

Revitalizing Education in Telangana: Tackling Challenges and Implementing Solutions

In the heart of India's youngest state, Telangana, lies the potential for an educational renaissance, driven by innovation and a staunch commitment to enhancing the quality and accessibility of higher education. Dr. N.V. Ramana Rao, Director of NIT Raipur, outlines a comprehensive strategy designed to confront the prevalent challenges and foster a robust, skill-centered educational framework.

As this presentation unfolds, we will explore the intricate tapestry of issues facing the domain of higher education, scrutinize the looming concern of graduate employability, and dissect the transformative initiatives reshaping the educational landscape of Telangana.

Agenda

- Introduction
- Challenges in Higher Education
- Graduate Employability
- General Skills and Methods/Tools
- Credit-based Framework
- Skills in School System
- National Credit Framework (NCrF)
- Benefits of NCrF



Challenges in Higher Education

1 Outdated Curriculum

An astonishing 90% of Indian universities are saddled with curricula that are relics of a bygone era, making it imperative to initiate educational reform that aligns with contemporary socioeconomic demands.

2 Graduate Employability

The chasm between academic qualifications and industry requirements has rendered a large swath of graduates ill-prepared for professional challenges, leading to increased employability concerns.

3 Systemic Inflexibilities

The current educational system, with its rigid entry and exit structures and lack of social acceptance for non-traditional pathways, exacerbates the plight of dropouts and the over-qualified youth.

Exploring Graduate Employability Issues

Job Mismatch

The endemic issue of overqualified youth grappling with job mismatch highlights the need for a more dynamic and integrative approach to higher education that bridges the vocational divide.

Vocational Integration

Seamless integration between Vocational and Regular Higher Education systems is essential for enhancing the Gross Enrollment Ratio (GER) and maximizing employability potential.

Skills Emphasis

Emphasizing general skills and methods/tools within the academic curriculum will provide students with a practical skill set applicable across various professions.



General Skills and Methods/Tools

1

Essential Skills

Fostering foundational skills such as reading, writing, communication, and digital literacy is pivotal to creating adaptable and competent future professionals.

2

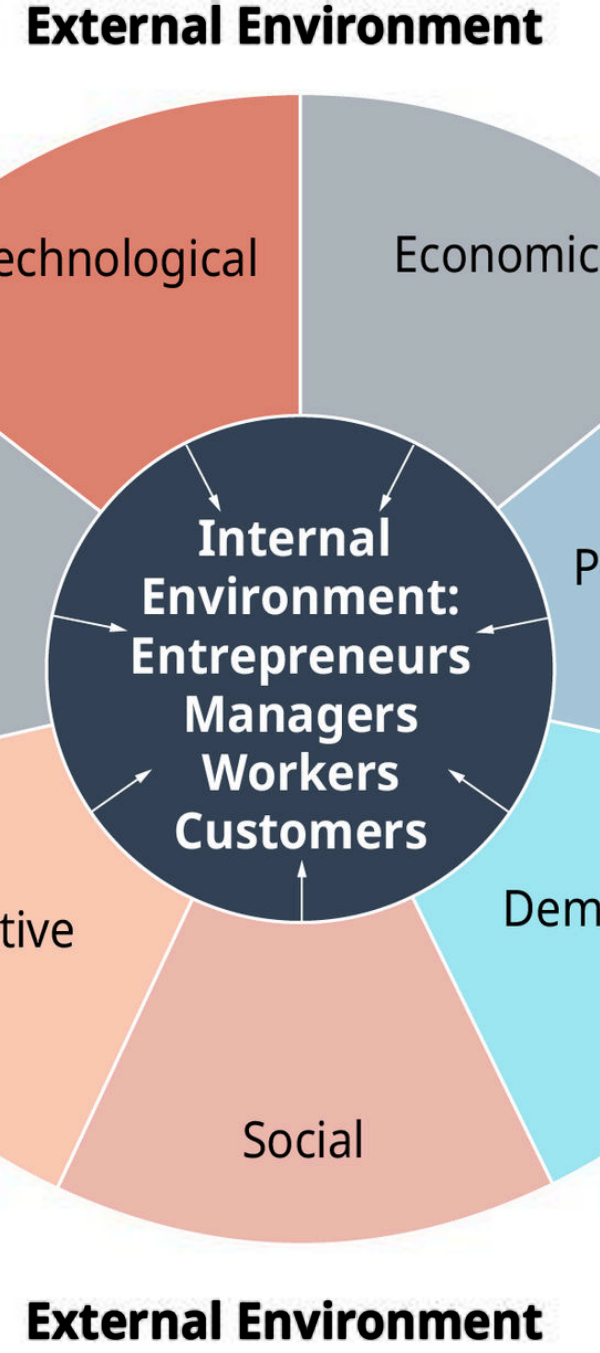
Logical & Analytical

Equipping students with logical thinking and analytical skills ensures they are able to engage with and contribute to complex problem-solving scenarios.

