Using Self-generated Drawings to Support Writing and Storytelling in Language Learning

Calvin C. Y. LIAO[*], **Yi-Chian LEE, Maureen WU, Tak-Wai CHAN**
Graduate Institute of Network Learning Technology, National Central University, Taiwan
*Calvin@cl.ncu.edu.tw

Abstract: Previous study indicated that self-generated drawings strategy possible will play a key role on students' learning to speak and write from emergent literacy to conventional phase. Hence, this study developed a self-generated drawings environment to support young children writing and storytelling. We implemented an activity integrated of drawing, writing, and storytelling. In particular, each student used the tablet PC to share a story with drawing and writing product. Besides, some implications about three future directions were also discussed.

Keywords: self-generated drawings, writing, storytelling, language learning

1. Introduction

In the last three decade, the relationship between drawing and writing has been explored in relation to children's literacy development (Caldwell, & Moore, 1991; Norris, Mokhtari, & Reichard, 1998). Some studies have suggested that student-generated drawings can supported for a variety of learning activities (van Meter, & Garner, 2005). In particularly, these suggestions included construction of knowledge representation (van Meter, & Garner, 2005), preparation for narrative writing (Caldwell, & Moore, 1991), and pre-writing strategy (Norris, Mokhtari, & Reichard, 1998). On the other hand, for a long time, oral narrative is considered important for interpersonal interaction and social communication (Vygotsky, 1986). Some studies considered that the oral narrative about the drawing and writing could scaffold children's topical understanding, such as using drawings to planning and discussion (van Meter, & Garner, 2005). That means that oral narrative about the drawing and writing allow children to share more detailed and accurate information with each other; they become acutely aware of the contrast between the pre-drawing-and-writing and the post-drawing-and-writing. In particularly, children determine whether modify their original illustrations, recreate new drawings, or add new text that more accurately reflects their drawing and writing. Above learning activities mean that student's self-generated drawings strategy have potential value for oral language and written language of primary children. In other words, self-generated drawings strategy possible will play a key role which students learn to speak and write from emergent to conventional phase. By contrast, few empirical studies of drawing construction on speaking and writing aspect have been systematic implementation in formal school, and much remains unknown about this learning process. Moreover, children in Taiwan lack the opportunity to practice oral narration and express their opinions (Chang, & Ku, 2008). Norris *et al.* (1998) also indicated that there has been limited formal study about the role of drawing in the writing process of children in primary grades 1-3. If we could combine drawing, writing, and storytelling

which will be more meaningful for children's language learning. Hence, this study attempts to support students drawing, writing, and telling their products in order to improve the writing skills and storytelling abilities of children.

2. Through Self-generated Drawings Strategy to Support Young Children Writing and Storytelling

Previous study developed an on-line drawing environment to support young children writing and to share their products, entitled Crazy Brush (Lee, Liao, & Chan, 2010). We implemented a drawing, writing, and storytelling activity. These activities in the digital drawing process can simplify automatic sketch segmentation, which can be used to support students in creating products from drawings. In particular, each student used the tablet PC to share a story with drawing based on text of writing. We hope the Crazy Brush system could let students draw their scribble and have fun, and meanwhile students would write a story about their scribble. In other words, students would find the interesting element from the process of drawing their scribble and transfer into writing, and presenting their products. The main sources of products include two ways: one is reading and the other is life experience. The Crazy Brush system would provide a writing channel and students could write a story through describing others' scribble. Through the system, students could mutually share ideas and maybe they could get more creative inspirations and ideas which will not be limited to reading or experience. Crazy Brush system utilizes three strategies to enhance students' learning and motivation. We hope system design is flexibility and it could support various activities, whether in the classroom or after school. The Crazy Brush system function contains three parts: *drawing*, *writing*, and *portfolio (for storytelling)*.

2.1 Drawing, Writing, and Storytelling

Drawing: The system provides the most basic functions, for example: brush, eraser, color, and etc., see Figure 1. Using the eraser tool can easy clear unwanted drafts and the undo tool can quickly return to the previous step. Paper cannot provide these functions. The button design principle is intuitive which could avoid children's cognitive overload. Students could scribble through system function to name their scribble. The system will also investigate creator the sources of ideas: (1) imagination, (2) their own experience, (3) reading experience, and (4) other. After the completion of product, the students could choose whether to share their scribble picture with others and the scribbles could become one of storytelling resources.

   Writing: Students have to write a story in light of choosing their own scribble. Students can use keyboard input words or handwrite on the screen. Students have to input a story topic and the system will search related words. Students can write a story using related words. In this part, the system provides video and sound recording functions and students could telling a story according to their write story. After story writing or telling, the students could choose whether to share with others and to publish to portfolio.

   Storytelling: The portfolio function would collect students' scribble and story, and students could review all their products. They could press the button and watch others' creative writing or speech. Paper cannot record students scribble process, but the system provide this function. In portfolio, students can see others scribble process, and they can learn from each other. In addition, the system also provides recommend feature, students can vote their favorite creation. We hope to make writing more fun and let students do the initiative writing and speaking.

2.2 *The Design of Activity Flow: Drawing, Writing, and Storytelling*

This section describes the Crazy Brush system how to use in the classroom learning activities. In the activity, teachers provide certain topic of activities. Through these topics, students need to paint and write a story, see Figure 1. The learning activity includes 3 steps. Step 1: students need to think and organize the ideas in mind, and then draw pictures. Step 2: students need to describe and explain these pictures, and then write down some scripts according to previous ideas. Step 3: students need to share and present these scripts and pictures with others.

Figure 1. Drawing, Writing, and Storytelling in Crazy Brush.

3. Remarks

This study developed a self-generated drawings environment to support young children's writing and storytelling. We implemented a drawing, writing, and storytelling activity. We come up with three future directions in which deepening the *creation*, *sharing*, and *assessment* of story making could be implemented. First, we should focus on story creation in order to increase the content and structure of story. Secord, we should focus on story sharing in order to provide the opportunity and interaction of students. Finally, we should focus on story assessment in order to enhance the sentence usage and article structure.

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