Inquiry-based collaborative learning:

Supporting a paradigm shift towards a technology-integrated shared classroom

by

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Bachelor of Arts & Science, University of Victoria, 1995
Bachelor of Education, University of Victoria, 1997

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Bachelor of Arts, University of Northern British Columbia, 2006
Bachelor of Education, University of Northern British Columbia, 2010

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A Project Submitted in Partial Fulfillment
of the Requirements for the Degree of

MASTER OF EDUCATION

in the Department of Curriculum and Instruction

Supervisory Committee

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Abstract

Teacher/student motivation and engagement is at the forefront of what we are trying to ameliorate at Fort St. James Secondary School. The new curriculum, as of 2016, gives us the freedom to fully explore cross curricular and inquiry methodologies in our school. Beyond that, our close-knit educational environment of 280 learners and 20 teaching staff, allows us as teachers, to work together as collaborators, to utilize a cross-curricular framework, which will guide our learners in breaking free from the traditional classroom model, and engage them in the learning of their own choosing. Throughout this project we focused on three predominant areas of study: Social Studies, Digital Media, and Carpentry. As a general query to guide us in this process, we asked the question, what are the benefits, for both teachers and learners, of employing Cross-Curricular Inquiry on student motivation and engagement, at Fort St. James Secondary School? Furthermore, we honed our skills as practitioners of collaborative inquiry, to enhance the emerging atmosphere of the facilitation of effective, and differentiated student learning.

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Acknowledgements

We would like to acknowledge that we work and learn on the traditional territory of the Nak'azdli Whut'en First Nations. There have also been numerous individuals that have supported us, and have contributed to our completion of this Master of Education (MEd) degree. Specifically, we would like to thank:

- Our families, colleagues, and students for their support, patience and understanding over the past two years. We could not have completed this venture without knowing you were all there supporting our learning journey. Your positivity and patience mean the world to us.

- Our professors and school district for allowing us the latitude to pursue this project in a manner that was meaningful to our school, our district, and our community.

- Finally, we would like to thank each other for the laughs, comradery, and diligent work ethic to see this project through to fruition.

Dedication

We would like to dedicate this project to our families: the Houghton family, the Soles family, and the Vogelsang family. We could not have completed my Master's in Education degrees without your continued support and patience. We are forever grateful for your positive attitudes and comments on our learning, and your confidence in us.

To Social Studies 10 learners, we are proud of your learning and sharing, specifically in regard to the development of the Truth and Reconciliation Learning Legacy Wall that you have created for our school and the community of Fort St. James. You completed this project with honesty, respect, and humility. Additionally, you have left a wonderful gift from which we can continue conversations and support learning.

Project Introduction

As high school teachers at Fort St. James Secondary School (FSJSS), we are, at times, challenged with apathy and lack of engagement during our lessons. We feel as though we are in a continual performance where we must create a more engaging lesson every day to draw the learners in. As this method of teaching is proving to have a limited lifespan, we came together as a group of educators, to implement, and enhance, new methods of teaching and learning that have started to emerge in our school, to better address our learners' needs. Our new area of focus is to employ a cross-curricular, collaborative co-teaching, project-based, inquiry learning practice (CCPBIL), which removes learners from the confines of the traditional classroom and enables them to explore learning on their terms, utilizing multi-faceted methods, and multiple learning environments (See definition of terms below).

We have chosen to examine Truth and Reconciliation, which is a part of British Columbia's Social Studies 10 curriculum. We have chosen this aspect of curriculum for the following reasons: Truth and Reconciliation is often considered a challenging curricular aspect to meet, the examination of Truth and Reconciliation has not been locally tackled in a project-based manner, and we have an extremely diverse school community that includes five distinct First Nations Reserves (Nak'azdli Whut'en, Tl'azt'en Nation, Binche Whut'en, Yekooche First Nation, and Takla Nation). It is for these reasons that we decided to tackle such a bold, and humbling, project.

Definitions of Terms

It is important to understand the common terminology used for the purpose of this project. Although many of the terms under the umbrella of CCPBIL can be defined in multiple manners, the working definitions we have used for the purpose of this project are as follows:

- Cross curricular - The teaching of a topic that includes contributions from more than one discipline or viewpoint to enhance the learner's connections.

- Collaborative co-teaching - Teachers working together, and in consultation, to deliver curriculum to students.

- Project-based learning - teaching so that students learn by engaging in real-world and individually meaningful projects

- Inquiry learning - Teaching methodology that focuses on the learners role in their own education. The learner is encouraged to explore, question, and experience the curriculum.

Division of Workload

Our master's project was completed as a group of three, including Gary Soles, Andrew Vogelsang, and Deirdre Houghton. The three of us work at Fort St. James Secondary School, where each of us teaches a variety of courses and multiple grades. To complete our project, we have had the opportunity to draw from our various areas of expertise. Our cross-curricular project, aimed to increase student motivation, has spanned to include activities from within our respective teaching areas, including carpentry, computer design, and social studies, enabling learners to work in a cross-curricular manner. Through our project development, we created a division of workload that has enabled us to work with learners, in our areas of proficiency, while

at the same time allowing us to develop our understanding, skills, and knowledge that evolves while co-teaching. We have provided a chart in Appendix 1 that outlines the division of workload that has been completed by each one of us, to complete our collaborative master's project.

Problem Statement

Student engagement in high school, using traditional instructional methods, are not wholly adequate. This problem is illustrated in the article by Darling-Hammond et al. (2019), where they state that learners need "meaningful work that builds on. . .prior knowledge and experiences and actively engages...in rich, engaging tasks that help them achieve conceptual understanding and transferable knowledge and skills" (p. 100). With the implementation of engaging, learning activities, including inquiry and project-based learning, learners gain various opportunities to expand on their learning and knowledge through collaboration. Darling-Hammond et al. further supports this as they state that "inquiry thoughtfully interwoven with explicit instruction and well-scaffolded opportunities to practice and apply learning…[enables] learners to question, explain, and elaborate their thoughts and co-construct solutions" (p.100).

British Columbia's new Social Studies curriculum (Social studies | Building student success, 2018), in the curriculum overview section, provides educators with flexibility in teaching methods and environments, to support learners. The Ministry states that "Learning can take place anywhere, not just in classroom" (para 29). Although the Ministry of Education identifies what must be taught, it does not direct "how to organize the time, space, or methods to teach it" ("Social studies | Building student success," 2018). Thus, opening the door for inquiry and project-based learning to engage learners in their learning endeavours.

Project Purpose

The purpose of this project is to explore how cross-curricular project-based inquiry learning can be integrated into the high school setting at FSJSS, and to use CCPBIL to enhance student engagement in our school community.

