Abstract ID : 54

Using a Paper-based Digital Pen to Support English Course in the Regular Classroom to improve Reading Fluency

Content:
Due to teaching English in Taiwan always focus on words, grammar and translations, students used to decode words one by one. So they can recognize words but fail to comprehension. In order to help students make the transition from reading that is word by word to text comprehension, reading fluency is the crucial bridge and considered to be critical to skilled reading and comprehension. Repeated reading proved to be a popular strategy and improves both students’ reading fluency and comprehension. Repeated reading strategy is having students read and reread the same passages or texts repeatedly. Through a great deal of practice, decoding word become automatic and students can be devoted to text comprehension to become fluent reader. Unfortunately, teachers always fails to provide individual student sufficient practice in their classroom. Given this, a variety of training tools have been developed at the aim of improving students’ reading fluency. However, most of them are computerized applications and use a screen-based interface to provide digital support. However, many students still prefer to use paper materials especially. Also, many studies indicated that paper is still ubiquitous and plays an important role especially in reading activities.
In the study, we used a paper-based digital pen to integrate digital functions into traditional paper material, and design a novel fluency intervention program incorporated into an English course in the regular classroom in Taiwan. During class, students can use digital pen to tap the Voice paper button to listen to good models of fluent reading for each selection passage. That can give students the chance to hear where to pause, where to change pitch, where to place stress and which segments to elongate. Students can also switch digital pen to Record mode to record their voice and then play back their recordings for themselves or for others to hear how they are using fluency skills to read. Thereby the students require minimum (or no) behavior changes during learning, and could have significant opportunities to practice each core component of fluency program in an accessible way.
Due that the intervention program was new to teacher and students, a questionnaire was first designed to assess their satisfaction and acceptance. The result shows that the program not only can be perceived by teacher as feasible but enjoyed to practice by students. Moreover, there are still important issue should be noticed that what components within the program are critical to the success? What attitudes and preferences of individual student toward the program? To understand these issues, we
apply the repertory grid technique as a tool for eliciting precise understanding of
the students’ preferences related to the program. Finally, teacher was able to give
suggest ways to use the program effectively to help students make substantial gains.
In the study, three findings are worth summarizing: (1) with the paper-based
interface, not only student can practice reading comfortably in paper material but
enjoy the benefits of using digital functions, (2) without computer, the fluency
intervention program can be easily incorporated into regular classrooms, (3) students
should re-listen a model until a suitable criterion is met, and then are allowed to
practice independent reading.

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**Track classification**: e-Learning

**Contribution type**: --not specified--

**Submitted by**: Mrs. TAN, Chia Chen

**Submitted on**: Friday 07 October 2011

**Last modified on**: Friday 25 November 2011

**Comments**:

**Status**: PROPOSED TO ACCEPT

**Track judgments**:

  Track: e-Learning
  Judgment: Proposed to accept (Oral Presentation)
  Judged by: CHEN, Nian-Shing
  Date: 25 November 2011 05:41
  Comments: ""