

GRADE 8

Financial Literacy Resource Guide



Ce guide est également disponible en français. www.collegefrontiere.ca/News/Resources

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Frontier College is funded by the Ontario Ministry of Education

The views expressed in this guide are those of Frontier College, and do not necessarily reflect those of the Ontario Ministry of Education.

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Introduction



Literacy:
Learning for Life.
L'alphabétisation,
Une leçon pour la vie.

About Frontier College

Frontier College is a national, charitable literacy organization that was founded in 1899. We work with children, teens, adults, and families who need help to improve their literacy skills.

OUR VISION IS

Literacy is recognized as a human right and a driving force to empowerment and prosperity. Frontier College leads the effort in Canada to help people and communities reach their full potential through the power of literacy.

We have worked with the Ontario Ministry of Education for over 15 years to implement programs that have a clear and positive impact on the reading, writing, and math skills of Ontario students. These programs focus on students from low-income, newcomer, and Indigenous communities who face barriers to learning. They include tutoring programs, summer learning, parent engagement, and community capacity-building. Our dedicated staff, strong volunteer network, and enduring partnerships ensure that we reach students in all parts of the province including towns, cities, and remote Indigenous communities. The focus of all our child and youth programs is to complement the formal education system and respond to Ministry of Education priorities.



The Importance of Financial Literacy

“Financial literacy is the ability to understand and effectively use various financial skills” (Fernando, 2021) to make informed decisions regarding our financial resources. Having strong financial literacy is a foundation for long-term financial health, which contributes to housing security (Oudshoorn, 2018), better physical and mental health (Whysel, 2018), longer life expectancy (*Benefits of Being*, 2019), and even stronger relationships and marriages (*Benefits of Being*, 2019).

Financial literacy is an essential life skill; however, students often learn these skills in an unstructured way. Some view financial literacy as a life skill that a person eventually learns as they grow older. Others may say it is knowledge to be passed down from generation to generation like family stories. Yet others may feel that a person is expected to struggle through life in order to acquire these skills.

The Ministry of Education in the Province of Ontario introduced financial literacy as part of the mathematics curriculum in Grades 1 through 9¹. The Financial Literacy curriculum strand contains three broad expectations:

- Money Concepts
- Financial Management
- Consumer and Civic Awareness

For detailed information on the financial literacy curriculum strand, please see **Appendix A** or visit the Ontario curriculum website: <https://www.dcp.edu.gov.on.ca/en/curriculum/elementary-mathematics>.

Structured teaching of financial literacy skills will support students in making effective financial decisions earlier in life, including loans, interest payments, investments, and budgeting as they pursue their careers and post-secondary education.

¹ The financial literacy strand in Ontario’s Mathematics curriculum was introduced in year 2020 for Grades 1 through 8, and year 2021 for Grade 9.

How To Use This Guide



This Financial Literacy Resource Guide includes learning activities, games, online resources, and project ideas for students, families, teachers, and community organizers. They follow the Ontario Ministry of Education’s mathematics curriculum (Queen’s Printer for Ontario, 2020) and are developed by Ontario Certified Teachers at Frontier College.

Culturally Responsive and Relevant Pedagogy (CRRP) is the foundational building block of this guide. The next subheading will further discuss the CRRP framework. In this guide, there are four special features that are developed with the CRRP framework in mind, in order to further support student learning.

TEACHER TALK MOVE

Question frames and teaching ideas to help teachers facilitate student discussions, build literacy skills, and develop student confidence.

PARENT TALK MOVE

Question frames and conversation starters to help parents have open-ended discussions with their child about what they are learning at school.

ACADEMIC LANGUAGE

Highlight specific words from an activity that teachers and community organizers may want to explicitly teach. This benefits all students, particularly English Language Learners (ELLs).

TIP

Provides new ideas or alternative ways of using the resource. If the tip is specified for one audience, it will say so. (For example: Tip for Teachers).

A special note to teachers and community organizers: Please be mindful of the students' and their families' lived experiences. It is appropriate to modify the lessons and activities accordingly.

Culturally Responsive and Relevant Pedagogy (CRRP)

Culturally Responsive and Relevant Pedagogy (CRRP) integrates a student's background, culture, and home language into the curriculum and classroom learning. Ladson-Billings (1995) describes the three pillars of CRRP. Teachers must:

- 1 Have high expectations for all students and attend to students' academic needs by teaching what is most meaningful to them.
- 2 Maintain students' cultural competence by utilizing students' culture and language as a vehicle for learning.
- 3 Guide students to develop a critical consciousness through which they challenge the status quo of our society.

It is *not* true that only exceptional teachers can achieve success with CRRP. By examining ourselves, and implementing purposeful pedagogy in our classrooms, we can all have a measure of success. Of course, it must start with us. Some of the most effective culturally responsive teachers describe teaching as “a way of life” rather than a job (Duncan-Andrade, 2007). According to individual circumstances, there are a few small things that teachers can do that can make a big difference. The next subheading provides some practical suggestions.

Additional worksheets and presentations to support this guide are available for download. To do so please visit the resources page on www.frontiercollege.ca

How To Use This Guide

HOW CAN CRRP BE APPLIED TO FINANCIAL LITERACY?

