curriculum and training.
- Infrastructure includes state-of-the-art workshops, labs and lecture theaters.
- The channels of funding include government funding, industry partnerships and tuition fees. University is primarily government funded, with a smaller share received from the private sector.

Case 2 — Internship and apprenticeship programs that allow students to gain practical, hands-on experience relevant to their fields while working

TAFE Australia

>1.2mn
Students are trained annually across Australia

>1,000
of industry partners across various sectors

- The university provides vocational education and training (VET), apprenticeships, trainees, higher education and short courses.
- Courses span disciplines like building and construction, business and marketing, IT, education and training, community and youth services, screen, media and games.
- Offers multiple internships and apprenticeships for hands-on learning.
- The placement rate after training is 92% as of January 2023.
- The university receives funding primarily from the government.

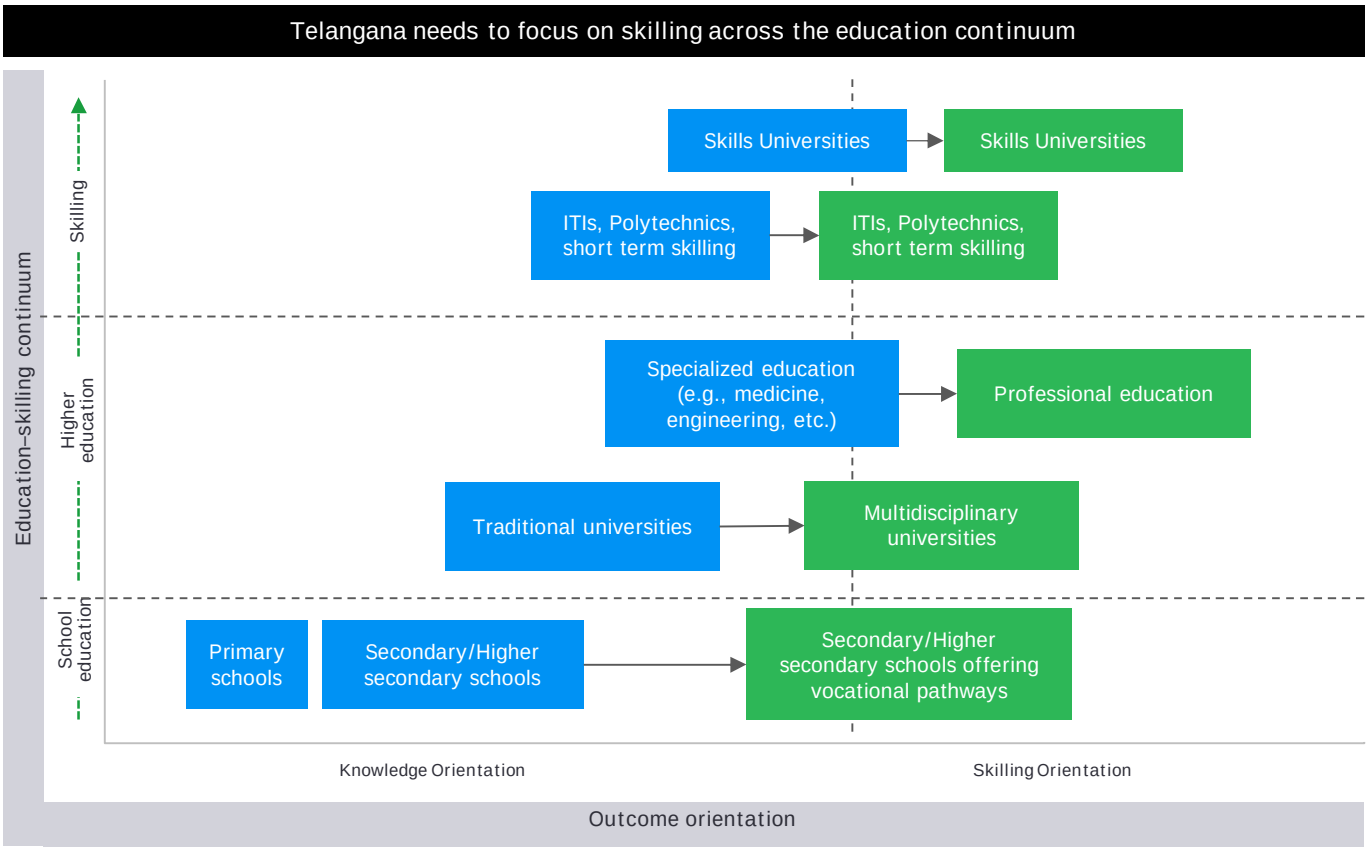
4

Recommendations and way forward

Telangana needs to shift from a knowledge-focused education model to one that prioritizes skill development, ensuring that learning translates directly into market-relevant skills

