

## 60. Skilled Teacher-Skilled Learner-Skilled India

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Education system in India with a rich history has been transformed into 3<sup>rd</sup> largest higher education system in the world. The higher education system in this era is facing some major challenges like scarcity of expert faculty, geographic barriers and high cost of education, etc.

The requirements of the learner has changed and hence the system has to adopt new pedagogies, making learning an

engaging process. The shift is actually from teacher centric to learner centric approach. Considering the global context and technological advancements, several new horizons have been opened for teachers and learners. Keeping abreast of the new pedagogies and technologies has become need of the hour. The role of governance is to empower the teachers by augmenting their traditional teaching skills with modern educational skills through innovative and best practices. Transforming the learners by trained and equipped teachers to ensure sustainable quality of outcome.

The Scottish physicist James C. Maxwell is credited with saying, “There is nothing as practical as a good theory.” As experienced teachers, we believe that all teachers operate according to theories. Our practice is driven by our “theories” about what will work for our students. Some of those theories are explicit and are learned in school; some are tacit and are the products of years of experience in schools—as teachers, parents, and students. The theories we briefly explore here have enormous potential both for helping teachers explain why they teach in the ways they do and for disturbing those patterns and prompting teachers to rethink their practice. Although many people want to claim that teachers are born, not made, we believe that good teaching requires teachers to create and use, expand and reject, construct and reconstruct theories of learning and teaching. Those theories are not intuitions, or “common sense” but carefully crafted lessons learned from years of experience and careful inquiry. We also believe that teachers

have more power over their pedagogical choices when they have made their theories explicit and tested them with classroom experience, colleagues' critiques, and knowledge of current research.

Remember that: It is not teaching that causes learning. Attempts by the learner to perform cause learning, dependent upon the quality of feedback and opportunities to use it. (Grant Wiggins, 1993).

India produces 25% of engineers of the world every year. 1.5 million engineers are passed out in India every year but the quality matters. The urgent need of paradigm shift is mandatory for engineering education. We know that education in INDIA can't be changed overnight, but the government should take some major steps to improve our education and research. Most of the educational institutes on India are mediocre Institutes, in which most of the faculty are under trained, under paid and under staffed. Thereby AICTE, MHRD and UGC has to provide autonomy and governance to the institutes to address these challenges.

Government has to equally divide funds for all colleges as same colleges through continuous monitoring of the fund's utilization. I mean all colleges should be equally treated. Faculty has to be recruited not only with degree instead the with the quality of teaching, because the role of a teacher for the current learner centered education is a facilitator or a guide. So, he must be trained through some agency. Corporate India says more than 70% of Indian engineering graduates are unemployable, so there

is a severe need to improve the quality of engineering education in India. It must be attained through OUTCOME based education only. So, the prime responsibility of every teacher is to transform their classrooms into a student centered classrooms. Therefore, Every faculty vision is to nurture the students into a dynamic professionals through proper teaching plan and methodology of teaching by preparing a learner centered platforms through various strategies of teaching. With the traditional teaching its very difficult to handle digital age students. So every faculty has to turn their class room into a learner centered platforms.

The industry requirements of a Good engineer are:

- ❖ Having sound knowledge of engineering sciences and technologies
- ❖ Ability to solve well defined and ill-defined problems.
- ❖ Awareness of customers' needs and market trends.
- ❖ Ability to work in a team.
- ❖ Ability to document, plan and communicate effectively.
- ❖ Willingness and ability to learn on the job.
- ❖ Having an interest and awareness in all facets of engineering activities

The faculty of engineering has to address the above mentioned points in their teaching strategies to produce good and marketable engineers.

Higher education need to prepare engineers of the future with skills and know how which they will need to manage rapid change, uncertainty and complexity. The key factor here is tailor engineering solutions to the local social, economic, political, cultural and environmental context and to understand the impact of local action on the wider world. India has the potential to be global technology leader. Indian industry is competing globally in software and even in automobiles, chemicals and engineering equipment. A critical issue for the future of Indian industry is the growth of engineering education in India.

Indian government is pushing Make in India campaign, through the central government of India is inviting manufacturing giants to come to India and setup their manufacturing plants to fulfill the needs of Indian people. As per the statement of Minister of State for Skill Development & Entrepreneurship Govt. of India "We are a youthful nation Our youth is our strength. The world and India need a skilled workforce and we are committed to achieve this mission. In order to meet the government of India mission being an academicians I can nurture my students as an effective and responsible citizens by bringing changes in the academics and governance. Dream of our Prime minister "If we have to promote the development of our country then our mission has to be 'skill development' and 'skilled India'. Therefore for the SKILLED INDIA, Skilled learner (Engineer) is required through the nurturing of Skilled, Trained & Passionate Teacher.