

Running head: METHODS

IDT 510: Methods

Bill Bennett

California State University Fullerton

Participants

Students enrolled at Urbita Elementary school in San Bernardino will be asked to participate in this study. The selection of participants will be from Mrs. Dacio's First grade class. It is expected that all students in Mrs. Dacio's class will participate which totals twenty-one students. Of the twenty-one students, twenty are Hispanic and one is Caucasian. Ten of the Hispanic students are English Language Learners (ELL). The gender distribution is nine girls and twelve boys. The age of the participants is between six and seven years-old.

Design

The design of this study will be experimental. The independent variable will be learning modality. The dependent variables will be student accuracy in applying instructions recorded by Mrs. Dacio after her students have completed a post application test, the participant's gender and whether English is the participant's primary language. No pretest will be given in order to control for practice effect.

Procedure

Mrs. Dacio will separate the students into four categories: girls whose primary language is English, boys whose primary language is English, girls whose primary language is not English, and boys whose primary language is not English. From the four categories Mrs. Dacio will randomly assign matched pairs into two groups. The experimental group will be shown a Camtasia created audio/video presentation instructing the students as to which types of specific features to add to a gingerbread man. The control group will be simultaneously presented the same audio presentation without the video. The presentation and testing will take place in the Urbita Elementary school computer lab with privacy screens in place for each student's station.

and the assessment will take place immediately after the instructional presentation to both groups.

The Web site Starfall will be used to assess student's retention of the information presented in the instructional tool. While on the Starfall Web site, students will use a Flash-based application to select assignment of three features and three feature color choices for a gingerbread man. The features choices consist of circle, triangle, square, or rectangle for the eyes; sphere, cone, and cube for the nose; and circle, triangle, square or rectangle for the buttons. The feature choices are then followed by color choices for each feature consisting of blue, brown, and green for the eyes; purple, yellow, or pink for the buttons; and red, brown, or orange for the nose. The gingerbread man graphic appears on the left of the screen and each feature choice eyes, nose, and buttons, and each feature color choice appear sequentially on the right of the screen. According to the instructional presentation, once each step was completed, the final gingerbread man should have had green triangle eyes, a red cone nose, and yellow circle buttons.

Mrs. Dacio will coordinate the students as they move throughout the steps by saying "now choose the shape for the eyes, click the green arrow to move to the next step, now choose the nose shape, etc." but will not be instructing the students as to which selection the student needs to make for each feature. Once the assessment is completed, Mrs. Dacio will record the results of each student by counting how many features the student chose that correctly matches what they were instructed to select in the instructional presentation. During the statistical analysis the data will be examined to determine if a correlation exists between the independent variable and the dependent variables, the assessment score, gender, and English as a primary language.