3

Research & Observation

Imparting research and observational skills is a key step towards nurturing a scientific temper and systematic work ethic amongst students, enabling them to thrive in a knowledge-based economy.



Vocation-based Skills and Framework

1 Core Management Skills

Developing managerial, secretarial, and organizational abilities along with presentation and people management skills are paramount for grooming future leaders.

2 Experiential Learning

Embedding apprenticeships, internships, and project-based learning within academic programs bolsters practical understanding and entrepreneurial spirit.

3 Expanding Networks

Creating an expansive network of skill training delivery institutions is integral to the democratization and dissemination of vocation-based education.

Enhancing Skills in the School System

1

Vocational Introduction

Introducing vocational subjects before the completion of high school serves to enhance the practical skillset of students from an early stage.

2

NCrF Mandate

The National Credit Framework (NCrF) mandates a more flexible and credit-based approach to education, allowing for a more personalized educational journey.

3

Credit Integration

With the NCrF, credits from vocational training can now be integrated into academic education, offering students a coherent and continuous learning trajectory.

University Initiatives in Telangana

Adoption of NEP

Telangana's universities have embraced the NEP 2020, starting from the academic year 2022-23, to catalyze a shift towards a more holistic education.

UGCF Formulation

Underpinning the new educational framework, the formulation of UGCF 2022 aims to provide a structured, student-friendly academic experience with diverse choices.

Industry Collaboration

Engaging with Sector Skill Councils and introducing flexibility, particularly in the final year of undergraduate programs, are significant steps towards blending academic knowledge with industry practices.

Skill Development Initiatives

1-5

Years Ahead

Anticipating the manpower requirements for the impending half-decade, Telangana institutes proactive skill development endeavors.

4.0

Industry Era

Industry 4.0 signifies a transformative phase in manufacturing and technology, necessitating a recalibration of the skill development roadmap.

The initiative 'Mission Youth' epitomizes Telangana's dedication to empowering the young generation through skill enhancement, thereby ensuring their active participation in the global workforce.

Industry 4.0 and Challenges Ahead

1

Technological Revolution

Industry 4.0 ushers in a technological revolution, setting the stage for advanced training in big data analytics, IoT, additive manufacturing, and more.

2

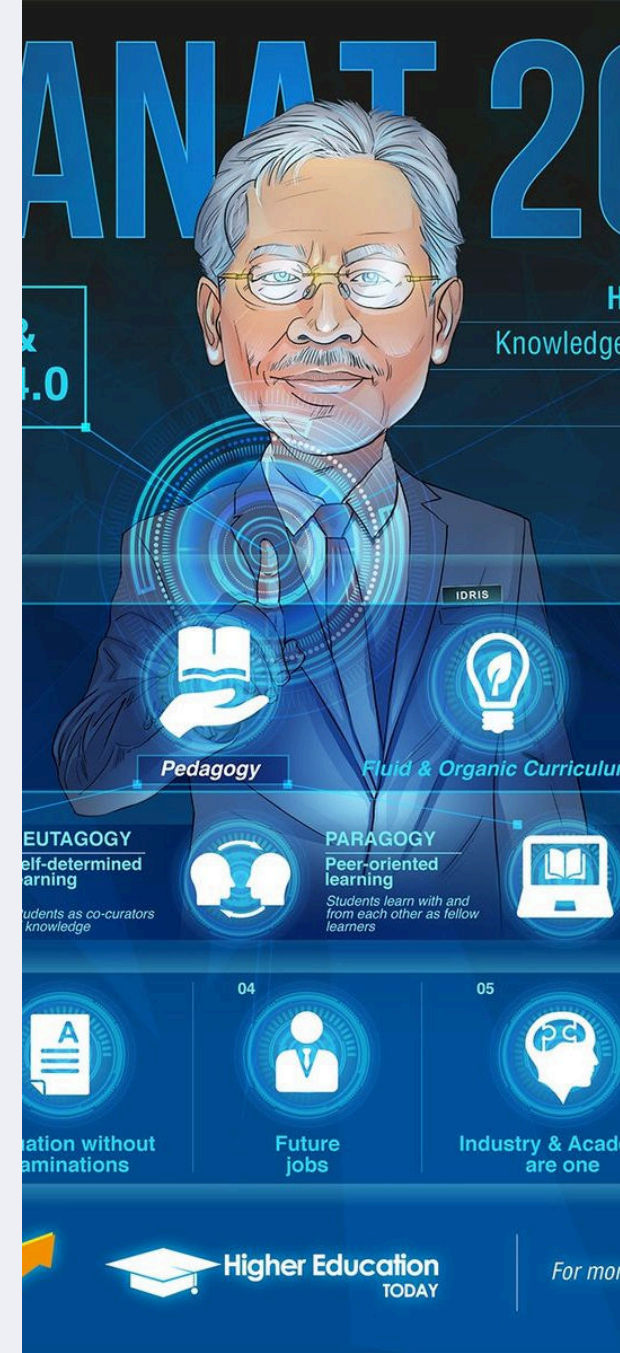
Collaborative Programs

Developing collaboration programs between academia and industry is critical to meet the evolving demands of the workforce and overcome challenges.

