



EST. 1899
United for Literacy
Littératie Ensemble

Funded by:



Financial Literacy Resource Guide

Grade 9





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www.litteratieensemble.ca/ressources*

Prepared by:

Ellie Hiu Ying Chan, OCT, M.Ed., BCom
Resource Development Advisor, Financial Literacy
United for Literacy

Teal Booth, M.F.A., B.A.
Resource Development Advisor, Financial Literacy
United for Literacy

Kris Knutson, OCT, M.Ed.
Resource Development Advisor, Financial Literacy
United for Literacy

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*The views expressed in this guide are those
of United for Literacy and do not necessarily
reflect those of the Ontario Ministry of Education.*

Technology Considerations

We are conscious of differing technology availabilities across various classrooms. If you have limited access to the internet or a printer, please contact us at **1-800-555-6523** to request a printed copy of the guide, lesson plans, assessments, or supplementary material.

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Introduction



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United for Literacy
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About United for Literacy

Formerly Frontier College, United for Literacy is the national registered charity dedicated to improving the lives of children, youth, and adults through literacy.



OUR VISION IS:

Literacy is recognized as a human right and a driving force to empowerment and prosperity. United for Literacy leads the effort in Canada to help people and communities achieve their goals through the power of literacy.

Since 1899, our *All Welcome!* approach and innovative services have been transforming every place into a learning place. In the past year, nearly 25,000 children, youth, and adults in over 200 urban, rural, and remote places across Canada (including 137 Indigenous communities) gained access to free, inclusive literacy and numeracy programs through United for Literacy. These programs took place both in person and online, and they were supported by nearly 2,000 trained volunteer tutors. In Ontario, we have worked with the 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.

The Financial Literacy Team at United for Literacy developed this guide, lesson plans, assessments, and other resources in partnership with the Ontario Ministry of Education. The team includes three Ontario Certified Teachers with qualifications in math and business. It also includes two advisors with educational experience in Indigenous communities, and three project managers with backgrounds in teaching and project management.

Financial Literacy Learning in Ontario High Schools

To develop this guide and the resources, we used a cross-curricular approach to provide students with a well-rounded learning experience.

“Financial literacy is the ability to understand and effectively use various financial skills” to make informed decisions regarding our financial resources (Fernando, 2022). 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 (Children’s Bureau, 2021), and even stronger relationships and marriages (Children’s Bureau, 2021).

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.

Structured teaching of financial literacy skills will help students develop critical thinking and problem-solving abilities and make effective financial decisions earlier in life as they prepare for post-secondary transition. To further benefit students' learning, the Ministry of Education in the Province of Ontario included financial literacy as part of the curriculum in Grades 1 through 10¹. For Grades 11 to 12, financial literacy learning is embedded throughout the Ontario curriculum.

Grades 9 to 12 Cross-Curricular Financial Literacy Resources

Through these resources, students will gain specific financial skills. They will deepen their understanding of the wider economy. They will also develop a critical eye as a consumer and learn to be a compassionate and responsible citizen. The Ontario Ministry of Education has established the following framework for financial literacy learning:

- ▶ **Citizenship:** Learn how to be a compassionate and responsible citizen.
- ▶ **Economic Understanding:** Understand the economy and how it affects our own financial planning.
- ▶ **Personal Finances:** Gain specific financial skills and make real-life applications.
- ▶ **Consumer Awareness:** Develop a critical eye as a consumer.

Our resources are designed using the following curriculum expectations.

Download at: www.unitedforliteracy.ca/Resources/Financial-Literacy-Guides-Overview

In Appendix A, you will find the curriculum expectations related to financial literacy in the Grade 9 Math curriculum. In Appendix B, you will find a glossary list of the relevant Ontario secondary course codes.

How we analyzed the Ontario curriculum for a cross-curricular approach

Our Financial Literacy Team analyzed the Ontario high school curriculum with the help of the Ministry of Education. We chose expectations that will support students' critical thinking, problem solving, and decision-making abilities. The curriculum expectations are drawn from the following curricula:

- ▶ Business Studies Grades 9 & 10 (2006 ed.)
- ▶ Business Studies Grades 11 & 12 (2006 ed.)
- ▶ Canadian and World Studies Grades 11 & 12 (2015 ed.)
- ▶ Career Studies Grade 10, Open (2019 ed.)
- ▶ Financial Literacy Scope and Sequence of Expectations (2016 ed.)
- ▶ Guidance and Career Education Grades 11 & 12 (2006 ed.)
- ▶ Mathematics Grade 9 De-streamed (2021 ed.)