Project Overview

As learners will be working in multiple locations on their cross-curricular, project-based inquiry, this project needs to be addressed in multiple phases with distinct contributions from both teachers and learners. As teachers, we needed to decide upon a display of learning. We wanted this display to be done as a collective with the learners' individual contributions present. We decided on a feather motif and a legacy wall, as the outcome of this project. This was done with the help of local knowledge keepers in our communities. We then had to look at the different spaces of the project, mainly the classroom, computer lab, and the carpentry shop, and how we would interconnect all these rooms in a way that is beneficial for the school, the learners, and ourselves. Once that was completed, we looked at the breadth of what we were trying to do.

For their contributions, the learners would then engage in a guided inquiry project that culminates with, in part, a motif that will be designed and drawn by the learners. Next, the learners will put the design in Aspire 9.0 software in the computer lab and set vectors that will work to fit their design into the allotted area of the feathers they were given. Once that design is completed, the learners will go to the carpentry shop where they set the GCode (a vector-based programming language that automates machine tooling) and print their sections using the Computer Numerically Controlled Router (CNC) (a powerhead tool with a shaped cutter that is controlled by a computer to conduct cutting and carving operations). The learners would then

take the finished carving, sand it down, and add colour and stain. Once all the pieces are together, the legacy wall will be mounted.

All aspects of the project will be recorded using video, picture, or journal contributions for reflective, and documentary purposes. Before the project starts, local leaders and school staff will be interviewed for a documentary to discuss the possible outcomes of this project on student learning and the aspects of Truth and Reconciliation. Once the project is completed, another documentary will be created asking what was learned through this process and the impacts it will have on our school and local community, along with what the Learners gained from this multi-modal, collaborative, project-based, inquiry process.

In accordance with The University of Victoria's Human Research Ethics Board, we followed the ethics review protocols to receive approval for this project. Our granted ethics review protocol number is 20-0389 and the ethics review is situated, for this document, under appendix B. We began the ethics review process on 03 August 2020, and were granted approval on 26 October 2020.

Please see attached introductory portion of the documentary we made moving into the project:

Project Pre-Documentary (Houghton, Soles, & Vogelsang, 2020)

Search Methods

To support our project on the role of CCPBIL in increasing student engagement, we conducted a thorough review of the literature relating to each of the aspects of CCPBIL. Our review of the literature seeks to examine the ways in which CCPBIL can enhance student learning, while also looking at some of the potential pitfalls.

As we selected articles we based our criteria on the following:

1. Literature that was published within the last five years was our priority as we wanted up-to-date information.
2. Literature that examined our focus area on both an international and national level.
3. Literature that examined the benefits and potential pitfalls of our focus areas that looked at perspectives of both the learner and the educator.
4. Literature that sought to examine data in both quantitative and/or qualitative ways.
5. Literature that was predominantly scholarly and peer reviewed in nature, although we did include a couple of books that were well recognized in our area.

Our search for literature began in the University of Victoria Library database where we searched for various peer-reviewed articles on the aforementioned subject areas. Once we had a collection of 50 to 60 articles, we read and evaluated the applicability of each article for our given project design. During our evaluation, we discussed each article, as a group, and decided on whether the article met its purpose in delineating our research topic.

It should be noted that all our research into the literature was conducted as a collective group to discuss the suitability of the articles chosen. Our chapter two sections will be loosely similar in outline/structure since we discussed theoretical frameworks and collected similar literature to address the same research problem/purpose. We have also shared research sources, but our literature libraries also vary. We each, however, have expressed our findings individually through the separate writing processes.

Search Procedure

When we were defining what our project would be, we looked up terms we felt would lead us in the right direction. We searched academic, peer reviewed, papers for keywords:

- Collaboration + education adolescence

- Co-Teaching + highschool + education

- Project-Based Learning + highschool

- Inquiry-Based Learning + adolescence

- Adolescence + Learning

- Adolescence OR Teen* + education

We started this search in November of 2019 looking at different situations, age levels, and geography. We looked at the UVic database, as well as: Google, Google Scholar, Directory of Open Access Journals (DOAJ), Ebsco, Eric, as well as print journals and books.

CCPBIL in Practice

After examining what Truth and Reconciliation means to our school and community as a whole, we began our journey of using cross curricular project-based inquiry to commence with a holistic legacy project. This endeavour encompassed almost 4 weeks of our grade 10 learners' Social Studies course, amidst the global Covid-19 pandemic. Our learners began by completing an inquiry-based project focussing on the curricular outcome of "discriminating policies and injustices in Canada and the world, including residential schools… and advocacy for human rights including findings and recommendations of the Truth and Reconciliation Commission" as outlined in the BC Ministry of Education Social Studies 10 Curriculum ("Social Studies 10," 2018, p.1).

Upon completion of their individual inquiry into the curricular content, learners chose one aspect from their inquiry that resonated with them, regarding the necessity of reconciling Canada's past wrongs inflicted upon our First Nations people, culture and heritage. Next, they turned their chosen focus into a rough drawing on paper, which may have included words or quotes to further strengthen their knowledge and understanding of the significance surrounding the Truth and Reconciliation processes. Once they completed their rough drawing, learners moved to the computer lab where they worked to digitize their designs in the Aspire software. This particular software enabled students to send their motif down to the Carpentry shop, more specifically to the Computer Numerically Controlled (CNC) router.

At this juncture, learners prepared their wood panels in the carpentry shop and double checked all of their programming before having the CNC machine carve their designs. Once the designs were carved, students painted, sanded, stained and varnished their individual art pieces thus getting them ready for installment. Each learner's piece of wood was designed to fit

together to create the overall image of two eagle feathers that are now permanently mounted on the wall in our school's entrance to create a learning legacy wall focusing on the significance of the Truth and Reconciliation processes.

In addition to the feathers, we have also included a carved metal sign that states our school community's commitment to recognizing the Truth and Reconciliation processes as we work, grow and learn together within our school community. The top third of the sign is written in Dakelh, which is the language of our local First Nations, the middle section includes the traditional Syllabics, and the bottom third includes the English translation. It should be noted that we worked with a local First Nations Knowledge holder to ensure the usage of the feather design is appropriate and for the Carrier language translations. This multidisciplinary, creation now serves as a permanent learning legacy. It serves as a welcome, recognition, and displays our commitment as a school community to our continuous learning as we move towards reconciliation.

To view this entire process in media format please see the following link.

Our Project Process Video (Houghton, Soles, & Vogelsang, 2020)

Finally, to exemplify the benefit of this project please see the final part of the documentary which interviews both stakeholders and students involved and affected by this project.