3

Future Readiness

Preparing for future initiatives is not just an academic exercise but a strategic move to ensure the longevity and relevance of higher education in Telangana.



Projecting Manpower Needs

Sector	Skilled Workers	Semi-Skilled Workers	Total
Trade (Retail & Wholesale)	26,075	90,258	1,16,333
Tourism & Hospitality	20,347	39,422	59,769
Manufacturing	13,423	26,846	40,269
Construction	9,804	24,510	34,314
Education, Health, Other Services	19,901	7,107	27,008
Real Estate & Professional Services	13,403	6,702	20,105
Power, Electricity, Water Supply etc.	5,225	7,602	12,827
Logistics & Transportation	2,759	6,622	9,381
Banking Financial Services and Insurance	5,856	2,928	8,785
Agriculture	1,964	3,928	5,892
Communication / IT& ITES	3,233	1,616	4,849
Total	1,21,148	2,16,138	3,37,287

Enhancing GER in Telangana

1

Access & Equity

To improve the Gross Enrollment Ratio (GER), there must be a concerted effort to make higher education more accessible and equitable across Telangana.

2

Quality Parameters

Enhancing the quality of education through upgraded infrastructure, qualified teaching personnel, and relevant academic content is essential.



Industry-Academia Interaction

Expert Lectures

Inviting industry experts to deliver guest lectures can bridge the knowledge gap and provide students with real-world insights.

Workplace Immersion

Practical training phases where students are immersed in workplaces can offer them a taste of professional life and its demands.

A group of approximately 15 professionals, including men and women in business attire, are standing in a meeting room. In the background, there are whiteboards and a projector mounted on the wall. In the foreground, a wooden conference table is partially visible with some papers and a water bottle on it.

Refining Curriculum Strategies

Aptitude-Oriented

Revitalizing the curriculum with an emphasis on identifying and enhancing individual aptitudes can lead to more specialized and tailored education.

Global Standards

Synchronizing Telangana's higher education curriculum with global standards ensures the state's graduates are competitive on the international stage.

Incorporating New Technologies

1

E-Learning Platforms

Adoption of e-learning platforms can revolutionize the delivery of education, making it more flexible and accessible.

2

Tech-Savvy Classrooms

Transforming traditional classrooms into tech-savvy learning environments enriches the educational experience and prepares students for the digital age.

3

AI & Robotics

Incorporating Artificial Intelligence and Robotics into the curriculum fosters an innovative spirit and equips students with skills for futuristic industries.



Facilitating Research

1 Funding & Grants

Allocating increased funding and grants to research activities is a cornerstone for an ecosystem that encourages innovation and discovery.

2 Research Collaboration

Fostering research collaborations between universities and industries can lead to practical solutions and advancements in various fields.

3 Student Projects

Supporting student-led research projects not only advances knowledge but also cultivates a robust community of young researchers.

Credit-Based Educational Uplift

Flexibility in Learning

A credit-based system fosters flexibility, enabling students to tailor their learning paths according to their interests and career objectives.

Interdisciplinary Approach

With credits, students can engage in interdisciplinary learning, promoting a well-rounded skillset and holistic development.



Emphasizing Soft Skills

Communication Excellence

Emphasizing soft skills such as communication excellence is vital to ensuring that students are articulate and effective in their interpersonal engagements.

Leadership Skills

Leadership skill training equips students to navigate and influence diverse group dynamics purposefully and ethically.

1

2

3

Critical Thinking

Critical thinking training encourages students to analyze, synthesize, and evaluate information from a broad spectrum of sources.



Online and Distance Learning

Widened Reach

Online and distance learning platforms have the potential to exponentially widen the reach of education, overcoming geographical and socioeconomic barriers.

Customized Pacing

These learning modalities allow students to proceed at a pace that suits their individual needs, promoting better engagement and understanding.

Diverse Course Offerings

They provide access to an array of diverse course offerings, catering to a wide variety of interests and professional trajectories.

Continuous Professional Development

365

Year-Round

Continuous professional development is integral, ensuring that educators are evolving throughout the year with the latest teaching methodologies and subject knowledge.

24/7

Access

Accessible learning resources for educators allow for round-the-clock professional growth and curriculum enhancement.