How can Blended Learning delivery be leveraged to facilitate implementation of BC’s new Career Education curriculum through integration of an advisory system?

by

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We accept the Process Paper as conforming to the required standard.

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Abstract

The 2018/19 school year in British Columbia (BC) marked the start of implementing BC’s new curriculum for Grades 10 through 12. A key component of this transition was the introduction of a revamped, more rigorous Career and Life Education curricula. The newly introduced courses are a requirement of graduation from BC schools, and have to be assessed in order to provide a letter grade upon completion. For many schools, implementing a yearlong course meeting these requirements, given already busy timetables, could prove daunting in a traditional face to face classroom. The intent of this project was to research ways Blended Learning, reliable, contemporary, engaging online resources, and a once weekly face to face advisor meeting, could be leveraged to create an outstanding career-life education course. The instructional model developed would need to provide students with meaningful, personalized learning opportunities utilizing exceptional resources, while ensuring compliance with Ministry of Education curriculum and marking requirements. The project deliverable was an online resource website with pages detailing: the development of an appropriate, engaging, blended instructional model based on defined school constraints; examples of actual resources in use; draft activity timetables; and online resources categorized into pages by functional characteristics. In addition, lists of BC curriculum content extracted from Ministry documents and organized by content areas, are linked to appropriately themed resource pages.

The project deliverable site: https://sites.google.com/gsuite.viu.ca/athrodewi-medl/home

Keywords: Career Education, Blended Learning, Advisory System, Career-Life Exploration, Career-Life Connection, Mentor, Advisor, Alumni, Life Skills, Post-Secondary, BC new curriculum
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Chapter 1 – Introduction

Purpose of the Major Project

Colin Latchem (2017), in a United Nations Educational, Scientific and Cultural Organization (UNESCO) sponsored report, addresses the world of work in the 21st Century thus:

However, with globalization, the transition from the Industrial Age to the Knowledge Age and the revolutions and innovations in science and technology, there is now a need for new domains of knowledge and new disciplines in all levels of education and training. (p. 9),

... it will not just be the low-paid, manual jobs that are at risk. In many jobs in the manufacturing and service industries that involve low levels of social interaction, creativity, mobility, dexterity, data gathering and analysis, more and more tasks will be automated (CEDA, 2015, p. 10)

and

Renewable energy and other industries that do not yet exist will create new jobs, but in the world of work in the 21st century, employees will need to be capable of undertaking tasks that are less routine and involve complex problem-solving, teamwork and interpersonal negotiation skills” (p. 10).

As automation through advances in robotics, artificial intelligence (AI) and digitization of experiences continues to accelerate, several previously immune jobs will succumb to productivity gains provided by these technologies. In counterpoint to this, a report authored by Institute For The Future (IFTF) (2017) suggests that:

Not only will workers have many jobs, the tasks and duties of the jobs they’ll perform will be markedly different from what they studied. The experts that attended the IFTF
workshop in March 2017 estimated that around 85% of the jobs that today’s learners will 
be doing in 2030 haven’t been invented yet (p. 14).

The research I undertook suggested to me a correlation between the number of articles 
and papers citing warnings such as those above, and an apparent global trend of reviewing 
existing Career and Life Education curricula and implementations, in light of such warnings. 
Many jurisdictions, Canada included, were experiencing dissatisfaction with their current 
delivery methods and outcomes for this important subject. Indeed, British Columbia’s school 
satisfaction survey of 2016 showed that while Grade 12 student evaluation of improvement in 
reading and writing exceeded 52% and in mathematics was 48% of responses (p.3), only 23% of 
Grade 12s felt they were adequately prepared for a job in the future (p.7). Similarly, while 62% 
of parents felt satisfied with their child’s learning at school (p.15), only 38% felt their child was 
well prepared for jobs (p.18) (BC Government, 2016). In Alberta’s school system, Witko et al. 
(as cited in Welde, Bernes, Gunn, & Ross, 2015) discovered that only 33% of students found the 
Career and Life Management (CALM) course to be helpful. These findings suggested that Career 
and Life Education courses failed to connect with and engage high school students in meaningful 
learning related to future life choices. Personal, informal discussions with current students and 
alumni also suggested to me that Career and Life Education was not being delivered effectively, 
at least within the context of our school.

The 2018/19 school year in British Columbia (BC) marked the start of implementing 
BC’s new curriculum for Grades 10 through 12. A key component of this transition was the 
introduction of revamped, more rigorous Career and Life Education curricula. The newly 
introduced curriculum courses are a requirement for graduation from BC schools, and have to be 
assessed in order to provide a letter grade upon completion, this is in stark contrast to the 
previous model of simply stating ‘requirements met’. In the context of schools with an already
full timetable of academic, arts and sports courses, this would have presented significant challenges to effectively implement in a dedicated F2F academic block. BC’s new curriculum modernized the parameters for delivery of Career and Life Education, recognizing the requirement for flexibility in delivery of the subject, enabling students to engage with the material in ways that were meaningful to themselves. This flexibility in curriculum definition also allowed schools to entertain novel approaches to local implementation of the curriculum.

To adapt to the future, increasing impact of information and communication technologies (ICT) in, not only the world of work, but also day to day life, competence in working, studying and problem solving with connected technologies would be a key factor in future life. ICT was identified as a key component of the project, not only to develop student mastery in leveraging technology, but also to provide agility in rapidly updating resources to reflect evolving career and life related scenarios. The new curricula also value and highlight mentor/student interactions, within the context of our school that meshes well with our current advisory system, in which every staff member supports a small group of ten to fifteen students.

Given the lack of effective current resources, both material and time, it was determined to initiate this project with the purpose of developing an online resource that would inform and support effective delivery of an engaging, meaningful Career and Life Education program within our school, while maintaining our current timetable format. It seemed that a Blended Learning model would best provide the flexibility for students to fully engage in course material, online and in collaborative group work, while the academic advisory system would provide the F2F contact, tracking and mentoring to ensure rigor within the courses. While the project was fundamentally predicated on a single school scenario, many of the project outcomes may have relevance with other school environments or could be adapted to catalyze new approaches to implementing this critical facet of BC students’ education.
Justification of the Major Project

While Career and Life Education is not a new concept, it has been a staple of BC schools in some form for well over 40 years, the ever-accelerating disruption to traditional careers powered by rapidly evolving digital technology has recently sounded alarm bells in this subject across the globe. Many existing Career and Life Education offerings are unable to keep pace with the current rate of change. Canada’s post-secondary institutions are critically aware of the changes already sweeping across our World, as evidenced by some of Andrew Petter’s statements at the 2018 Simon Fraser University (SFU) Convocation:

A recent Oxford University study estimated that 47 percent of current jobs will be automated out of existence over the next 20 years. When I attended university, lo those many years ago, I was encouraged to believe that if I developed a good career plan, that plan could serve me for a lifetime. In today’s dynamic world, the notion of planning a lifelong career is as redundant as many of the careers for which I might once have planned. (Petter, 2018, n.p).

