

शिक्षक दिवस के अवसर पर आपको मेरी ओर से हार्दिक बधाई एवं समाज निर्माण में महती भूमिका निर्वाहन हेतु शुभकामनायें।

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## MENTOR'S OPINION

# Pedagogical Challenges for Technical Education in Digital Age

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**P**resent Digital era has put forward the greater challenges to the academia of technical education in bringing students to class room and make them learn for meeting the present technological developments.

Today the knowledge is ubiquitous and the technology savvy younger generation finds it much more convenient to fetch the desired technical content of curriculum from web instead of classroom / laboratory where they are taught by the teachers having varying teaching capabilities.

Introspection into this situation shows that during last two decades, there has been tremendous increase in intake of technical education without any serious concern for the availability of good quality teachers. This insufficiency of teachers created compelling situation for students to look for suitable options to overcome the deficiency in teaching. Variety of teachers and their different teaching styles made situation grim and students started looking for good quality technical content for self-learning. There is no doubt that the self learning is the most effective for learning from the students perspective but in case of technical education, it is essential for a teacher to imbibe the student with basic capability so that self learning can be ensured. In view of the critical requirement of good teaching content and the availability of digital technology, the efforts were made for creating animated videos about different technical phenomenon, video lectures, online courses, MOOCS and so on. One school of thought says that in spite of variety of technical study material available for self study, it is absolutely necessary to understand that the desired skills cannot be developed in the absence of student-teacher interaction during teaching-learning processes as the technical education is primarily meant for imbibing students with the understanding and analytical capability to negotiate any forthcoming challenge related to use of technology



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This ease of availability of technical content in lucid styles in form of videos is good for supplementing the content taught in class room but it cannot be considered replacement to the class room teaching where teacher interacts with the students face to face to make them learn. While others say that the traditional way of teaching is continuously losing its charm because the students today need different skills such as critical thinking, good communication skills, innovative and creative mind along with ability to negotiate and collaborate to achieve solution of the problems faced.

In view of quantitative growth of technical education, digital invasion in the lifestyle of youth, complex global challenges and fast changing technological requirements, it has become inevitable to have a suitable pedagogy that inculcates the desired technical competencies and skills in technocrats as per present expectations of technical education. Human beings learn in a variety of ways and it is a challenge for a teacher to find out the approach that makes them learn effectively. For making classroom interactions meaningful, it is important for teachers to identify the strengths and needs of almost every learner so that the teacher may choose suitable teaching style and create impact in class-



room. In today's time, students have become active learners and look for all opportunities for creating information and new ideas. Due to seamless integration of different streams of technology the traditional application of simple mathematical tools from specific stream are no more useful,

rather it has become inevitable to make students learn through their active participation in the context of real world activities, challenges and solving its problems i.e. project based learning. Teachers need to partner with community and learners for the deep understanding of the new skill requirements as well as initiate collaborative type informal learning for personalized teaching and imbibing capability of critical thinking in students. Productivity of teacher-student interaction also needs to be assessed and taken

care by teacher for ensuring that the value of learner's time is assured for creating a sense of autonomy in them to handle the real life challenges on their own. It is essential to understand the aspirations of Generation Y coming in higher education Institutions. Present day students are no more spectators, but they are active learners and endeavour for creation of information and new ideas. Teachers should essentially look into the need of the millennial and adapt personalization, participation and productivity in teaching methods. Similar to centuries ago when gurukuls used to offer real life learning, today again the learning strategies need to be embedded by real world learning and interactions between students and teachers in this regard can offer productive learning. In today's context the modified teaching pedagogy is critically required for ensuring that students are motivated by their mentors through technology driven innovative, research centric and meaningful class interactions along with generating interest for learner's own learning (LOL) with equal focus on curriculum coverage and learner understanding. Present day's ICT engulfed ambience throws challenge before the teachers for ensuring that they continue to be useful and real makers of young generations for sustainable future. HER



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