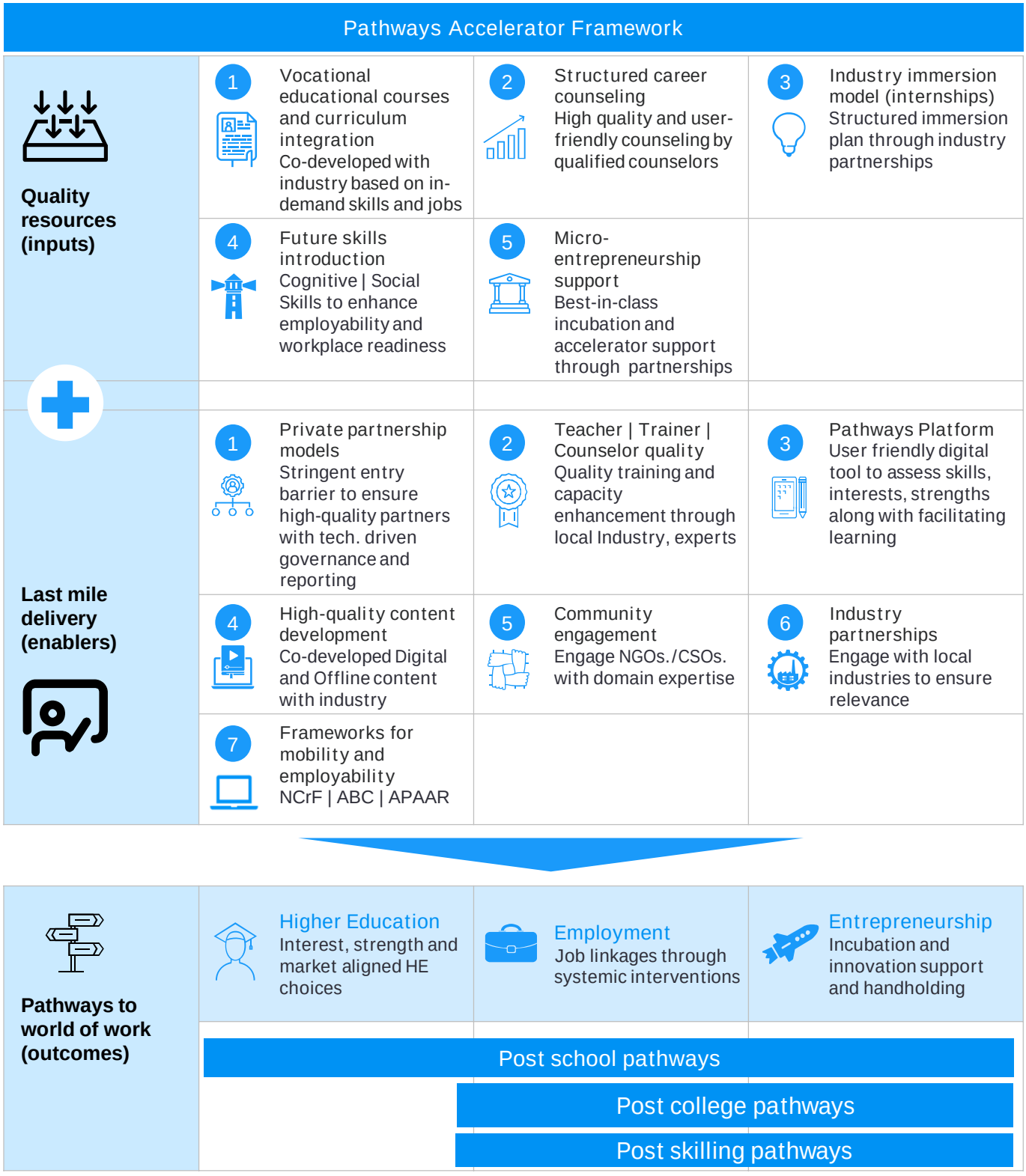
Telangana state should focus on integrating vocational trainings and skill-based education into the mainstream education ecosystem across the continuum of education, thereby shifting a focus from knowledge orientation to skill orientation. This shift will help close the gap between current skills and skills required by the industry.

Figure 17: Illustrative for education-skilling continuum



Structured interventions across the results chain will translate into quality outcomes

Figure 18: Quality inputs and rigorous last-mile delivery enabling better pathways



Source: EYP Analysis

Telangana should focus on activating quality inputs, supported by ecosystem-led last mile delivery to derive quality outcomes (1/2)

Quality resources (inputs) + Last mile delivery (enablers) = Pathways to world of work (outcomes)