He also referenced American political activist and commentator Van Jones in describing how time has changed:

Then came the industrial age, an era of transformation and change.
In this era, time became linear: the past behind you, the present with you, the future stretching out in front of you but still distant.
Jones compared the industrial era to being on a train with the track ahead leading one to a new destination.
In this era – this unfolding environment – the key value for survival was planning. One could look ahead and prepare for a lifetime of well-ordered tomorrows.
But the industrial era has now been supplanted by a digital era in which, Jones said, we are no longer travelling into the future.

Rather the future is coming towards us at ever-faster pace, no longer content to wait as our plans unfold.

In his words, the future is “onrushing” … bringing with it changes that overwhelm our ability to plan.

So today the key value for survival is not preservation or planning, but rather adaptability; or as Jones calls it: the capacity to pivot. (Petter, 2018, n.p)

While lengthy, this narrative eloquently describes the world we are now experiencing, and the concepts drive the vision of SFU to graduate students capable of thriving in this new world.

While ICT was identified as a major driving force in the changes experienced in the workplace, it was not the only factor. Globalization has also had a profound effect on people’s futures. BC’s high school graduates of the future could as easily find themselves working and living in Europe, Asia, Africa or elsewhere in the Americas. Research on careers, and career resources, in a global context, would have also have to be considered to adequately inform the project development process and ensuing deliverable.

The BC school system needs to graduate students with the capacity to understand and thrive in not only the new world of work, but also the new world of tertiary education. Career and Life Education is a critical component of those graduation requirements. Although a growing acceptance of the need to modernize and react to these changes had occurred, at the time of project planning, local resources to effectively inform and support change were limited. Within the context of our school, a need to research and document suitable learning resources and methodologies was identified. While much of the learning from Vancouver Island University (VIU)’s Online Learning and Teaching Diploma (OLTD) program informed initial research
activities, in order to compile as full a picture as possible of the career education landscape, these were further expanded by considering evolving resources from Canada, the USA and around the globe. This was even more significant in our local context due to the high number of international students attending the school.

Welde, Bernes, Gunn, & Ross, (2015) state “Stand-alone career education courses, … have not been rated as effective by high school students” (p. 81) and “Career infusion and/or integration may serve as a viable alternative … that integrates career concepts and planning strategies into the mainstream curriculum to impart relevance to subject matter at school” (pp. 81-82). This supports the concept that all staff within a school can provide insights relevant to Career and Life Education, in which case, resources and training need to be available to empower staff to take up this mantle and support their students. While providing career education training in all education courses is a discussion for post-secondary institutions, the research undertaken in this project suggested that an accessible, comprehensive resource of materials and methods would be of benefit to school leadership, and teachers, embarking on implementing new career-life curricula.

**Critical Question/Challenge to be Addressed**

*How can a Blended Learning delivery be leveraged to facilitate implementation of BC’s new Career Education curriculum through integration of an advisory system?*

**Key Deliverables**

The key deliverable of the project was a web-based resource site which provides information on resources and delivery models to facilitate provision of effective Career-Life Education (CLEd) to satisfy the requirements of BC’s new curriculum for Grades 10-12. Initially derived from a single school context, the deliverable also aimed to provide examples that could
stimulate discussions and/or explorations in other schools toward non-traditional implementation strategies for effective delivery of Career-Life Education.

**Definition of Terms**

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<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Blended Learning</td>
<td>Education programs in which a student learns at least in part through online learning, with some element of student control over time, place, path, and/or pace.</td>
<td>Blended: Using Disruptive Innovation to Improve Schools.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>eBook: ISBN 9781118955178</td>
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<tr>
<td>CLC (Career Life Connections)</td>
<td>Specific BC course focused on applying personal career-life management knowledge, skills, and strategies to one’s own personal life journey.</td>
<td><a href="https://curriculum.gov.bc.ca/courriculum/career-education/core/introduction">https://curriculum.gov.bc.ca/courriculum/career-education/core/introduction</a></td>
</tr>
<tr>
<td>CLE (Career-Life Education)</td>
<td>Specific BC course focused on gaining a clear understanding of career-life development knowledge, skills, and strategies for life’s journey into adulthood.</td>
<td><a href="https://curriculum.gov.bc.ca/courriculum/career-education/core/introduction">https://curriculum.gov.bc.ca/courriculum/career-education/core/introduction</a></td>
</tr>
<tr>
<td>CLEd</td>
<td>Career-Life Education</td>
<td>Devised by myself.</td>
</tr>
<tr>
<td>GBL (Game Based Learning)</td>
<td>Describes an approach to teaching, where students explore relevant aspect of games in a learning context designed by teachers.</td>
<td><a href="http://edtechreview.in/dictionary/298-what-is-game-based-learning">http://edtechreview.in/dictionary/298-what-is-game-based-learning</a></td>
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<tr>
<td>Gamified Learning</td>
<td>The application of typical elements of game playing (rules of play, point scoring, competition with others) to other areas of activity, specifically to engage users in problem solving.</td>
<td><a href="https://ii.library.jhu.edu/2014/05/13/what-is-gamification-and-why-use-it-in-teaching/">https://ii.library.jhu.edu/2014/05/13/what-is-gamification-and-why-use-it-in-teaching/</a></td>
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<tr>
<td>ICT (Information and Communications Technology [or technologies])</td>
<td>Devices, networking components, applications and systems that combined allow people and organizations to interact in the digital world.</td>
<td><a href="https://searchcio.techtarget.com/definition/ICT-information-and-communications-technology-or-technologies">https://searchcio.techtarget.com/definition/ICT-information-and-communications-technology-or-technologies</a></td>
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<tr>
<td>STEAM</td>
<td>STEAM is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking.</td>
<td><a href="https://educationcloset.com/steam/what-is-steam/">https://educationcloset.com/steam/what-is-steam/</a></td>
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<tr>
<td>STEM</td>
<td>STEM is a curriculum based on the idea of educating students in four specific disciplines — science, technology, engineering and mathematics — in an interdisciplinary and applied approach.</td>
<td><a href="https://www.livescience.com/43296-what-is-stem-education.html">https://www.livescience.com/43296-what-is-stem-education.html</a></td>
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**Brief Overview of the Project**

The project was initially conceived out of a conversation around ways to resolve a teaching crunch within Brentwood College School, where BC’s new Career Education program had to be implemented in the 2018/19 school year. The new curriculum introduced two new courses and a capstone requirement, Career-Life Education essentially replaces Planning 10 and Career-Life Connections with its Capstone Project replaces Graduation Transitions. The new courses — both required for graduation — while designed with flexibility and personalized, individual choice in mind, were also intended to be more rigorous by introducing the requirement for letter-grading the course work. This structural change would require greater accountability by students and teachers of record, through tracking of individual learning outcomes more akin to a full academic subject.