In the high school curriculum, there are similar expectations in different streams and pathways. At United for Literacy, we categorized the expectations into two groups: "core" and "related" expectations. Please note: these terms are coined by United for Literacy. They are not from the Ministry of Education. The financial literacy resources we developed

¹ For Grades 1 through 9, Ontario's Mathematics curriculum includes a financial literacy strand. For Grade 10, the Career Studies curriculum includes financial planning and management.

meet the “core” expectations. We included some “related” expectations that can be taught using the same resource. The lists of related expectations are not a complete list. By including some related expectations,

we hope teachers across different streams and pathways can use these resources to benefit more students. **You may modify the resources according to your classroom and student needs.**

This diagram shows an example of “core” and “related” expectations:

Grade 9 Core Expectation

→ **MTHIW (Grade 9 Mathematics, De-streamed) F1.3** compare the effects that different interest rates, lengths of borrowing time, ways in which interest is calculated, and amounts of down payments have on the overall costs associated with purchasing goods or services, using appropriate tools

■ **Related Expectations**

BB1IO and BB12O (Introduction to Business) calculate the total cost of a variety of loans (e.g., balance carried on credit cards, car loan, mortgage)

GLC2O (Career Studies) C2.2 compare different forms of borrowing and identify some of the risks and benefits associated with each (e.g., federal student loans, provincial student loans, OSAP, loans or bursaries, etc.)

CIE3M (Individual and the Economy) B4.4 analyse the choices (e.g., cash, credit, loan, lease) to determine the best method of payment for major consumer purchases (e.g., home, car, tuition, holiday, electronics)

In this example, the resource is designed for course MTHIW expectation F1.3. The resource can be modified to teach related learning expectations found in other courses, such as BB1IO/BB12O, GLC2O, CIE3M, and more.

We chose the core expectations from various streams and pathways². This creates a well-rounded learning experience for all students. Oftentimes, the curriculum expectations are similar across the streams and pathways. Our resources will be relevant

for many students. Sometimes, the curriculum expectations are not similar. In those cases, we created tiered tasks. This will allow teachers to modify the level of difficulty according to the stream or pathway they teach.

Grade 11 Core Expectation

→ **MCF3M (Grade 11 Functions and Applications) B3.3** determine, through investigation (e.g., using spreadsheets and graphs), that compound interest is an example of exponential growth [e.g., the formulas for compound interest, $A=P(1+i)^n$, and present value, $PV=A(1+i)^{-n}$, are exponential functions, where the number of compounding periods, n , varies]

■ *Related Expectations*

MBF3C (Grade 11 Foundations for College Math) B1.2 determine, through investigation (e.g., using spreadsheets and graphs), and describe the relationship between compound interest and exponential growth

MCR3U (Grade 11 Functions) C3.3 solve problems, using a scientific calculator, that involve the calculation of the amount, A (also referred to as future value, FV), the principal, P (also referred to as present value, PV), or the interest rate per compounding period, i , using the compound interest formula in the form $A=P(1+i)^n$ [or $FV=P(1+i)^n$]

MCF3M (Grade 11 Functions and Applications) B3.2, MBF3C (Grade 11 Foundations for College Math) B1.3 solve problems, using a scientific calculator, that involve the calculation of the amount, A (also referred to as future value, FV), the principal, P (also referred to as present value, PV), using the compound interest formula in the form $A=P(1+i)^n$ [or $FV=P(1+i)^n$]

In this case, the related expectations differ from the core expectation. The resource is a tiered task, which allows teachers to modify the level of difficulty.

² Ontario secondary streams include Academic and Applied. The pathways include University/College Preparation, University Preparation, College Preparation, and Workplace Preparation.

