Encouraging Attitudinal Change through Online Oral History

Jason B. Ellis, Amy S. Bruckman College of Computing, Georgia Institute of Technology Email: {jellis, asb}@cc.gatech.edu http://www.cc.gatech.edu/elc/palaver/

Abstract: Computing technology has been used extensively in the classroom to aid students in learning about math, science, and writing. Comparatively little work has focused on the sorts of history learning computing technology facilitates, if any. Can computing technology be used to facilitate history learning? What does it mean to support history learning? How do we evaluate such learning? In this paper, we give an overview of some of the key components of history learning and discuss one way to encourage them: supporting students as they explore history through direct contact with and interpretation of primary sources. We present Palaver Tree Online, a constructionist and social constructivist environment that aims to enable authentic history learning by supporting students in doing oral history projects online. We then discuss the impact of the system on the development of empathy, one of the four forms of historical thought. Specifically, analysis of the data shows that students develop an increased empathy for elders and a stronger enjoyment of learning history through participation in online oral history.

Introduction

Technology has been used to support many types of learning in the classroom – from math to science to writing. A great deal of work has focused on history learning (see (Wineburg, 2001) for a survey) and the practical issues involved in using technology to teach history (PeachStar Education Services, 2001; Sample, Hofmann, Finlay, & Weiss, 1998; Thompson, 2000; Trinkle & Merriman, 2000). However, comparatively less attention has been given to understanding the specific types of historical thought technology can help students develop (Bass & Rosenzweig, 1999). Here, we discuss a software system that aims to support history learning through online oral history and offer an analysis of its impact on one educational vector: attitudinal change.

We begin by giving an overview of some of the key components of history learning and look at a way in which these forms of learning might be encouraged. We then discuss Palaver Tree Online (PTO), an environment which employs ideas from constructionism (Papert, 1991) and social constructivism (Vygotsky, 1978) to support authentic (Shaffer & Resnick, 1999) history learning. We then discuss a study design designed to uncover attitudinal change in the areas of history, language arts, and elders. We then describe the results of that study – significant change on nine attitude statements, providing evidence of increased interest in history and empathy for elders. Finally, we discuss the implications of those results for CSCL and conclude with ideas for future work.

Issues in History Learning

At a high level, history learning can be split into two categories: retention of historical content and the more general ability to think historically. While one can learn historical content prior to developing historical thought, developing some level of understanding about the nature of history makes synthesis more likely. This is because developing historical thought means developing the tools necessary for thinking critically about historical content. A review of the literature has uncovered four interrelated characteristics of historical thought:

Present vs. past context – helping students develop the notion of the often vast differences between our current day understanding of the world and the understandings of those in the past. Learning to avoid thinking that the categories we use to understand the world (racism, tolerance, etc.) are not static, a pitfall Lowenthal refers to as the "timeless past" fallacy (Lowenthal, 1985).

Empathy – helping students develop a sense of empathy that allows them to "see through the eyes of people who were there" (Bradley Commission on History in Schools, 1988). This can help students develop a broader understanding of those who are different from themselves in general.

Author bias – helping students develop a belief that subtexts exist and learn to consider the source. Crismore found that the removal of hedging language, especially prevalent in textbooks, is often read as an indicator of truthfulness by students (Crismore, 1984).

Understanding the multiplicity of history – seeing history not as a fixed story, but a dynamic and continuous uncovering and reinterpretation of the past. As Holt puts it, students should see the construction of history as an "ongoing conversation with the past, not a closed catechism or a set of questions already answered" (Holt, 1990).