Brentwood’s academic timetable only contains 6 teaching blocks with, in grades 10 and 11, strict requirements for 2 compulsory subjects (English and Math) and 4 electives to be taken. This consideration limited the possibilities of implementing these courses to some form of Blended Learning, integrated learning or intervention through a dedicated career-life counselling
office. The Career Education 10-12 Guide (BC Government, 2018e) suggested integrating learning across specialized elective subjects, this would have involved major disruption to existing course structures and teaching assignments. Intervention style implementation, through a careers office pulling students out of regular programming would also be incredibly disruptive, and would be unlikely to build true appreciation and understanding by staff of every individual student’s needs. Blended Learning coursework tracked through the advisory system however, would provide full flexibility for students to pursue their interests and passions, while building strong, meaningful mentor relationships with advisors in smaller student ratio settings. In this way advisors would be able work with students through all three years of the graduation requirement courses, understanding their personalities and passions.

From these initial observations and evaluations, the project developed through intensive online research to determine curriculum requirements, investigate BC, Canadian and global perspectives, and seek out online resources capable of supporting implementation of the curriculum requirements. As the information base grew, the vision to create a web-based reference developed. This would be a flexible platform capable of sustaining rapid updates to stay abreast of new initiatives and would include separate sections for topics such as resources, methodologies, relevant research, connections and community.
Chapter 2 – Literature Review

Introduction

With the impending implementation of BC’s new curriculum for Grades 10, 11 and 12, there is a requirement for a more rigorous delivery of Career and Life Education culminating in assigned letter grades rather than a simple “requirement met”. In determining how best to implement these new programs within a school, I have embraced learning from my studies and experiences in VIU’s OLTD program to envision an academic advisor system that leverages Blended Learning methodologies to effectively deliver quality, engaging Career and Life learning that is trackable, and which can be assessed to provide the requisite letter grades. My initial research was driven by the vision of an advisor facilitating weekly Face-to-Face (F2F) meetings with students, during a dedicated advisor block, to negotiate and monitor deadlines for completion of learning tasks satisfying curriculum outcomes. Students would perform learning tasks through a variety of internet connected, technology-based platforms, more capable of maintaining currency with evolving career landscapes. Assessment could take place online or in person, with grading transferred to a central mark book.

This literature review, due to geography, examines literature from the BC Ministry of Education related to Career and Life Education and also considers relevant literature concerning Blended Learning environments — both Career Education related and generalized. In addressing my Critical Challenge Question (CCQ) — How can Blended Learning delivery be leveraged to facilitate implementation of BC’s new Career Education curriculum through integration of an advisory system? — I discovered that academic research papers specifically discussing Career Education facilitated through Blended Learning are sparse, while articles, blogs and videos regarding the topic are more prevalent. Blended Learning, as a general delivery modality, has warranted significantly more academic research to support it, as has Career Education, which has
been of tremendous importance from an academic perspective for a long time. Much of the historical research in Career Education however does not address the rapidly changing career landscape of the 21st Century.

At the onset, it may be useful to define “career”, as this concept is central to the research topic. The Oxford Dictionaries define career as — “An occupation undertaken for a significant period of a person's life and with opportunities for progress” with occupation further defined as “A job or profession” or alternately “A way of spending time”. I personally like the definition found in “The future of Career Education in New Zealand secondary schools” by Anne Yates and Megan Bruce where they quote the New Zealand (NZ) Ministry of Education’s definition: “... more broadly, ‘career’ embraces life roles in the home and the community, leisure activities, learning and work. Work, learning and life, though sometimes distinct, are closely intertwined. Everyone has a career” (Yates & Bruce, 2017, pp. 1-2). This is consistent with dictionary definitions, and also acknowledges that “career” can be many things to many people and no one is excluded from requiring Career Education — indeed it is critical for all students to undertake what is essentially life management education.

**Career Education Transformed**

The new Curriculum Overview document from the BC Government, provides the reference model for curriculum transformation to meet 21st Century skill requirements and aims to ensure that BC graduates are ‘educated citizens’ capable of forging a future in a rapidly changing technological environment, (BC Government, 2018d, p1). The new curriculum seeks to prepare students for a lifetime of learning, where ongoing change is constant, and is designed around the Know-Do-Understand model (depicted in Figure 1), while stressing personalized approaches to the learning. Several references are made to learner-centred delivery of curriculum such as— flexible learning environments where “Learning can take place anywhere, not just in
classrooms” (BC Government, 2018d, p. 1), personalized learning where “…it involves the provision of high-quality and engaging learning opportunities that meet the diverse needs of all students. Schools may provide flexible timing and pacing …” (BC Government, 2018d, p. 1) and ICT-enabled learning environments in which “Technology can facilitate collaboration between students, educators, parents, and classrooms…” (BC Government, 2018d, p. 1) and “…enables classrooms, communities, and experts around the world to share digitally in a learning experience,...” (BC Government, 2018d, p. 1). The Career Life Education and Career Life Connections documents from the BC Education Ministry elaborate on the general overview by detailing the content, curricular competencies and big ideas that make up the Know-Do-Understand model of the Career Education curriculum.
In the new Career Education courses, students are expected to assume more ownership of their progress through self-discovery of interests, traits and skills, and evaluating local and global information to guide decisions about labour, career and education choices. The new curriculum also embraces mentorship as a key component of the learning experience. Combined, these
components of the curriculum seem to support my belief that Blended Learning facilitated by an advisor fits many of the criteria for course delivery.

**Current shortcomings.** Gaylor and Nicol (2016) studied the effects of experiential Career Education in Saskatchewan high schools. In their paper they identify that Career Education has become ubiquitous in high schools across Canada. However, the effectiveness of career (and life) education remains variable across the country and “career decision-making skills and post-secondary transition plans remain underdeveloped after high school for many students” (Gaylor & Nicol, 2016, p. 3). As a result of the current shift toward an increasingly knowledge and technical skills-based economy, high school students are increasingly seeking out post-secondary training and education, with increasing numbers deciding to attend university. Gaylor and Nicol (2016) however cite a Statistics Canada report that estimates 50% of Canadian university students fail to finish their first degree within five years. Other studies they refer to suggest that this failure rate may be due to several factors: the selected program not being what the students expected; realizing that they actually have far more interest in another field discovered at college or, they were simply under-informed when planning for post-secondary studies. Gaylor and Nichol’s research studied the effect of experiential courses offered in Saskatchewan high schools, which placed students in work environments to support classroom learning activities — the aim being to encourage intrinsic motivation in line with the self-determination theory, developed by Deci and Ryan. Such co-op work programs help develop competence, autonomy, and relatedness, thereby enabling supportive classrooms in which teachers value student input and offer meaningful assessment choices. (Gaylor and Nicol, 2016) The intention of these employment-oriented courses was to motivate students to explore their own interests and research career and education paths that resonated internally, rather than merely completing a check box of the graduation requirements. While my major project may not
inherently involve job placement experiences, the same tenets could apply to a blended model if strong connections between students and career practitioners are created and maintained, and career exploration resources are engaging, self-determined and, possibly, created by the students for community sharing.

