Web 2.0 Technologies in High School Curriculum: Exploring the Culture of Media, Health and Literacy in Myanmar

Christine Beer
University of Victoria
Canada
cmbeer@uvic.ca

Abstract: This paper is a report on a newly initiated project to examine how the theory of Critical Media Health Literacy functions in a high school curriculum. The population of focus is high school students in one school setting in Yangon, Myanmar. The school's mission states that critical thinking strategies across subjects, the development of healthy lifestyles, and the role of technology in student learning are valued components of the curriculum. The purpose of this report is to discuss the latest research and development in progress, how Web 2.0 technologies are used in the curriculum process to support the participatory action research design, how digital and social media for engaging youth about the cultures of media and health, and the potential for partnering with other researchers in the field.

Introduction

People around the world are increasing their use of media content and digital information and communication technologies for evaluation and communication of health issues. Literacy is key to this process. Literacy is more than reading and writing. In the areas of media and health, literacy is how the individual reads, critiques, analyzes, communicates and acts on the health information presented as media and through media communications. Previous research has shown that a person's evaluation and communication of health information and resulting behaviour towards health is related to the person's literacy in health and media.

Little is known about the critical literacy, health literacy, and media literacy of high school students in Myanmar. In addition, there is a lack of research about the relationship of critical, health and media literacies to Myanmar students' health promoting behaviours. Health promoting behaviours are the abilities of high school students to understand health and media information and use the information to act in ways that improve their health.

The theoretical concept which will be examined in this study is Critical Media Health Literacy. This concept brings together concepts of health literacy, media literacy, and critical literacy. Critical Media Health Literacy is a concept which attempts to describe the effects of media modes and messages on an individual's health beliefs and behaviors. Research has shown that high school students' ability to critically interact with media is important to the ways that the students act in situations that impact their health.

Given the lack of research with high school students in Myanmar, this research project will examine how students' interactions with digital media and health are related to the students' literacy in the content areas of media and health. In addition, this research project will examine how students carry out purposeful actions for the benefit of their own health.

Theoretical Rationale

Critical literacy is a way of thinking with language that can affect one's sense of critical consciousness for being, knowing, and acting in the social contexts which situate one's life experiences (Friere, 1973). A person's life experiences are acted, whether consciously or subconsciously, in many social contexts, such as family, school, and mediated digital communications. This acting forms habits through repeated actions in symbolic environments in which a person solves problems of beliefs and behaviours, and "the problem-solving component can be expected to form the habit of critical or hypothetico-deductive methods of reasoning in social and individual problem situations" (Broudy 1981).

Critical Media Health Literacy bridges the domains of media and health (Begoray, Cimon, Wharf-Higgins, 2010, Begoray, 2011) in a theoretical concept that seeks to explain the power and practice of literacies to consciously interact with ideas and processes in society and the power to critique factors that influence health beliefs and behaviours.

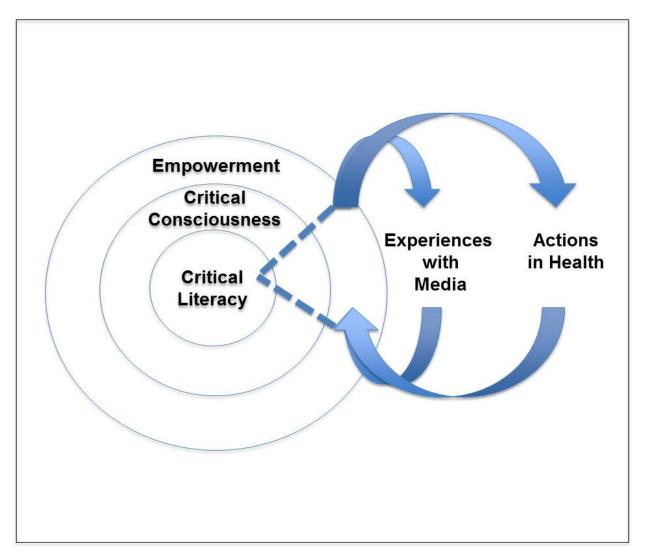


Figure 1: Critical Literacy is Key to Empowered Actions with Media and in Health

The Participatory Action Research Project

The purpose of this project is to contribute to new knowledge about how Myanmar high school students' use of digital media influences health literacy and ultimately health through what is termed 'critical media health literacy'. As participants in the research, high school students will choose a health issue relevant to the entire group of study participants, and then the participants will work together on a digital media project to explore, discuss, and take action on the health issue.