[Truth and Reconciliation Documentary Part 2](#) (Houghton, Soles, & Vogelsang, 2020)

Final Group and Personal Reflections

Prior to applying for our master's degree, we knew that we were interested in pursuing a project that involved working together to enable students to move, both physically and cognitively, throughout the building to foster motivation and engagement. Although we were not acutely aware of all of the aspects of CCPBIL we have examined in the previous chapters, we felt that cross curricular learning that involved collaboration, project-based learning, and a focus on students' interests were at the forefront of what we wanted to achieve. To make our reflections impactful we recorded ourselves discussing various aspects of our learning, implications of our work, and how it connects to our community.

Truth and Reconciliation Project Reflection (Houghton, Soles, & Vogelsang, 2020)

References

Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019).

Implications for educational practice of the science of learning and development. *Applied*

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Houghton, D., Soles, G., & Vogelsang, A. (2020, October 27). *FSJSS-Truth and Reconciliation*

Documentary Part #1 [Video]. Retrieved from

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Houghton, D., Soles, G., & Vogelsang, A. (2020, October 27). *FSJSS-Truth and Reconcilliation*

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Project Process Video [Video]. Retrieved from

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Project Reflection [Video]. Retrieved from

https://www.youtube.com/watch?v=sqNTtou3IqU&ab_channel=FSJInquires

Social Studies 10. (2018). Retrieved from https://curriculum.gov.bc.ca/curriculum/social-

studies/10/courses

Appendices

Division of Workload

Masters Students Responsibilities	Deirdre Houghton	Andrew Vogelsang	Gary Soles
Chapter 1: Written Introduction	• We worked as a trio to individually complete specific sections of the introduction and abstract, and we also added information to/edited each other's written work. • Working in Google Docs. enabled us to move freely into each other's work and add to it or re-word it.	• We worked as a trio to individually complete specific sections of the introduction and abstract, and we also added information to/edited each other's written work. • Working in Google Docs. enabled us to move freely into each other's work and add to it or re-word it.	• We worked as a trio to individually complete specific sections of the introduction and abstract, and we also added information to/edited each other's written work. • Working in Google Docs. enabled us to move freely into each other's work and add to it or re-word it.

Introductory Documentary (Video) (Section of Chapter 1)	• Narration, • Still pictures, • Wrote script narration in-conjunction with Gary, • Group watching, spotting, and editing.	• Main Editor, • Video Recording, • Set up of equipment and recording area (room), • Group watching, spotting, and editing.	• Main Recorder, • Audio Recording, • Wrote narration script in-conjunction with Deirdre, • Group watching, spotting, and editing
Masters Students **Responsibilities**	**Deirdre Houghton**	**Andrew Vogelsang**	**Gary Soles**
Chapter 2: Written Literature Review **NOTE:** *Although, many of our readings are the same, there are some differences where our chosen set of articles may not have resonated with us individually;*	• We met and collectively chose our readings for research, • Set time after work and on weekends to discuss our readings, • Wrote literature review individually based on our personal findings	• We met and collectively chose our readings for research, • Set time after work and on weekends to discuss our readings, • Wrote literature review individually based on our personal findings	• We met and collectively chose our readings for research, • Set time after work and on weekends to discuss our readings, • Wrote literature

therefore, leading to further research of new articles.	and/or connection to our readings.	and/or connection to our readings.	review individually based on our personal findings and/or connection to our readings.

Social Chapter 3: Actual Inquiry, Cross-Curricular, Project-Based "Learning Legacy Wall"	• Social Studies 10 completed an inquiry/research project, where the focus was on the Truth and Reconciliation process. A variety of written and creative projects were completed to showcase individuals' learning and understanding of their specifically chosen topic. • Upon the completion of their inquiry, students were instructed to choose one aspect from their research that earnestly resonated with them regarding Truth and Reconciliation process. Students recorded their chosen piece of learned knowledge and wrote a brief paragraph as to why they chose it. • Students created a hand drawn motif of a picture and combined with a learning phrase that represented their chosen knowledge of the Truth and Reconciliation Process that could	• Worked with Social Studies 10 students in the computer lab to create their design online. • Taught learners about the ASPIRE software that they would be using to complete their design. • Assisted learners with getting their design into the Aspire Program and how to identify and set particulars, including: - Design outlay - Font choice - Thickness of wood that will be carved into - How to make calibrations. - Editing picture in plain format, - Editing picture in wood grain format, - Making any pre-carving edits and corrections, - Sending picture off through the Aspire program to the carving machine in the carpentry lab. (CNC Machine or Computerized Numerically Controlled router).	• Provided Social Studies 10 students with a safety demonstration in the Carpentry shop. • Instructed students on how to properly wear Personal Protective Equipment. • Instructed students on how to lay out and attach their given piece of wood on the Computer Numerically Controlled machine (CNC). • Instructed students on how to set the computer on the machine to read their designs as set in the ASPIRE software program. • Gave post carving instructions that focused on: - Sanding techniques with the palm sander, - Using the air hose to clean carving, - Specific painting and staining, instructions and where to find the necessary tools,

	be passed on to teach others.		- Clean up.

Chapter 4: Reflection Video	Individual Video Reflection Group Editing	Individual Video Reflection Group Editing	Individual Video Reflection Group Editing

Ethics Review Documents
Certificate of Ethics Approval

University of Victoria

Office of Research Services | Human Research Ethics Board
Michael Williams Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

Certificate of Approval

PRINCIPAL INVESTIGATOR	Valerie Irvine (Supervisor)	ETHICS PROTOCOL NUMBER	20-0389
		Expedited review - delegated	
PRINCIPAL APPLICANT	Andrew Vogelsang Master's student	ORIGINAL APPROVAL DATE	26-Oct-2020
UVIC DEPARTMENT	Curriculum and Instruction EDCI	APPROVED ON	26-Oct-2020
		APPROVAL EXPIRY DATE	25-Oct-2021

PROJECT TITLE **Inquiry-Based Collaborative Learning: Supporting a paradigm shift towards a technologically integrated shared classroom.**

RESEARCH TEAM MEMBERS
 Gary Soles - Master's Student, University of Victoria
 Deirdre Houghton - Master's Student, University of Victoria

DECLARED PROJECT FUNDING **None**

DOCUMENTS INCLUDED IN THIS APPROVAL
 Project Permission Manu Madhok.JPG - 03-Aug-2020
 Project Permission Craig Houghton.JPG - 03-Aug-2020
 FSS-interview-questions.docx - 11-Sep-2020
 Social Studies 10 Cross Curricular Learning Experience.odt - 23-Sep-2020
 School District 91 Covid Protocols.pdf - 24-Sep-2020
 Interview Request Letter.docx - 23-Oct-2020
 Student Consent Form.docx - 23-Oct-2020
 Adult Consent Form.docx - 23-Oct-2020
 Neutral 3rd Party Script.docx - 23-Oct-2020
 Study Specific Assessment.docx - 23-Oct-2020

CONDITIONS OF APPROVAL

This Certificate of Approval is valid for the above term provided there is no change in the protocol.