How To Use This Guide



This Financial Literacy Resource Guide includes lesson plans, assessments, at-home activities, and online resources for teachers and students. They align with the Ontario Ministry of Education’s curricula and are developed under the guidance of Ontario Certified Teachers at United for Literacy.

Culturally Responsive and Relevant Pedagogy (CRRP) and the Growing Success frameworks (Queen’s Printer for Ontario, 2010) are the foundational building blocks of this guide. In this guide, there are five special features that are developed with these two frameworks in mind to further support student learning.



Teacher Talk Moves

Include question frames and teaching ideas to help teachers facilitate student discussions, assess student learning, build literacy skills, and develop student confidence. At your discretion, choose the questions to use for discussion or journal entries. Personal topics may be better suited as a journal entry. Suggestions are labeled as “Discussion” or “Journal.”



Academic Language

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



Tips

Provide suggestions or alternative ways of using the resources, often with a culturally responsive approach. It also includes suggestions for modification, accommodation, and differentiation where appropriate.



Remote and Rural

Provide suggestions for adapting resources to be relevant for students living in remote and rural areas.



Urban

Provide suggestions for adapting resources to be relevant for students living in urban areas and highlight parts of the resources that may apply mainly to those living in urban communities.

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 our own selves 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 section provides some practical suggestions.

A special note to teachers:

Please be mindful of the students’ and their families’ lived experiences. It is appropriate to modify the lessons and activities accordingly.

How can CRRP be applied to financial literacy learning?

Financial literacy skills are used by everyone from all backgrounds and cultures. We all make financial decisions every day, whether big or small, and these skills are applicable to everyone. However, topics related to financial literacy may intersect with cultural values. *(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 teachers can build on their current practice:

- ▶ Perform self-reflection 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 in 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. Students carry funds of knowledge that can provide rich cultural and community values to the classroom. View their lived experience as an asset rather than a limitation or deficit (Moll, 1998; Weiner, 2006).
- ▶ Encourage students to use their home language in class (Gee, 2004). Teach vocabulary, including in math classes. The vocabulary, also called “academic language,” is made up of words that are rarely used in everyday life. When students discuss topics using academic language, they deepen their understanding and reasoning (Mercer, 2007). To further support teachers, this guide provides “Academic Language” boxes.
- ▶ Continue to spend time in the community where you teach. Perhaps go on a walk during lunch time and visit a local restaurant and speak with the patrons. Or walk around the school campus before or after school and speak with students outside the classroom. Or have an open-door policy once a week during recess, inviting students to hang out in your classroom as a safe space. These small things will add to what you are already learning about your students and the community. 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).

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. Use the questions in the “Teacher Talk Moves” boxes and throughout our resources to generate meaningful class discussions on social justice.

Demonstrating respect for Indigenous territories and educating oneself about treaties and/or agreements made with the government is a step towards reconciliation and decolonization. Gaining knowledge about Indigenous territories and history may contribute to the comprehension of applicable curriculum expectations and examples when teaching Indigenous learners. Reflect before the implementation of a lesson to ensure that Indigenous peoples past and present are respected and recognized.



Growing Success: Effective Assessment and Instructional Practices

We created assessments and instructional resources using the Growing Success framework (Ontario Ministry of Education, 2010). Our goal was to develop resources “to improve student learning” (Ontario Ministry of Education, 2010, p. 6). We designed assessments in this guide to be used as assessments *for* learning and *as* learning (Ontario Ministry of Education, 2010, p. 31). Our focus is on teacher observations, student discussions, group work, experiential-learning, projects, rubrics, reflections, and more. You may choose to use some of these resources as assessments *of* learning (Ontario Ministry of Education, 2010, p. 31). We designed our assessments and resources to reinforce high academic expectations. They align with the curriculum, and include differentiation suitable for:

- ▶ English Language Learners (ELLs),
- ▶ Students with special educational needs,
- ▶ Those living in an urban context,
- ▶ Those living in a rural context,
- ▶ Those living in remote Indigenous communities.

Growth Mindset and Developing Student Confidence

In addition to CRRP and Growing Success, 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. Those “with a growth mindset feel their skills and intelligence can be improved with effort and persistence. They embrace challenges, persist through obstacles, learn from criticism, and seek out inspiration in others’ success” (“Growth Mindset”, 2020). In this guide, you will find resources that help teachers promote growth mindset in a student’s learning. Use the questions found in the “Teacher Talk Moves” boxes to generate meaningful discussions in your classroom.