Table 7: Recommendations across the Pathways Accelerator Framework

Parameters	Recommendations
Quality resources (inputs)	Vocational educational courses and curriculum integration ▪ Vocational education awareness and in-demand skills should be integrated in school curriculum ▪ HEIs should integrate vocational skill component ▪ Skilling institutions offering long and short-term courses should market align programs
	Structured career counseling ▪ Institutes should offer counseling to help explore, understand and make the right choices that are industry linked and aligned with the student's strengths and preferences ▪ counseling should be provided early with a grade wise structured counseling plan to gradually guide students through the Awareness, Discovery to Action continuum
	Industry immersion model (Internships) ▪ Focus on practical learning through industry visits (secondary grades), real world industry projects (higher secondary), internships (HEIs) and hybrid - 50% classroom + 50% industry (skilling institutions)
	Future skills introduction ▪ Institutes should offer workplace readiness (cognitive, social and emotional) skills from grade 6 onwards for more holistic development of students ▪ Skills to be covered Cognitive: problem solving, decision making | Social: Empathy, Assertiveness, collaboration, communication | Emotional: Self-awareness and adaptability
	Micro-entrepreneurship support ▪ Education and Skilling institutions should provide incubation and acceleration support with ideation, enabling linkages, seed funding facilitation, etc.
Last mile delivery (enablers)	Private partnership models ▪ Redefine eligibility criteria to onboard only quality and outcome focused private partners for inputs ▪ Define outcome metrics, tech.-based tracking and performance-based payment and renewal
	Teacher | Trainer | Counselor quality ▪ Experienced Teacher | Trainer | Counselor should be onboarded to ensure quality ▪ Industry, NGOs, CSOs and private players with domain expertise should be leveraged
	Pathways Platform ▪ Holistic student/trainee and teacher/trainer/counselor facing platform should be developed ▪ Platform will act as a single source of awareness to action for students/trainees ▪ Platform will help facilitators plan and execute edu./skilling along with managing their own learning
	High-quality content development ▪ Content must be co-developed with industry and vocational experts to ensure relevance ▪ Content must be engaging and interactive along with being multi-channel (classroom and digital)
	Community engagement ▪ Leverage outcome focused orgs. (NGOs/CSOs) with domain expertise in vocational education, skilling and counseling to ensure high quality, outcome-oriented implementation at scale
	Industry partnerships ▪ Institutions should work closely with industry across the lifecycle, from course design to placements incl. projects, research, visits, lectures, CoE, funding, etc. ▪ Partnerships should be managed by a dedicated individual/team with relevant experience

Source: EYP Analysis

Telangana can become the "lighthouse state" by integrating structured vocational education and skill development with the rigorous implementation of the Pathways Accelerator Framework

Table 8: Implementation phase focused on quality resources (inputs)

Interventions / Inputs	1 Vocational edu. course and curriculum integration	2 Structured career counseling	3 Industry immersion model (internships)	4 Future skills Introduction	5 Micro-entrepreneurship support
Objective Key segments targeted	▪ Integrate in-demand vocational education courses into the curriculum for both school and higher education	▪ Handhold school and higher education students and trainees undergoing skilling through the awareness to action lifecycle	▪ Mandatory internships and targeted apprenticeship programs in the higher and skilling education segments	▪ Introduce students and trainees to cognitive, social and emotional skills to improve their workplace readiness	▪ Create an enabling environment by providing support to students and trainees from ideation to setup
Base lining Assessing current state for establishing reference	▪ Current gaps and penetration of vocational education | counseling | internship | entrepreneurship support | future skills ▪ Relevance of courses offered | curriculum and pedagogy | Current internship, placement, counseling processes ▪ Capacity and capability – teachers | trainers | counselors ▪ MoUs/partnerships with industry | community (NGOs/CSOs) ▪ Map current ecosystem involvement in school, higher and skilling education institutions ▪ Benchmarking best practices				
Design Creating structured plans and solutions to address identified gaps	▪ Identify attractive sectors ▪ Define course offerings ▪ Industry partnership models ▪ Teacher/trainer capacity building programs ▪ Design skill assessment test	▪ Structured counseling framework ▪ Counselor training and certification program ▪ Partnership for capacity enhancement ▪ Technology driven solutions	▪ Structured internship program (time, duration, learning objectives) ▪ Industry partnerships and incentives ▪ Student support (interview, CV) ▪ Internship cells capability	▪ Comprehensive future skills framework ▪ Curriculum integration plan ▪ Innovative teaching pedagogy ▪ Design workplace readiness assessment ▪ Partnerships with relevant orgs. with expertise	▪ Curriculum and pedagogy development and integration ▪ Partnerships for imparting skills ▪ Market linkages establishment ▪ Post education support mechanism structure
Pilot and scale Small-scale implementation to test feasibility and effectiveness	1. Pilot ▪ Identify resources required for pilot implementation ▪ Piloting the initiatives with shortlisted schools, HEIs and skilling institutions across rural and urban districts ▪ Evaluate success and key learnings from pilots to fine tune design		2. Scale ▪ Identify resources required for implementation at scale ▪ Design rewards and incentive programs for adoption ▪ Draft and roll out policy for clarity across stakeholders ▪ Scale across the network of schools, HEIs and skilling institutions		
Monitoring and evaluation Tracking progress and assessing outcomes against set metrics	▪ Develop comprehensive monitoring and evaluation framework with clearly defined KPIs ▪ Establish baseline data for all interventions before full-scale roll-out and implementation ▪ Implement real-time data collection and analysis systems, including dashboards for continuous monitoring ▪ Conduct progress reviews with key stakeholders such as schools, HEIs, skilling institutions, government and industry partners ▪ Perform annual impact assessment and implement a feedback loop to continuously refine and improve interventions				

To ensure success, Telangana must clearly define stakeholder roles and responsibilities to foster collaboration and accountability

Table 9: Actions to be taken by stakeholders focusing on integrating skill-based education