Modifications
To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.

Renewals
Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.

Project Closures
When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.

Certification

This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropiate standards of ethcis as outlines by the University of Victoria Research Regulations Involving Human Participants.

Interview Request Letter

Good afternoon,

    Deirdre, Andrew and I are working on a cross-curricular inquiry, truth and reconciliation project here at Fort St. James Secondary. We would like to extend an invitation to you to:

1.) Show you what we are working towards with our learners and,

2.) Interview you about a) what truth and reconciliation means to you, b) why is it important to teach truth and reconciliation to our youth, and c) what you hope our learners take away from this project.

The footage will be used in a documentary we are making about this journey, in part, for our Master of Education degree.

If you voluntarily agree to participate in this documentary, your participation will involve answering a few questions, expected to take up to 10 minutes. Excerpts from your video interview may be included in the documentary and may also include video or images of artifacts you wish to share. This documentary will highlight all stages of this learning process and will be shared throughout the school community and on social media (including, but not limited to: YouTube, the teacher created website, the school district website, the school website, the school Facebook page, the school Twitter, the school district Twitter, and the educators' Twitter). Participants' faces and audio will be visible in this documentary. Though the interviews will be edited, the statements made by participants will be left in their original context, and not distorted. There are no known or anticipated dissemination risks.

Please note: Due to COVID-19, we will be adhering to all School District 91 and Ministry of Education COVID-19 safety protocols for the interview process. All interviews will be conducted on-site, or via Microsoft Teams, at Fort St. James Secondary School.

If possible, we would like to meet with you at your earliest convenience.

Individuals who may be contacted regarding this study include:

████████████████████████ (Neutral Third Party)

Andrew Vogelsang: avogelsang@sd91.bc.ca, Deirdre Houghton: dhoughton@sd91.bc.ca

Gary Soles: gsoles@sd91.bc.ca , or Dr. Valerie Irvine, Assistant Professor (MEd Supervisor): 250-721-7778 or virvine@uvic.ca. In addition, you may verify the ethical approval of this project, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Thank you kindly for your time,

Gary, Deirdre, and Andrew

Adult Consent Form

Adult Interview Consent Form

University
of Victoria

Education

Fort St. James Secondary School:
Truth and Reconciliation Project Documentary

Inquiry-Based Collaborative Learning:

Supporting a Paradigm Shift Towards a Technologically Integrated Shared Classroom

Community members, staff, and social studies students in grade 10 have the opportunity to participate in a documentary highlighting the importance of cross-curricular learning to examine the Truth and Reconciliation process and to participate in a learning legacy carving project that will serve as a monument to our school, and communities, thereby bringing cultural awareness of the significance of the Truth and Reconciliation process. Throughout this project we plan to focus on three predominant areas of study: Social Studies, Computer Technology, and Carpentry. In these courses, students will have the opportunity to create a carved piece of a learning legacy (in the form of a wall monument) for Fort St. James Secondary School and the community of Fort St. James as a whole. This learning legacy will focus on our understanding, and the significance of the Truth and Reconciliation process. As a general query to guide us in this process, we are asking the question: What are the benefits, for both teachers and students, of employing Cross-Curricular Inquiry on student learning at Fort St. James Secondary School? Furthermore, we are hoping to hone our skills as practitioners of collaborative inquiry, to enhance the emerging atmosphere of the facilitation of effective-and differentiated student learning. Please note, the examination of the Truth and Reconciliation Process is a part of the BC curriculum as is compulsory for students to participate in. The documentary that will serve to highlight the importance of cross-curricular inquiry and the Truth and Reconciliation is part of a larger Master's degree project, and will be completely voluntary for students to participate in, and ~~as~~ will be further described below.

What is Involved: If you voluntarily agree to participate in this documentary, your participation will involve answering a few questions, expected to take up to 10 minutes. Excerpts from your video interview may be included in the documentary and may also include video or images of artifacts you wish to share. This documentary will highlight all stages of this learning process and will be shared throughout the school community and on social media (including, but not limited to: YouTube, the teacher created website, the school district website, the school website, the school Facebook page, the school Twitter, the school district Twitter, and the educators' Twitter). Participants' faces and audio will be visible in this documentary. Though the interviews will be edited, the statements made by participants will be left in their original context, and not distorted. There are no known or anticipated dissemination risks.

Voluntary Participation/You Can Withdraw at Any Time: Your participation in this project must be completely voluntary and you may withdraw anytime without any consequences. Choosing to participate or not will not affect grades, class standing, or relationships. At the completion of the filming, you will have the option to withdraw your footage from the 'Truth and Reconciliation' documentary until such time as the documentary is released to the public. This time period shall be no less than (10) days, to withdraw consent. Further, all filmed volunteers will have the opportunity to view the completed 'Truth and Reconciliation Cross-Curricular learning' documentary prior to its public release. At this time, any volunteer that so wishes to withdraw from the documentary may do so.

If an online interview is preferred, it will be conducted using Microsoft Teams video conferencing software. Both the audio and video will be recorded, and you have the option of using only the audio recording in the documentary. The online interview video conferencing software is based in the United States. Please be advised that as this software is based U.S.A. there is a possibility that information about you that is gathered for this documentary may be accessed without your knowledge or consent by the U.S. government in compliance with the U.S. Freedom Act.

Neutral Third Party: To mitigate the pressure to participate that students, adults, staff, and parents/guardians may feel the use of a neutral third party has been provided to assist with recruitment. The neutral third party will discuss the research aspects and informed consent processes with you, in order to mitigate feelings of pressure to participate and to allow, as much as possible, an arms-length recruitment process. The neutral third party has been provided as an additional contact on the Consent Form for participants, who wish to withdraw from the study, or who wish to discuss some aspects of the study outside of the research team.

Risks: As per the BC curriculum, learning about Truth and Reconciliation, and the harms done to Indigenous groups in the past may cause some discomfort amongst participants. Our documentary project will focus on the cross-curricular methods used to teach about Reconciliation, and the students' learning of the positives developing from the Reconciliation process, rather than focusing on historical harms, as Indigenous participants and their families may be living with the lasting and ongoing effects of these harms. The interview responses may be personal and sensitive in nature, and there may be risks of emotional or psychological discomfort or distress when participating in this interview. In the unlikely event that a participant becomes overly distressed during participation we will stop the interview and refer the participant to the relevant support services, such as counselling, which is provided by Nechako Lakes School District 91, and on site as needed.

