Integrating the critical thinking approach with web resources:
An application to history teaching in a junior high school

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1. The Research Problem
In line with a shift from transmissional/didactic instructional approaches to constructive/critical activities, the technology mediated history curriculum via critical thinking instruction is constructed to provide students an opportunity to engage in a critical and meaningful investigation of history. Instead of consuming predigested accounts of historical figures, events, and fragmentary information, the project engages students in authentic historical inquiry. Peter Stearns (2000), a leading American historian, wrote about teaching history to young people, saying: "The key to developing historical habits of mind...is having repeated experience in historical inquiry. Such experience should involve a variety of materials and a diversity of analytical problems...What matters is learning how to access different magnitudes of historical change, different examples of conflicting interpretations, and multiple kinds of evidence."

As students often do not see the nature of evidence gathering and interpretation in history and the discursive nature of history texts; thus, they tend to view history texts as "objective truth" that they do not question or otherwise think about critically. The critical thinking modules using major characteristics and theories of Richard Paul's model, Ennis are designed and instruct students how to analyze and interpret primary source documents. The model was integrated into a series of assigned classroom activities, stimulating learners’ using sourcing, contextualization, and corroboration as engaged in by historians (Wineburg, 1996). The design of web sources is designed to broaden the students' understanding of events, periods, and themes by offering them the multiple perspectives. In addition, as a knowledge creation tool, the discussion forum is designed to allow students to make visible their constructed representations of what they are learning, giving teachers a means of assessing student understanding as well as giving students a platform for discussion and reflection on their historical thinking. It is hoped that through this history project of integrating the critical thinking approach with web resources, it promotes learners’ active learning and development of critical thinking, reasoning, and problem solving.

With this background in mind, the study teaches students to think critically using web resources in history. The study looked at learners’ perceptions and learning growth of critical historical thinking as they learn history using advanced technological tools. The project offers students the opportunity to become researchers of history by using technology. It is hoped that the thoughtful and creative use of computer technology in conducting historical inquiries will contribute to learners’ historical knowledge, critical thinking skills, and interest in learning history. The insights gained in this study will help teachers’ design and implement oral historical projects. Some challenges to the implementation of historical projects will be discussed.

2. Methodology

2.1 Participants
The 33 participants, 9 boys and 24 girls, in this study were students from second grade of Chi-Jin junior high school. They selected the course as an extracurricular activity. They joined the project voluntarily.

2.2 Context of the study
In order to give readers a general sense of the context in which the study took place, this subsection briefly describes the overall course structure. The instructor integrated the Web into the curriculum, and required the students to use it extensively on their projects. The instructor chose the technology and the project assignment and acted as a guide throughout the activities. The instructor aimed to help students develop historical understanding with critical and creative disposition.

Specifically, the instructor’s objectives for this endeavor were to: (1) provide students with multiple information about late Chin dynasty, (2) provide students with an information-literate experience in the Web technology; (3) enhance students’ discourse synthesis ability, namely, learning how to search, organize, and compose information for a research project, and most
importantly, (4) offer critical thinking modules, providing students with a strategy for critical thinking about multiple, conflicting documents, provide them with opportunities to engage in a historian's activities.

2.3 Doing history project

The subjects had to complete several assignments during the semester for the course. The main assignment, Doing history project, was used as the task for the study. Using the resources of Web-Based Historical Curriculum students can find a range of resources to study the theme of the Opium War and the Sino-Japanese War. Doing history project integrates Hexter's Doing history model and Anderson-Inman & Kessinger Gather Model (2000) to instruct students how to analyze and interpret primary source documents. The students were encouraged to engage their historical inquiry. They are required to compose their we-based projects in a group of 45 by presenting their personal perspectives on a selective topic related to the theme of the Opium War and the Sino-Japanese War. The grades for this project were awarded based on several criteria. The information being communicated, the breadth and diversity of the information, the credentials/documents used to present the information, as well as the formulation, organization and synthesis of ideas.

2.4 Web-Based Historical Curriculum

The Web-Based Historical Curriculum enhances students learning history through quick and extensive access to primary sources. In this website, we have collected many primary sources not limited to printed documents such as letters, newspapers, diaries, official documents and poems. Artifacts (art, pottery, articles of clothing, tools, documents), places (events, and other buildings and structures), sounds (music, stories, and folklore), and images (paintings, photographs, and videos/movies) can also be considered primary sources. Introducing and using primary sources in the history classroom leads to active learning and to the development of critical thinking and enhancement of the learning process by allowing students to construct their own understandings of people, events, and ideas.

2.5 Critical thinking instructional modules of history

We design critical thinking history modules using major characteristics and theories developed by Richard Paul and colleagues at the Foundation for Critical Thinking, complemented by Ennis’s critical thinking model, IMPACT (Improving Minimal Proficiencies by Activating Critical Thinking).

2.6 Questionnaire

After project was done, a questionnaire was given to elicit relevant information on the participants’ perception of, and their attitudes towards Web-Based Curriculum, doing history project. The first part of the survey pertained to background information. The second part consisted of attitude statements about evaluation of Historical Website, such as learning content, screen design, interface design, system usage as well as learning effect. The third part specifically focused on the learners’ self-evaluation of their Historical learning Website. The fourth part included 5 opening questions depicting their reflections about the project.

3. Discussion and Summary

The goal of our research and development is to offer students the opportunity to become researchers of history by using technology. The project is to enrich students’ historical understanding by providing multiple perspectives and contextualized environment. The study found that our Web-Based Historical Curriculum Critical thinking instructional modules of history and doing history project have the potential to scaffold construction of an integrated understanding of historical context and content. The study demonstrated that students’ perception of the subject of history is changed – they no longer see history as a static-descriptive subject. With the learning modules designed to nurture students’ capability of critical thinking in learning history, students do not only know what happened in the past, but also realize how to make inquiries and search for answers.

Moreover, the implementation of critical thinking instruction modules of history shows that students’ capability of thinking of history in a critical way is enhanced to different degrees– some realize better techniques while the other less so. As a result, it is important to design a long-term project with aims to developing such techniques for long-lasting effect.

4. References