Undoubtedly, financial literacy skills are used by people from all backgrounds and cultures. We make financial decisions every day, whether big or small, and these skills are applicable to all people. However, money can carry a cultural aspect. For example, spending habits often reflect personal, cultural, and societal priorities. Culturally responsive teachers are mindful that the topic of financial success and wealth inevitably carries notions of privilege and power. Therefore, it is important to understand students' and their families' lived experiences and the factors that influence their decisions to spend, save, or invest. Many teachers are already incorporating CRRP in their classrooms. Here are a few practical ways that teachers can build on their current practice:

- Perform self-examination of social location, privilege, and power in the current social context. This helps a teacher to understand where they stand in comparison to their students and school community.
- Parents are valuable resources. Invite parents, relatives, Elders, and community leaders into the classroom to share cultural and academic knowledge. Be mindful not to “import” role models who do not have firsthand experience that the students can relate to (Ladson-Billings, 1995).
- Build on student strengths. View students as a fund of knowledge who can provide rich cultural and community knowledge that they bring to the classroom as an asset. (Moll, 1998; Weiner, 2006).
- Encourage students to use their home language in class (Gee, 2004). In addition, teaching academic language is also a priority in the math curriculum. By using academic language in the form of student discussions, students deepen their understanding and reasoning (Mercer, 2002). To further support teachers, this guide provides “Academic Language” boxes.
- Make an effort to spend time in the community where you teach. Perhaps go on a walk during lunch time, visit a local restaurant, and speak with the patrons. Walk around the school campus before or after school and speak with students outside the classroom. Have an open-door policy once a week during recess, inviting students to hang out in your classroom as a safe space. You may be surprised with what you learn about your students and the community by doing these small things. Woodson (1933) illustrates a teacher as someone who serves their community: “The servant of the people is down among them, living as they live, doing what they do, and enjoying what they enjoy” (Woodson, 1933, p.131).



In this guide, the activities and resources are designed to reinforce high academic expectations aligned with the curriculum by using higher-order thinking questions; low-floor, high-ceiling performance tasks; and project-based learning. Activities include differentiation suitable for:

- English Language Learners (ELLs),
- Those living in an urban context,
- Those living in a rural context,
- Those living in remote Indigenous communities.

Once teachers have a strong grasp of their individual identity and their role in a student’s life, it is crucial for teachers to explore the more difficult topics with their students. Section III, titled “Teaching Extensions & Project Ideas,” provides teachers with options to further explore—with a critical eye—financial literacy concepts with their students. This equips and empowers the students to make sense of the world and to create change for the future.



Growth Mindset and Developing Student Confidence

In addition to CRRP, it is essential to help students develop a growth mindset in their learning. There is a strong connection between growth mindset, student success, and student confidence. In short, growth mindset is the concept that intelligence can be developed and that the brain is malleable. In this guide, you will find resources that help teachers and parents to promote growth mindset in a student's learning. For teachers, use the "Teacher Talk Move" boxes. For parents, use the "Parent Talk Move" boxes.

HOW TO PROMOTE GROWTH MINDSET?

- Ask open-ended questions, not simply "yes/no" questions or regurgitation of information.
- Encourage students to find multiple solutions.
- Celebrate progress and give praise for student effort, not just for the "right" answer.
- Encourage students to fail and make mistakes.
- Encourage student to reflect, consolidate their learning, and understand how to improve.



GROWTH MINDSET VIDEOS

“Growing your mind” by Khan Academy (3:04)

<https://www.youtube.com/watch?v=WtKJrB5rOKs>

Learn about the science behind the brain as it learns!

“Neuroplasticity” by Sentis (2:03)

<https://www.youtube.com/watch?v=ELpfYCZa87g>

Learn about how we can rewire our brain!

“Carol Dweck: The power of believing that you can improve” by Ted Talk (10:11)

https://www.ted.com/talks/carol_dweck_the_power_of_believing_that_you_can_improve?language=en

Carol Dweck is a prominent researcher in growth mindset. Learn about the power of “not yet”!

Technology Considerations

We are conscious of differing technology availabilities across various classrooms and households. The activities and resources include options for both lower-tech and higher-tech spaces. Students will achieve the same learning goals regardless of the technologies available.

Note: Internet is required to access most of the resources, as they are posted on the Frontier College Financial Literacy webpage.

If you don't have access to the internet, please contact us at: **1-800-555-6523** to request a paper copy of the guide, presentation, worksheets, or supplementary material.

TIPS

There are benefits in teaching the same concept in multiple ways. Those who are able may consider using both versions to give the student more practice.

Learning Activities



Below are the Grade 8 financial literacy learning sessions created by Ontario Certified Teachers at Frontier College. The learning sessions are accompanied by presentations, performance tasks and worksheets. You may download the resources from the Frontier College Resources webpage. Please be mindful of the students' and their families' lived experiences, and modify the content according to student needs.

This Grade 8 resource guide provides activities that helps students connect the curriculum expectations. There are five sections to this resource guide with presentations and worksheets. After each learning session, students should be provided with in-class time to work on their culmination project "Grade 8 Financial Literacy Culmination Assessment". Each presentation is designed to connect directly to this overarching assignment, so students can connect and apply their daily learning to an ongoing activity.

Learning Sessions and Performance Tasks

NAME	LOCATION
Business Planning and Culmination Project	www.frontiercollege.ca/news/resources
Budgeting	www.frontiercollege.ca/news/resources
Customer Incentives	www.frontiercollege.ca/news/resources
Interest Rates, Investments, & Debt	www.frontiercollege.ca/news/resources
Currencies and Exchange Rates	www.frontiercollege.ca/news/resources



Learning Session 1

Business Planning and Culmination Project



MATERIALS

Financial Literacy Culmination Assessment,
Business Long-Term Budgeting

These materials are available on the Frontier College website at:
www.frontiercollege.ca/News/Resources

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

The session includes the following curriculum standards:

GRADE 8 FINANCIAL LITERACY

F1.2 Create a financial plan to reach a long-term financial goal, accounting for income, expenses, and tax implications

F1.3 Identify different ways to maintain a balanced budget, and use appropriate tools to track all income and spending, for several different scenarios

The Business Planning PowerPoint helps students to understand some of the benefits of creating a long-term financial plan. This presentation also gives students an overview of the culmination project.