Stakeholders		Line departments (school education, higher education, skill development)	TASK	Industries, MSME department	Industry associations	Private (for profit) organizations	NGOs/CSOs
Interventions/Inputs	Current state assessment and gap analysis	▪ Assess and identify gaps in teachers' capabilities to deliver current VE courses	▪ Lead the base lining and gap analysis based on current state info. from line departments and best practices from industry	▪ Identify and communicate in-demand industry skills	▪ Share best practices for gap analysis	▪ Identify and communicate in-demand industry skills	▪ Share information regarding current state and gaps based on their experience of working in the field
	Designing intervention and stakeholder buy-in	▪ Operational design across the five inputs in line with the strategic design and ground realities	▪ Lead the strategic design based on current state, gaps and industry best practices	▪ Provide inputs from an industry lens to ensure design is industry aligned	▪ Critically evaluate the design from an industry friendliness lens	▪ Provide inputs on incentives required for private sector involvement	▪ Provide inputs on operational design from an executable point of view
	Pilot planning, execution and learnings incorporation	▪ Define outcome metrics with budget and timelines ▪ Drive pilot implementation ▪ Assess outcomes and scalability	▪ Regularly review the progress and provide real-time feedback ▪ Oversee pilots in select districts or institutions	▪ Provide support by aligning industry players and leaders to participate in the pilot	▪ Contribute to the pilot success by convincing key industry player to dedicate time and resources	▪ Participate with the objective of making pilots successful keeping profitability as a longer-term objective	▪ Secure grants for participation in pilots to augment department capacity and capability
	Population scale implementation planning and execution	▪ Ensure interventions are implemented across the network	▪ Tweak design based on learnings from pilots ▪ Oversee implementation at scale	▪ Support implementation by institutionalizing collaboration with line departments	▪ Support by leveraging network to generate awareness about interventions	▪ Enhance capacity to implement at scale	▪ Build capacity to scale operations ▪ Drive implementation in respective geographies
	Robust monitoring and evaluation and feedback loop	▪ Monitor student/trainee outcomes ▪ Track and monitor operating metrics ▪ De-bottleneck operational challenges	▪ Triangulate performance on outcome metrics based on data from line departments, industry, private players and NGOs/CSOs ▪ De-bottleneck strategic challenges	▪ Provide independent feedback on outcomes and implementation at scale	▪ Provide independent data on outcome achievement ▪ Facilitate industry feedback on implementation at scale	▪ Ensure systems and processes are in place to capture and report outcome and operational metrics	▪ Integrate systems and processes to capture and report outcome metrics ▪ Independent capture and reporting of outcomes in respective geographies

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5

Conclusion

Conclusion

Telangana can position itself as a model for education and skilling by aligning the following strategic pillars - government vision, leveraging collaborations and focusing on results to create an empowered, future-ready workforce.

Government and bureaucratic leadership

- The success of Telangana's youth skill development initiatives depends on strong government leadership that actively supports the youth of the state.
- Bureaucratic leadership needs to make effective decisions and take decisive actions required to achieve the goal of increasing the employability of the youth in the state.
- Clear communication of outcome-oriented objectives at all levels among stakeholders is essential, ensuring that everyone, from top leaders to field staff, understands their role in the mission.

Cross-departmental collaboration

- Achieving the vision of youth empowerment in Telangana will require seamless collaboration across multiple departments, including school education, higher education, skill development, industries and MSMEs. To ensure these departments work effectively together, there must be clear communication channels, shared objectives and coordinated planning.
- Initiatives such as joint task force, cross-departmental committees and integrated policies will help synchronize efforts towards the common goal of empowering the youth.

Ecosystem engagement

- In addition to government departments, participation of the broader ecosystem, which includes employers, private education and skilling players, NGOs, civil society organizations (CSOs) and other stakeholders, is equally critical for the success of youth development initiatives at scale.
- The ecosystem can play a key role in ensuring that opportunities for skill development and employment reach every student and trainee across the state. For the ecosystem to contribute effectively, there needs to be a structured platform for collaboration with the government.
- Public-private partnerships, advisory councils and regular stakeholder meetings will help foster meaningful collaboration and ensure that all parties are aligned in their efforts.
- Coordinated actions across government departments and external partners will be essential in addressing the diverse needs of students and trainees, ensuring that they have the skills and opportunities to succeed.

Focused outcome orientation

- Across all stakeholders, it is vital to maintain a razor-sharp focus on achieving tangible outcomes for the youth of Telangana.
- A unified approach, with all parties aligned towards a common goal, will be essential for the success of the state's youth employment initiatives.
- Every effort should be directed towards providing meaningful opportunities and outcomes that truly benefit the youth of Telangana.