With these goals in mind, one is left with the question of *how* to encourage these types of historical thought. Although there is much more to learn about the development of historical thought (Wineburg, 2001, p. 110), the directive that many researchers agree on is that we need to engage students in doing history – helping them understand the past through telling it (Bass & Rosenzweig, 1999; Ross, 1998). Here, Wineburg offers some important advice:

It is not enough to expose students to alternative visions of the past, already digested and interpreted by others. The only way we can come to understand the past's multiplicity is by the direct experience of having to tell it, of having to sort through the welter of the past's conflicting visions and produce a story written by our own hand. We have in mind here a vision of history classrooms where students learn the subject by rewriting it. (Wineburg, 2001, p. 131)

This model of instruction changes the typical history classroom from a place where history is a fixed story (Loewen, 1995) to one where many different stories are considered, and the multiplicity of history is revealed. Who gets to decide which stories are included and which are left out? Working with primary sources not only gives kids a better grasp of the past, but a clearer understanding of the present.

This approach – learning history by doing the job of a historian – can be interpreted as a constructionist one (Papert, 1991), since it encourages students to explore history by doing their own research and building a representation of it that is personally meaningful. Similarly, the environment discussed here is constructionist in that it supports kids building online projects based on interviews they do with primary sources (elders). The system we describe aims to support social constructivist learning as well (Newman, Griffin, & Cole, 1989; Vygotsky, 1978). By bringing students and elders together, we hope to create an environment where elders scaffold the development of students' historical thought. In addition, our system integrates three of the four types of authentic learning characterized by Shaffer and Resnick (1999): learning that is personally meaningful for the learner, learning that related to the real world outside of school, and learning that provides an opportunity to think in the modes of a particular discipline. In our work, students ask questions of elders based on their own interests and build projects that reflect what they uncover. They learn about a particular historical era as well as how history relates to their everyday lives. Finally, by taking on the role of historian in a limited fashion, kids learn about historiography as a discipline.

Palaver Tree Online

Oral history provides one way to approach the aforementioned learning goals since it has a rich tradition of providing a view of history through the eyes of primary sources. Projects such as Foxfire (Wigginton, 1985) have shown that oral history work can make history especially tangible for students and provide opportunities for them to engage and grapple with primary sources meaningfully. In fact, Ross (1998) finds oral history to be a better way to learn history for younger children since speech is still their principal mode of communication. However, doing oral history is a time-consuming process. Interviewers must find interviewees, coordinate schedules, secure equipment, generate questions, do the interview, and produce an artifact from it. Numerous texts document interview (Seidman, 1998) and oral history (Ives, 1995) technique.

The difficulty of doing oral history is increased significantly when one attempts to incorporate it into a middle-school classroom. Teachers are already overwhelmed with work, and the prospect of training students to do effective interviews, recruiting elders to be interviewed, and scheduling times for the interviews to happen is daunting. Many texts discuss the complexities of doing oral history in the classroom (Stave, 1998; Whitman, 1999;

Wood, 2001). In fact, our early work has shown that even exceptionally talented teachers in history-rich neighborhoods have trouble undertaking such projects (Ellis, Bruckman, & Satterwhite, 1999).

Palaver Tree Online (PTO) is an exploratory project that looks at the ways in which network technology might support doing oral history in the classroom. A Palaver tree (Land, 1992) is a West African tree that serves as the center of a village. It is a place where elders come to share their life stories and where the community comes to listen. Our aim is to create an online space that honors this tradition – a place where kids can hear history from primary sources. PTO aims to reduce the amount of effort required of teachers doing oral history projects while providing students access to the stories of elders they would likely never meet otherwise. In addition, we believe that by having students take on the role of historian in a limited fashion – hearing elders' stories and distilling them into stories of their own – we can encourage historical thought.

PTO was designed and revised through four years of work in classrooms between 1997 and 2001. We began by doing two studies examining how e-mail and mailing lists support doing oral history online. Our first study connected kids with World War II veterans and the second with older African Americans (Ellis et al., 1999). We then used the lessons learned from that early work to build PTO, a software system that aims to better support and extend the online oral history process. Finally, we did two studies of PTO, one in a summer camp and another in a local middle school, in order to understand its impact. For detailed case studies of kid-elder interaction in Palaver Tree Online, see the Proceedings of CSCL 2002 (Ellis & Bruckman, 2002a, 2002b).

