

Disruptive innovation in learning methodologies in undergraduate students based on the visibility of scientific production in SCOPUS and Web of Science

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Abstract

The study shows the disruptive innovation in online learning methodologies focused on the undertaking of research projects for publication in prestigious databases such as SCOPUS and Web of Science. The treatment of an experimental group of students from the 8th semester of the Faculty of Engineering of the National Technological University of Lima Sur with developments based on the methodology of successive repetitions (Ebbinghaus) and on active action (Edgar Dale) in weekly sessions is considered in parallel to the fundamentals of the project course, achieving 100% approval in the first review and more than 50% acceptance letters to the conferences indexed on the Web of Science and SCOPUS.

Keywords

Disruptive innovation, Online learning methodologies, Undergraduate students, Visibility of scientific production, SCOPUS and Web of Science.

Biographies

Mario Chauca is the first Peruvian to receive the “Global Engineering Education Award 2021” by International Society, the first Peruvian Vice-President and Member of the Executive Committee of the International Federation of Engineering Education Societies IFEEES 2019-2021. Mario Chauca was a Director of the AOTS-Kenshu Kiokay-Peru, a member of the technical committees since 2010, invited by the University of Washington IEEE, in 2010 joined the Steering Committee Member IEEE-MWSCAS, has participated in committees in the European Union, Asia, America and Africa, all event proceedings are indexed in Scopus and Journals. He obtained a scholarship from the AOTS-Japan and NIPA-Korea; he was consultant IDB-PNUD-Peruvian Congress. Advisor of the winner First Award Paper CONEIMERA2018. Advisor IEEE chapters at the National University of Callao And Ricardo Palma University. Advisor First General Project Prize over 5000 projects in the Romero Group contest. First projects in the INTERCON, CONEIMERA congress and was nominated for the Graña y Montero Prize for Research in Peruvian Engineering. Nominated Peruvian Research Southern Prize 2019 and nominated research award 2018 MEXICO. He has published more than 50 papers in Peru and internationally, served as author and advisor of articles published in IEEEExplore, Scopus and other database, organizer of international academic events and editor of proceedings, He teaches at the postgraduate and undergraduate level, with 30 years of experience. He graduated as an Electronic Engineer from Ricardo Palma University in Lima Peru, obtained his Master’s Degree and his Doctorate.

Danilo Cáceres, Electrical Mechanical Engineer by profession, Bachelor's Degree in Electrical Mechanical Engineering, Master in Energy and Environment and Doctor in Environmental Management, with 29 years of professional experience and social work; performing in positions at the San Luis Gonzaga National University of Ica, Faculty of Electrical and Electronic Mechanical Engineering, Member of the Faculty Council, Member of the University Assembly and heads of University Management and Teaching, Ordinary Member of the College of Engineers of Peru. As a professional, he exercised University Teaching, professor in the course of Electrical Machines, Undergraduate Thesis Counseling to obtain a Professional Title in the Faculty of Electrical and Electronic Mechanical Engineering. He developed consultancies in infrastructure projects, renewable energy and management in social investment projects.