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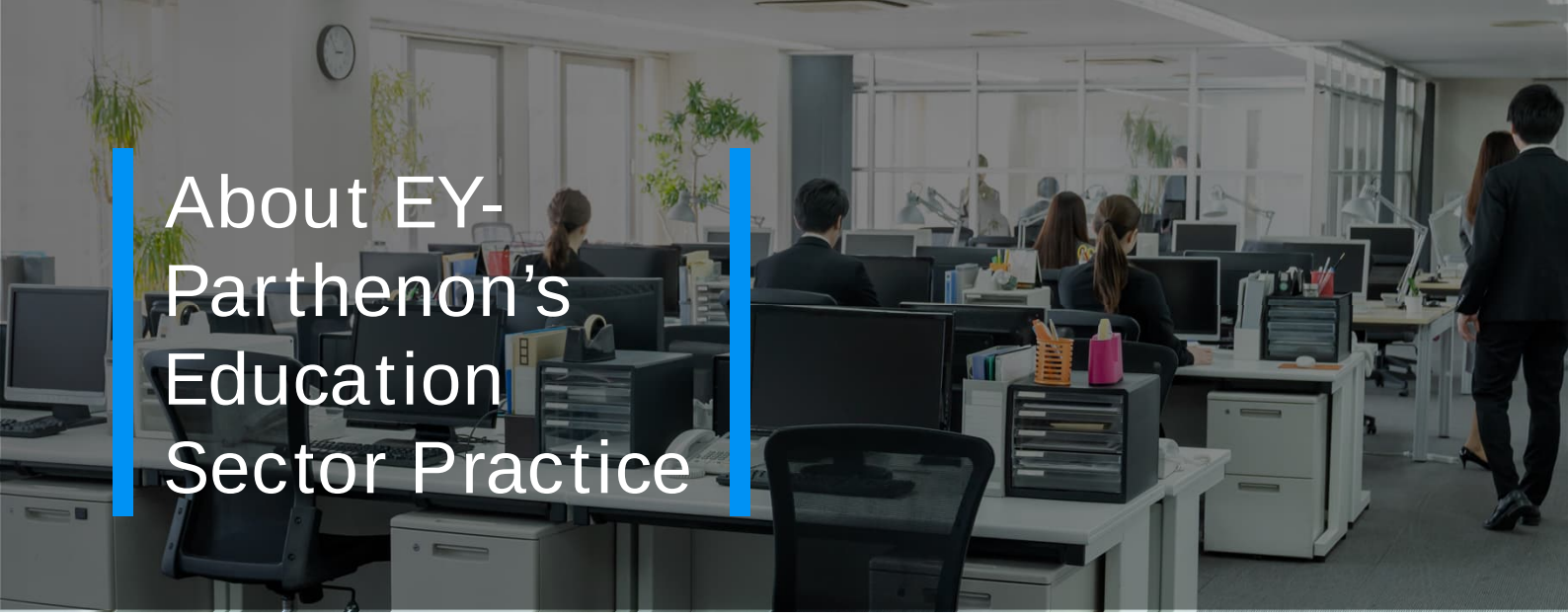
Glossary

ABC	Academic Bank of Credits
AI	Artificial Intelligence
AICTE	All India Council for Technical Education
APAAR	Automated Permanent Academic Account Registry
AR	Augmented Reality
BC	Backward Caste
CBSE	Central Board of Secondary Education
CoE	Center of Excellence
CSR	Corporate Social Responsibility
EBC	Economic Backward Caste
EPFO	Employees' Provident Fund Organization
EV	Electric Vehicle
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GSVA	Gross State Value Added
HEI	Higher Education Institution
HOD	Head of Department
HR	Human Resources
HTML	HyperText Markup Language
ICSE	Indian Certificate of Secondary Education
ICT	Information and Communication Technology
IT	Information Technology
ITE	Information Technology Education
ITeS	Information Technology enabled Services
ITI	Industrial Training Institute

MBA	Master of Business Administration
ML	Machine Learning
MoE	Ministry of Education
MSDE	Ministry of Skill Development and Entrepreneurship
NAAC	National Assessment and Accreditation Council
NBA	National Board of Accreditation
NCrF	National Credit Framework
NEP	National Education Policy
NER	Net Enrollment Ratio
NGO	Non-Governmental Organization
NIRF	National Institutional Ranking Framework
NSQF	National Skills Qualifications Framework
PG	Postgraduate
PTR	Pupil-Teacher Ratio
R&D	Research and Development
RBI	Reserve Bank of India
STR	Student-Teacher Ratio
TAFE	Technical and Further Education
TASK	Telangana Academy for Skill and Knowledge
TGCHE	Telangana State Council of Higher Education
T-SAT	Telangana Skills and Training
TSU	Telangana Skills University
UG	Undergraduate
VET	Vocational Education and Training
VR	Virtual Reality



About EY-Parthenon's Education Sector Practice

With over 50 partners and 1000 consultants in India, EY-Parthenon, the strategy branch of EY, ranks fourth among the top consulting firms according to Vault Consulting's 50 list. EY-Parthenon is a leading strategic advisor to the education sector globally, with our education team completing over 300 projects annually.

The EY-Parthenon education consulting strategists help clients negotiate the changing currents in the sector so that they not only adapt but also adopt strategies in terms of globalization-driven skill sets and new collaborations.

With broad experience and deep sector knowledge, the education strategy consulting professionals at EY-Parthenon are helping leaders overcome challenges with bespoke, all-encompassing growth strategy plans, due diligence services and implementation support.

