

Multiliteracies education: Canadian and Hong Kong students connected in a web 2.0 learning environment – A transnational project in collaborating with the Chinese University of Hong Kong (CUHK)



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Research Objectives

To strengthen Canada's deep-rooted ties with Hong Kong (HK), reflecting longstanding and comprehensive political, commercial bilateral relations (Government of Canada, 2012). The research objectives included 1) to create a social networking platform where Canadian and Hong Kong university students would be able to share and learn about effective teaching and learning practices of multiliteracies* to cater to a diversity of learners (The New London Group, 1996), and 2) to enhance university students' skills and abilities in utilizing, re-purposing, and creating high quality Open Educational Resources (OERs)* that benefit diverse learners.

Participants

Student participants included 35 Canadian and 47 HK university students. The Canadian students represented 20 diverse ethnic backgrounds while HK students represented 4 different ethnic backgrounds (see Fig. 1). All HK students were bilingual with English as their second language. 23% of Canadian students reported English as their second language with the remaining 77% reporting being native English speakers.



Figure 1. Participants' ethnic backgrounds

Project Activities

- 1) Participants and engaged in discussions with each other weekly through Web Knowledge Forum (WebKF), a social media platform (see Fig. 2).
- 2) Students were assigned the task of creating online educational resources regarding cultural studies using new technologies (see Fig. 3). Student work was published using publicly available and free services such as YouTube and Google places. Links to each assignment were posted in Web KF.
- 3) Students were also given the task of reviewing and commenting on their peers work on WebKF. Students offered thoughts, feelings and recommendations on how the materials could be improved for international audiences.



Figure 2. A sample thread of students' online discussion



Figure 3. A sample of students' OER projects

Data Collection, Coding and Analysis

Both quantitative and qualitative methods were employed. The data collection procedure was well aligned with the courses' objectives, and assignments for students. 1) Semi-structured online discussions with guided questions took place around three themes regarding multiculturalism, multiliteracies and new technologies with teaching and learning innovation. Students' posting scripts were documented, categorized and thematically analyzed (Boyatzis, 1998); 2) students' OER projects were achieved and analyzed; 3) an online survey was administered to collect data regarding students' perceptions of the project, i.e., online discussion and their OER group projects. T-tests were used to analyze variations in UOIT and CUHK students' perceptions on the project.

Results of Qualitative Analysis

Thematic analysis showed that structured asynchronous online forums enabled student participants to generate reflective and substantial postings between diverse Canadian and HK students, nurturing a supportive and constructive learning environment, which in turn, affirmed their identity and enhanced their critical literacy awareness (Cummins, 2000; The New London Group, 1996).

The asynchronous collaborative module gave the students the flexibility to think through others' ideas, construct their own understanding and evaluate the relevance and significance of their responses, while allowing them with certain privacies in contrast to face-to-face interactions in regular classrooms when discussing sensitive issues. This discussions, which took place amongst students across continents and with significantly different language, cultural, educational and professional backgrounds in a multiliteracy context, provided participants with an exciting and authentic learning experience.

Results of Quantitative Analysis

Overall students in both universities reported enjoying their online interactions with their international peers (also see Fig. 4). In general 1) Canadian students demonstrated a more positive perception towards their experience in online discussions than the HK students (see Table 1). 93% of Canadian students agreed that the experience of participating in this cross-border communication had broadened their vision of the diverse use of new technologies in educational settings. 86% agreed that participation in this study had helped heighten their understanding of cross cultural communications as well as developing OERs for a multiliteracy audience. On the Hong Kong side, 76% of students agreed that participating in this project had helped them to realize the importance of using digital technologies to enhance their communication and learning. 79% of them agreed that as result of this experience, they would attempt to incorporate transnational learning communities in their future teaching, learning and professional practices. 2) The majority of students responded favourably to the use of OERs. Again, Canadian students demonstrated a significantly more aligned perception with the surveyed items regarding their experience and future orientations in using and creating OERs for their class projects than the HK students (see Table 2). 80% of Canadian students stated that they would attempt to incorporate OERs in their future teaching, learning and professional practice.

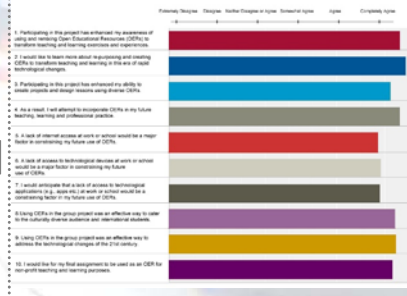


Figure 4. Students' perception on their OER group projects

70% agreed that they would like to provide their final assignments as an OER for non-profit teaching and learning purposes, while 73% HK students agreeing that by participating in this project they had enhanced their awareness of using and remixing OERs, and 69% of students stating that they would like provide their final assignments as an OER for non-profit teaching and learning purposes.