How to promote growth mindset?

- ▶ Ask open-ended questions, not simply “yes/no” questions or asking students to simply repeat information.
- ▶ Encourage students to find multiple solutions.
- ▶ Celebrate progress and give praise for student effort, not just for the “right” answer.
- ▶ Encourage students to challenge themselves and to learn from their mistakes.
- ▶ Encourage students to reflect, consolidate their learning, and understand how to improve.

Growth Mindset Videos

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

www.youtube.com/watch?v=WtKJrB5rOKs

Learn about the science behind the brain as it learns!

“Neuroplasticity” by Sentis (2:03):

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):

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!”



Section I. Core and Related Curriculum Expectations



Grade 9 Financial Literacy Curriculum Expectations

Grade 9 Core Expectations

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.1** identify a past or current financial situation and explain how it can inform financial decisions by applying an understanding of the context of the situation and related mathematical knowledge
- **MTH1W (Grade 9 Mathematics, De-streamed) F1.2** identify financial situations that involve appreciation and depreciation, and use associated graphs to answer related questions

■ *Related Expectations*

BAT4M (Financial Accounting Principles) analyse methods of amortization (e.g., straight-line, declining balance, units of output) and their effects on financial statements

BAN4E (Accounting for a Small Business) describe the different methods of calculating depreciation (e.g., straight-line, declining balance, units of output)

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.3** compare the effects that different interest rates, lengths of borrowing time, ways in which interest is calculated, and amounts of down payments have on the overall costs associated with purchasing goods or services, using appropriate tools

■ *Related Expectations*

BB10 and BB20 (Introduction to Business) calculate the total cost of a variety of loans (e.g., balance carried on credit cards, car loan, mortgage)

GLC20 (Career Studies) C2.2 compare different forms of borrowing and identify some of the risks and benefits associated with each (e.g., federal student loans, provincial student loans, OSAP, loans or bursaries, etc.)

CIE3M (Individual and the Economy) B4.4 analyse the choices (e.g., cash, credit, loan, lease) to determine the best method of payment for major consumer purchases (e.g., home, car, tuition, holiday, electronics)

Grade 9 Core Expectations continued

→ **MTH1W (Grade 9 Mathematics, De-streamed) F1.4** modify budgets displayed in various ways to reflect specific changes in circumstances, and provide a rationale for the modifications

■ *Related Expectations*

H1F10 and H1F20 (Exploring Family Studies) B1.2 distinguish between needs and wants, and identify needs, wants, values, and goals that may develop during adolescence

H1F10 and H1F20 (Exploring Family Studies) C2.3 describe and demonstrate financial strategies and the financial literacy skills necessary to manage financial resources to meet personal and family financial goals



Section II. Lesson Plans & Assessments



Below are the Grade 9 financial literacy lesson plans and assessments. You can download the resources at: www.unitedforliteracy.ca/resources. Please be mindful of the students' and their families' lived experiences and modify the content according to student needs.



LESSONS

1. Class Discussion: Financial Situation
2. Understanding Appreciation and Depreciation
3. How Much Does It *Really* Cost?
4. Adjusting Budgets

1. Class Discussion: Financial Situation

Materials:

- ▶ Grade 9 Financial Situation Graphic Organizer

These materials are available on the United for Literacy website at: www.unitedforliteracy.ca/resources.

The activity addresses the following curriculum expectation:

Grade 9 Core Expectation

- ▶ **MTH1W (Grade 9 Mathematics, De-streamed) F1.1** identify a past or current financial situation and explain how it can inform financial decisions by applying an understanding of the context of the situation and related mathematical knowledge

Lesson Overview:

Have a class discussion about a financial situation and apply mathematical understanding to it! This can be done in a variety of ways. (For example, research a past or current event based on student choice or teacher-generated

suggestions.) You can use the “Financial Situation Graphic Organizer” for this activity. Students can work in small groups and share their findings with the whole class.