Anonymity & Confidentiality: You will not be anonymous since the video would be for public sharing. However, you may choose whether to have your name identified or to be nameless (e.g., "Staff Member"). You may also opt to have your audio shared and not your video. Please check below your preferences:

☐ With Name as Follows: _____   ☐ Use my Audio & Video

☐ Without Name   ☐ Use my Audio Only

Dissemination/Sharing/Storage: The documentary will be shared via email to the school and local community and will be posted online via aforementioned social media platforms. It may also be shared with the media, the Master's Projects of Andrew Vogelsang, Deirdre Houghton, and Gary Soles at the University of Victoria, professional or academic articles, presentations at community gatherings and academic conferences, and beyond as shared by the general public. Please be advised that this research study includes additional data storage outside of Canada (e.g., the U.S.A.). The original files and published documentary will be stored on local school servers and not deleted. The materials will be copyrighted with the intention that it is shared with permission. The copyright will allow us to safeguard any edits or uses to respect the intentions of the project and the participants.

Contacts

Individuals who may be contacted regarding this study include:

Andrew Vogelsang: avogelsang@sd91.bc.ca, Deirdre Houghton: dhoughton@sd91.bc.ca

Gary Soles: gsoles@sd91.bc.ca , or Dr. Valerie Irvine, Assistant Professor (MEd Supervisor): 250-721-7778 or virvine@uvic.ca. In addition, you may verify the ethical approval of this project, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of participation in this project and that you have had the opportunity to have your questions answered by the team.

Name of participant:

_____

_____   _____

Signature of participant   Date

Student Consent Form

Student Interview Consent Form

Fort St. James Secondary School:
Truth and Reconciliation Project Documentary

University
of Victoria

Education

Inquiry-Based Collaborative Learning:

Supporting a Paradigm Shift Towards a Technologically Integrated Shared Classroom

Community members, staff, and social studies students in grade 10 have the opportunity to participate in a documentary highlighting the importance of cross-curricular learning to examine the Truth and Reconciliation process and to participate in a learning legacy carving project that will serve as a monument to our school, and communities, thereby bringing cultural awareness of the significance of the Truth and Reconciliation process. Throughout this project we plan to focus on three predominant areas of study: Social Studies, Computer Technology, and Carpentry. In these courses, students will have the opportunity to create a carved piece of a learning legacy (in the form of a wall monument) for Fort St. James Secondary School and the community of Fort St. James as a whole. This learning legacy will focus on our understanding, and the significance of the Truth and Reconciliation process. As a general query to guide us in this process, we are asking the question: What are the benefits, for both teachers and students, of employing Cross-Curricular Inquiry on student learning at Fort St. James Secondary School? Furthermore, we are hoping to hone our skills as practitioners of collaborative inquiry, to enhance the emerging atmosphere of the facilitation of effective and differentiated student learning. Please note, the examination of the Truth and Reconciliation Process is a part of the BC curriculum as is compulsory for students to participate in. The documentary that will serve to highlight the importance of cross-curricular inquiry and the Truth and Reconciliation is part of a larger Master's degree project, and will be completely voluntary for students to participate in, and will be further described below.

What is Involved: If you voluntarily agree to participate in this documentary, your participation will involve answering a few questions, expected to take up to 10 minutes. Excerpts from your video interview may be included in the documentary and may also include video or images of artifacts you wish to share. This documentary will highlight all stages of this learning process and will be shared throughout the school community and on social media (including, but not limited to: YouTube, the teacher created website, the school district website, the school website, the school Facebook page, the school Twitter, the school district Twitter, and the educators' Twitter). Participants' faces and audio will be visible in this documentary. Though the interviews will be edited, the statements made by participants will be left in their original context, and not distorted. There are no known or anticipated dissemination risks.

Voluntary Participation/You Can Withdraw at Any Time: Your participation in this project must be completely voluntary and you may withdraw anytime without any consequences. Choosing to participate or not will not affect grades, class standing, or relationships. At the completion of the filming, you will have the option to withdraw your footage from the 'Truth and Reconciliation' documentary until such time as the documentary is released to the public. This time period shall be no less than (10) days, to withdraw consent. Further, all filmed volunteers will have the opportunity to view the completed 'Truth and Reconciliation Cross-Curricular learning' documentary prior to its public release. At this time, any volunteer that so wishes to withdraw from the documentary may do so.

If an online interview is preferred, it will be conducted using Microsoft Teams video conferencing software. Both the audio and video will be recorded, and you have the option of using only the audio recording in the documentary. The online interview video conferencing software is based in the United States. Please be advised that as this software is based U.S.A. there is a possibility that information about you that is gathered for this documentary may be accessed without your knowledge or consent by the U.S. government in compliance with the U.S. Freedom Act.

Neutral Third Party: To mitigate the pressure to participate that students and parents/guardians may feel the use of a neutral third party has been provided to assist with recruitment. The neutral third party will discuss the research aspects and informed consent processes with the students, in order to mitigate feelings of pressure to participate and to allow, as much as possible, an arms-length recruitment process. The neutral third party has been provided as an additional contact on the Consent Form for students, and/or parents/guardians, who wish to withdraw from the study, or who wish to discuss some aspects of the study outside of the research team.

Risks: As per the BC curriculum, learning about Truth and Reconciliation, and the harms done to Indigenous groups in the past may cause some discomfort amongst participants. Our documentary project will focus on the cross-curricular methods used to teach about Reconciliation, and the students' learning of the positives developing from the Reconciliation process, rather than focusing on historical harms, as Indigenous students and their families may be living with the lasting and ongoing effects of these harms. The student interview responses may be personal and sensitive in nature, and there may be risks of emotional or psychological discomfort or distress when participating in this interview. In the unlikely event that a student participant becomes overly distressed during participation we will stop the interview and refer the participant to the relevant support services, such as counselling which is provided by Nechako Lakes School District 91, and on site as needed.

Anonymity & Confidentiality: You will not be anonymous since the video would be for public sharing. However, you may choose whether to have your name identified or to be nameless (e.g., "Student"). You may also opt to have your audio shared and not your video. Please check below your preferences:

☐ With Name as Follows: _____   ☐ Use my Audio & Video

☐ Without Name   ☐ Use my Audio Only

Dissemination/Sharing/Storage: The documentary will be shared via email to the school and local community and will be posted online via the aforementioned social media platforms. It may also be shared with the media, the Master's Projects of Andrew Vogelsang, Deirdre Houghton, and Gary Soles at the University of Victoria, professional or academic articles, presentations at community gatherings and academic conferences, and beyond as shared by the general public. Please be advised that this research study includes additional data storage outside of Canada (e.g., the U.S.A.). The original files and published documentary will be stored on local school servers and not deleted. The materials will be copyrighted with the intention that it is shared with permission. The copyright will allow us to safeguard any edits or uses to respect the intentions of the project and the participants.

