

Interactive Multimedia Oral Language Instruction for At-risk Students

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Description

The Narrative Strategy CD Program is an interactive multimedia program designed to teach oral language skills to at-risk adolescents. The program will be introduced, and research data demonstrating its effectiveness will be discussed. The focus of the presentation will be on the development of the interactive multimedia (IM) format and a demonstration of the program. The advantages of the multimedia format from both a production and instructional standpoint will be discussed. The software includes demonstrations of various skills through the use of post-production compositing of videos with embedded alpha channels. Flash animation is used to enhance the software, particularly in the interactive practice activities that students use to review content. The software includes a coded tracking system to monitor the user's progress, and quizzes have been included to evaluate the user's knowledge throughout the program. The software programs used in this project were Flash Professional 8.0, Adobe Photoshop, Pro Tools LE, Final Cut Pro, Sorenson Squeeze, and Bryce.

The Project

Development and evaluation of the Narrative Strategy CD Program was funded by the National Institute of Child Health and Human Development. Specifically, the purpose of the project was to design and field test an interactive multimedia program for teaching at-risk students in grades 6 through 9 an oral communication strategy for clearly and concisely presenting narrative information.

The resulting Narrative Strategy CD provides self-paced instruction in communication strategies. Students use the first part of the program to learn to prepare to tell a story. They are taught to think about their audience and decide whether or not a casual or formal style of speaking is most appropriate for that situation. They watch youth actors demonstrating examples of casual and formal styles. They then listen to and/or read along with a story and are instructed how to determine the important elements of the story. Students are taught to transfer these elements onto a graphic organizer (called a "story map"), add interesting vocabulary, and practice saying the story aloud, using their maps as a guide. They practice the skills taught with interactive activities. Games and quizzes were also included in the program to help students gain mastery of the content.

During the second part of the strategy, students learn how to "deliver" the story to an audience. They are taught to attend to their vocal expression, facial expression, gestures, posture, proximity to the audience, eye contact, adjust their delivery based on clues from the audience, listen and answer questions, and evaluate their own performances.

In the next section of the program, students watch as all of the steps of the Narrative Strategy are used and then they practice the steps to tell a story. Finally, they learn about and use the steps of the strategy to plan and write a short story of their own.

Field Test Research

Research studies were conducted to test the efficacy and effectiveness of the program. The results of the studies indicate that the interactive multimedia format is an effective way to teach oral language skills to at-risk students. The studies showed that experimental students increased their understanding and performance of storytelling skills as a result of the instruction, and those results were significantly different from the results of the comparison students.

This project is relevant because a reported six million students are at significant risk of dropping out of school, and these students are disproportionately poor and represent minority populations. There are several barriers to oral language instruction. A pressing challenge confronting those who work with at-risk students, besides finding appropriate curriculum materials, is finding sufficient time to provide the intensive and explicit instruction required to bring about significant change in student performance. With the growing pressure to provide instructional services to all students within the context of the general education classroom, this problem is compounded even further because of the prevailing expectation for general education teachers to cover large amounts of content -- often at the expense of skill or strategy instruction. Since both time and financial resources are limited, alternative instructional formats need to be designed for teaching critical strategies to students under prevailing school conditions.

The interactive multimedia (IM) format is a viable option because it offers several advantages over traditional instructional programs. The instructive advantages to the multimedia format include the following: it provides immediate access to a validated instructional program; it allows youth to complete instructional activities at convenient times; it permits youth to review the information whenever needed; it provides standardized delivery of instruction (intervention fidelity); it accurately monitors and assesses learning progress; it provides a non-threatening context for instruction; and it can provide culturally sensitive instruction in a format appealing to youth. In addition, the IM format allows flexibility in scheduling instruction (e.g., after school, during study hall) to minimize loss of instructional time in other areas. From a production standpoint, the newer Flash 8 Professional technology used to create this software allows less expensive production but produces a high quality product that is more affordable to the educational community.