Tip

- ▶ The following topics can lead to discussions about power and inequality. These discussions can be sensitive for many students. Teachers must create a safe space for students to share their perspectives. Be mindful of diverse expectations, practices, and experiences.

Some ideas of past and current financial situations at the...

Global and national level

- ▶ World War I or II
- ▶ Post-World War II boom
- ▶ Financial crisis of 2007–2008
- ▶ COVID-19 pandemic
- ▶ Oil reserves around the world
(*For example: OPEC's share and control*)

Local level

- ▶ Local food banks and how they reflect the financial health of nearby residents
- ▶ Community or city distribution of funds
(*For example: infrastructure, local business supports, social programs, education, etc.*)
- ▶ Past or current local business issues

Individual level

- ▶ Change in circumstances
(*For example: increased or decreased household income, moving, attending a new school, a new member in the family, etc.*)





Teacher Talk Moves³

Discussion:

- ▶ What are some past or current financial situations, events, or issues that have had an impact on you personally, on the local community, country, or the world at large?
- ▶ What factors contributed to this financial situation?
- ▶ Who had the ability to make decisions in this financial situation?
- ▶ Who had less control over the decisions made?
- ▶ Who was affected by the decisions made?
- ▶ Were those most impacted by the decisions also those who made the decisions in this situation?
- ▶ What sources could you use to gather more information about the context of the situation?
- ▶ What math concepts could you use to better understand this situation and its impact?
- ▶ What math concepts would you need to learn more about to better understand this situation and its impact?

Journal:

- ▶ What are some expenses that a person has when they live independently?
- ▶ What are some expenses that a family might have?
- ▶ What are some expenses that a business owner has in order to keep their business running?
- ▶ What are some financial challenges that business owners or families are facing in your community?

Related mathematical knowledge⁴:

- ▶ Proportional reasoning
- ▶ Operation sense
- ▶ Linear and non-linear relations
- ▶ Graphical analysis
- ▶ Data analysis

³ Some questions are taken from the Ministry of Education curriculum website.

⁴ "Related mathematical knowledge" is taken from the Ministry of Education curriculum website.

2. Understanding Appreciation and Depreciation

Materials:

- ▶ Appreciation and Depreciation: Exploration Activity
- ▶ Appreciation and Depreciation: Scenario Examples
- ▶ Graphing paper or graphing calculator or online resources

These materials are available on the United for Literacy website at:

www.unitedforliteracy.ca/resources.

The activity addresses the following curriculum expectations:

Grade 9 Core Expectation

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.2** identify financial situations that involve appreciation and depreciation, and use associated graphs to answer related questions

■ *Related Expectations*

BAT4M (Financial Accounting Principles) analyse methods of amortization (e.g., straight-line, declining balance, units of output) and their effects on financial statements

BAN4E (Accounting for a Small Business) describe the different methods of calculating depreciation (e.g., straight-line, declining balance, units of output)

Lesson Overview:

There are two resources to support this curriculum expectation: Exploration Activity and Scenario Examples Activity. The Exploration Activity guides students to research the appreciation or depreciation of an item. It includes online resources to encourage experiential learning. The Scenario Examples Activity uses tables of values to provide different scenarios of appreciation and depreciation. You may choose to use the appropriate resource for your classroom. You can use both resources to support various learning needs.

To get students started on the activity, here is a list of items that can appreciate or depreciate:

- ▶ collectibles
- ▶ electronic goods
- ▶ vehicles
- ▶ real estate
- ▶ stocks and other investments

ACTIVITY 1 – Exploration Activity:

1. In small groups, ask students to brainstorm items that can either appreciate or depreciate. You can also provide suggestions for each of the categories listed above.
2. Have students research the increase or decrease of an item's value using appropriate resources. Some relevant web sites including interactive graphs are listed in the resources below. Allow students enough time to explore. Guide students to hover their mouse over an interactive graph and interpret the values.
3. Ask students to examine an interactive graph or create their own graph(s) by hand, with a graphing calculator or other appropriate tools. You may ask students to plot two or three items on the same graph for comparison. For each item, students will need a minimum of three data points to accurately understand the trend of appreciation or depreciation.
4. Ask students to examine the graph(s) and use the reflection questions in the activity for student discussions in small groups, as a whole class, or as a written assignment.



