

The Challenges for Teaching in Virtual Environment: Learning Tools for Engineering Education in the Quality Field

Luz María Valdez-de la Rosa

Engineering Department, School of Engineering and Technologies
Universidad de Monterrey
Nuevo León, México
luz.valdez@udem.edu

Abstract

The engineering education has natural challenges to get the learning outcomes established by the curriculum in a classroom ambiance. The interactions between students and teachers, that took place in physical spaces, can be drawn different connections for them than in virtual environment. Due to Covid19, the teachers are dealing with define the best way for make sure that students have learned in online classes, by using new virtual spaces and tools. In this lecture, we discus about the different learning tools for teaching in virtual environment, by exposing pedagogical methods and instruments for online classes. This, by showing an application in the quality field for undergraduate students in industrial engineering and engineering management. In addition, it's examine the teaching and learning in virtual ambiance and how to succeed.

Keywords

Learning tools, engineering, quality field, virtual environment.

Biography

Luz María Valdez de la Rosa is currently professor of Engineering Department at School of Engineering and Technologies at University of Monterrey (UDEM). She has more than 15 years in the academic field, as a Director of Engineering Management and Industrial Engineering Bachelor Academic Programs and as a teacher at UDEM, in the state of Nuevo Leon, Mexico. She earned B.S. in Industrial Engineering and Systems and Masters in Quality Management at University of Monterrey, Mexico, and the Ph. D. in Administration Sciences from the Autonomous University of the State of Nuevo Leon, Mexico. She has 18 years of experience in the Quality field and 13 years as a higher education teacher. She has participated as consultant for the manufacturing and services in the quality field, and participated as ASQ and IISE member.