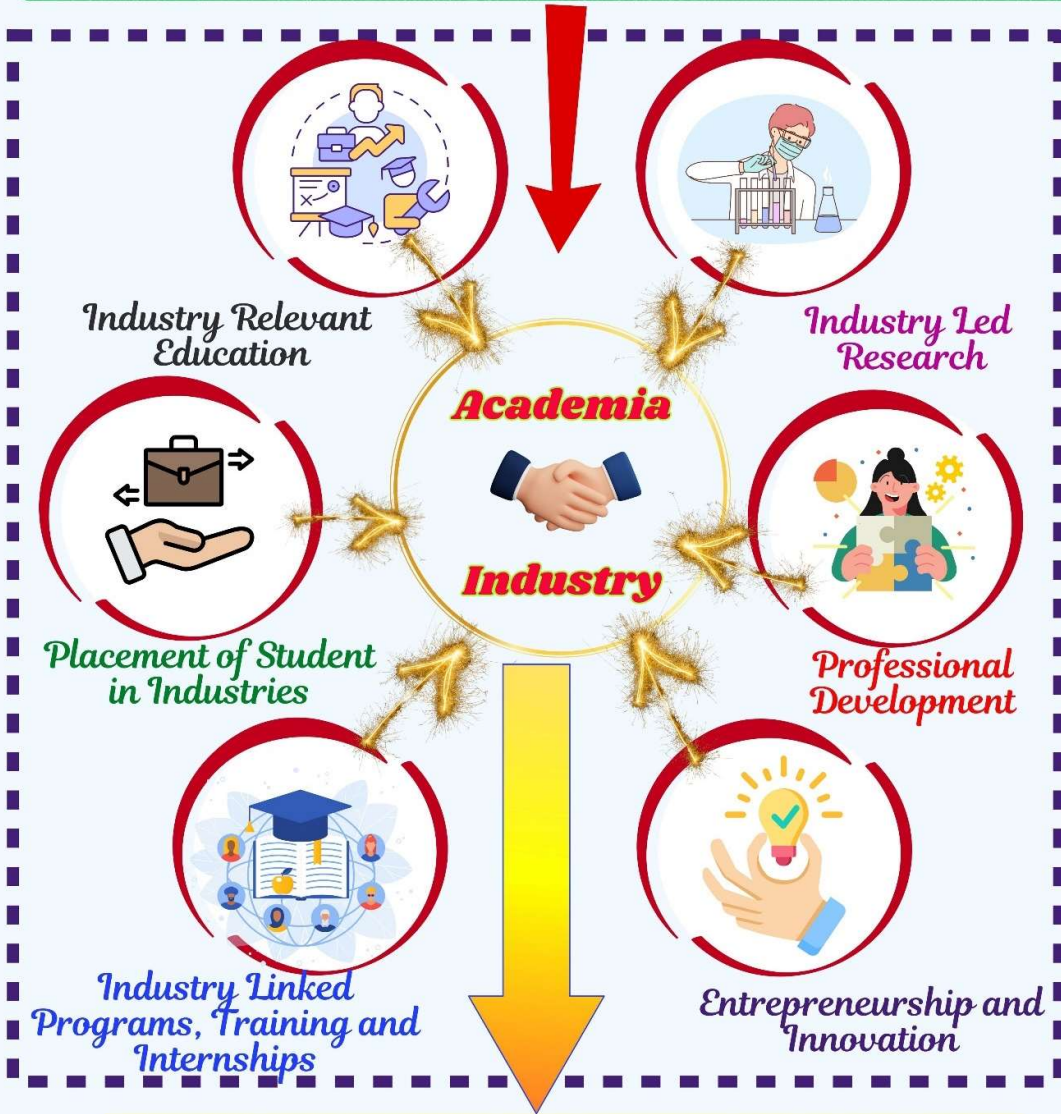


7.2.1. Best Practice – I

Bridging the Gap: VISTAS' Industry Engagement Initiative.