**The Canadian context.** Despite the criticisms identified in many of these works, Canada is, in many respects, highly regarded by other countries for its career guidance efforts. A UK study, “Failing to deliver? Exploring the current status of Career Education provision in England” Moote & Archer (2018), examines Career Education in England and recognizes poor delivery of relevant advice as a global problem. “Careers education has been a topic of policy concern around the globe, with even countries considered to have more advanced and developed career education efforts receiving criticism” (Moote & Archer, 2018, p. 208). They identified that Canada had a widely disparate implementation of career planning across the country but confirmed that recent Canadian efforts had been focused on integrating Career Education into the mainstream curriculum and away from dedicated career counsellors. The English students studied, clearly identified that they needed more and better Career Education despite the fact that England, like BC, has mandatory requirements for delivery of Career Education. The students also desired to have more personalization and flexibility in their Career Education with more of a one-on-one relationship where advisors were better able to understand the student’s individual interests and desires. (Moote & Archer, 2018)

The Learning Partnership (TLP) is a national charity dedicated to enhancing publicly funded education to prepare students in Canada for a globally connected world by building partnerships between government, education and business. They also conduct studies on educational topics to “connect ideas and credible research with stakeholders in education, business and the community by moving knowledge across provincial boundaries and shining
light on successful practices in education” (The Learning Partnership, 2018, About Us section).

Three reports from TLP centred on Career Education have informed my topic exploration. “It’s Their Future” is a 2013 Pan-Canadian Career Education study focused on “What are the approaches to Career Education and technical training programs across Canada?” and “What are the policy changes that would improve the effectiveness of Career Education and students’ ability to plan for their future careers, and thereby awareness of education pathways?” (The Learning Partnership, 2013, p. 10). This report analyses curriculum offerings across Canada in light of the changing business and economic drivers that are affecting future workplace skills requirements — in particular the growing need for STEM skills and 21st Century skills. Two other reports focus on the student Career Education experience. It’s My Future: Student Voices From Across Canada (The Learning Network, 2014), another Pan-Canadian study, and Changing World, Building Careers: It's My Future 2 (The Learning Network, 2016) a case study involving Ontario students specifically. All three reports identify disparities in Career Education across the country, which is not surprising, as education is a provincial mandate. The reports document a troubling finding that while the majority of students recognize that Career Education and planning would help them make informed decisions about their future, a large number of students do not feel they receive adequate meaningful instruction in this field. Students felt that the current content does not reflect the world they will be living and working in. Further, they are not conversant with potential future career pathways nor which employment sectors are likely to grow in quality and quantity.

Themes for improvement. Returning to Yates & Bruce (2017), this major NZ study also highlighted Canada as viewing Career Education being geared more toward developing lifelong learning skills, and that Career Education fosters student engagement in school. Based on their analysis of international studies, the authors identified the following themes for improvement:
increasing importance of Career Education; integrated whole school approaches; [changing] role of the career advisor; attitudes toward Career Education; resourcing time and professional development (Yates & Bruce, 2017). Many of these points highlight the need to deliver targeted Career and Life Education programs towards facilitating individual student’s needs and building an understanding of how to best serve these needs. This cannot happen without some degree of personal connection and relationship building.

Welde, Bernes, Gunn, & Ross (2015) identify the importance of students developing awareness of personal attributes, current global job options, career planning capabilities, decision making skills and lifelong learning capabilities that can be reused to adapt to future life opportunities. In general, many current standalone Career Education courses are considered ineffective by high school students. In Alberta, one study suggests only 33% of students found the CALM course to be helpful (Witko et al. as cited in Welde, Bernes, Gunn, & Ross, 2015).

Much career guidance is performed by a specialist counsellor within the school and, typically, student to counselor ratios are very high, leading to limited quality time for student-counselor relationships to flourish and genuine understanding of the individual to occur. Welde, Bernes, Gunn & Ross’s study involved ten intern teachers taking newly created Career Education courses to develop skills in teaching modern career exploration, engaging students in career development and creating units integrating career components. These units were delivered to high school students and the overall results were extremely successful with over 61% of students agreeing that, through the courses they had learned a lot about careers, become excited about what they could do in life and wanted to learn more about career opportunities. This research may indicate that all teachers would benefit from a Career Education instruction course not only in order to better assist students in developing connections between personal attributes, education and future career options, but also to emphasize “… identity rather than personality, adaptability
rather than maturity, intentionality rather than decidedness, and stories rather than scores”
(Savickas, as cited in Slomp, Gunn, & Bernes, 2014, p. 24, as cited in Welde, Bernes, Gunn, &
Ross, 2015, p. 81). Perhaps if all school faculty were given some training in Career Education
and an academic advisory system was in place with smaller student-advisor ratios the success
rates of Career and Life Education programs would increase.

Blended Learning Delivery

In their book ‘Blended’ (2015) Horn and Staker state “...blended learning is any formal
education program in which a student learns at least in part through online learning, with some
element of student control over time, place, path, and/or pace.” (Horn and Staker, 2015, p.84)
This definition ties in exceptionally well with the Ministry of Education’s definitions of
“Flexible Learning” as previously presented. While research is currently underway, Horn and
Staker’s Flex Model is currently favoured as the blended delivery model best suited to this
applied project.

In this model, most of the learning is provided through online learning resources with
some F2F classroom sessions. Students are able to negotiate a flexible learning schedule to
ensure learning objectives are met, and can utilize different learning modalities to suit the
specific content module they are engaged in. The Flex Model is considered a disruptive learning
model where the teacher switches roles to become a ‘guide on the side’ as a counselor, or
advisor, supporting the student’s individual learning, rather than a ‘sage on the stage’ dictating
consistent, rigid learning to every student. The flexible delivery environment provided through
Blended Learning lends itself to the incorporation of many online learning methodologies —
foremost of which might be Mobile Learning (M-learning).

