



## Building Skills for Work & Life

*Dr. Swati Mujumdar*

### ABSTRACT

Industry 4.0 is set to transform industries and businesses giving rise to new job roles. World Economic Forum report 'The Future of Jobs Report 2018' indicates that four specific technological advances—ubiquitous high-speed mobile internet; artificial intelligence; widespread adoption of big data analytics; and cloud technology—are set to dominate the 2018–2022 period as drivers positively affecting business growth. Our education system has to be revamped to meet this changing requirement of the industry. In India, out of 8 million students that graduate every year, nearly 6 million students do not find employment, even when there are jobs available in the market. This gap exists due to lack of employable skills amongst the youth. Thus, there is a need to re-imagine our education system to be more responsive to the fourth industrial revolution. Skill development can be the key to address this gap between employment & employability. There is a need to identify emerging sectors, job roles and competencies required by our workforce to meet the requirement of industry 4.0. These competencies need to be further translated into skill development courses and embedded into our degree programs. Skill development can also provide opportunities for re-skilling and upskilling for the unemployed youth. The researcher through this paper presents a case study of a unique skill development university that is revolutionizing the higher education landscape. The researcher discusses a paradigm shift in teaching learning pedagogy from input based to outcome and competency based, focus on hands on training, inclusion of 21st century skills in curriculum and other reforms implemented by Skill Development University. The University has disrupted the education sector by creating a learning space which brings technology, industry, students and faculty on a common platform. Learning factories and Centres of Excellence on the university campus provide students simulated industry environment. With 70% focus on experiential learning, the University ensures that the students are market ready. Close industry collaborations and internships at regular intervals play a pivotal role in preparing students for industry 4.0. The research study finds that TVET sector can be transformed by implementing this new education system and transforming the way we impart education and training. Introduction of technology courses in automation, Internet of things, data science, machine learning, AR/VR etc. is the need of the hour. Policy reforms in TVET sector both at Centre and State level will go a long way in addressing the challenges posed by industry 4.0.

**Keywords:** Industry 4.0, TVET, Skill Development, IoT, Automation, Skill University

## BRIEF CV

Dr. Swati Mujumdar is an international TVET and higher education expert. With 20+ years of professional experience in education, she has been advising the governments at national & international level on policy related matters in higher education, skill development, vocational education (TVET) and ODL. She is a policy adviser on skill development & self-financed universities. Under her able leadership, Symbiosis has established two Skills Universities namely Symbiosis Skills & Open University, Pune and Symbiosis University of Applied Sciences, Indore. With an investment of over US 80 million Dollars, the two landmark universities are developing skill & competencies in students, aligned to the industry needs.

Dr. Swati was the chairperson of the Skill Development and Vocational Education Committee of Maharashtra State Government for defining the State's TVET Policy. She has been advising Govt. of India's Ministry of Human Resource Development (MHRD) and Skill Ministry on policy matters related to skill development & integrating skills in education. She was a member of the working group of MHRD and Planning Commission for providing inputs in the area of Vocational Education and Skill Development to Government of India for the XII Five year plan.

She has been doing research on VET models for 10+ years and has studied various TVET models prevalent in many countries. She has developed a unique model of a 'Skills University' suitable in the Indian context and aligned to the mission of Skill India. The Symbiosis Skills Universities are India's first residential skill universities offering skill based courses at all levels in niche areas in line with industry needs. Dr. Swati has partnered with top industries and foreign universities to provide skill training and experiential learning to students pursuing various courses at the University. The University has established 'learning factories & centres of excellence' on the campus, a unique feature in India.