

Public Abstract

First Name:Carla

Middle Name:Pauline

Last Name:Bates

Adviser's First Name:Joi

Adviser's Last Name:Moore

Co-Adviser's First Name:

Co-Adviser's Last Name:

Graduation Term:SS 2017

Department:Information Science & Learning Technologies

Degree:PhD

Title:TEACHING PEDAGOGY AND PREFERRED LEARNING STYLES FOR INTRODUCTORY COMPUTER PROGRAMMING COURSE

As society moves into the information age, it has generated the need for people capable of computational, and computer-oriented tasks. Universities have responded with more disciplines requiring at least one programming course, but educators stand witness to students of all degree majors struggling in these introductory programming courses. Traditionally, these courses follow a classic pattern of lecture followed by homework programs written during lab sessions. This raises the question of whether students would be more likely to complete a beginning programming course successfully if instructors included various pedagogy styles.

In this research, the question is addressed by interacting with students through various methods in a controlled fashion to quantify the impact of student learning styles. This is achieved by the instructor posting programming teaching materials matching known learning style featuring variation in visual, aural, read/write, and kinesthetic (VARK ) concentrations. Then the students complete the VARK®, A Guide to Learning Styles, questionnaire. It is found that there are not any significant statistical relationships in regard to preferred learning styles, but additional teaching material for different preferred learning styles were popular with the students.