

Advances in Science Education

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Skill-Based, Problem-Based and Research-Based Learning

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ABSTRACT

For surviving in 21st century, some innovative approach to learning is required, which enables students to adapt critical thinking, apply their knowledge and to work in collaboration for the creation of new projects with better and sustainable outcomes. Problem-based, skill-based and research-based learnings are student centered techniques which provides them with a larger opportunity for independent approach to various problems, thus making a room for more innovations. The need of the hour is to shift the rapid flow of globalization towards the more efficient learning processes. Now a days, higher education curriculum gives immense importance to capability development, life oriented and learning paradigm rather than work oriented and teaching paradigm. This shift would definitely require innovation in the learning process and student learning experiences. This study shows that introducing and implementation of models like skill-based learning, problem-based learning and research-based learning increases the quality of learning. There are more chances of innovation along with the better credibility.

Keywords: Skill Based Learning; Problem Based Learning; Research Based learning; Innovation; Critical thinking; 21st Century Skills

INTRODUCTION

Today's technology has affected the way human live and work drastically (Lau, 2018) and has remarkably shifted the traditional educational paradigm towards the internet of things (Khan *et al.*, 2018; Kurniawan *et al.*, 2019 and Sulistyono *et al.*, 2019). In life-based learning, the learning activities are implemented through various characteristics like social skills, thinking skills, everyday experiences, interdisciplinary, and trans-disciplinary, learning more dynamic and flexible responses. Furthermore, in such approach, students act as organisms and sources of knowledge with collaborative learning. In today's scenario, the need of the hour is the type of learning that is able to explore the new ideas from students (Mustofa & Hidayah, 2020). Dewey emphasized on the idea of "learning by doing". He stated that the classroom should be a kind of society