MAPPING OF BEST PRACTICE – I WITH MISSION OF VISTAS

Bridging the Gap: VISTAS' Industry Engagement Initiative



Facilitating skill enhancement through add on courses and hands on training (M2)

Institute Mission

BEST PRACTICE – I

1. Title of the Practice

"Bridging the Gap: VISTAS' Industry Engagement Initiative"

2. Objectives of the Practice

The primary objectives of the VISTAS' Industry Engagement are

- To facilitate the exchange of knowledge, experience, and resources between VISTAS and industries in order to promote innovation and problem solutions.
- To align academic courses with industry demands and standards to provide students with practical skills and knowledge that can be applied in the workplace.
- To offer students opportunities for industry experience, internships, and collaborative projects to help them improve their practical skills, industry awareness, and employability.
- To foster collaborative research projects between VISTAS and industries to address real-world problems and achieve meaningful outcomes.
- To facilitate the transfer of research findings and intellectual property from VISTAS to industrial partners for future development, commercialization, and societal impact.

3. The Context

There is a substantial disparity in India between the competencies possessed by graduates and the requirements of the industry. While industry often perceives that Higher Education Institutions (HEIs) are failing to adequately prepare their students and conduct applied research to address rapid technological advancements and societal demands, HEIs counter that industry shows reluctance in utilizing their research outputs or lacks confidence in investing and collaborating with them to solve real-world problems. In today's dynamic landscape of rapid change, it is imperative for both industry and institutes to support each other to avoid understand mutual responsibilities to the global community. Enhancing collaboration between Higher Educational Institutions (HEI) and Industry is crucial in order to narrow this divide, hence impacting the design and development of curricula. This engagement will develop students with the necessary skills to be industry ready by exposing them to cutting-edge technologies and innovative techniques. Simply ensuring graduates are job-ready is merely the surface of collaboration, akin to the tip of an iceberg. What is truly needed is a comprehensive partnership between industry and HEIs across all facets of their operations, spanning from student admission to graduation and beyond.

4. The Practice

VISTAS' association with the industry is multifaceted, influencing every element of university life. It aims to help students, academics, industry, and society. Key details of the Institute-Industry engagement include:



Provide Industry-Relevant Education:

The academic curricula are aligned with industry needs to equip students with necessary industry skills and knowledge which are directly applicable in the work place. At VISTAS every course is designed by involving the industry and academic experts.

This practice ensures that industry personal's expertise is utilized in a focused manner to develop the curricula. Besides, few UG programs have been conducted at VISTAS in collaboration with industries.

Facilitate Industry Led Research:

VISTAS collaborates with industry partners to conduct research projects that address current challenges, explore the possible emerging technologies and drive innovation in specific research sectors. At VISTAS competent departments have extensive research collaboration to solve the research challenges faced by the industries.

To facilitate these activities, VISTAS invested approximately 11 crores to establish Central Instrument lab equipped with various high-end instruments viz., BET Surface Area Analyzer, FESEM, HPTLC, XRD, Particle Size and Zeta Potential Analyzer, and Raman Spectrometer.

Enhance Professional Development:

VISTAS provides opportunities for faculty members to engage with industry professionals through seminars, workshops, and collaborative projects to stay updated with industry trends and best practices.

Stimulate Entrepreneurship and Innovation:

VISTAS encourages entrepreneurial activities among students, faculty, and alumni by providing support for start-up ventures, Technology Business Incubators (TBI), and access to industry mentors, networks, funding and product promotional centre.

Offer Industry-Linked Programs, Training and Internships:

The collaboration with industry partners, at VISTAS, to conduct various degree programs, offer training and internships for students to gain hands-on experience, industry exposure, and networking opportunities.

It is mandatory for the students belonging to the programs viz., Medicine, Nursing, Health Science, Engineering, Management, Life and Basic Sciences to undergo internship and skilling programs at industries.

In this context, VISTAS-Industry engagement serves as a catalyst for fostering mutually beneficial relationships, driving innovation, and creating positive societal impact. By leveraging each other's strengths, expertise, and resources, VISTAS and industries could unlock new opportunities for growth, competitiveness, and prosperity for inclusive development.

5. Evidence of Success

- In the past Five years, VISTAS meticulously signed **225 active MoUs** with various industries for the benefit of Students / Staffs and Communities. Our Stakeholders are achieved the following Success because of this 225 MoUs.
 - Research Projects / Collaborative / Consultant Projects)
 - Industrial Training (Inplant Training/ Community Pharmacy Training)
 - Industrial Visit
 - Hands on Training to Students
 - Student Internship
 - Guest Lectures / Conferences / Symposium / Seminars / FDP
 - Certificate Courses
 - Awareness Programmes
 - Yoga Class

