

22BCE0159(Y.Poonia)

Title: Virtual Situated Learning of Spoken English Based on Computer Simulation Technology

Abstract:

This research report delves into the innovative approach of utilizing computer simulation technology to facilitate virtual situated learning of spoken English. The study explores the potential of this technology-enhanced learning method in improving learners' spoken English proficiency and their ability to communicate effectively in real-world contexts. Through a comprehensive mixed-methods research design, the study examines the effectiveness of virtual situated learning by analyzing language acquisition, learner engagement, and the overall learning experience.

Introduction:

Background:

Language learners often encounter challenges in practicing spoken English, especially when attempting to use the language in authentic and contextually relevant situations. Virtual situated learning, which leverages computer simulation technology, offers a promising solution to bridge this gap by creating immersive environments that simulate real-life communication scenarios.

Research Objectives:

The primary objectives of this research are as follows:

- a) To investigate the impact of virtual situated learning on learners' spoken English proficiency.
- b) To examine the effectiveness of computer simulation technology in creating realistic communication contexts.
- c) To assess learners' engagement and motivation in a virtual situated learning environment.
- d) To explore learners' perceptions and experiences of virtual situated learning for spoken English.

Methodology:

Participants:

A diverse group of language learners with varying proficiency levels was selected for the study. The participants represented different demographic backgrounds and language learning experiences.

#### Research Design:

A mixed-methods research design was employed, combining quantitative assessments and qualitative data collection methods. Pre-test and post-test evaluations were conducted to measure learners' spoken English proficiency, and qualitative data were gathered through surveys, interviews, and participant observations.

#### Virtual Situated Learning Environment:

The study utilized a computer simulation platform designed to replicate real-life communication situations. Learners engaged in conversations with virtual characters in scenarios such as job interviews, travel interactions, and social gatherings. The technology aimed to provide an authentic context for practicing spoken English.

#### Results:

##### Improvement in Spoken English Proficiency:

Quantitative analysis indicated a statistically significant improvement in participants' spoken English proficiency scores after engaging in virtual situated learning. The technology-enhanced environment effectively facilitated language acquisition and usage.

##### Realistic Communication Contexts:

Participants expressed a positive perception of the realism of the communication scenarios provided by the virtual situated learning environment. They reported that the scenarios closely resembled real-world situations, enabling them to practice language skills in context.

##### Enhanced Engagement and Motivation:

Qualitative data revealed that learners exhibited heightened engagement and motivation while interacting with the computer simulation technology. The interactive and immersive nature of the learning environment contributed to sustained interest and active participation.

### Positive Learning Experience:

Learners expressed satisfaction with their experiences in the virtual situated learning environment. They appreciated the opportunity to apply their language skills in practical scenarios and believed that this approach bridged the gap between language instruction and real-world communication.

### Discussion:

The findings suggest that virtual situated learning of spoken English, facilitated by computer simulation technology, offers a valuable method for enhancing language proficiency, engagement, and motivation. The immersive environment enables learners to develop their communication skills in contextually relevant situations.

### Conclusion:

This research highlights the potential of virtual situated learning as an innovative and effective approach to improving spoken English proficiency. Computer simulation technology creates immersive contexts for learners to practice language skills, fostering engagement, motivation, and real-world communication abilities. Further exploration and integration of such technology-driven approaches in language education are warranted to maximize their benefits.