The ubiquitous presence of mobile devices in students’ lives, when meshed with
appropriate mobile-friendly learning objects, facilitates the ability for the student to learn
anywhere, anytime and at their own pace. M-learning is currently finding great traction in the workplace with employers flocking to implement engaging training materials deliverable via mobile devices. Many of the resources are considered ‘micro-learning’ and are based on short information bites delivered in less than 10 minutes. Steve Penfold (2016) in an article for E-Learning Industry, informs us that modern learners are using bite-sized mobile learning modules for varied reasons: employers are providing less time for training; the learners have shorter attention spans; and small mobile screens are not conducive to extended cognitive reading periods. This is reinforced in a Grovo blog article 7 Things We Learned from Bersin’s ‘Meet the Modern Learner’ (Grovo, 2015). While M-learning seems increasingly prevalent in industry, (Pedro, Barbosa, & Santos, 2018) article reveals that it is less prevalent in formal education contexts and that studies of actual results of M-learning integration from a teacher perspective are few. They also address concerns that mobile devices, if used in a learning context, can cause distractions and degrade focus in class. This should not be unexpected as blended, and M-learning are intentionally supposed to give the learner control over where, when and how they learn. With industries adopting these techniques, educators should also be seeking positive ways to introduce future 21st Century workers to the learning modalities they may encounter in the workplace.

**Blended Learning and Career Education**

Using ICTs and Blended Learning in Transforming TVET (Latchem, 2017), is a detailed UNESCO report that considers the future of workplace transformation on a global scale — setting the context for increased use of Information and Communication Technology (ICT) in providing instruction for technical and vocational education and training. It details nine case studies from countries including Canada. The report highlights how technology is rapidly automating many work environments and changing the technical knowledge and skills required
in others. New jobs and careers are being created annually as innovation drives industries to new product areas such as autonomous vehicles, space travel and alternative energy.

Digital data has become a core component of many industries requiring skilled practitioners to devise digital representations of real-world situations and objects. Many of the world’s most influential companies have massive holdings but, compared to the influential companies of 40 years ago, employ a fraction of the people that traditional, large employers hired previously. The report also suggests that while university enrollment and graduation rates are higher than ever, many graduates find themselves in jobs that do not require the degree which they spent a significant amount of money acquiring. As cited in Latcham, (2017, p. 19) “...many recent graduates in Australia are struggling to find full-time work and are being paid lower starting salaries than their predecessors (Lousikkian, 2015), many of the jobs held by college-educated graduates in the US are not worth the price of their diplomas (McGuinness, 2013) and almost half of graduates in the UK are in non-graduate jobs (Allen, 2013).” This suggests that Career and Life Education is not currently comprehensive nor flexible enough to react to rapidly changing career/education marketplaces and that a more flexible, blended, ICT-based delivery that considers all manner of career and postsecondary options, could help stimulate more informed planning for a student’s future. ICT based course materials can also more efficiently keep pace with changing trends, as career data (in a delivery vehicle) can be updated and immediately be made available to all subscribers.

León & Castro (2014) offer many insights into connecting students with material about, and experts in, the specialized field of music. Their paper presents a case study of Blended Learning in delivering career guidance to music students at a Spanish conservatoire who had, in previous studies, indicated generalized discontent in relation to career guidance. The study supports the view that Career Education, while incredibly important, is often considered to be
sub-par in many environments as it lacks exposure to a rich diversity of career paths. Within a Blended Learning approach to career guidance, ICT is highlighted as a tool to connect a greater diversity of career professionals with students. Virtual tours of different music-related work environments were highlighted — music production studios, DJs, instrument makers etc. This enabled students to gain knowledge from Music related practitioners who were not all teachers, thereby expanding students’ views of music related job opportunities. This has relevance as I also hope to bridge the gap between students and those currently working to create an engaging community of learning where students are able to obtain “real world” viewpoints from experts outside a relatively insular school environment.

**Game-Based Learning (GBL)- can games help?** One other “blended” modality that has received some attention in the context of Career Education, is Game Based Learning. Hummel, Boyle, Einarsdóttir, Pétursdóttir & Graur (2017), noted that “Current career counselling practice does not appear very compelling or motivating to young people” (p. 1) and aimed to discover whether GBL could motivate students to learn more effectively. Career-based game play, while fun, is also classed as serious since it aims to foster learning, stimulate intrinsic motivation and enable the player to develop understanding of themselves, as well as of potential careers. Results of the study showed “...participants mostly report positive change after doing the career activity. Significant positive effects over time were found for career adaptability and perception on career learning competences” (Hummel, Boyle, Einarsdóttir, Pétursdóttir & Graur, 2017, p. 10).

Justin Marquis (2012) in his article ‘Game-Based vs Traditional Learning – What’s the Difference?’ identifies GBL as allowing students to experience simulations of reality which can replicate real-world situations and cause the brain to react and develop real-world responses. While he acknowledges that commercial games have higher fun factors, but lower educational learning outcomes than serious games, and vice-versa, the report is now five years old and
educational game development is now more prevalent with a number of identifiable career-targeted offerings available. If the aim is to engage students, in the career exploration process, GBL may turn out to be a valuable incentivizer.

Conclusions

Research and anecdotal evidence from my conversations with students and alum, suggests that many standard, traditional career and life education offerings do not adequately fulfill the requirements of our modern age. There are however glimmers of hope in the gloom of the industrial age demise regarding progressive approaches to this important subject. Current researchers, through engagement with students, have identified themes that, if developed, have the potential to nurture meaningful, engaging programs that truly inform students of viable career choices. Continued research into more current publications, as well as school community-based investigations, will be needed to adequately answer my Critical Challenge Question “How can Blended Learning delivery be leveraged to facilitate implementation of BC’s new Career Education curriculum through integration of an advisory system.”

The results of these and future findings will be applied to the development and refinement of the deliverable for my major project, a web-based resource package. The intention is to develop a website that provides, to the best of my abilities, researched methodologies to implement Blended Learning practices as they relate to career and life education. My initial plan is for the site to have several sections including: Online Career Education resources, Integrated Career and Life Education products, advisor system and Blended Learning delivery models, Research and Blog articles related to CLEd. As the project development progresses, these initial plans may evolve, but the final product will be an online resource of benefit not only to Brentwood College School, but to the greater educational community of BC and hopefully other jurisdictions.
Chapter 3 – Procedures and Methods

Major Project Development

As stated in the previous chapter, the intention of the project is to develop a resource website supporting educators developing Career and Life Education (CLEd) program meeting BC’s new curriculum guidelines. The development process will include some live evaluation of web-based software designed to deliver career education learning, as well as researching additional online content that could support efforts in this critical component of a student's development. As the key deliverable also aims to reference implementation of F2F supervision through an advisory system, collaboration with school administration will be undertaken to determine the optimal structure and scheduling of such sessions within the greater school context. I hope to include tentative results of school discussion as a draft schedule of CLEd instructional sessions tied to a selected delivery platform thereby answering both parts of my stated CCQ.

Major Project Design and Considerations

The initial design phase of the project involved several concurrent activities; evaluation of online software capable of delivering integrated CLEd courses in a robust, engaging environment; meeting with school administration to discuss Grade 10, 11 and 12 advisor roles in relation to CLEd; researching additional online resources to enhance delivery or provide cheaper implementations; and determining a delivery platform for my resource package.