We have dedicated consultants in the following five segments of the sector:

Governments and foundations	Pre-K and K-12 school chains	Higher education institutions and TVETs	Indian and global ed-tech companies	Global investors
Our clients include central and state ministries of education, supporting organizations and foundations. We have supported in developing short term and long-term growth strategy plans to reform systems.	Our teams provide services such as market needs assessment, strategic planning, performance analytics, operational improvement, financial advisory and organizational redesign.	Our teams help HEIs identify opportunities for differentiation through various modes, using our insights from global best practices. We also help TVETs formulate end-to-end strategies and help with executing the same.	We provide competitive landscaping, market analysis, go-to-market strategies, support on organic and inorganic growth like fundraising, acquisitions, partnerships, joint ventures or divestments.	We provide due diligence services to investors. From the pre-contract stage through the eventual integration or separation, we help guide decision-making and provide execution assistance.

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Education & Skills Panel of CII Telangana for the year 2024-25

Annexure 1: Skills and courses in Telangana’s emerging sectors

Schools, HEIs and skill education are integrating vocational programs to address industry demand (1/2)

Annexure 1: Skills and courses in emerging sectors

Emphasis on vocational and skill-oriented programs in Telangana's education continuum

- Schools and colleges are updating curricula to include industry-relevant skills and emerging technologies, preparing students for today's job markets.
- Skilling education, which includes Diploma education and AICTE programs, specifically targets vocational skills, addressing skill gaps in the workforce and enhancing graduates' employability.

Emerging sectors	Skills offered through vocational courses	Courses offered	Education level	Education class
Life Sciences	▪ Pharmaceutical literacy	Home medicine management	School education	CBSE
	▪ Biotechnology safety awareness ▪ SOP and chemical management	Foundation skill for science	School education	CBSE
	▪ Molecular and biotechnology analysis	M.Sc.(Biological Sciences)	Higher education	PG
	▪ Biotechnology proficiency	M.Sc. (Biotechnology)	Higher education	PG
	▪ Drug preparation ▪ Dosage formulation ▪ Pharmaceutical operations	Pharmaceutical engineering	Higher education	B.Tech
	▪ Medical sensors ▪ Biomedical instrumentation ▪ Medical imaging equipment	Biomedical engineering	Skilling education	Diploma
IT/ITeS	▪ AI tools ▪ AI ethics ▪ AI-models ▪ Generative AI tools	AI and ML	School education	CBSE
	▪ Intelligent systems and robotics ▪ Cognitive analytics ▪ Natural language processing		Higher education	B.Tech
	▪ Python with AI ▪ Scratch programming ▪ HTML and python programming languages	Diploma in coding	School education	CBSE and State board
	▪ Programming with C ▪ Website development		Skilling education	Diploma
	▪ Data science ▪ Data governance	Computer data science and analytics engineering	School education	CBSE
	▪ Coding ▪ Statistics proficiency		Higher education	B.Tech
	▪ XR setup	AR/VR	School education	CBSE
	▪ Software development ▪ Computer architecture ▪ Operating systems	B. Sc. computer systems and engineering	Higher education	UG
	▪ Network security ▪ Cryptography	Cybersecurity	Higher education	B.Tech
	▪ Network security ▪ Database security ▪ Web application security		Skilling education	Diploma
	▪ Pharmaceutical literacy	Home medicine management	School education	CBSE
	▪ Biotechnology safety awareness ▪ SOP and chemical management	Foundation skill for science	School education	CBSE

Source: 1. CBSE Academic, 2. Telangana Government, 3. Telangana State Board of Technical Education & Training

Schools, HEIs and skill education are integrating vocational programs to address industry demand (2/2)

Annexure 1: Skills and courses in emerging sectors (cont'd.)

Emphasis on vocational and skill-oriented programs in Telangana's education continuum

Emerging sectors	Skills offered through vocational courses	Courses offered	Education level	Education class
Life Sciences	▪ Waste management	Environmental science	School education	ICSE
	▪ Environment planning ▪ Environmental management ▪ Sustainable resource management		Higher education	UG
	▪ Wastewater management ▪ Solid-waste management	Environmental engineering	Higher education	B.Tech
	▪ Energy management ▪ Energy infrastructure development ▪ Energy efficiency	Renewable energy	Higher education	M.Tech
	▪ Sustainable development ▪ Energy management	Energy management	Higher education	MBA
Electric mobility	▪ Components of an automobile	Automotive	School education	CBSE
	▪ Advanced engineering ▪ Battery technology	Electrical engineering and electric mobility	Higher education	B.Tech
	▪ Manufacturing new vehicle ▪ Installation and maintenance of vehicle	Automobile engineering	Skilling education	Diploma
Aerospace and defense	▪ Basics of rockets and satelites	Rockets, satellites and its application	School education	CBSE
	▪ Avionics systems ▪ Aircraft systems and instruments ▪ Aerodynamics	Aerospace engineering	Higher education	B.Tech
	▪ Design, construction, maintenance of aircraft ▪ Aircraft components ▪ Thermodynamics ▪ Fluid dynamics	Aeronautical engineering	Higher education	B.Tech

Source: 1. CBSE Academic, 2. Telangana Government, 3. Telangana State Board of Technical Education & Training


