

virtual forum theater – a CSCL environment for scenario generation and rehearsal for change

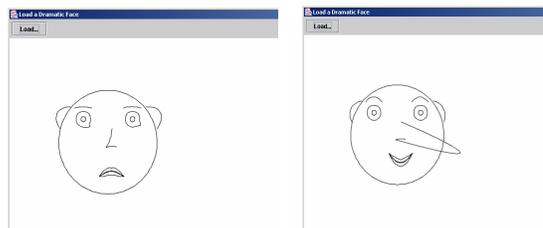
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Virtual Forum Theater (VFT) combines education, theater, and technology to allow children to produce drama via digital means, including audio, images, and video. We performed a multi-week field test of software that we designed for VFT. Eight girls ages 10-12 participated in creative drama workshops and were invited to create plays using VFT software. Detailed observation of their behavior during their use of VFT exposes several obstacles that future design must overcome. For example, tensions arise when collaborating on creative drama that portrays real life issues as children interact through the varying perspectives of developmental stages; the things that are important to children in each stage vary from fantasy to reality and might delay communication and reflection about oppressive struggles between them. For this study we assess how the children make use of the tools and how the tools provide them with the desired learning in playwriting, planning, artistic expression and team collaboration. Based on this experiment, we will determine what the next steps should be in terms of interface and development.

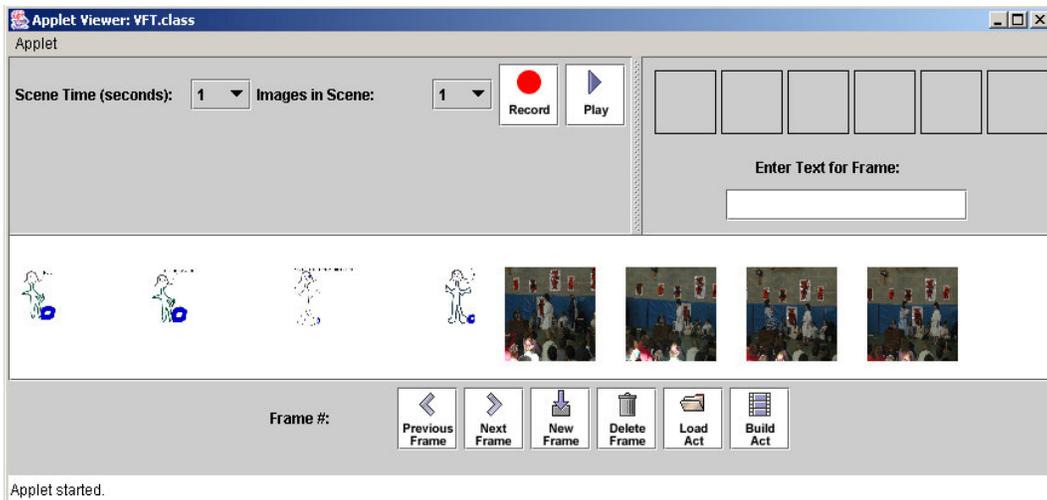
In semi-structured afterschool sessions, children use these first prototypes to create dramatic scenarios. These three weeks of study provided an initial basis for measuring changes in target behaviors such as: children's abilities to identify, recognize, and respect others' points of view; solve personal and community conflicts; and identify oppression as it occurs. Some of these behaviors lead to the study of the main constructs: expressive fluency, critical awareness and conflict resolution. Expressive fluency is confined to digital drama, visual arts (computer drawings), digital literacy and is the ability to express emotions through acting, drawings or playwriting. Critical awareness is the ability to process and question any information received by someone else, as well as the knowledge being incorporated. Conflict resolution means solving a struggle or disagreement between people in real life or in stage.

The Dramatic Face interface provides an environment where children can modify (tweak) a pre-drawn face in order to give it the desired expression or emotion. Tweaking involves placing a mouse cursor over a facial feature, holding down a mouse button, and moving the mouse to change the feature's shape. The lines describing a given part of the face like eye, nose or mouth behave like rubber bands when the mouse pulls upon them. The framework of universal emotions such as sadness, happiness, anger, surprise, disgust and fear provided by Ekman (1975) are the basis for the design of DF. The GUI storyboard interface provides an environment where the learner puts together a sequence of at least three images to create a sequence of movements (action) and records a speech line for the characters. The sequence of images and voices are then played as an animation in Real One Player™ in the Internet where groups of children can interact and modify the play simulating different solutions to the same conflict (Cavallo, 2004).

The theoretical framework is based on Pedagogy of the Oppressed (Freire, 1972), constructivism (Piaget, 1977), constructionism (Papert, 1980), Computer Supported Collaborative Learning (CSCL) (Koschmann, 1996), Theater of the Oppressed (Boal, 1974) and Brecht's theory on theater (1964). The learning afforded by VFT is social by design and therefore all the premises explored by the socio-constructivism paradigm (Vygotsky, 1978) apply to our study. Children work in groups, negotiating meaning, taking different roles in their collaborative stories, swapping points of views and elaborating argumentations to justify their choices and to solve conflicts.



Dramatic Faces



Java GUI storyboard interface

Keywords: CSCL, socio-constructivism, Drama in Education, virtual learning environment