The evaluation of dedicated, Canadian, online career education software comprised Career Cruising, Xello and myBlueprint. During this process I recorded screen captures of my interactions with the products in order to provide examples of first-hand interactions with the software. Some of these interactions are featured in the online resource I created. I also conducted online research to uncover other suitable supporting, and possibly mainline, products.
Searches were targeted at BC specific resources, Canada specific resources and worldwide resources. Given the global nature of the internet and the mobility of populations in the 21st century, I believe worldwide career and education resources are a valid, possibly vital, part of comprehensive career and life explorations.

The meetings with school administration determined that the advisory system would indeed be a good fit to deliver CLEd, however, other courses such as residential life might also have to be accommodated. This posed initial difficulties with determining a potential delivery timetable which would need to be resolved at a later date. Approval of advisory classes to stage the F2F component of CLEd, did however lead me to research the general familiarity of BC educated teachers with formal career education delivery. Email queries were sent to post-secondary teacher education institutions in BC to determine if their programs covered this, the results of which I eventually included in the project.

Determining a delivery platform for the project involved considering the relative merits of Weebly and New Google Sites. I was very familiar with Weebly having used it to maintain my OLTD ePortfolio, however I had started using Google Sites for OLTD assignments and wanted to see if I could stretch it to deliver this project. Despite not having all the features of Weebly, Google Sites produces a very elegant, modern looking end product, optimized for multi-device viewing. I elected to use Sites, partly to test my resourcefulness, partly to learn a lot more about Sites and partly because of the tight integration with the other google creative products that I use to generate artefacts.

Having acquired the essential prerequisites and a comprehensive catalogue of resources to populate the website with, I commenced the organizational design of the resource. Initial site structure was designed with an introductory home page describing rationales for creation of the project, a project history page describing the background contexts driving the blended
implementation, a page dedicated to Blended Learning and providing example videos and presentations, one page dealing with all-in-one software suites such as those evaluated and one hierarchical page structure to collect the ad-hoc resources capable of, either enhancing a core software product or, through combining many individual resources, replacing a potentially costly single solution. As the individual sections were populated with their content, it became apparent that some changes needed to occur in layout and structure. Deficiencies in page content and organization were exposed, certain advanced technical features did not complement the layout as well as hoped and a consistent navigation colour theme was impossible due to banner image choices.

Iteration two of the project site transferred the history page content onto the home page and removed the troublesome accordion effects. The Blended Learning rationale page was bolstered with additional examples of F2F opportunities for career learning and by including links to BC Ministry of Education curriculum documents for easy reference. The three core content area titles, as they were specified at the time, were presented on this page in column format. Key content specifics from the ministry documents were hyperlinked to hidden internal pages that collated the site-wide resources into these targeted descriptors. The new pages had been developed as part of the personal review I undertook. The Blended Learning examples were removed to their own, new, “delivery in action” page and extra video examples added to enhance the visualization of how engaging Blended Learning can be. The “other resources” page tree was enhanced through the addition of a consistent graphical menu on each subpage of the tree to provide simpler, quicker navigation between these pages. Extra details were added to the individual resource blocks to clarify the origin of the site and its particular specialty or quirk. Finally, the banner images were redone in order to achieve a consistent white text theme throughout the site navigation. This overhaul, I believe, made the site as a whole more
consistent, easier to navigate, more informative in terms of curriculum linking and more attractive.

**Major Project Implementation and Feedback Process**

With the major development complete, the site was published via the Google publish button and the published link copied and sent to different non-VIU accounts for access testing:

https://sites.google.com/gsuite.viu.ca/athrodewi-medl/other-resources/career-exploration-resources. The site was accessible from all locations tested, all features functioned correctly on the laptops, further testing was done with mobile devices to ensure the site worked correctly on a variety of platforms. In order to distribute the site to a wider audience and collect feedback on the site’s design, content and usefulness, a Google Form was created which included the link to the site on the introduction page:

This form is part of the project I have been working on to satisfy the requirements of my Master of Education which I am currently undertaking at Vancouver Island University. The project aim is to create an online resource which may be beneficial to educators/schools/districts wishing to teach the new BC Career and Life Education curriculum via a Blended Learning model. This form seeks feedback on the site created in order to improve and tailor the site to better support educators. I would be eternally grateful if you could review my offering linked here and provide insights into the content and organization of it.

Website address: https://sites.google.com/gsuite.viu.ca/athrodewi-medl/home

This form was then published, and the link sent to a network of teaching professionals in the local SD79 school district and local independent schools. The form collects data anonymously and results were immediately available to me through the form’s responses interface anytime the
form was submitted. Feedback from the collected data could be used to improve the final project site.

**Project Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 15th 2018</td>
<td>MEdL 680 begins</td>
</tr>
<tr>
<td></td>
<td>Chapter 1 under development</td>
</tr>
<tr>
<td></td>
<td>Chapter 2 complete</td>
</tr>
<tr>
<td>July 23rd 2018</td>
<td>Final Lit Review Revisions started (Ch.2)</td>
</tr>
<tr>
<td></td>
<td>Chapter 1 meat started</td>
</tr>
<tr>
<td>August 17th 2018</td>
<td>Ch. 1 and Ch. 2 complete. Ch. 3 started</td>
</tr>
<tr>
<td></td>
<td>Major Project website v. 1 started</td>
</tr>
<tr>
<td>Sept 14th 2018</td>
<td>MEdL 690 begins</td>
</tr>
<tr>
<td>Nov 2nd 2018</td>
<td>Major Project website v. 1 complete</td>
</tr>
<tr>
<td></td>
<td>Sent for supervisor review</td>
</tr>
<tr>
<td>Nov 14th, 2018</td>
<td>Initial revision to v1.1 made on website</td>
</tr>
<tr>
<td>Nov 23rd</td>
<td>Website v 1.2 completed</td>
</tr>
<tr>
<td></td>
<td>Google form completed and sent for review to several people</td>
</tr>
<tr>
<td>Nov 26th 2018</td>
<td>Chapter 3 completed</td>
</tr>
<tr>
<td>Dec 7th 2018</td>
<td>Chapter 5 complete, paper sent to supervisor for final review.</td>
</tr>
<tr>
<td>Dec 13th 2018</td>
<td>Dean’s final sign off</td>
</tr>
</tbody>
</table>
Chapter 4 – Field/Beta Testing and Findings

Field Testing-- Methods and Process

Field testing of my Major Project deliverable was conducted through the use of a Google Form shared with testers electronically. Google Forms is an online data collection tool that allow you to create questionnaires, or forms, with numerous different question styles. These forms are delivered via email and when a recipient completed the form, the results are electronically stored in the master form document as responses. These responses can be viewed graphically within the forms interface, either as a summary view of all responses, or as individual responses. In this instance, the form created was set to accept responses anonymously, no personal data was collected as part of the form submission and no institutional Ethical Review was required. In addition to specific explanatory language in the body of the email delivering the form to testers, an introductory section was included within the form, in which the link to the project website was provided, explaining the reason for the request to assist in evaluating the website.