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Kermanshah
Hamadan
Qom
Arak
Yazd
Semnan
Sabzevar
Bojnurd
Gorgan
Sari
Ardabil
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Singerei
Nisporeni
Ialoveni
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Dubasari
Causeni
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Taraclia
Ceadir-Lunga
Vulcanesti
Basarabeasca
Cimislia
Leova
Hincesti
Orhei
Soroca
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Annexure 2: Other recommendations for Telangana’s education and skilling sectors

At the school education level, Telangana needs to strengthen its foundational skills, promote vocational education in early classes and upskill teachers (1/2)

Gap	Stakeholder	Recommendation	Detailed Description
Need to strengthen foundational skills on subject matter expertise	School education: Public and private	Strengthen foundational literacy and numeracy skills in students	▪ Implementation: Schools should prioritize foundational learning from Class 3, offering quality, age-appropriate education that prepares students for future academic success. Early introduction of pre-literacy and pre-numeracy skills fosters a sound foundation and supports cognitive and social skills development. ▪ Expected outcome: Students will develop strong foundational literacy and numeracy skills during early school education, contributing to higher educational attainment and long-term success.
Gap in vocational and soft skills development	School education: Public and private	Integrate and mandate the vocational and soft skill from early class	▪ Implementation: Schools should promote vocational courses by highlighting their career benefits and mandate students to take at least one skills-based subject. They should also prioritize training teachers in essential soft skills like communication and teamwork and expand upskilling mandates for teachers to reach more educators in other institutions. ▪ Expected outcome: Students will possess both technical skills and essential soft skills, leading to improved academic performance.
Need for more skilled teachers	School education: Public and private, industry, government	Conduct comprehensive training sessions for teachers	▪ Implementation: Schools should organize short-term upskilling programs with industry partners to help teachers innovate their teaching with new technologies. Additionally, the state government should implement a dedicated training program for teachers. Schools should implement methods to evaluate both students' practical skills and teacher effectiveness and create a platform for collaboration on new teaching approaches. ▪ Expected outcome: Teachers will adopt innovative methods, resulting in more engaging and interactive learning experiences for students.

Source: EYP Analysis

At the school education level, Telangana needs to strengthen its foundational skills, promote vocational education in early classes and upskill teachers (2/2)

Gap	Stakeholder	Recommendation	Detailed Description
Room to enhance access to public education	School education: Public and government	Increase enrollments through awareness campaigns and incentives	▪ Implementation: Schools should promote free quality education in government schools through banners, special enrollment camps before summer and social media. Workshops should educate parents on enrollment, curriculum options and the benefits of education. ▪ Expected outcome: Education will be accessible to every child, leading to an increase in enrollment and better educational outcomes for students.
Opportunity to increase awareness of school-to-work, higher education and skilling pathways	School education: Public and private	Implement targeted awareness campaigns and establish career counseling services	▪ Implementation: Schools should implement a career support program that offers psychometric tests, one-on-one counseling, expert interactions and exposure visits. The program should also provide job shadowing opportunities for students to gain firsthand experience in various career paths. ▪ Outcome: Students will gain a better understanding of various career pathways, helping them make informed decisions about their futures.

Source: EYP Analysis

At the higher education level, Telangana needs to focus on market-oriented curriculum, collaboration with industry partners and soft skills training (1/2)

Gap	Stakeholder	Recommendation	Detailed Description
Lack of alignment between education curriculum and industry skill requirement	Higher Education: Public and Private, State Government, Industry	Transform curriculum from conventional to market-oriented framework	▪ Implementation: HEIs should evaluate programs to identify skills gaps, involving industry and state government in curriculum design to align with needs and improve outcomes. They should integrate a 30% skills component in the overall curriculum and introduce market-oriented degree and vocational programs, focusing on innovative teaching methods for diverse students. ▪ Expected outcome: Higher education institutions will produce graduates who possess the skills and knowledge that drive greater employability and success in various sectors.
Lack of industry partners to train students through internships	Higher Education: Public and Private, Government (TGCHE), Industry	Collaborate with industry players to train students on skill-based courses	▪ Implementation: HEIs should collaborate with corporations and industry leaders in emerging technologies by inviting professionals for guest lectures and workshops. They should also work with industry partners to create internships and job placement programs that provide students with practical experience. ▪ Expected outcome: HEIs will produce graduates with relevant skills and practical experience in emerging technologies, enhancing student academic performance and meeting industry demand.
Lack of a focus on soft skills	Higher Education: Public and Private	Provide advanced soft skills training	▪ Implementation: Higher education should integrate soft skills into the curriculum, host workshops with industry experts, and implement assessments to measure soft skills development. Students should be encouraged to participate in internships and community service projects for practical experience. ▪ Expected outcome: HEIs will produce graduates who possess strong domain knowledge along with essential soft skills, enhancing their employability and adaptability in the job market.