The intent of the project is to develop an understanding of how the theoretical concept of Critical Media Health Literacy works in a curriculum process and how a curriculum process designed on that theory affects the particular way the students develop abilities for critical analysis of digital media related to health issues. In addition, this project is intended to create a local understanding of this phenomenon and improve the design of curriculum processes which promote media literacy, health literacy, and health outcomes for high school students situated in Myanmar.

The Virtual Presentation

This report will discuss the initiation of the participatory action research project. Emphsis wil be on the issues and practical aspects of finding and employing Web 2.0 technologies, such as social media, for ethical classroom use. Areas of the study which will be discussed may include the following:

- 1. Development of a plan of action
 - a. Discussions of health issues
 - b. Facilitation of identification of issues and priority order of the issues
 - c. Design of a practical solution for one health issue
 - d. Development of individual web pages to explore the chosen health issue and its practical solution
 - e. Set up and use of online individual journals
 - f. Set up and use of online group discussion (web log) for students
 - g. Set up and use of online group discussion (web log) shared by students and teachers
- 2. Data Collection
 - a. Record daily field notes
 - b. Record daily personal observations and perspectives
 - c. Record digital multi-media text (e.g., video, audio, photo, written texts) created by students as part of their individual web pages
 - d. Record online discussions on the health issue, web pages and practical solution

References

Alpay, L., Verhoef, J., Bo, X., Te'eni, D., Zwetsloot-Schonk, J. (2009). *Current challenge in consumer health informatics: Bridging the gap between access to information and information understanding*. Biomedical Informatics Insights, 2, 1-10.

Begoray, D., Cimon, M., Wharf Higgins, J. (2010). *Mediating health: The power and role of the media*. New York, NY: Nova Science Publishers, Inc.

Begoray, D. (2011). PowerPoint slides presented at the 2011 conference of the National Association for Media Literacy Education (NAMLE) in Philadelphia, Pennsylvania. Retrieved from http://namle.net

Keselman, A., Logan, R., Smith, C., Leroy, G., Zeng-Treitler, Q. (2008). *Developing informatics tools and strategies for consumer-centered health communication*. Journal of the American Medical Informatics Association, 15(4), 473-83.

Levin-Zamir, D., Lemish, D., Gofin, R. (2011). *Media health literacy (MHL):Development and measurement of the concept among adolescents*. Health Education Research, 26(2), 323-335.

Lupiáñez-Villanueva, F., Angel Mayer, M., Torrent, J. (2009). *Opportunities and challenges of Web 2.0 within the health care systems: An empirical exploration. Informatics for Health & Social Care*, 34(3), 117–126.

Marschollek, M., Mix, S., Wolf, K., Effertz, B. Hauxi, R., Stienhagen-Theissen, E. (2007). *ICT-based health information services for elderly people: Past experiences, current trends, and future strategies*. Medical Informatics and the Internet in Medicine, 32(4), 251-261.

McCray, A. (2010, July 2) Consumer Health Informatics: Evidence-based decision making by patients and families. Powerpoint lecture presented at the Marine Biology Laboratory in Woods Hole, New Hampshire. Retrieved from courses.mbl.edu/mi/2010/presentations_spring/ConsumerInformatics.ppt

Nobel, J. (2006). Bridging the knowledge–action gap in diabetes: information technologies, physician incentives and consumer incentives converge. Chronic Illness, 2, 59-69.

Perry, G., Weldon, S. (2005). Consumer health informatics research: implications for consumers, health information professionals, and researchers. Journal of Consumer Health on the Internet, 9(2), 1-10.

Rootman, I., Frankish, J., & Kaszap, M. (2007). Health literacy: A new frontier.

In O'Neill, M., Pederson, A., Dupéré, S., Rootman (Eds.), *Health promotion in Canada*. (2nd ed.) (pp. 61-74). Toronto: Canadian Scholars' Press Inc.

World Health Organization (WHO). (2007). 10 facts on adolescent health. Retrieved from http://www.who.int/features/factfiles/adolescent_health/en/index.html

World Health Organization (WHO). (2010). World Health Statistics report. Retrieved from http://www.who.int/whosis/whostat/en/

World Health Organization (WHO). (2011). *Reproductive Health*. Retrieved from http://www.who.int/topics/reproductive_health/en/

Zaracadoolas, C., Pleasant, A., & Greer, D. (2005). *Understanding health literacy: An expanded model*. Health Promotion International, 20(2), 195-203.