

# Facilitating Story Revision Through Peer Questioning on a Scribble Environment

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**Abstract:** For the past 1 1/2 years, eight second-grade Taiwanese classrooms ( $n = 207$ ) have used *BookTalker* to draw pictures and write stories. Although, this allows for easy sharing of one's story, students still seem to lack an understanding of what constitutes a "quality" story or how to self-improve. The study proposed in this paper aims to extend the use of *BookTalker* to enhance the quality of students' stories by incorporating scaffolding through the process of asking questions regarding the content of peers' stories, critical analysis of asked questions, and story revision.

**Keywords:** story writing, peer questioning, drawing, writing revision, scaffolding

## 1. Introduction

In traditional elementary school Chinese writing classrooms, students passively execute writing tasks assigned by teachers with the goal of merely turning in written homework assignments containing bits of knowledge acquired in past lessons. To approach this problem, interactive peer questioning on a digital environment is considered as a strategy to increase students' analytical skills in order to improve their written Chinese. For the past 1 1/2 years, eight second-grade Taiwanese classrooms ( $n = 207$ ) have used *BookTalker*, an application of "Crazy Brush" [3] developed to allow students to create stories through drawing and writing. The main purpose of the proposed study is to facilitate students' story revision through peer questioning on the scribble environment "BookTalker." In addition, this study attempts to observe specifically what about peer questioning enhances story quality.

### 1.1 Sharing and Revising Stories

In traditional Chinese classrooms, computers and the Internet provide potentials of making such stories meaningful and interactive. By drawing and writing on the computer and then sharing these creations online with classmates, more interactive opportunities can be created. In the present study, the researchers present a scenario in which students need to solve problems (questions) generated by peers.

### 1.3 Peer Questioning

Several studies have been carried out investigating question generation [1, 2, 6]. Saddler [5] reports that students with learning disabilities increased their story-writing ability through self-regulated strategies. Although much interaction took place in the previously reviewed studies, but do to the fact that this interaction was conducted face-to-face, this interaction was extremely limited. Hence, the study proposed in this paper provides students with an

extra period of time for interaction through the online-based peer interaction afforded by *BookTalker*.

## 2. Peer questioning to enhance story quality

Based on previous research, we designed a three-session activity to stimulate students' peer questioning: (1) Writing a story; (2) Questioning peers' regarding their stories; and (3) Revising one's own story. In session one, students' literacy skills will be improved through writing practice during the story creation process. Besides, students will be able to gain the knowledge of the elements that constitute a good story. In session two, students are empowered to judge and give comments about peers' stories. In session three, revising stories enables students to gain ownership of their stories. At the same time, their literacy skills can be improved by revising errors.

The teacher will first introduce the system and all "BookTalker" functions including how to draw, write, give titles, submit a story, choose another's story to ask questions, submit questions, and revise one's own story (see Fig. 1). Then the teacher will illustrate examples of the seven elements that generally occur in a good story and how the peer-questioning task should be completed through the use of a sample story included in *BookTalker*. Afterwards, an entire class peer questioning story practice using a second sample story from *BookTalker* will be conducted to confirm if students can take story-specific questions into practice. In addition, an instructional video and an image laden textual description as references are available to students while interacting on *BookTalker*.



Fig. 1 BookTalker Drawing Interface

First, students choose and read two classmates' stories on *BookTalker*. The drawings and writing associated with a story is unavailable for preview. Instead students are given a list of story titles to choose from. Once a story is chosen, the story writer's name will be appended to the story title and the story will be removed from the list of available stories; the story writer's name is shown after selection to aid face-to-face interaction that takes place during the story revision process.

Second, students are able to propose questions below each picture or on the webpage that presents all four pictures of the story. Each student is asked to propose at least two questions for each story chosen. A five-minute countdown begins when a student starts the process of posing questions on a classmate's story; if two questions have not been generated after the five minutes are up the student will receive links to the instructional video and reference material as well as the question prompts. After submitting two questions for the first story *BookTalker* will then send the student to the second story where the process is repeated. After all students have proposed questions regarding two classmates' stories, each student revises one's own drawing or writing according to peers' questions. Before revision, students must determine if the questions contribute to the revision. Students decide which questions to take into consideration or to debate with the question givers face-to-face until a consensus is reached. After the story is revised, individuals resubmit through *BookTalker*.

### 3. Discussion

The purpose of the proposed study is to develop a three-session activity to guide students in generating questions regarding peers' stories in order to improve students' Chinese writing and story creation. Students are expected to improve from three different perspectives; they are: social, psychological, and cognitive.

*Social perspective: Empowerment in the classroom.* In this study, the role of reviewer shifts from teachers to peers. With this empowerment [8], students' performance in story writing is expected to improve allowing students to produce more authentic creative quality stories.

*Psychological perspective: The Ownership of work.* Creating and revising stories is not merely to meet teachers' requirements, but also to foster ownership [7]. During the processes of generating questions and revision, students become deeply involved in their own and peers' story creation to not only improve story quality but also analytical skills.

*Cognitive perspective: The practice of literacy skills.* Compared with explicitly teaching students the knowledge of literacy skills, a meaningful writing task of creating and revising stories enables students to take these skills into practice [4]. Peers' questioning plays the role of facilitating the process of story revision.

The progress of this proposed study so far has been the construction of *BookTalker*. The upcoming work is to run the experiment in a third-grade Chinese writing classroom as a pilot.

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