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████████████████████████████ (Neutral Third Party)

Andrew Vogelsang: avogelsang@sd91.bc.ca, Deirdre Houghton: dhoughton@sd91.bc.ca

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Your signature below indicates that you understand the above conditions of participation in this project and that you have had the opportunity to have your questions answered by the team.

Name of participant: _____

_____   _____

Signature of participant   Date

Name of parent / guardian: _____

Signature of parent / guardian: _____

Date _____

Interview Questions

The questions we plan to ask the interviews for the preliminary documentary include:

1.) What does Truth and Reconciliation mean to you?

2.) How do you think this project will benefit the students?

Upon the completion of the Truth and Reconciliation monument we plan to ask those being interviewed:

1.) How has this process enhanced your understanding of Truth and Reconciliation?

Neutral Third-Party Script

Hello everyone, my name is ███████████, and I am acting as a neutral 3rd party. In this role, I am going to explain the project as it pertains to the voluntary nature of the interview for the documentary participation.

1) You have the opportunity to participate in a documentary highlighting the importance of cross-curricular learning to examine the Truth and Reconciliation process. Although you must participate in the Truth and Reconciliation Inquiry project because it is part of the BC Curriculum, you may choose to – or choose not to - participate in an interview documentary which examines at how you felt about participating in a cross-curricular inquiry project.

2) First off, this documentary is completely voluntary.

3) The purpose of the documentary is to highlight your learning experience within the cross-curricular nature of your Social Studies project, that focused on what resonated with you regarding the significance of the Truth and Reconciliation process, and consequently your carving that you created.

4) The documentary, will be used in a final project for a Masters of Technology in Education at the University of Victoria, currently being completed by Mr. Vogelsang, Ms. Houghton, and Mr. Soles

5) Participation in the documentary section is fully voluntary. You will neither be marked on your participation, nor be penalized should you decline participation in this project.

6) If you voluntarily agree to participate in this documentary, your participation will involve answering a few questions, which should expect to take up to 10 minutes.

7) Questions you will be asked, include:

   a. Did you find the multi-modal method (will explain if needed) of learning beneficial?
   b. What piece of learning did you find the most powerful?

8) You will be given various ways to contribute to this documentary, should you decide to take part, including:
   a. Being on the video and sharing your comments,
   b. Sharing your comments via audio only and being anonymous,
   c. Sharing your comments via audio yet letting your name stand publicly,

  d. Sharing your comments through written statement and being anonymous but allowing us to publish it,

  e. Sharing your comments through a written statement and allowing us to publish it with your name attached.

9) You will be given the opportunity to see your contribution before it is publicly published/shared, and at that time you will be given the option of having your contribution removed should you, change your mind.

10) Rescinding your contribution must be done within the first 10 days after seeing your part in the final piece, before publication.

11) Please note if needed, there will be counseling available should you feel that it is warranted, as this need may arise when feelings are unearthed, and you are having a difficult time managing them, of if you find you need someone to talk to about your feelings.

12) All footage included in the documentary will be used in the spirit it was given and stored on the School District servers. Though the clips may be edited for reasons of length and time, the meaning behind the statements will align with the original interview.

13) AGAIN, all participants will have a chance to view the final documentary and remove their consent at that time before it is uploaded. All footage of the participant will then be deleted.

14) Just to reiterate, Anonymity & Confidentiality: You will not be anonymous since the video would be for public sharing. However, you may choose whether to have your name identified or to be nameless (e.g., "Student"). You may also opt to have your audio shared and not your video.

15) Once the documentary is disseminated onto the media platforms media (including, but not limited to: YouTube, the teacher created website, the school district website, the school website, the school Facebook page, the school Twitter, the school district Twitter, and the educators' Twitter).

16) Again, this is a totally voluntary activity. It is only meant to seek your opinion should you wish to share.

17) If there are any questions that I am unable to answer I will take them to Mr. Soles, Ms. Houghton, or Mr. Vogelsang for clarification.

18) Furthermore, should you decide to remove yourself from this activity you are welcome to let me know, and I can let Mr. Soles, Ms. Houghton and Mr. Vogelsang know should you feel you are not able to tell them yourself.

19) Individuals who may be contacted regarding this study include:

████████████████████████████████ (I am the neutral third party)

Andrew Vogelsang: avogelsang@sd91.bc.ca,

Deirdre Houghton: dhoughton@sd91.bc.ca

Gary Soles: gsoles@sd91.bc.ca ,

or Dr. Valerie Irvine, Assistant Professor (MEd Supervisor): 250-721-7778 or virvine@uvic.ca.

In addition, you may verify the ethical approval of this project, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Thank you for your time and consideration regardless of your decision.

Social Studies 10 Cross Curricular Project Overview

Social Studies 10

"A CROSS CURRICULAR LEARNING EXPERIENCE"

dhoughton@sd91.bc.ca

Now that you have had a chance to complete your inquiry project on the Truth and Reconciliation process, you will have the opportunity to complete *a cross-curricular project* that will ultimately be developed into a permanent learning legacy wall for our school community. Each one of you will be designing, digitally creating, carving, sanding, and painting an anonymous wooden piece of art that will showcase your learning. Your design will be created from your previous research, in particular an aspect that resonated with you from your Truth and Reconciliation inquiry.

For this project, we will adhere to the following steps:

1. In our class, design (on paper/using a sharpie felt pen), a picture/motif and/or a saying/quote that resonates with you personally around the importance of the Truth and Reconciliation process. (Note: each one of you will have a different design as your experience and knowledge gained from your previous inquiry activities focussed on different aspects as to "why" and "how" the Truth and Reconciliation process came to be and its significance. This visual of your individual learning is what makes this project unique).

2. Once your design has been created on paper, we will move to LAB #204. Here we will work with Mr. Vogelsang to create your design on the computer and download it into the ASPIRE Software Program.

3. Once your digital design has been approved by both Mr. Vogelsang and/or myself, you will send it to Mr. Soles in the Carpentry Lab. (REMEMBER – Do NOT Add your name on the design).

4. Once your design has been sent to Mr.Soles, we will be heading to the Carpentry Lab. Here you will receive a piece of wood on which your ASPIRE design will be carved using the CNC machine.

   a. **NOTE**: *Prior to starting any work in the Carpentry lab, we will be given a safety demonstration and appropriate PPE will be handed out. It is essential all PPE are worn, and safety guidelines followed.*

5. Once your individual design is carved out, you will be given access to sanding, painting, and

This is an exciting process as we employ various methods of learning to complete our class project which will be permanently displayed on the wall, in the main hallway, of our school for others to reflect upon and learn from. (All wooden pieces will be anonymous; you will

staining supplies.