One important lesson we learned in the early work with e-mail is that we are scaffolding a complex social process that involves students, teachers, and elders. Teachers need a way to recruit elders to work with their classes and manage their students online. The environment needs to provide a comfortable place for elders to share their stories and other personal information online. Finally, we need to support kids taking the stories they hear from elders and creating online artifacts based on them. We call these artifacts PalaverStories. We also developed an interaction model that supports online kid-elder discourse, from curriculum to kid-elder discussion to projects to feedback on those projects. We used these and other lessons learned from our e-mail studies to design PTO – a client interface and server infrastructure that aims to help the process of online oral history go more smoothly for all. The software helps carry through our interaction model and supports the roles of kids, teachers, and elders along the way.

PTO has four primary components: *Profiles* that give background on elders and *Discussion Space* that provides a place for teacher-scaffolded kid-elder discourse and feedback on projects. PTO also features the *PalaverStory* artifact creation tool and *Home Screens* that scaffold the roles of kids, teachers, and elders in the community (see Figures 1-4).

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Figures 1 and 2 (left to right): Elder Profile and Discussion Space.

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Figures 3 and 4 (left to right): PalaverStory and Kid Home Screen.

By moving student projects online, this design reduces the "black box" problem identified in our early work and by others (O'Neill & Gomez, 1998), that is, the lack of visibility of student work in many online kid-adult relationships. In addition, our email work showed that the quality of elder responses varied – some wrote wonderful responses and others did not respond at all. PTO makes all kid-elder discourse visible to everyone. Thus, students are able to participate in discussions with more responsive elders and leverage those stories in their work. Students can also contrast the accounts of multiple elders. For more on the design of PTO, see (Ellis & Bruckman, 2001).

Attitudinal Change in Palaver Tree Online

The analysis presented here is based on data collected during the use of Palaver Tree Online in a middle school classroom during the 2000-2001 school year. During that school year, we studied the use of Palaver Tree Online in one 8th grade Georgia History class over the course of six weeks. There were 21 students in the class and they worked in groups of two, with one group of one. The classroom was predominantly Caucasian, with one African-American student and one Vietnamese-American student. Students visited the computer lab once or twice per week over the course of six weeks. Each visit lasted one hour. We did extensive classroom observation, pre and post interviews with the kids and teacher, a student focus group, and student and elder surveys. We did post interviews with several elders as well.

Before getting started with PTO, students were assigned to read the Civil Rights chapter in their Georgia history textbook (London, 1999). They then spent a day in class brainstorming questions for elders. The first day in the lab, students reviewed discussions and PalaverStories from prior classes. The second day, each group of students was assigned an elder to interview, read the elder's profile, and posted initial questions for the elder.

Interviews consisted of a question and answer session between one elder and a group of kids over the course of two weeks (four sessions). After this, kids began work on their PalaverStories while many continued their discussions with elders for an additional two weeks (four sessions). Finally, each group made their projects available for feedback from elders and other kids. Feedback occurs in an anchored discussion (Guzdial, 1997) that has the group's project as its focus. Kids spent the next two sessions giving each other feedback and reading the feedback they received from elders. A few groups made revisions to their PalaverStories based on elder feedback. Through this process, we believe students' attitudes towards elders and history will change. The study described here aims to uncover what sort of attitude changes that occur (if any).

Study Design

In order to assess students' attitudes before and after the use of PTO in a middle school classroom, we devised an attitudinal inventory composed of 45 statements regarding history, language arts, and elders on a 5-point Likert scale (Eagly & Chaiken, 1993). This instrument is internally consistent by Cronbach's alpha coefficient (Cronbach, 1990). We administered the instrument two days before the software was introduced and one day after students completed their participation. Eighteen of the 21 students completed both the pre and post survey (1).