ACADEMIC LANGUAGE

- Revenue
- Expenses
- Income
- Start-up costs

After the session, students will be able to:

- Identify the difference between short-term and long-term financial planning
- Balance a budget and compare prices
- Track all income and expenses
- Conduct research to examine a sample budget for a small business



TIPS FOR TEACHERS

- Help your students to compare revenue and cost by searching for selling prices and the cost of supplies. For example, using the PowerPoint sample of a T-shirt Business, teachers can research different companies to compare prices and costs (e.g., Mallon’s Promotional Clothing and Products - Home (mallons.com); ETSY; Pinterest; 4imprint.ca).
- Teacher and students can compare costs such as shipping, costs of actual product, taxes, duties, variety of options, etc. Class discussion could also include comparison of shipping costs, international currency exchange rates, ethical sourcing, etc.

CULMINATION PROJECT: BUILDING A BUSINESS PLAN

Culmination Project: Building a Business is a handout that will guide students to build a realistic long-term business plan. Students should be given an option to work individually, in pairs, or in small groups and an opportunity to present their business plan.

Directly before or after presenting the Business Planning PowerPoint, teachers are encouraged to share the “Building a Business” culmination project with students. The project will help students connect the various curriculum expectations to an overarching assignment. After teaching a new curriculum expectation, students should be given in-class time to connect the day’s learning to their projects. For example, after the Budgeting PowerPoint, students should be given time in-class to create a financial budget for their business. As you move through the five sections, students will build their business according to curriculum expectations.

TIPS

- You can differentiate this activity by providing students with guidelines including a starting cost, a set income, and/or a financial goal. Students at a lower-level can work with smaller numbers, whereas students at a higher-level can work with larger numbers. All of the questions can be adapted according to students' learning levels.
- Encourage students to express themselves through their business ideas. It is important to respect your student's choices and individual identity when it comes to their business creation. Students may want to import something from a different country or create something that represents a part of their identity. This is a great opportunity for students to share their lived experiences and aspects of their cultural identities with their peers. By creating an inclusive and safe space, students are more likely to be creative and express new thoughts and ideas.



Learning Session 2

Budgeting



MATERIALS

6 Styles of Budgeting

Budgeting Practice 1- Simple

Budgeting Practice 2-Advanced

Monthly Budget Planner_Short Version

Monthly Budget Planner & Income Tracker_Long Version

Review:

Grade 7: The Finance of Adulting

These materials are available on the Frontier College website at:

www.frontiercollege.ca/News/Resources

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

The session includes the following curriculum standards:

GRADE 8 FINANCIAL LITERACY

F1.2 Create a financial plan to reach a long-term financial goal, accounting for income, expenses, and tax implications

F1.3 Identify different ways to maintain a balanced budget and use appropriate tools to track all income and spending for several different scenarios

After the session, students will be able to:

- Explain the difference between gross pay and net pay
- Understand the various deductions on a pay stub to accurately estimate their income
- Create a two to five-year budget using digital tools
- Identify and use at least six different types of budgeting strategies
- Graph their current and future long-term budgets

ACADEMIC LANGUAGE

The 6 Styles of Budgeting Explained | How to Make A Budget - YouTube

<https://www.youtube.com/watch?v=jSpvkaRIsOM>

- Gross Pay
- Net Pay
- Tax Bracket
- Investment
- Income Tax
- Income
- Revenue
- Expenses
- Accounting
- Employee contributions to Employment Insurance (EI)
- Employee contributions to the Canada Pension Plan (CPP)

Students may already have a good grasp on the basics of budgeting. In this section, students will focus on long-term financial planning, different types of budgets, and using digital tools to help track their budget. At the end of this learning session, have students connect these concepts to their business plan from Section 1. Some recommendations of digital tools are provided below.

If students do not have access to technology, and are thus unable to access digital tools, they can use the blank budget planners to keep track of their personal monthly income and expenses throughout the unit as a performance task.

- After learning about the different types of budgets, students can practice using one or two of them and set a goal for themselves. Using the different tools, students can decide which budget best helps them meet their individual long-term financial goals.
- Have students use this monthly budget outline to estimate their annual budget and save money for something they want to buy in 2-5 years.
- Have them use Microsoft Excel sheets or other digital tools provided below to graph and estimate their future income, expenses, and savings.
- Additionally, students can use this worksheet to keep track of their expected expenses and income for their Culmination Activity business plan.



TIPS

- Teachers are encouraged to be mindful of the diverse lived experiences in each classroom. For many students, it may not be a reality to receive an allowance or cash for special occasions, or to save money on a regular basis.
- Teachers may use the differentiated budgeting practice (simple and advanced versions) to better support students at various learning levels.

ASSESSMENT & ACTIVITY IDEAS

1. Student Budgets

Ask students to keep track of their personal income and expenses over the course of the unit. After a week or two of tracking their income and expenses, ask students to set realistic short-term financial goals. Teachers may want to use Kahoot, Seesaw, or other resources to have students practice balancing a simple budget and examine realistic expenses that may impact long-term financial goals.

TIP

Students should be familiar with balancing a budget from Grades 6 and 7. However, practice and repetition are helpful for students' learning.



