

Financial Literacy Curriculum in BC Secondary Schools

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Introduction to Teenopoly

Teenopoly is a game designed to supplement the BC Ministry of Education’s Planning 10 course in its financial literacy curriculum. The *Teenopoly* project consists of a standard board game with accompanying accessories such as character pieces, money, chance cards, and dice. Students can use this stand-alone artifact for interactive gameplay without any technological component. A website also accompanies the game and can be used optionally to allow students to improve their knowledge and for teachers to access further resources. A detailed description of the *Teenopoly* website can be found in the “Design Documentation / Specification” section. Because of significant discrepancies in internet and technology access across the schools in our province, this game is developed to meet the financial literacy needs of educators and students in urban, rural and remote locations, with infinitely customizable content to create meaningful and relevant learning opportunities in this critical and underdeveloped area of curriculum.

Audience

Context of the problem: The need for financial literacy

Teenagers in the 15-18 high school age range are most in need of these financial literacy lessons as they are emerging into the work force and obtaining disposable income. Credit is being made available to younger people than ever and student debts are at an all-time high. Consumer debt in British Columbia has increased 95% since 2008 and students are

graduating high school without the necessary financial literacy to avoid the pitfalls that many have encountered before them (Uppal, 2012). Parents don't always have the financial knowledge either or a clear understanding of the long-term consequences from financial decisions made early in life. 66% of BC teenagers stated that they are not comfortable talking about financial matters with their friends (The Brondesbury Group, 2012, p. 11). This same study also shows that students' perceptions of relevant financial learning in school has decreased between 2009-2012 (The Brondesbury Group, 2012, p. 21).

According to Work Safe BC, approximately 350,000 youth (ages 15-24) are currently employed in the BC workforce (Work Safe BC, 2012), which accounts for about 16% of British Columbia's total workforce and growing. Between 2003 – 2008, BC youth employed in paid positions during the school year rose from 37 to 41% (Work Safe BC, 2012). These young people are fully functioning parts of the commercial cycle whose high levels of disposable income and less developed critical evaluation skills make them vulnerable to impulsive spending motivated by peer pressure, social conformity, and clever marketing.

Teenagers are a key target demographic for advertisers and marketing firms. They are often the focus of intense marketing campaigns. Young people are also better positioned to spend carelessly because they do not have the same financial responsibilities of their parents. These factors coupled with easy credit can quickly lead to accumulating debt with limited knowledge of the future consequences. According to a 2011 study published by Harris Decima, 13% of 16 to 18-year olds currently have credit cards in Canada (Harris Decima, 2011). A dramatic increase in credit use is observed after age 18; the data shows

85% of 19 to 22-year olds in Canada have credit cards. This significant increase after the age of emancipated decision making parallels another taboo subject matter, alcohol consumption. When we treat a subject matter as taboo, dismissing it as bad without providing the context for why or how it is bad, it's only natural that youth will be interested in experiencing this for themselves. Financial literacy curriculum should prepare young people for the challenges they will face shortly after leaving high school. After all, 22% of all youth age 16 - 22 with credit cards also are carrying a balance. (Harris Decima, 2011). Shouldn't curriculum address this head on, with a harm-reduction approach instead of turning a blind eye to the use of credit in youth?

Current BC curriculum doesn't acknowledge that students live in a world that is surrounded by debt, and that on occasion it is necessary to accumulate. By stigmatizing the concept of debt, we are inadvertently creating students that are not thinking critically about the reality of it. An opportunity to reflect the experiences of youth who have accumulated debt is being missed. Debt management strategies and detailed descriptions of the realities of living under the burden of debt could provide tangible, real-world learning opportunities for students.

Many students currently leaving high school – and many adults – have weak financial skills and little knowledge of the financial realities they will face in the future (British Columbia Securities Commission, 2011). According to research conducted by TD Financial in 2009 – 56% of Canadians do not possess an adequate level of financial literacy and 28% do not even possess a basic level of numeracy skills necessary for a modern economy (TD

Financial Group, 2009). As a result, they make costly mistakes, and are more vulnerable to scams and frauds. The huge increase of online scams and other moneymaking schemes prey on those without the financial knowledge to make critical decisions about their finances.

Average student debt in BC upon graduation from post-secondary is \$29,500 (\$2,500 more than Canada's national average), factoring compound interest over repayment terms, that amount balloons to \$37,000 (Bradshaw, 2012). These loans are readily available and actively promoted by post-secondary institutions, especially private institutions whose quest for profit does not always correlate to sound advice when it comes to incurring student loan debt (Smith, 2010). While the process to apply and receive the loan is supported by many facets of the registration process at post-secondary schools across the province, the repayment support is often left up to the student to seek out on their own. Students are making financially significant decisions about their future without an adequate knowledge around the long-term consequences of these choices.