Table 1. Differences in Canadian and HK students' perceptions on online discussions

Statements	Canadian	HK	T	p-value
1. I enjoyed online discussions between fellow Canadian and HK students about multicultural education.	5.03 (1.13)	4.26 (1.27)	2.62	.01*
2. I enjoyed online discussions between Canadian and HK students about incorporating Social Networking Sites (SNSs) in teaching and learning.	5.06 (1.21)	4.03 (1.30)	3.40	.00**
3. I enjoyed online discussions between Canadian and HK students about incorporating new technologies to cater for students' multiple intelligences.	5.06 (1.09)	4.11 (1.27)	3.32	.00**
4. Participating in an authentic cross-border communication experience has helped me better understand respect for diverse cultures.	5.03 (1.22)	4.37 (1.24)	2.21	.03*
5. The experience of participating in the project has broadened my vision of the diverse use of multimedia and new technologies.	5.03 (1.08)	4.24 (1.02)	3.13	.00**
6. This project has helped me realize that incorporating transnational learning communities has great potential to enhance learning opportunities.	5.13 (1.18)	4.32 (1.07)	3.00	.00**
7. This project has helped me realize incorporating transnational learning communities has great potential to enhance learning opportunities.	5.06 (1.15)	4.18 (1.14)	3.18	.00**
8. The project has helped me realize the importance of using digital technologies to enhance our learning in cross-cultural contexts.	5.23 (0.96)	4.21 (1.19)	3.85	.00**
9. Sharing group projects has made me realize the importance of a broadened audience for learning in the era of technological revolution.	4.97 (1.25)	4.05 (1.11)	3.21	.00**
10. As a result of this experience, I will attempt to incorporate transnational learning communities in my future teaching, learning and professional practice.	4.81 (1.14)	4.26 (1.18)	1.93	.06
11. WebKF is adequate to assist the cross-border communication between fellow Canadian and Hong Kong students.	4.06 (1.55)	3.13 (1.34)	2.68	.01**

Table 2. Differences in Canadian and HK students' perceptions on their OER projects

Statements	Canadian	HK	T	p-value
1. This project has enhanced my awareness of using and remixing OERs to transform teaching and learning.	4.77 (1.07)	4.11 (1.06)	2.54	.01*
2. I would like to learn more about re-purposing and creating OERs to transform teaching and learning in the era of rapid technological changes.	4.94 (1.06)	3.89 (1.37)	3.46	.00***
3. Participating in this project has enhanced my ability to create projects and design lessons using diverse OERs.	4.61 (1.28)	3.82 (1.01)	2.89	.01**
4. As a result, I will attempt to incorporate OERs in my future teaching, learning and professional practice.	4.81 (1.38)	4.45 (1.22)	1.25	.22
5. I would anticipate that the lack of access to the Internet at work/school would be a major factor that constrains my future use of OERs.	4.35 (1.52)	4.13 (1.04)	0.72	.47
6. I would anticipate that the lack of access to technological devices (e.g., computer etc.) at work/school would be a major factor that constrains my future use of OERs.	4.42 (1.61)	3.95 (1.06)	1.46	.15
7. I would anticipate that the lack of access to technological applications (e.g., apps etc.) at work/school would be a major factor that constrains my future use of OERs.	4.39 (1.56)	3.87 (1.19)	1.56	.12
8. I use OERs in the group project as a way to cater to the audience's and students' multiple intelligences.	4.68 (1.14)	4.32 (1.21)	1.27	.21
9. I use OERs in the group project (e.g., the video analysis class project and instructional design) in a way to address the technological changes.	4.77 (1.20)	4.13 (1.02)	2.40	.02*
10. I would like to provide our final assignments as OER for the non-profit teaching and learning purposes.	4.66 (1.29)	4.05 (1.31)	1.87	.07

Conclusions and Implications

It is clear that the innovative learning environment provided students with an authentic and intercultural constructive learning experience. The results indicated that, when in tandem with appropriate instructional design, web 2.0 technologies, have a great potential to facilitate multiliteracy education and practices through effectively forming transnational learning communities that harness the strengths of diverse students. Social networking and web 2.0 technologies will inevitably become a more attractive medium of instruction for educational institutions, particularly for those on restricted budgets (Weber, 2012). Future research will be beneficial to address how to creatively integrate multiliteracy curriculum across subject content areas using cutting-edge technologies, a critical challenge we are facing in Canadian and HK educational contexts as well as on a global basis.

Notes

*Open educational resources are freely accessible, openly licensed documents and media that are useful for teaching, learning, and assessing as well as for research purposes (Unesco, 2014).

*Multiliteracies: A new approach to literacy pedagogy which "argue that the multiplicity of communications channels and increasing cultural and linguistic diversity in the world today call for a much broader view of literacy than portrayed by traditional language-based approaches". It "overcomes the limitations of traditional approaches by emphasizing how negotiating the multiple linguistic and cultural differences in our society is central to the pragmatics of the working, civic, and private lives of students." Multiliteracies approaches to pedagogy enable students to achieve two goals for literacy learning: "creating access to the evolving language of work, power, and community, and fostering the critical engagement necessary for them to design their social futures and achieve success through fulfilling employment" (The new London Group, 1996, p.60).

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