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# MAPPING KEY CONCEPTS OF E-LEARNING AND EDUCATIONAL-SYSTEMATIC REVIEW THROUGH PUBLISHED PAPERS

ICERI2018 Proceedings

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## Introduction:

e-Learning also known as electronic learning has gained a wide acceptance from all educational fields and academic institutions. In the past decades we have experienced a profound growth of e-learning courses in education and multiple systems have appeared from medicine to management covering different needs and users.

Previous studies indicate a proliferation and discrepancy of e-learning contents that affect interoperability patterns in education for students, teachers and academic staff and have done little to assess the usability of e-learning educational systems leading to contradictory findings that can mislead academics and users.

## Purpose:

The aim of this investigation is to provide information on several types of findings relating to the cumulative results on e-learning in education. We carefully analyzed 99 articles with peer review from 2010 to present conducted in different fields of education.

Research questions: For the research synthesis tree main questions are stated:

What is meant by e-learning in different academic areas? Search for a common definition.

Which contents of e-learning are included?

Which are the elements that have been studied and why?

## Design/methodology:

For this study, we used a collection of methodological coding protocol with the aim to standardize and make explicit all the procedures used to collect and code the articles with keywords: education and e-learning. We employed Leximancer text analytics software (4.0 edition) to analyze a large number of articles covering the research topic. The Leximancer software bases its analytical procedures on Bayesian statistical theory and accumulates fragmented pieces of evidence to anticipate what is occurring, in essence, Leximancer uses a quantitative approach to conduct qualitative analysis for this

systematic review.

#### Results:

The systematic review identifies four themes, Learning is the most important theme “314 hits” in the literature, interpretation reflects the main related concepts (education, technology, mobile, teaching, devices, applications, educators, universities ) the second most frequent theme is Education with “208 hits” associated concepts are (education, development, social), the third themes explored in the literature associated learning to the academic context and is Students “119 hits” with four concepts (students, satisfaction, system, factors) and Usability “109 Hits” with the final concepts associated of (use, online, effective)

#### Originality:

his paper organizes 8 years of research that contribute towards providing an update overview of key drivers in e learning and education

**keywords: e-learning, education, systematic review, semantic analysis.**