Results

We performed two t-tests on the attitudes scores. First, we determined whether the number of kids affected positively or negatively was significant. Second, we determined whether the overall attitudinal shift was significant. Significant changes were found for nine statements (see Table 1).

STATEMENT	NUMBER THAT CHANGED	MAGNITUDE OF CHANGE	DIRECTION OF CHANGE
1. I like studying history	Significant *	Significant *	Positive
2. I could be a historian	Significant *	Significant *	Positive
3. Elders cannot teach young people	Significant *		Negative
4. Young people cannot teach elders	Significant *	Marginal significance §	Negative
5. Older people are interesting		Marginal significance §	Positive
6. I like to read	Significant *		Positive
7. I like to write	Significant *	Marginal significance §	Positive
8. I am a good writer	Significant *	Marginal significance §	Positive
9. Writing is easy		Marginal significance §	Positive

Table 1: Statements that saw statistically significant changes from the pre-test to post-test (* p < .05 or § p < 0.1). Direction indicates positive or negative change from pre to post test (1 = strongly disagree, 5 = strongly agree).

The strongest changes were for the statements "I like studying history" and "I could be a historian." Significant negative changes were also found for "Elders cannot teach young people" and "Young people cannot teach elders." Students found older people more interesting as well (statement 5). Finally, we found significant changes for four statements related to reading and writing (statements 6 through 9). All changes were in the predicted direction.

Discussion

The data presented above shows significant changes on a number of statements that relate to PTO. While changes on statements 6 through 9 certainly show important attitude changes, they deal more with reading and writing attitudes. In this discussion, we focus on statements 1 through 5, which are more related to oral history. We place these statements into two categories: enjoyment of history and empathy for elders. As we discuss each statement, we use quotes from student interviews to further illustrate their attitudes.

Enjoyment of History

Students reported that they enjoyed studying history more and believed more strongly that they could be historians. These attitude changes point to a change in how students perceive history after using PTO. More enjoyment of history (statement 1) may indicate a break with the typical student conception of history as an "endless parade of names and dates" (Wineburg, 2001, p. 169) or simply "boring" (Rosenzweig & Thelen, 1998, p. 31) and more connection with history on a personal level – through hearing elders' stories. Felicia (age 13) (all names in this paper have been changed) explains: "Instead of reading books, it was nice to be able to talk to people who actually experienced stuff. I liked it better than textbooks and stuff, because you can actually talk to real people and share your projects with them."

Similarly, a stronger belief that one could be a historian (statement 2) may point to a change in students' conceptual model of the job of a historian. For students, first hand experience with doing part of the job of a historian – hearing and synthesizing real people's stories – may have improved their attitude towards their capacity

to be successful in the history profession. As Pam (age 14) put it, "My favorite part was the story – writing the story and drawing all the pictures for it. I liked chatting with the elders and viewing everyone else's story."

Empathy for Elders

After using PTO, students also believed more strongly that elders could teach young people and that young people could teach elders. There was also a change showing students finding older people more interesting. These attitude changes may indicate a change in students' level of empathy for elders. Levenson and Ruef define empathy as "knowing what another person is feeling, feeling what another person is feeling, or responding compassionately to another person's distress" (Levenson & Ruef, 1992, p. 234).

The increased belief that elders can teach kids (statement 3) likely comes from the core structure of PTO. The kid-elder interaction fostered by the system largely consists of kids asking prompting questions of elders and hearing their stories. Thus, the increased belief that elders can teach kids indicates that interacting with elders may have fostered a clearer understanding of what elders have to offer. This change points to an increase in the level of empathy students feel for elders. Pam explains: "…everyone is always like 'it was bad, it was really bad,' but I never actually get to hear from people who actually went through it. All I can do is believe what everyone else says but to like talk to someone who was actually there kind of makes me believe better."