Script for Chapter 4 Reflections

Question 1: Reflect on aspects of what you have done in the classroom in the past and relate your experiences and practices to the literature review. How do you plan to continue to use these practices in the future?

Gary

Prior to this project we have all had the luxury of working together as we all teach in the same small rural school and have a very cohesive staff. This said, we have also previously believed in modern constructivist educational learning theory which according to the literature is 'students learn best through real world projects which also seek to activate their prior knowledge. Since we have previously believed this educational theory to be accurate, we have historically attempted to build projects that met these criteria. That is, we have designed a project, attempted to ensure that it was relevant and meaningful to the learnings. Regarding our major project – as our school community is comprised of roughly 70% First Nation's population, we wanted to focus on a project that was meaningful to both our school and community at large, while also meeting curricular constraints. Since our educational values are shared with the surrounding first nations communities, we felt it important to design a project that met this constructivist theory for all the stakeholders. The literature states that using constructivism as a learning theory helps support learner productivity, improves engagement, and helps in the development of new knowledge. We have by making our project relevant to our students lives, this is accurate.

Looking at Co-teaching. In the past Andrew and I have co-taught a specific Computer numerically controlled routing course together. Additionally, we have worked to implement co-teaching practices in our day-to-day courses, by combining projects such as computer design and then implementation in the shop. The literature is clear that co-teaching is beneficial to both educators and students as it allows both to 'break out of the mold' so to speak, and allows teachers to teach to their own strengths. This ultimately means that students are receiving the

best education possible as they have Andrew for example teaching and working with students in his area of expertise (computer graphic and technical design), while at the same time they have me teaching towards my area of expertise (carpentry, joinery, and CNC operations). According to the literature, and in conjunction with what we have found in practice, this gives students multiple viewpoints and learning opportunities that they would not otherwise receive in a traditional classroom setting. As far as our major project is concerned we took this a step further by also having Deirdre facilitate the social studies inquiry regarding the significance of the Truth and Reconciliation Process. We were all then able to assist the students throughout the project in our areas of strength.

Deirdre

Continuing with co-teaching, in the past I have had students work in alternative spaces (such as the computer lab, or shop) with Andrew and Gary. However, students were helped and supervised by Andrew and Gary, but we were not working as a co-teaching unit which means planning and assessing students learning together. We found this learning manner not as effective as it was not as clear who the teacher in charge should be, students were often confused as to who they should turn to for assistance, and assessment was often a concern which was more difficult for the supervising teacher to comment on. The literature also discusses these points as a possible concern when co-teaching is not as effective. The literature states that it is important for teachers to design a concrete plan, share responsibilities, and assess students together, while also providing time for educators to discuss and reflect upon lessons and student work. These are things that we improved upon in our main project for this degree.

Linked to the concept of co-teaching is the idea of collaborative learning (for both teachers and students). The literature states that for collaboration to be effective it must be done

in a manner that fosters respect amongst all participants and is not forced. In the past – we have tried to cross departmental lines and increase teacher collaboration throughout the school. For our main project Andrew, Gary, and myself collaborated extensively to create a project that is a respectful representation of our school culture across the subject areas of social studies, computer technology, and carpentry / joinery. The benefits of staff collaboration according to the literature are helping to end isolation, increase guidance, increase motivation, and help reflect on one another's practices. We have found, through our collaborative journey that this is accurate, and this process helps to greatly improve our own teaching practices.

As for student coloration, the literature states it also enables their voices to be heard and promotes their individuality. Students can also serve as mentors to one another and support each other's learning. In the past we have all tried to have students work together but have traditionally had limited success. Our master's project was really the first main project where we have had needed students to collaborate effectively to meet a common goal. Students responded very well to this, helped each-other a great deal with the creative design aspects, as well as many of the technically aspects. Our project really exemplified how successful collaboration can be when focused on.

Andrew

Moving on to Project Based Learning – in the past we have all found PBL to be an immensely important teaching tool in our school. A great deal of our students find PBL to be engaging and helps to motivate them. The literature states that this is the case because students are given a choice as to what they want to focus on which makes their projects meaningful to them. According to our research PBL also helps students to learn creativity, deep thinking, and transferrable skills that they may not otherwise learn via a traditional stand and deliver

curriculum. Gary and I have been teaching our courses using PBL as a focus for many years. Students choose a project after learning the basic skills and learn additional skills by completing that project. This, as you can imagine, works very well for both the computer lab and carpentry shops as there is plenty of room in the curriculum to support this style of learning. Deirdre also implements a number of PBL projects into her teaching environment, but has felt constrained to some extent by the lack of physical space, as well as curricular 'need to knows' that are difficult to cover by broad projects.

We have found that the process that supports PBL is the inquiry process. The inquiry process helps guide students to question, investigate, and construct new understanding and knowledge. Although the inquiry process is not necessarily tied to PBL – we found it helps a great deal to guide students in a successful project, as PBL adds an important element of hands on learning to the inquiry process. In the past, we have done very little inquiry work and have focused mostly on PBL. Dierdre did a little inquiry work in the humanities department, but has never used it in a cross curricular manner. As such, our major project was the first time the three of us worked extensively with inquiry.

Our research shows us that the inquiry process is learner focused, and much like PBL assists in the development of critical thinking skills. Perhaps most importantly, Inquiry (especially guided inquiry) provides us a framework for outlining the steps students need to take in their learning. According to the literature this gives the students voice in their learning, and takes into account natural differentiation for each student thereby supporting equity in the classroom. In our major project we found Inquiry to be an invaluable tool for helping to frame and structure our projects. This structure helped guide, not only the students, but us as professionals, and kept our collaboration focused and meaningful.

In the future the three of us would like to continue using the principles of cross curricular, co-teaching, collaboration, PBL, and Inquiry learning to guide our instructional practice and support student motivation in learning. We, likely will do this on a smaller scale, however, as our major project was costly and a significant amount of additional work. Ultimately, we would like to see students be able to flow throughout the school to make use of all of the faculties expertise as well as the school facilities.

Question 2: Consider the implications of educational practices and theories in relation to socio-cultural and cross-cultural context. How might 'western' practices be realized in another cultural context?

Gary

Our primary goal with this project was to use learning theory (constructivism, co-teaching, collaboration, PBL, and Inquiry) to increase student motivation in learning in the cross-cultural context of First Nations Truth and Reconciliation. As a vital part of this project, we collaborated with local knowledge holders to ensure the Western teaching practices listed above could be used to not only help our students meet the curricular competencies but engage with the subject matter in a meaningful and relevant fashion that helps us grow as a school and also a community as a whole.