Source: EYP Analysis

At the higher education level, Telangana needs to focus on market-oriented curriculum, collaboration with industry partners and soft skills training (2/2)

Gap	Stakeholder	Recommendation	Detailed Description
Lack of multi-disciplinarity courses	Higher Education: Public (TGCHE) and private	Re-design curriculum to implement multidisciplinary learning	▪ Implementation: HEIs should integrate multiple disciplines into their curriculum for cross-disciplinary courses aligned with industry standards. Flexible structure allows students to choose electives based on their interests, with modular options available. Faculty should receive professional development in multidisciplinary teaching methods and collaborative pedagogy. ▪ Expected outcome: Academic institutions will equip students to understand and navigate the complexities of the modern world, fostering their ability to innovate and drive progress across diverse sectors.
Limited quality institutes (based on NAAC and NIRF rankings)	Higher Education: Public and private, government (TGCHE)	Enhance teaching effectiveness and provide faculty training	▪ Implementation: HEIs should review programs to identify improvement areas and provide faculty training to enhance teaching effectiveness. The state government should allocate budget resources to address faculty shortages in state universities and upgrade learning materials, technology and facilities. ▪ Expected outcome: HEIs will produce a more skilled and effective teaching workforce, enhance the institution's reputation and improve educational quality and student outcomes.

Source: EYP Analysis

At the skilling education level, Telangana needs to develop a career pathway framework and offer more internship programs for the students (1/2)

Gap	Stakeholder	Recommendation	Detailed Description
Lack of courses grouping	Skilling Education: Public and private (ITI, Polytechnic and AICTE), industry	Develop a career pathway framework	▪ Implementation: Partner with industry to design course bundles that map to specific career pathways, incorporating both foundational and advanced skills. Offer faculty training to ensure effective teaching and regularly monitor student outcomes to assess and refine the program's success in meeting job market demands. ▪ Expected outcome: Students will gain essential life skills and competencies within a specific cluster, while advanced training will allow them to deepen their expertise in a chosen area.
Limited apprenticeships and internship programs	Skilling Education: Public and private (ITI, Polytechnic and AICTE), industry	Offer short term, hands-on internships where students can practice their skills in real-world situations	▪ Implementation: The state government should partner with skilling institutions and industry leaders to support internships and entrepreneurship initiatives. Industry players should offer mandatory one to three months, activity-based internships for students to gain work experience and demonstrate their skills before consideration for long-term positions. ▪ Expected outcome: Students will gain access to more internships that offer hands-on experience, helping them understand various career paths and necessary skills and encouraging proactive career planning.
Limited recognition of programs and certifications in the educational system	Vocational institutions (HODs), government (ITI, Polytechnic and AICTE), industry	Ensuring curriculum alignment with job market demands, enhancing the value of credentials	▪ Implementation: Institutes should collaborate with industry to assess in-demand skills and establish advisory boards with industry representatives to guide curriculum relevance and training needs. The state needs more skill development projects to bridge gaps and offer courses that enhance employment opportunities for youth. ▪ Expected outcome: Students will possess the required industry skills and able to fill the industry demands.
Lack of courses grouping	Skilling Education: Public and private (ITI, Polytechnic and AICTE), industry	Develop a career pathway framework	▪ Implementation: Partner with industry to design course bundles that map to specific career pathways, incorporating both foundational and advanced skills. Offer faculty training to ensure effective teaching and regularly monitor student outcomes to assess and refine the program's success in meeting job market demands. ▪ Expected outcome: Students will gain essential life skills and competencies within a specific cluster, while advanced training will allow them to deepen their expertise in a chosen area.

Source: EYP Analysis

At the skilling education level, Telangana needs to develop a career pathway framework and offer more internship programs for the students (2/2)

Gap	Stakeholder	Recommendation	Detailed Description
Poor placement support	Skilling education: Public and private (ITI, Polytechnic and AICTE), industry	Provide career support services to students in choosing their career pathways	▪ Implementation: Institutes should partner with industry to understand job requirements and provide resume and interview training. Collaborating with HR consultancies can help secure job placements. They should also offer career counseling to assist students in clarifying goals, selecting courses and developing future career management skills. ▪ Expected outcome: Students will gain a clearer understanding of career pathways and job market demands.

Linking academic programs directly with skill development

In conclusion, these recommendations for school, higher and skilling education aim to build a future-ready workforce by aligning academic curricula with industry requirements, promoting interdisciplinary learning and embedding critical soft and technical skills. By integrating vocational training and skill-based education within the mainstream ecosystem, Telangana can ensure that students acquire practical, job-oriented competencies from an early age, fostering a culture of continuous learning and adaptability. To drive this transformation, Telangana can implement frameworks that link academic programs directly with skill development, enabling students to build industry-relevant competencies throughout their educational journey.

Source: EYP Analysis

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Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with around 9,000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 365,000 enterprises from 294 national and regional sectoral industry bodies.

For more than 125 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness, and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Through its dedicated Centres of Excellence and Industry competitiveness initiatives, promotion of innovation and technology adoption, and partnerships for sustainability, CII plays a transformative part in shaping the future of the nation. Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

For 2024-25, CII has identified "Globally Competitive India: Partnerships for Sustainable and Inclusive Growth" as its Theme, prioritizing 5 key pillars. During the year, it would align its initiatives and activities to facilitate strategic actions for driving India's global competitiveness and growth through a robust and resilient Indian industry.

With 70 offices, including 12 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with about 300 counterpart organizations in almost 100 countries, CII serves as a reference point for Indian industry and the international business community.

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