2. Calculating Income Tax

Ask students to calculate the federal and provincial tax based on their personal income. Note: These tax brackets may change annually. Provide students with a chart of different salary amounts and ask them to calculate the federal and provincial income tax. Below are some links for up-to-date federal tax brackets:

In Canada, we pay income tax at graduated rates. This means that the tax rate goes up as your income goes up. The table below shows the federal tax rates that apply in 2021. In addition to federal tax, you must also pay provincial tax, which varies by province. (Intuit Canada ULC, 2021)

Income Level	The tax rate that applies (2020)
\$1 to \$49,020	15%
\$49,020 to \$98,040	20.5%
\$98,040 to \$151,978	26%
\$151,978 to \$216,511	29%
Over \$216,511	33%

Canadian income tax rates for individuals - current and previous years - Canada.ca

<https://www.canada.ca/en/revenue-agency/services/tax/individuals/frequently-asked-questions-individuals/canadian-income-tax-rates-individuals-current-previous-years.html>

Income tax - Canada.ca

<https://www.canada.ca/en/services/taxes/income-tax.html>

Canada's Federal Personal Income Tax Brackets and Tax Rates | 2021 TurboTax® Canada Tips (intuit.ca)

<https://turbotax.intuit.ca/tips/an-overview-of-federal-tax-rates-286>



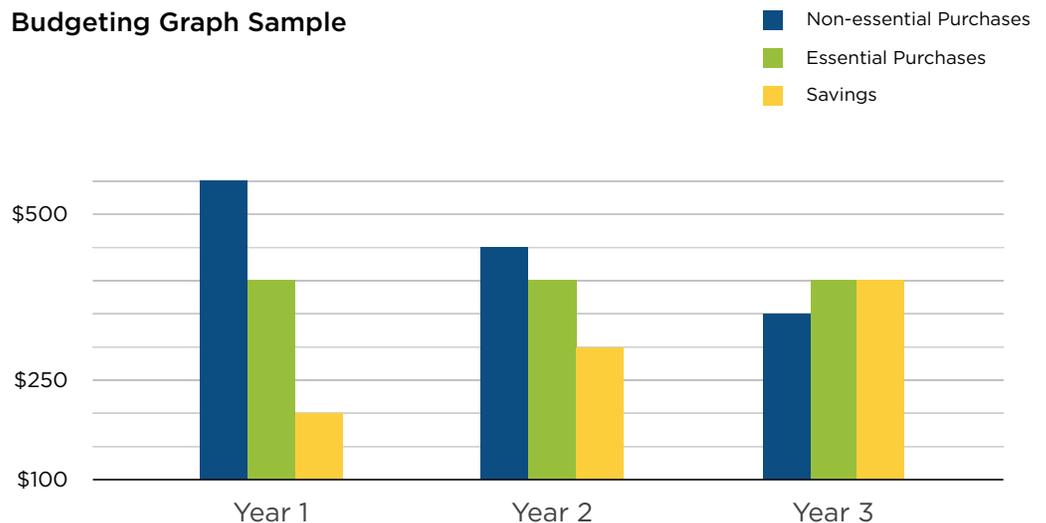
3. “The Finance of Adulting”

This is a PowerPoint presentation and simulation where students choose an avatar to follow and make financial decisions. Students will help their avatar organize their monthly budget while they live on their own! This resource can be accessed from the Frontier College Financial Literacy webpage.

4. Graphing A Budget

Ask students to graph their estimated monthly or yearly budget. For example, they will estimate next year’s savings and expenses based on their current year’s budget. Have them highlight the percentage or amount of money they will spend on necessary items, non-essential items, savings, investments, donations, debt, etc. (See graph example below).

Budgeting Graph Sample





5. Video & Worksheet

Have students watch this YouTube video on the 6 different types of budgeting and explain the different types of budgeting methods. See worksheet titled “6 Styles of Budgeting”.

The 6 Styles of Budgeting Explained | How to Make A Budget - YouTube

<https://www.youtube.com/watch?v=jSpvkaRIsOM>

6. Budgeting on Excel

Provide students in-class time to learn about Microsoft Excel and how to use it to create a budget. Librarians or business teachers will likely have some sample lessons on how to use Excel. This website provides step-by-step instructions on how to create a budget using Excel:

Budget Template in Excel - Easy Excel Tutorial

<https://www.excel-easy.com/examples/budget.html>

7. Role plays & Case Studies: Create case studies and various personas to share with students as an assignment. Have students work independently or in pairs to balance a budget and make financial decisions using a given scenario. Below is a brief example of what a case study might look like.

Example

Your name is Sam, you are a father of four who lives in Thunder Bay, Ontario. You work as a heavy machine operator. You earn \$60,000 a year before taxes. Your average monthly expenses include \$1,500 in rent, \$700 in groceries, \$150 in car insurance, and \$185 in gas, etc. Have students create a monthly budget and determine how much money Sam could be saving at the end of the year.



Sample Guiding Questions

- How much money will Sam earn in a year after taxes?
- What percentage will Sam be taxed?
- Should Sam invest some of his monthly income? If so, how much and where could Sam invest his money given the following options? (Note: Teachers can provide students with various investment options.)
- Sam wants to buy a new vehicle. He wants to save up \$5,000 as a down payment for the car. How much money every month will he need to put away?
- Sam needs to buy a vehicle that will fit his whole family. Research some different vehicles that Sam can afford. Outline how much Sam can afford as a down payment, and whether he chooses to lease, finance, or pay for the car in cash. Calculate the payments and savings required to purchase the vehicle you chose. Don't forget the taxes!
- Sam receives a raise of 5% each year for 3 years. Offer some suggestions on what Sam can do with this new income.

TIP

Teachers can adapt and change guiding questions as they see fit. These sample questions are a starting point for teachers.