Tips

- ▶ Boost student engagement by incorporating student choice. Guide students to research items that interest them and are relevant to their lives.
- ▶ Have students research the value of a specific item, not just a broad category of items.
(For example: research the value of a pair of brand-name shoes that are highly desirable instead of shoes in general.)
- ▶ To engage students more fully, ask them to research several items within the same category.
(For example: research the value of three different pairs of sneakers and make comparisons.)

Research resources:

StockX: A website that tracks the appreciation and depreciation of collectible shoes, apparel, electronics, and more. For each item, there is an interactive graph that tracks the changes in value over time.

Google.com: Search for stock prices, fluctuations of currency exchange rates, and more. Includes an interactive graph that tracks the changes in value over time.

TSX: Search for stock prices listed on the Toronto Stock Exchange (TSX). TSX is a stock exchange based in Toronto, Canada. It is the 11th largest exchange in the world. TSX includes many mining and oil companies. Prices are in Canadian dollars (“Toronto Stock Exchange”, 2022). The TSX website includes interactive graphs and tables that show the changes in value for each stock.

NYSE: Search for stock prices listed on the New York Stock Exchange. NYSE is a stock exchange based in New York City, United States. It is by far the largest stock exchange in the world. Prices are in U.S. Dollars (“New York Stock Exchange”, 2022). The NYSE website includes interactive graphs and tables that show the changes in value for each stock.

Nasdaq: Search for stock prices listed on the Nasdaq Stock Market. Nasdaq is another stock exchange based in New York City, United States. Most of the world’s largest technology companies are listed on Nasdaq. Prices are in U.S. Dollars (Hayes, 2022). The Nasdaq website includes interactive graphs and tables that show the changes in value for each stock.

ACTIVITY 2 – Scenario Examples Activity:

1. This resource provides various scenarios of appreciation and depreciation as tables of values. You can select an appropriate scenario for each student group according to their learning needs.
2. Using the table(s) of values, ask students to create their own graph(s) by hand, using a graphing calculator or other appropriate tools.
3. Ask students to examine the graph(s). Tell them to use the reflection questions in the activity for student discussions in small groups, as a whole class, or as a written assignment.



Tips

- ▶ Teachers can modify the level of difficulty by including more or fewer data points.
- ▶ Teachers can also modify the tables of values by changing the numbers. For an easier task, round the numbers to the nearest whole numbers. For a more difficult task, ask students to estimate, use larger numbers, or include decimals.



Academic Language

Appreciation, depreciation, asset, real estate, stocks, linear, non-linear

3. How Much Does It *Really* Cost?

Materials:

- ▶ “How Much Does It Really Cost?” PowerPoint
- ▶ “How Much Does It Really Cost?” Assignment and Suggested Answers
- ▶ Internet access

These materials are available on the United for Literacy website at:
www.unitedforliteracy.ca/resources.

The activity addresses the following curriculum expectations:

Grade 9 Core Expectation

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.3** compare the effects that different interest rates, lengths of borrowing time, ways in which interest is calculated, and amounts of down payments have on the overall costs associated with purchasing goods or services, using appropriate tools

■ *Related Expectations*

BB10 and BB20 (Introduction to Business) calculate the total cost of a variety of loans (e.g., balance carried on credit cards, car loan, mortgage)

GLC20 (Career Studies) C2.2 compare different forms of borrowing and identify some of the risks and benefits associated with each (e.g., federal student loans, provincial student loans, OSAP, loans or bursaries, etc.)

CIE3M (Individual and the Economy) B4.4 analyse the choices (e.g., cash, credit, loan, lease) to determine the best method of payment for major consumer purchases (e.g., home, car, tuition, holiday, electronics)

Lesson Overview:

When we make a purchase with a loan, how much do we *really* pay in the end? Students will learn about the key factors that affect the total cost of purchases made with a loan. They will look at interest rates, loan terms,

compounding periods, and down payments through an experiential learning experience. This activity prepares students for more specific topics in the higher grades, including mortgages.