The intended outcomes of the testing were to determine if the website was well designed in terms of navigation, relevance of information presented, applicability of the resource suggestions to other educational environments and whether testers had any suggestions to improve the organization, navigation, layout or information within different sections of the site. Unintended outcomes of the testing have yet to be encountered, however, results will continue to be monitored so that such outcomes can be identified should they appear.

Feedback Questions

General Site Navigation:

In your opinion is the visual appearance of the site pleasing?

If unhappy with the visual appearance, what suggestions do you have that could improve the experience?
In your opinion is the site easy to navigate?

If unhappy with the navigation, what suggestions do you have that could improve the navigation?

Home page:

Does the landing page adequately describe the rationales for developing this project?

Do you believe developing a project of this nature is beneficial within BC’s education context?

Does the landing page adequately describe the difficulties associated with delivering career-life education?

Could the difficulties expressed on this page be applicable in your educational environment?

Does the landing page adequately describe the educational environment in which my development took place?

If not, what other information would improve your understanding of our environment?

Does the page make a strong case for Blended Learning as a solution to the challenges expressed?

If not, do you have suggestions on how the case could be better presented?

Blending Learning:

Does the "Why and How" section provide a compelling argument to implement Blended Learning?

Do you have suggestions to improve the "How and Why" section?

Does the "Course Content" section provide helpful information on implementing content requirements tied to the curriculum through online resources?

Do you have suggestions to improve the "Course Content" section?

Blended Delivery:
Does the page provide useful examples that serve to illustrate the model being developed?
If not, what improvements could be made to this page?
Do these examples adequately illustrate the flexibility of a Blended Learning approach?
If not, what additional resources or examples could be included?
Could you envision your institution adopting a delivery method of this style?

Career-Ed Suites and Other Resources:

Are these pages divided into appropriate categories?
Are the number of resources presented appropriate?
Is the variety of resources presented appropriate?

Please evaluate the navigation experience within these pages.
Please evaluate the visual layout of these pages

**Findings of Field Testing**

**General site navigation.** Feedback in this section was generally positive in terms of appearance and navigation. One reviewer suggested that there was too much text on the landing page, which was a concern I had considered at the time of reworking the page. I was therefore not overly surprised to encounter this critique. Another comment in this section was that the banner image did not seem to tie into careers in any meaningful way. Again, I had foreseen possible concern with this image, but finding an image that evoked “career” well, and which preserved the correct colour tone to force white header text, was proving to be difficult at the time. As a result of the feedback, I revisited image searching and discovered two images which, while not as elegant as the original, framed the concept of a career site far better. In making the banner change, I opted to keep the bright spot concept present in my original choice by using the job chasm image.
Home page. This section was also generally well regarded with 80% of reviewers indicating positive assessments on the scales. One reviewer suggested: “Point form pros and cons compared to other delivery methods: Block / DL / integrated. Also, I am not sure that students will be keen on more homework. The theory of it sounds good, but in practice many students already have too much homework in my opinion. Consider integrating some of the content with other subjects - reducing the workload.”. This is good feedback for the delivery of the course content and certainly some specific activities, such as budgeting, are covered to a degree in other subjects. In this case the students can submit budgets created in other classes to their portfolios to demonstrate competence.

Blending Learning. Once again, over 80% of responses were on the positive side of the scaled response questions indicating generally good page content. One respondent offered these thoughts: “I wonder if an overview or summary would be better and then a person could link to a more fully developed explanation. It's a lot to read before getting down to the bottom part where there is more practical information.”. This was thought provoking feedback and led me to consider returning to the accordion text segments I had been experimenting with earlier in the design process.

Blended delivery. This section elicited no negative responses to the content provided, nor to the question related to envisioning implementation, though a larger proportion of responses indicated “maybe.” No material changes were made to the project deliverable based on feedback here, but the overarching positive results prompted me to consider if better questions could have been asked.

Career-Ed suites and other resources. Once again, the responses in this section were overwhelmingly positive, though it should be noted that no written feedback questions were asked. As a result, no material changes were made to this section of the site. On reflection, I
believe written response opportunities should have been included in this section in order to maximize constructive feedback.

**Significance of Findings**

Findings of the field testing indicate that the project deliverable may indeed be a valuable resource for those seeking to implement a career life education course. Overall the collection and presentation of resources was well received. The graphical logos with succinct text descriptions were undoubtedly contributors to this positive reception, I also believe the live links to websites of these featured resources were a major contributing factor. While the Home and Blended Learning pages also received some good feedback, nuances in that feedback suggested that the, overwhelmingly text based, content on these pages was not as engaging as the resources pages. Significantly, this indicates to me that modern online reading preferences may dictate a requirement to “chunk” intensive text details in a more engaging, visually stimulating format. This led me to seriously consider structural changes within these text-heavy pages. Either by adding sub-pages or expanding panels to display the more detailed information. Specifically targeted suggestions in the feedback, such as image choice, were acted upon as described in the preceding paragraphs. In conclusion, the feedback generated by sharing the project with a greater audience, many of whom had a strong interest in curriculum implementation resources, led to significant improvements in the final MEdL version of the project resource site as related in Chapter 5.
Chapter 5 – Conclusions and Recommendations

Conclusions as Applied to the Project Re-Design

The feedback from the field testing indicated that all the content on the site was of value to educators considering implementing a career life program. No consideration was therefore given to removing content, indeed, it seemed the site was beneficial enough to warrant regular maintenance and addition of resources. Some minor cosmetic changes were made as a direct result of specific suggestion in those areas: changing banner images, modification of title headings, and grammatical changes to text passages.

The biggest changes initiated by the feedback provided was to the text-heavy Home and Blending Learning pages. These were radically modified to provide less text on initial viewing and the addition of supporting images on the pages. Since Google Sites currently does not provide a facility to expand and contact text blocks, the effect was achieved through the use of hand coded “accordion panels” embedded in the site page. This did take significant extra time to implement, but I believe the final result was worth the effort, those pages are now far more engaging and, upon first encounter, far less intimidating.

A suggestion to include sections comparing alternative delivery methods against Blended Learning to, I believe, provide a better overall picture of how career life education could be delivered, was not acted upon. I elected not to pursue this avenue since my critical challenge question specifically considered only Blended Learning, rather than trying to choose between different models.

Outcome Evaluation

In Chapter one I identified a few major themes that were to guide the development of the project: developing an accessible, comprehensive resource of engaging materials and methods to deliver CLEd; student agency in completing CLEd learning; integration of ICT into delivery and
completion of course outcomes; developing strong, meaningful, supportive relationships between students and adults; and doing all this within a extremely constrictive time and venue environment. These themes are detectable within the final deliverable through a variety of examples.