Other case study ideas

- Planning a trip, for one person or for multiple people
- A person wanting to sell a craft they make
- Someone who is planning a fundraiser

TIP

- If you have already covered lessons on currency exchange and interest rates you can add more complex questions to these case studies.
- When creating case studies/personas for students, it is important to make case studies culturally relevant, and to provide a wide range of identities to address students' lived experiences. This makes learning more relevant and engaging.

ADDITIONAL RESOURCES

CashVille Kidz Episode 22: Saving vs Investing – YouTube

<https://www.youtube.com/watch?v=jBfqIsz6mAo>

8 Unique Ways to Budget (fundingcloudnine.com)

<https://www.fundingcloudnine.com/different-ways-to-budget/>

How to Make A Budget Using the Values Based Budget | Values Budget Explained – YouTube

<https://www.youtube.com/watch?app=desktop&v=D4t2ZuuQsN4>

Understanding the tax deductions on your pay stub | Understanding tax | GetSmarterAboutMoney.ca

<https://www.getsmarteraboutmoney.ca/plan-manage/planning-basics/understanding-tax/understanding-the-tax-deductions-on-your-pay-stub/>

What is deducted from your pay? – Canada.ca

<https://www.canada.ca/en/revenue-agency/services/tax/businesses/topics/payroll/what-deducted-your-pay.html>



ONLINE TOOLS AND APPS FOR BUDGETING

Budget Planner – Canada.ca (fcac-acfc.gc.ca)

<https://itools-ioutils.fcac-acfc.gc.ca/BP-PB/budget-planner>

Budget Template in Excel – Easy Excel Tutorial

<https://www.excel-easy.com/examples/budget.html>

Accounting Software for Self-Employed

| QuickBooks Canada (intuit.com)

https://quickbooks.intuit.com/ca/self-employed/?cid=ppc_G_b_CA_QBSE_CA_APP_SEM_NB_BMM_Features_G_S_FY19_%2Bbudget%20%2Bapp_txt&gclid=EAlaIQobChMlu8fd6JjM8QIVpGxvBB3tBQlyEAAYASAAEgKz5PD_BwE&gclid=aw.ds

Buddy – Budget & Save Money on the App Store (apple.com)

<https://apps.apple.com/ca/app/buddy-budget-save-money/id936422955>

Ontario Income Tax Calculator | WOWA.ca

<https://wowa.ca/ontario-tax-calculator>

Budget Tracker & Planner | Mint (intuit.com)

<https://mint.intuit.com>

PocketGuard: budget, bills and money management

– Apps on Google Play

<https://play.google.com/store/apps/details?id=com.pocketguard.android.app&hl=en&gl=US>

Best Home Budget App for Android, iPhone, & Web

| Goodbudget

<https://goodbudget.com>

Financial Tools and Calculators – Canada.ca

<https://www.canada.ca/en/services/finance/tools.html>



Learning Session 3

Customer Incentives



MATERIALS

Customer Loyalty Program Graphic Organizer

These materials are available on the Frontier College website at:
www.frontiercollege.ca/News/Resources

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

The session includes the following curriculum standards:

GRADE 8 FINANCIAL LITERACY

F1.5 Compare various ways for consumers to get more value for their money when spending, including taking advantage of sales and customer loyalty and incentive programs, and determine the best choice for different scenarios

Customer incentives are a great way to increase sales and customer loyalty. Incentives also help customers get more value for their money or “bang for their buck.” Students should be able to see the benefits and downsides of customer incentives from both the customer’s perspective and the business’ perspective.

A brief learning session with YouTube links will show your students the key learnings on customer incentives. After teaching the lesson, provide students time to conduct research and to create their own customer incentives program for their business from Section 1. In their business plan budget, have students track how much money they are “losing” or giving back to customers; this amount will need to be deducted as an expense. Students should also learn that while incentive programs are a type of expense, it is actually a great way to increase sales and improve customers’ shopping experience.

After the session, students will be able to:

- Identify different types of customer incentive and loyalty programs
- Compare value, benefits, strategies, and potential downsides to customer incentives

ACADEMIC LANGUAGE

- Target marketing
- Consumer
- Incentive
- Loyalty program

ADDITIONAL RESOURCES

The Top 5 Benefits of Running Customer Incentive Programs (referralrock.com)

<https://referralrock.com/blog/customer-incentive-program/>

The Secrets Behind Successful Loyalty Programs - YouTube

<https://www.youtube.com/watch?app=desktop&v=jdJhHdpdjU4>



Learning Session 4

Interest Rates on Investments and Debt



MATERIALS

Investments and Debt Practice

Review:

Grade 5 Understanding Credit and Debt

Grade 7 Video: Interest on Borrowing vs. Investing

Grade 7 Video: Debt vs. Investment – The Pro’s and Con’s

These materials are available on the Frontier College website at:
www.frontiercollege.ca/News/Resources

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

The session includes the following curriculum standards

GRADE 8 FINANCIAL LITERACY

F1.4 Determine the growth of simple and compound interest at various rates using digital tools, and explain the impact interest has on long-term financial planning

F1.6 Compare interest rates, annual fees, and rewards and other incentives offered by various credit card companies and consumer contracts to determine the best value and the best choice for different scenarios

After the session, students will be able to:

- Visually express (i.e., graph) the difference between simple and compound interest
- Explain how simple and compound interest rates can affect their financial goals on investments and debt
- Understand the benefits to long-term financial planning when investing and saving money
- Explain and make financial decisions based on the main components of an interest rate: percentage, simple or compound, accrument frequency (monthly, quarterly, semi-annually, etc.), and the length of time



ACADEMIC LANGUAGE

- Principal
- Interest
- Interest rate
- Simple interest
- Compound interest
- Exponential growth
- Consumer Contract
- Investment
- Debt
- Loan
- Credit