British Columbia is home to most indebted population in the country. We currently sit at 40% higher average debt levels per individual compared to the national average (Luke, 2012). Furthermore, over the past 4 years there has been a 42% increase in bankruptcies in BC compared to an 11% increase nationally (Luke, 2012). These statistics alone indicate a populous that is making poor financial decisions; over-borrowing to compensate for British Columbia's high cost of living. This is also demonstrative of why we need a more specific, BC focused, financial literacy curriculum. We live in a part of the country that

presents a wholly unique set of financial demands that a generic curriculum simply cannot adequately address.

A recent survey by Canadian Chartered Accountants reveals that 89% of young people aged 16-22 believe parents should be taking the main role in educating youth about finances (Harris Decima, 2011) but if the parents aren't financially literate themselves then how beneficial can their advice actually be? There should be a structured, thorough, and relevant financial literacy curriculum that students experience in each year of high school. *Teenopoly* will take the role of one small part of that curriculum.

Problem

The current requirement for financial curriculum in secondary schools in BC is not adequately serving the needs of students graduating today. This curriculum is only mandatory in Planning 10, which is taken – at the earliest – two years before students are leaving school to begin making significant financial decisions that can have a long-term impact on their credit and finances for years to come. Although there are elective courses in business and finance at grade 11 and 12 levels, these are not mandatory and attract only a small percentage of students.

Planning 10 is multi-subject course covering everything from education and career choices to health education and financial literacy (BC Ministry of Education, 2007). There is a tremendous amount of information for teachers to cover and the amount of curriculum around career choices and health exceeds the financial components dramatically. While the curriculum discusses topics like debit and credit and planning for a future living

independently, the curriculum fails to address when and where debt can be necessary and even beneficial. (see “Teachers” page on teenopoly.ca for further excerpts from the IRP)

Currently in BC, Planning 10 is the only required course where prescribed learning outcomes relate to financial literacy. In comparison, Ontario brought in mandatory financial literacy curriculum from grades 4-12 as of the 2011/2012 school year (Ontario Ministry of Education, 2011). In Ontario, the scope and sequence is viewed through a dynamic lens where the role and type of financial literacy curriculum evolves to meet the changing needs of the maturing student. The curriculum becomes a relevant part of the ongoing discussion rather than something relegated to a one-time focus. Although BC’s Planning 10 curriculum covers some key areas of financial literacy like career and education costs, savings and debts, credit cards, taxes, and investments; the 20 course hours allotted to this vast subject area are not enough (BC Ministry of Education, 2007).

In addition to the curriculum, Ontario Ministry of Education offers numerous additional resources such as videos, games, and classroom activities. The BC Education Ministry has long been relying on outside public and private groups like the BC Securities Commission, the Aboriginal Financial Officers Association, Financial Literacy for Youth, and numerous private financial institutions like Vancity and TD to develop the resources necessary to help teachers fully realize their Planning 10 financial literacy learning outcomes. (see sources for further details about these organizations)

In fact, some of the best complimentary curriculum to augment Planning 10 financial units is all supplied by outside, third party groups whose interests and motivation are not endorsed by the Ministry of Education. The BC Securities Commission has created what

seems to be the most thorough BC based financial literacy curriculum supplementation (British Columbia Securities Commission, 2004-2010). They have a website (that students must register and provide information to) that offers several units of work and instruction in the areas of debit and credit, moving out, doing taxes and more. That being said, in a brief informal survey in my school of Planning 10 teachers, 1 of the 4 had heard of this website and none had ever used or tried it out, citing lack of computers (a whole other issue) as the main reason behind not doing so. Other supplementary resources these teachers used or were familiar with were primarily American sites and disconnected from BC curriculum and BC financial realities.

Perhaps the BC Ministry of Education is hoping that these private interests are filling the gaps that current Provincial curriculum is not? Perhaps the need for increased education in financial literacy simply hasn't been communicated effectively? Either way, research indicates burgeoning personal debt levels across the population, higher student loan debts and young people with more consumer opportunities than ever before. These are all strong indications that mandatory financial literacy education across all grades of high school is overdue.

Learning Goals

A goal of *Teenopoly* is to offer students a personalized understanding of debt and risk management. In the small amount of mandatory financial curriculum that all BC students complete, debt is viewed as something to avoid. As adults living in 21st century British Columbia, we realize that debt is almost unavoidable, especially if you are looking to be a

home owner in our inflated housing economy. Experts also realize that sometimes debt can be beneficial. Debt allows individuals to invest in human capital through education, to start a new business, and to finance the acquisition of assets (TD Financial Group, 2009). The nuances of debt strategizing and debt management, although complicated, should be translated and de-mystified for a well-rounded understanding of financial literacy.