➤ Disposal of Biomedical Waste

- In order to meet the Industrial requirements **31 different Programmes** were conducted in collaboration with **11 distinguished Industrial Partners**. Various Value-Added Courses were conducted for the benefit of Students with the Industry Experts.
- During the Last five Years **204 Industry Experts** were pursuing their Research by Registering Ph.D. in VISTAS among various disciplines.
- In order to equip students with necessary Industrial Skills and Knowledge which are directly applicable in the workplace. The academic curriculums are aligned with Industry experts. In the Board of Studies (BoS) of all programs conducted by VISTAS external experts from industry are invited to be a part of curriculum design which plays a significant role in preparing the students ready for the industry. **More than 75 industrial experts** from various industries are part of Board of Studies of **46 departments of VISTAS**. Besides, VISTAS has industrial representation in institutional bodies' viz., Board of Management (BoM), Academic Council, and IQAC.
- **10 Collaborative Research Projects** were done.
- VISTAS invested approximately **11 crores to establish Central Instrument lab** equipped with various high-end instruments in **2017** to help the scientific community for their advanced research with nominal charges.
- The faculty members, students, and research scholars have carried out collaborative research projects in association with industries. For Example: **Areete Life Sciences - Study on Micro Structural Analysis Strength and Durability Aspects of Concrete using Artificial Aggregates**.
- **323 Advisory / R&D consultancy projects** including Clinical trials during the last Five years.
- **276 Guest Lectures / Special Lectures** Organized by Various Schools during Last 5 Years for the Benefit of Students and Staffs.
- Over the past five years, we have successfully incubated **22 startups** across various domains, contributing to innovation and entrepreneurship in diverse sectors. We have established key partnerships with organizations such as the Entrepreneurship Development Institute of India (EDII), Centre for Entrepreneurship Development (CED), National Small Industries Corporation (NSIC), Entrepreneurship Development and Innovation Institute (EDII-TN), MSME Department, Government of India to provide enhanced support and resources for our startups and innovators.

- The following **15 Products** are developed through our Incubation Centres are as follows:
 - IoT Based Book Lifting Rover
 - IoT Controlled Warehouse Robot
 - IoT controlled Fire Fighting Robot
 - Pet Paw Washer and Dryer
 - Wireless Automation for Retrograde Urethrogram Device
 - Intelligent Power Saver
 - Ablution Water Saver
 - IoT based Automated Tilt Switch
 - IoT based Smart Dustbin
 - AI Interactive Mask
 - Dehumidifier
 - Tablet Vending Machine
 - Smart Cradle
 - Step Climbing Robot
 - Mobile Controlled Food Feeder
- For the Past five years **11,805 Students** are Placed in Various Industries through VISTAS' Industry Engagement Initiatives.

6. Problems Encountered and Resources Required

Problems Encountered:

When industrial empowerment is necessary on a vast and varied scale that encompasses the VISTAS's aforementioned activities, the first and most important prerequisite is ongoing engagement and confidence building with industry. Communication hurdles, such as differences in language, terminology, and communication styles, can impede efficient collaboration between VISTAS and Industries. However, with consistent effort from both sides, this impediment has been surmounted.

Institutes and industries may have different priorities, deadlines, and goals, resulting in a misalignment of expectations. As an academic institute VISTAS concentrate on scholarly pursuits, whereas industries prioritise practical outputs and immediate answers.

Institute-industry interaction efforts may face substantial hurdles due to limited resources such as finance and time. The industries are reluctant and lack of confidence in allocating funds for research due to the expected outcomes and timely completion of projects.

Another problem encountered is finding scheduling for Professors involvement to participate in industry-related collaboration activities in addition to teaching, academic research, administration, and other student-centered activities.

Despite these setbacks, VISTAS is resolute in its mission to improve student learning and faculty research capacity through the cultivation of corporate collaborations.

Resources Required:

- Resources for analysing the effectiveness, impact, and outcomes of collaborative initiatives are critical for tracking progress, identifying areas for improvement, and demonstrating return on investment.
- VISTAS in the process to establish performance measures, evaluation criteria, and monitoring procedures to quantify the success of collaborative engagements.

VISTAS' industry engagement initiative aimed at "Bridging the Gap" connects academia with industry to equip students with practical skills, foster innovation, and enhance employability.

Through collaborations, internships, and cutting-edge research, VISTAS narrows the gap between classroom learning and real-world demands. VISTAS' impactful partnerships over the years has proved that, "Success lies in collaboration, where knowledge meets opportunity."