TIPS

- For review purposes, teachers can use the following resources from the Frontier College Financial Literacy webpage:
 - Grade 5 Understanding Credit and Debt.pdf
 - Grade 7 Video: Interest on Borrowing vs. Investing
 - Grade 7 Video: Debt vs. Investment – The Pro’s and Con’s
- Using online tools, have students investigate the concepts of simple and compound interest by manipulating different metrics including interest rate percentage, length of time, etc.
- Using online tools, provide students with additional simulated scenarios of borrowing and investing
- Investment Calculator : A useful tool to show the breakdown of calculations for compound interest

ASSESSMENT & ACTIVITY IDEAS

Comparison Chart 1

Provide students with a blank chart for them to fill out and compare bank accounts or credit cards. Students can look at annual fees, rewards and interest rates on investments and debt at various banks in their community. Here is a great tool to compare accounts:

Account Comparison Tool – Canada.ca (fcac-acfc.gc.ca)

<https://itools-ioutils.fcac-acfc.gc.ca/ACT-OCC/SearchFilter-eng.aspx>



Investment and Debt worksheets

Provided is a PDF document titled, “Investment and Debt Practice” and the answer keys. This worksheet asks students to use digital tools to calculate compound and simple interest rates.

Apply the concept to the culmination project

You may ask students to apply this concept to their business plan by selecting an investment or requesting a loan. Provide students with various investment and debt options, and some of the links below to calculate the interest on the investment and/or debt for their culmination business project.

Case Studies

Provide students with case studies and scenarios in which they are given personas with various incomes and expenses. Have them create a long term (3 to 5-year) financial goal based on the case study. You may ask students to research investment opportunities for their case studies or provide them with a set list of investments and debt options to have them calculate the interest. To extend this task, you may have students reassess their investments and debt daily. You can use simulated scenarios such as announcing an increase in interest rates or a crash in the stock market that will inevitably impact their investments and debt. You may also ask students to graph and compare simple and compound interest on investments and debt.

Extension

Teachers may choose to have two case studies, one that focuses solely on investments and one that focuses on loans/debt.

TIP

When creating case studies and scenarios, offer a diverse range of economic situations and cultural identities for students to choose from.



DIGITAL TOOLS TO CALCULATE INTEREST

Compound Interest Formula in Excel - Easy Excel Tutorial

<https://www.excel-easy.com/examples/compound-interest.html>

Loan Repayment Estimator - CanLearn.ca

<https://tools.canlearn.ca/cslgs-scpse/cln-cln/crp-lrc/af.nlindex-eng.do>

Interest Rate Calculator

<https://www.calculator.net/interest-rate-calculator.html>

Compound Interest Calculator | Investor.gov

<https://www.investor.gov/financial-tools-calculators/calculators/compound-interest-calculator>

ADDITIONAL RESOURCES

Compound Interest Explained with M&Ms - YouTube

<https://www.youtube.com/watch?v=RX9UmacjIWg>

The Power of Compounding - YouTube

<https://www.youtube.com/watch?app=desktop&v=l6yVhbx5Gws>

5 Minute Lesson for kids Debt BrainPOP - YouTube

https://www.youtube.com/watch?app=desktop&v=jl1RGuvZ7_Y

Simple Interest vs. Compound Interest | Investment U

<https://investmentu.com/simple-interest-vs-compound-interest/>

CashVille Kidz Episode 22: Saving vs Investing - YouTube

<https://www.youtube.com/watch?v=jBfqIsz6mAo>

Investment Definition (investopedia.com)

<https://www.investopedia.com/terms/i/investment.asp>



Learning Session 5

Currencies and Exchange Rates



MATERIALS

Payment Methods Graphic Organizer
Currencies and Exchange Rates Practice
Currencies and Exchange Rate Answer Key

These materials are available on the Frontier College website at:
www.frontiercollege.ca/News/Resources

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

The session includes the following curriculum standards:

GRADE 8 FINANCIAL LITERACY

F1.1 Describe some advantages and disadvantages of various methods of payment that can be used when dealing with multiple currencies and exchange rates

After the session, students will be able to:

- Identify some advantages and disadvantages of payment methods when dealing with different currencies
- Understand how currency exchange rates change daily
- Understand and identify the domestic and foreign currency, and the stronger and weaker currency

ACADEMIC LANGUAGE

- Target marketing
- Consumer
- Incentive
- Loyalty program

TIPS

- It is helpful to do a quick refresher on converting currencies using exchange rates, as it is covered in Grade 7. Teachers can download the Grade 7 currency exchange resources from the Frontier College Financial Literacy webpage.
- When discussing currencies, exchange rates, and monetary value, students may have questions about the global economy, trade, and the existence of rich countries vs. poor countries. From a culturally responsive teaching perspective, teachers should be mindful not to reinforce ideologies of capitalism and colonial thinking. Teachers may use these teachable moments to help students become aware of social inequities. Additionally, teachers may help students see how privilege and wealth can be used to support social justice movements in their community.



DIGITAL TOOLS TO CALCULATE INTEREST

Graphic Organizer

Teachers may use the graphic organizer for student notes or assessment for learning.

Trip Around the World

Ask students to plan a trip around the world. They must stop in at least five countries that have different currencies. At each place they must convert their previous currency to this new currency. It is up to the teacher to decide if students will use online tools to calculate the currencies or if the students will calculate the currencies on their own. Have students identify three different methods of payment they used on this trip and the advantages and disadvantages of each.