A secondary goal of *Teenology* is to explore the “grey areas” of finance. When should you borrow and how soon should you pay it back? What happens if you don’t? Throughout this game, the players encounter various situations where debt can accumulate. They must make decisions about assuming debt and often are tempted with seemingly significant benefits or advantages by doing so. *Although, you qualify for X amount of dollars in loans, should you take it all?* Game players are met with further challenges where debt can be paid off, or players can spend their money on more pleasurable returns. Opportunities to aggressively pay down debt arise along with scenarios where a player maintains debt, pays interest, and continues to acquire new investments. The competing concepts of immediate gratification and long-term gain, repeatedly clash in simulated real-life scenarios – all translated into situations that will be relevant and identifiable to the students in our target age range.

The game presents several situations, i.e. having your wallet stolen and needing bus fare to get home, finding a video game that’s on sale that you want to buy even if you haven’t saved up enough yet, and other situations where students will be left without sufficient funds and will have to make decisions in relation to borrowing or saving and waiting. These situations

will be customizable by the teachers to make them more personalized towards the specific needs of their students, wherever they are in the province.

One of the reasons that current financial curriculum falls short is that although it describes why saving should be done, it fails to illustrate this concept with tangible scenarios that demonstrate what happens when you haven't saved enough. The game will allow students to play out these scenarios and see what happens when you over-extend yourself.

Sometimes acquiring some debt might work out to their advantage, or it very well might result in a devastating scenario – those variables will make the game interesting and will allow students to gain a valuable range of experiences. It will also allow for unpredictable gameplay that will afford a plethora of outcome potentials to keep players interested in playing again.

Design Documentation / Specification

I have chosen to take a primarily non-tech approach to this project for the backbone of it. Inspiration comes from open-source software platforms where the original source code can be modified or customized infinitely. This game will be available for educators at no-cost, they will be able to modify the product however they wish, they will be able to re-distribute the product as they see fit when referencing the original source. The technology component of this project is the website which will serve as a hub for modification and/or personalization of this game. This hub will allow educators to share resources and lesson ideas to facilitate online professional development.

Why is personalized learning important?

Throughout many of our readings for this course we are learning about the shift to develop deeper connections with our students through personalized learning. Part of the BC Education Plan calls for a significant transformation towards the personalization of education (BC Ministry of Education, 2012) . Placing the curriculum into context with the lives of the students in a meaningful way allows the teacher to foster deeper integration of learning and experience into the curriculum. It also creates a sense of relevancy for the students and affords them insights into how the subject matter is applicable to their lives.

What the website does

The *Teenopoly* website serves multiple purposes. Firstly, the website will be a source to replace the accessories for the game. Players will be able to download multiple copies of the rules, the chance cards, the money, and every other accessory that could go missing or become damaged. Taking into consideration the gaps in technology access, I have provided game board designs that will fit both large and regular sized printers and allow for both colour and/or greyscale versions of the game without affecting gameplay. This will allow for teachers to always be able to maintain a functioning game. For those teachers that prefer to include a technological component and have access to an internet device for their students, the website can play a greater role in the game by including a random chance card generator. So if players prefer to let the random algorithm generate the chance cards, then this is available. This can reduce human error or allegations of cheating. It also serves as an environmentally friendly way to replace missing cards.

A second focus for the website will be to allow teachers to discuss how they are using the game within their classrooms, hopefully resulting in a tool to share resources and increase provincial collaboration and dialogue around financial literacy issues. Teachers will be able to upload pictures of how they have customized the game and share templates for other teachers to use. Often, especially in elective teaching areas of high schools, there tends to be a proprietary mentality where resources and artifacts are closely guarded and protected. Teachers work hard to develop resources from scratch and are often reluctant to share these; often attributing their tenure to their resource accumulation. For this reason, developing an artifact for use in the classroom becomes an extension of the teacher's work and identity at the school. The open-source nature of this game aims to foster a community of sharing and collaboration and to challenge the proprietary mindset of these elective subject areas.

Assessment

As in the concept of open-source software, the assessment will be primarily formative as the teacher collaboration process and continual improvement and adjustment of the product will continue to improve the design and outcomes of the game. The assessment will be led by the teachers leading the gameplay in their classrooms. There will also be experiential learning happening as those making sound financial decisions throughout the game will naturally come out ahead at the end. Post-game debriefing sessions led by the teachers will examine the outcomes of the games played and an examination of who won and why. There will be a variety of ways to analyze the gameplay and transfer that into tangible learning opportunities for the students involved. The online component where

teachers will be sharing their experiences with the game will add on to the knowledge base of practice to offer more and more opportunities to personalize gameplay.

The simple act of engaging in this game will foster an environment of continual self-assessment as the student evaluates their decisions and strategizes how to try and win the game. They will be learning to make sense of information, relating it to their prior knowledge, strengthening their meta-cognition, meanwhile making adjustments, changes, and improvements to their knowledge base as the game unfolds.

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