Deirdre

In a traditional social studies setting, upon completing a specific unit or focus of study, students would likely complete some form of a small research project, such as an essay or small hands-on project to demonstrate their learning. Consequently, the constraints of this teaching method, neither provide nor support learners with an in-depth learning experience. However, the institution of co-teaching, collaborative learning, inquiry processes and project-based learning, provided our students with choice and voice in their learning content, it enabled them to be creative, it encouraged peer assistance and it developed a level of respect for each other's

learning interests. Furthermore, students reaped the benefits of learning and building knowledge from different educators, while at the same time developed transferrable skills, such as communication and problem solving, that will be valuable throughout their lives.

Andrew

We were fortunate enough to work with our local elders and knowledge holders who enhanced the conception of what the project could be, by encouraging us to use local language and ways of knowing. For example, our school's mission statement on the Truth and Reconciliation process is not only presented in English, but also in Dakelh and syllabics, which were translated by local knowledge holders. Their encouragement from a micro-community outlook to a macro-world vision was noted in their suggestion to use woods from around the world in the students' carving processes, as it would encompass the unique cultures we have in our school and the community at large.

Questions 3: What are considerations of the limitations and challenges of your review and new questions that arose from your review as well as personal reflections on the impacts on ourselves and our profession?

Gary

The single largest obstacle we needed to overcome with this project was all the changes due to the COVID-19 Pandemic. These were many and included but were not limited to:

- Students and stakeholders not having access to the school

- Access to the student's work was changed, and how it was handed in was modified

- Not all students were able to use the software or have direct access to the carpentry shop

- Some students stopped attending, but it was encouraging to see other students want to get involved in the project and help complete it.

- A great deal of the joinery for this project was left for only a few students who were able to access the carpentry shop. Again, thankfully several carpentry students originally outside the scope of this project stepped up to help with this legacy piece.

- Many students also needed to do the finishing carpentry work for their piece at home – providing them with materials and establishing a drop off and pick-up system was necessary to achieve this.

Another limitation of this study was that it was done for a specific large scale legacy project. The nature of this project had an enticing effect as it was to be permanently mounted on the school wall. I wonder if smaller projects conducted in the same manner will be as enticing for students?

I believe, moving forward, one of the components of this project that resonated the most with me was the co-teaching and collaborative time I spent with Deirdre and Andrew. Throughout this process we have grown as professionals and had time to reflect on our practice as never before. As such I believe our students gained more insight and learned at a capacity that would not have been possible without this collaboration.

Finally, I plan to continue running all of the shop projects using the inquiry based PBL platform we used throughout this project. I also plan to continue with our co-teaching and staff collaboration endeavors, as they are vital for my professional growth as well as enabling students to enjoy cross curricular learning. I have recently acquired a new CNC laser cutter / engraver which should also help to enable more cross curricular learning – hopefully from other teachers throughout the school.

Deirdre

Two areas that were both challenging and eye opening as an educator, include Covid - 19's impact on our school environment, and the completion of our ethics review to gain and report on students' learning experience.

First, Covid-19 drastically changed how our project unfolded. Initially students had to work from home until our district was given permission to allow learners access back into the school, however this change was optional for families. We as educators provided work in various forms to support students, including video conferencing, texting, emailing and or providing hard copies of work and materials that were delivered directly to students that were not back in the classroom.

My Social Studies 10 students were hit with limitations to their inquiry process as many did not have access to computers or may not have had internet access. Therefore, the initial style of inquiry that I chose, which was open inquiry, had to be changed to guided inquiry for those students who did not have computer or internet access. For those students who had both computers at home, and access to the internet they were able to continue with their open inquiry. However, for those with no computer or internet access I had to provide them with a variety of hard copies of resources from which they could then work from to complete their inquiry; therefore, their resources were not of their choosing.

Upon competing their inquiry project, students were instructed to pick one piece of information that resonated with them from their investigation and create a motif that would represent their learning. Students could also include a quote or statement to enhance their motif.

The ethics review was a second hurdle we had to complete in order to gain permission to interview students and stakeholders and enable their presentation to be included in our project. It

was an unexpected addition that we spent close to 3 months working on and stressing over to the point where we almost cancelled the media portion of this project. Ultimately, we are glad we stuck with it, and were approved so we can better portray the learning that took place, by providing students and stakeholders firsthand accounts.

Andrew

It would have been easy to change the scope of our project due to COVID-19 but we decided to proceed and modify as needed. This really challenged our adaptability as professionals and we are glad we persevered. As such, the learning went beyond the initial social studies classroom and became a collective school-wide project.

Some designs didn't work and needed change. The limitations of our software could not make everything they designed, transfer perfectly. There were edits to their designs that they made, sent back, and were incorporated into their final section of the feather. We were proud the students and their adaptability. Though, it would have been ideal that they were in the lab and making these changes the From this, I believe if our profession was to make a single change – it would be provide teachers greater opportunity to move outside of their traditional classroom boundaries, and collectively with each other. Working so closely with your colleagues makes you want to do more with your students – more projects, more field trips, ask more questions, investigate more answers. It helps us to regain excitement for our subjects – and really think about ways to explore and create like never before.

From this, I believe if our profession was to make a single change – it would be provide teachers greater opportunity to move outside of their traditional classroom boundaries, and collectively with each other. Working so closely with your colleagues makes you want to do more with your students – more projects, more field trips, ask more questions, investigate more

answers. It helps us to regain excitement for our subjects – and really think about ways to explore and create like never before.

Though this was for a master's project and was large in scope – something of this size would not be replicable for each class. This was a massive undertaking that we learned as we progressed. The concept was simple enough, but the completion was anything but simple. We learned a lot and would love to do something similar, but in a much smaller fashion. The learning, for both students and ourselves, was amazing. Simply put, What is big is not easy and what is easy is not big.

Question 4: Do you have any final reflective statements from this project?

Gary

From this, I believe if our profession was to make a single change – it would be provide teachers greater opportunity to move outside of their traditional classroom boundaries, and collectively with each other. Working so closely with your colleagues makes you want to do more with your students – more projects, more field trips, ask more questions, investigate more answers. It helps us to regain excitement for our subjects – and really think about ways to explore and create like never before.

Deirdre

In spite of challenges, I am grateful for the processes that Gary, Andrew and myself learned and pursued through as educators. Furthermore, I am awed at the work that our students created that led to the school's and community's Truth and Reconciliation Legacy wall that we can all reflect upon and learn from both now and in the future.

Andrew

In the end, I would have to say that this was a very enlightening and humbling

experience. The reception from the school, and community has been heartening and made it all

worth it. We are only going to grow if we have the tough conversations and move towards true

truth and reconciliation.