Activity Extensions

- Provide students with a set amount of dollars that they saved for this trip and ask them to spend a set amount of Canadian dollars at each location. How many Canadian dollars do they have left when they come back?
- Ask students to create a budget based on the amount you provide them, considering accommodations, meals, entertainment, transportation like flights, car rentals, etc.
- Have students present to the class or in small groups what their trip around the world looked like.
- Ask students to calculate the exchange rate by giving them the original currency amount and the newly converted amount.



ADDITIONAL RESOURCES

**Finance 101: What is Currency and Exchange Rate?
Easy Peasy Finance for Kids and Beginners - YouTube**
<https://www.youtube.com/watch?v=WbRvCnsjLxU>

The Economics of Foreign Exchange - YouTube
https://www.youtube.com/watch?v=ig_EO805rpA

Why is Money Actually Worth Anything? - YouTube
<https://www.youtube.com/watch?v=QJppOwxzUFE>

Currency Exchange Rates - How To Convert Currency - YouTube
https://www.youtube.com/watch?v=JRf7_RKF3uA

Money Management Worksheets

The “Managing Your Money” worksheet series will show students the basic concepts of money management. It is effective to have discussions with the students while they complete the worksheets with you. In some areas, there are no right or wrong answers; it comes down to personal preferences and priorities. This can be a fun and eye-opening opportunity for students, teachers, and families to learn more about each other. You may download these worksheets from the Frontier College Financial Literacy webpage.

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

TIP

It is a good idea to complete the worksheets in the given order, as some of the ideas build on the previous worksheet.



1. MANAGING YOUR MONEY: NEEDS VS. WANTS

2. MANAGING YOUR MONEY: SPEND VS. SAVE

3. MANAGING YOUR MONEY: NOW VS. LATER

TIP

At your discretion, watch a 5-minute TED Talk video about the famous marshmallow test and delayed gratification.

“Joachim de Posada: Don’t eat the marshmallow!” by TED (5:46)
https://www.ted.com/talks/joachim_de_posada_don_t_eat_the_marshmallow

Money Manipulatives

Learning is always more fun with a hands-on activity! Money manipulatives are suitable for both classrooms and home, and for all learner types. They are especially beneficial for newcomers and ELL students to gain literacy skills. Once the student understands how to represent dollar amounts using the manipulatives, this tool can be used for any activity to help them think, reason, and strategize. You may purchase money manipulatives online and in store.

SUITABLE FOR

Teachers, parents, community organizers, newcomers, ELL students, urban students, rural students, Indigenous students

Games and Resources

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Teachers, parents, and community organizers should use the following resources at their discretion to meet the needs of your students.

Games

MONEYMAGIC.COM

Help Enzo manage his budget, reach his savings goal, and make it to Vegas. (Note: Enzo has a tendency for short-term gratification.)

EDUCATION.COM | WORD SEARCH MAKER

Parents, students, and teachers can create their own wordsearch

Online Resources

PRACTICALMONEYSKILLS.COM

A wide range of financial literacy topics from budgeting to credit score to buying a car or a home.

PRACTICALMONEYSKILLS.COM | GRADE 7 AND 8 LESSON PLANS

Detailed lesson plans covering a wide range of topics with teacher's guide, student activities, PowerPoints and presentations.

EDUGAINS.CA: FINANCIAL LITERACY GRADE 8

EduGAINS is an Ontario Ministry of Education website that houses Ministry developed resources, including some financial literacy resources.

MAC'S MONEY CENTRE | MCMASTER UNIVERSITY

The Student Success Centre at McMaster University has explanations covering a variety of financial topics that impact a student pursuing higher education, such as paying for school, living on a budget, and taxes.



BRAINPOP: FINANCIAL LITERACY

Animated educational site for kids including videos, worksheets, quizzes, games, lesson plans, and more. Free videos. Subscription is required for other materials.

ECONEDLINK

Suitable for all grade levels. A great resource for teachers and parents to get some ideas about what to discuss with the student. It explores concepts like fair trade, non-profits, making choices, wants vs needs, etc.

YOUTH HANDS ON BANKING

This website has great course activities for elementary school students, teacher resources, and family resources.

Apps for iPhone and Androids

POCKETGUARD

A free app that makes it easy to take control of your personal finance and stop overspending. Its intuitive money management tools help you make a budget and track spending automatically.

GOODBUDGET

The Goodbudget app allows users to track their household's spending by allocating a certain amount of their income into categories (or digital "envelopes"), like groceries, rent and debt payoff. There is a free or paid plan.

BUDDY - BUDGET & SAVE MONEY

Buddy helps you set up a budget and keep track of your expenses, either by yourself or together with your loved ones. Subscription fee is required.



CURRENCY - OFFLINE CURRENCY CONVERTER

A powerful yet simple currency converter that provides up-to-date exchange rates.

XE CURRENCY & MONEY TRANSFER

Free app that updates currency exchange rates live and transfers money overseas.

FLIPP

Browse thousands of flyers digitally and find deals from over 2000 stores.

REEBEE

Browse the latest flyers and deals from 100+ retailers.

FLASHFOOD | SAVE MONEY WHILE SAVING THE PLANET.

Buy high quality, surplus grocery items at steep discounts (up to 50% off without using coupons). Available at Loblaw's' owned locations (Real Canadian Superstore, Loblaw's, No Frills, etc.)
Pick-up in store.

POCKETGUARD

A free app that makes it easy to take control of your personal finance and stop overspending. Its intuitive money management tools help you make a budget and track spending automatically.

CREDIT KARMA

Free credit scores, reports, and insights. No hidden fees. Credit Karma does not impact your credit.