We also found the reverse of statement 3 – an increase in student attitudes towards their ability to teach elders (statement 4). Students created projects based on elder stories and shared them with the elders and other kids. Perhaps, then, students felt that elders learned something from what was presented in these projects. Certainly, elders other than the ones students were interviewing enjoyed reading their stories. As Pam put it, "Yeah. We got feedback from like 4 other elders that said that they really liked our story and that [we] should start writing children's novels." Other students found that the very elders that they were writing about were strongly impacted by the projects: "Ms. Hughes said it brought tears to her eyes," said Pam. Natalia (age 13) said her elder "felt like she was reliving the experience over again."

Kids felt that they both had something to learn from elders as well as something to teach them (statements 3 and 4). This result points to the possibility that students felt more of a connection with elders overall and, thus, now believe an exchange between the generations to be more useful.

The last piece of evidence for empathy is that students found elders more interesting after using PTO (statement 5). This result points to a change in student attitudes towards elders. One of the primary goals of connecting kids with elders is to demonstrate to kids the important stories many elders have to share. This result provides evidence that PTO has been successful in accomplishing this goal. Natalia puts it this way: "[PTO] gave me a whole new respect for elders – for what they had to go through and what they stood up for changed how we are today in a good way."

Implications for CSCL

Here, we have examined evidence for the impact of Internet-mediated oral history on historical thought. We have discussed some fundamentals of historical thought: developing an understanding of the importance of historical context, developing empathy, understanding author bias, and unlearning the notion that history is a fixed story. We have found evidence that online oral history can encourage a positive change in students' level of empathy for elders and, more generally, in their enjoyment of history.

Given these findings, one might categorize Palaver Tree Online as system which creates a form of empathic community (Preece, 1998, 1999). Preece defines groups "in which communication between members is strongly empathic, as empathic communities to distinguish them from groups that are primarily concerned with factual information exchange" (Preece, 1998, p. 33). Elders in Palaver Tree Online share their life experiences with students and, as we have shown above, that sharing can help students develop empathic relationships with them.

Because of the fallibility of memory, oral history should not be the only way students learn recent history. For instance, in *Remembering Ahanagran* (White, 1999), Richard White documents his mother's life and explores the contradictions between her recollections and immigration records – highlighting the complex relationship between memory and fact. However, oral history offers things that are more difficult to learn through books.

Specifically, oral history can enable students to see history through the eyes of people who have lived it and enable new kinds of engagement with historical knowledge.

Conclusion

We began this article by discussing some fundamentals of historical thought: developing an understanding of the importance of historical context, developing empathy, understanding author bias, and unlearning the notion that history is a fixed story. We then discussed our analysis of attitudinal data, which showed evidence that participation in Palaver Tree Online increased student empathy for elders and interest in history.

We conclude that online oral history can positively impact students' development of one area of historical thought: empathy for others. In addition, we have provided an example of using the Internet to make authentic social constructivist and constructionist learning feasible under realistic conditions – in the classroom. In CSCL 2002, we also looked at synthesis as an indicator of learning in online oral history (Ellis & Bruckman, 2002a, 2002b). Future work might aim specifically to encourage learning in other areas of historical thought. For instance, Kathy (age 13) seemed to indicate an interest in exploring the multiplicity of history. She found hearing different perspectives useful because "it adds information to what I know about and gives me another opinion of what people think. Just to show the different sides." Jacob's (age 14) thoughts about the differences between what he had learned in school and the stories his elder shared lead to an interest in better understanding author bias. He puts it this way:

I think that what they really taught us back in elementary school and grade school was that the African Americans were really scared to fight back at all and that [our elder] was really saying that they just did lots of stuff did all kinds of things, to get their equality.

Others indicated an interest in gaining a deeper understanding of historical context. Pam put it this way: "[I enjoyed talking with my elder] because you can kind of be on the same level as them. Be able to see what happened." Finding ways to encourage and evaluate historical thought in these areas is an important next step in developing our understanding of technological support for history learning.

Endnotes

(1) The full attitudinal survey is available online at http://www.cc.gatech.edu/elc/palaver/study/survey2001.html

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