The website contains a comprehensive list of resources, Canadian and global, that could be utilized to support CLEd in many ways, all of which can be accessed online and possibly be adapted to F2F or non-technical delivery environments. These resources were primarily researched for the purpose of implementing a Blended Learning approach, which is recognized as providing high levels of student agency. During the process of reviewing resources for inclusion in the project deliverable, the potential for student engagement was a major consideration. Some key elements that I considered “engaging” included: short instructional videos; short video interviews; gamified or game-based activities; online, interactive quiz activities; interactive simulations; and live video webinar style presentations.

The proposal to link specific small groups of students to an adult within the school through, in our case an advisor role, but equally expandable to a home room environment, demonstrates the importance placed on meaningful mentorship and relationship building. Developing an understanding of a student’s strengths, personality and learning preferences through conversations, portfolio sharing and reflective exercises, enables teaching staff to better mentor students toward life goals and sustainable careers. The mentorship model is further reinforced by the suggestion of forming alumni contact networks, enabling current students to connect with past graduates engaged in careers or currently at college.

While ICT features prominently in the delivery modalities of the proposed course structure highlighted in the final project, F2F activities are also integrated through a wide range of organized events and experiential activities. The site provided several suggestions for
meaningful activities to build a student’s portfolio of career and life experiences. The advisory sessions themselves also become opportunities for discussions of experiences as they relate to general life tasks.

While real student results were not collected as formal data for this project, many of the project suggestions have in fact been implemented in a production environment, the suggested format has been adopted at our school as pilot. Informal generalized conversations with students indicate that the exploration activities targeted at understanding yourself have been well received, and many students indicated that the surveys were fun to do, the online software easy to use and engaging, and the suggested careers presented often unknown prior to the activity. Marks have already been gathered for some activities and from a teaching perspective, the process is working extremely well given the number of people involved. This anecdotal evidence suggests to me that the project has already fulfilled many of its goals in a broader perspective.

**Results of Findings in Relation to the Literature Review**

The literature review indicated that career and life education programs, while ubiquitously delivered within Canadian schools, enjoyed less than stellar success in engaging students with the material. Several reports provided data confirming dissatisfaction with overall results of career life education programs. The review also highlighted the accelerating pace of change in the world of work, the increasing inroads ICT was making into traditional occupations and the ever-expanding portfolio of brand-new occupations ICT was creating. Traditional hard copy resources could not hope to keep pace with such a rapidly evolving occupation landscape, the project’s focus on discovering and highlighting flexible, responsive online resources addresses the shortcomings exposed in the literature review. A few of the products evaluated during development of the project have now been deployed in a live environment and are proving effective in engaging students in career explorations.
The requirement for grades to be assigned to course work, as identified in the literature review, is reflected in the model of using an advisor (or other dedicated adult mentor) system. This was intended to ease the ‘span of control’ for a full grade course which, while in previous incarnations was not evaluated, now required marks to be accurately collected. In the current pilot, based on the model presented in the project, universal rubrics are used by advisors to assess advisee work and the marks entered into the course tracker. This is far more effective than one or two individuals having to coordinate that process. Advisor groups are smaller and the individual students easier to hold to account in a small group F2F check in.

The review also suggested that career life resources needed to be responsive to rapid change cycles in society. The major career software suites listed on the project site are updated with new data annually at a minimum, and quite possibly more frequently, providing the most up to date information possible for student explorations of occupations, training and qualifications. The project site itself is also capable of rapid update cycles. Implementation of the final project version through a major restructuring of two text-heavy pages within the site was accomplished in a single evening.

Limitations of the Project

One major limitation of this particular project in terms of the context I was developing it in was the exclusion of specific research and resources to address post-secondary education choices. While the major career suites do include guidance on courses of study and trade training options, no attempt to implement a specific post-secondary monitoring program was made due to the existence of a pre-existing, mature, well defined post-secondary counselling program. From a school perspective, this will be investigated in the future as results from the current pilot are examined in the context of potential programs targeted at highlighted occupation options.
**Major Project Recommendations**

During this project, research into products addressing career life education was extensive. Innovative resources from around the globe were located, examined and, if deemed useful, added to the project deliverable. Not all of these resources will stand the test of time, some will fade, some will be devoured by competitors. Frequent checks will need to be made to revalidate the resources, and discover new ones, if this project is to remain relevant.

As technology continues its inexorable march through the world of work, alternately destroying established occupations and creating brand new ones, career education professionals and providers will have to wrest that technology to their bidding. In preparing the students of the day for rewarding careers of the future, only ICT will provide the capacity to pivot, update resources in a timely enough manner, and provide relevant information for future, yet to be determined, experiences.

Blended Learning was identified as a potential solution to implementing an extensive career life education program, meeting BC’s new, more rigorous curriculum in this area, while not impacting current timetabling of other core and elective subjects. Although the model presented in the project was guided by one specific school environment, it could certainly be adapted to other settings. The resources presented in the project site are also equally valid, given a good networked technology environment, for full year classroom course models. The CCQ was addressed through the development of the specific model presented online. The delivery method highlighted the advisory role within the process, draft timeframes were presented as well as descriptions of activities to be undertaken through the year, both F2F and online. In consideration of BC’s specific privacy laws, major integrated suites were identified as being compliant with BC’s privacy laws, or not, to aid others in tailoring to BC implementations.
Overall, I was extremely pleased with the final product of my efforts. It contains a strong pool of resources from diverse global locations, a course delivery model that proved to be effective in practice and a visual appearance that was greatly improved through constructive feedback. Future additions to consider would be adding a postsecondary education and training resource section and re-evaluating the site through a Grade 12 program lens to determine any required additions.

Final Conclusions

The intent of this project was to produce an online resource which not only catalogued a wide range of engaging, resources applicable to delivering career life education programs, but also detailed at least one example of a Blended Learning delivery scenario, facilitated by a staff mentor to a small group of students. The project site fully implemented that intent, and this should be apparent to anyone browsing it.

The Blended Learning model presented in the project deliverable fully addresses my CCQ by demonstrating how Blended Learning, integrated with an advisory system, can be used to deliver a career and life education course, fully meeting the requirements of the new BC curriculum.

The current project was, by necessity, focused at Grade 10 implementation, a future direction could be to revisit the project to determine if enhancements need to be made to address Grade 12 course implementation. Building a resource section dedicated to supporting post-secondary education and training might also be undertaken, as this stage, between high school and occupational careers, was not initially addressed due to our school’s mature, effective process supporting those transitions.

Working to bring this project to fruition has been a time consuming but rewarding experience. During the process I have learned a great deal about career and life education,
discovered innovative, intriguing resources and been allowed the leeway to propose a new vision for our school’s career-life education programs. Witnessing current students actively engaged in career-life activities outside of the classroom has been a profound reward for the countless hours spent developing my ideas, and this resource.
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