Teaching Extensions and Project Ideas



In addition to the classroom and at-home activities provided in the sections above, teachers can play a role in discussing the more difficult topics about finance and equity. Culturally responsive teaching of financial literacy includes the understanding of the many social forces in play that affect personal finances, such as racial inequalities, wealth disparity, and the unequal distribution of resources. We have a responsibility to guide students to understand the realities of the world we live in and empower them with the knowledge, tools, and confidence to create future change.

1. GRANTS FOR ENTREPRENEURS

Federal, provincial, and municipal governments, financial institutions, as well as many large and small organizations offer a wide range of entrepreneurship grants and loans for specific groups. These groups include people starting a business, female-led businesses, or businesses owned by a specific cultural or racial group. Teachers can encourage students to discuss and research grants and loans they could access now or in the future.

2. GUEST SPEAKERS

Teachers can invite local entrepreneurs within the community to speak about the challenges and successes they experienced. The speaker can show students the practical matters of starting a business as well as the value of cultural identities of the products or services. The key is for the guest speaker to empower and inspire students. Teachers must be mindful to invite guest speakers from the community.

It must be someone to whom the students can relate.



3. RESEARCH ENTREPRENEURS

Since it's not always possible to invite guest speakers in the classroom, teachers may ask students to research entrepreneurs from diverse backgrounds.

Famous example: Rihanna

4. SUSTAINABLE AND ETHICAL BUSINESS IDEAS:

While students begin to research their business ideas, invite them to consider some ethical and sustainable ways to create and source their business. If students are creating an item to sell, they may want to consider some ethically responsible options to make their business more ethically responsible and sustainable.

5. ADDITIONAL WORKSHEETS

Additional worksheets and presentations to support this guide are available for download. To do so please visit the resources page on www.frontiercollege.ca/news/resources

Appendix

Appendix A: Curriculum Analysis

This curriculum analysis contains the key words from the Ontario Ministry of Education Financial Literacy curriculum document. To see the exact curriculum expectations, please refer to the Learning Sessions in the guide.

GRADE 4	GRADE 5	GRADE 6	GRADE 7	GRADE 8
MONEY CONCEPTS				
<p>Various methods of payment</p> <p>—</p> <p>Goods and services</p> <p>—</p> <p>Estimate and calculate transactions involving multiple items in whole dollars (no tax), using mental math</p>	<p>Ways of money transfer between individuals, organizations, businesses</p> <p>—</p> <p>Estimate and calculate transactions in dollars and cents with taxes, using different strategies</p>	<p>Advantages and disadvantages of various methods of payment</p>	<p>Identify and compare exchange rates, convert foreign currencies to CAD</p>	<p>Advantages and disadvantages of various methods of payment when dealing with currencies and exchange rates</p>
FINANCIAL MANAGEMENT				
<p>Explain concepts of spending, saving, earning, investing, donating; identify key factors to consider</p> <p>—</p> <p>Explain relationship between spending and saving; spending and saving behaviours</p>	<p>Basic budget for various earning and spending scenarios</p> <p>—</p> <p>Concept of credit and debt; how financial decisions may be impacted by each</p>	<p>Identify different types of financial goals (earning and saving goals)</p> <p>—</p> <p>Identify and describe various factors that help or interfere with financial goals</p>	<p>Identify and describe various reliable sources of info that help with planning for and reach financial goals</p> <p>—</p> <p>Create, track, adjust sample budgets to meet longer-term financial goals for various scenarios</p> <p>—</p> <p>Identify personal and societal factors that may influence financial decision-making</p>	<p>Create a financial plan to reach a long-term goal (include income, expenses, and taxes)</p> <p>—</p> <p>Identify different ways to maintain a balanced budget; use appropriate tools to track all income and spending</p> <p>—</p> <p>Determine the growth of simple and compound interest using digital tools; explain impact interest has on long-term financial planning</p>
CONSUMER & CIVIC AWARENESS				
<p>Determine whether something is reasonably priced (a good purchase)</p>	<p>Calculate unit rates for goods and services; identify which rates offer best value</p> <p>—</p> <p>Types of taxes collected by different levels of government; explain how taxes provide services in the community</p>	<p>Concept of interest rates; identify types of interest rates and fees with different accounts and loans</p> <p>—</p> <p>Describe trading, lending, borrowing, donating to distribute financial and other resources among individuals and organizations</p>	<p>Explain how interest rates can impact savings, investments, cost of borrowing over time</p> <p>—</p> <p>Compare interest rates and fees for different accounts and loans; determine best option for different scenarios</p>	<p>Various ways for consumers to get more value when spending (sales, customer loyalty/incentive programs); determine best choice for different scenarios</p> <p>—</p> <p>Compare interest rates, annual fees, rewards for different credit cards and consumer contracts</p>



Curriculum Trends Across Grade-Levels

MONEY CONCEPT

- 1 Basic numeracy skills in estimating and calculating total dollars and cents (with and without tax)
- 2 Methods of payment and their advantages and disadvantages
- 3 Exchange rates and foreign currencies

FINANCIAL MANAGEMENT (KEY EXPECTATION)

- 1 Concepts and connection between spending, saving, earning, investing, donating
- 2 Budgeting & Financial Planning
 - i. Moving from basic budget to long-term financial plan
 - ii. Create, track, adjust, maintain balanced budget
 - iii. Identify and plan towards different types of financial goals (short-term vs. long-term)
 - iv. Finding sources of info to inform decisions
- 3 Credit and debt
- 4 Simple and compound interests using digital tools

CONSUMER & CIVIC AWARENESS

- 1 Different strategies consumers should have in order to get the best value in their spending
- 2 Interest rates and fees on bank accounts, loans, credit cards, and consumer contracts
- 3 Taxes and community services

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