Review of Important Concepts:

At your discretion, you may use these resources to access prior knowledge before starting this lesson. Download at: www.unitedforliteracy.ca/resources

- ▶ Grade 8 Investments and Debt (Understanding Simple and Compound Interest) PowerPoint and Activity
- ▶ Grade 5 Understanding Credit and Debt

Video: "Interest on Borrowing vs. Investing" www.youtube.com/watch?v=-tXFAVMyl7I

Video: "Compound Interest Explained with M&Ms" www.youtube.com/watch?v=RX9UmacjIWg

Link: Simple Interest vs. Compound Interest: www.investopedia.com/ask/answers/042315/what-difference-between-compounding-interest-and-simple-interest.asp



Teacher Talk Moves

Discussion:

- ▶ If you borrowed money to purchase your item, how much do you really pay at loan maturity?
- ▶ What is the total amount of interest you will pay?
- ▶ What percentage of the total loan amount are interest payments?

Journal:

- ▶ Do you think it is worthwhile to borrow money to make purchases? Why or why not?



Tips

- ▶ The PowerPoint will guide students through the assignment.
- ▶ On slides 11-16, where students work with the “Deferred Payment Loan” calculator, you may ask students to research the interest rate and compounding period of a credit card. Students can input these terms and see how quickly credit card debt grows if they never make a payment. (Note: most credit cards charge an interest rate that compounds daily.)
- ▶ **Additional resource:** For a credit card calculator including monthly payments, go to www.calculator.net/credit-card-calculator.html.
- ▶ On slide 19, where students input values in an auto loan calculator, you can decide if they should enter sales tax and fees. Students can research the provincial sales tax and title, registration, and other fees when purchasing a car. This will give students a more realistic understanding of the costs associated with purchasing a vehicle.



Remote and Rural

- ▶ For many remote communities, shipping costs can be high. Remember to include the costs as part of the purchase price.
- ▶ If the community where you teach does not have easy access to auto loans, you can adapt the activity to calculate savings. There are many online tools available.
- ▶ Major consumer purchases may include essential items like groceries, clothing, prescriptions, and furniture. Many families budget for essential items. Other major purchases may include snowmobiles, hunting/fishing equipment, camping gear, etc. It is important to create an environment where students’ lived experiences are respected.



Academic Language

Loan, principal, interest, interest rate, simple interest, compound interest, down payment, loan maturity

4. Adjusting Budgets

Materials:

- ▶ “Adjusting Budgets: Individual” PowerPoint and Assignment
- ▶ “Adjusting Budgets: Household” PowerPoint and Assignment
- ▶ “Adjusting Budgets: School Club” Assignment and Suggested Answers
- ▶ “Adjusting Budgets: Business” PowerPoint, Assignment, and Suggested Answers

These materials are available on the United for Literacy website at:

www.unitedforliteracy.ca/resources.

The activity addresses the following curriculum expectations:

Grade 9 Core Expectation

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.4** modify budgets displayed in various ways to reflect specific changes in circumstances, and provide a rationale for the modifications

■ *Related Expectations*

H1F10 and H1F20 (Exploring Family Studies) B1.2 distinguish between needs and wants, and identify needs, wants, values, and goals that may develop during adolescence

H1F10 and H1F20 (Exploring Family Studies) C2.3 describe and demonstrate financial strategies and the financial literacy skills necessary to manage financial resources to meet personal and family financial goals

Lesson Overview:

Adjusting budgets is an important financial skill in life! We created four assignments to reflect different financial contexts. Students will adjust the budget in response to unexpected financial changes. In the individual, household, and business contexts, the budgets are given

as tables. In the school club context, the budget is given as a circle graph. Teachers have the option to choose which assignment(s) to use. These can be individual or small group assignments.

ACTIVITY 1 – Individual Assignment and 2 – Household Assignment:

- ▶ Both activities use the same assignment sheet, which is a budget template.
- ▶ The assignments follow along with their respective PowerPoints, which are interactive lessons that give students scenarios of unexpected financial change. Students will adjust their budgets in real-time.

ACTIVITY 3 – School Club Assignment:

- ▶ The assignment does not require a PowerPoint lesson.
- ▶ Engage in a student discussion about a club or team that they would like to create. *(For example: a sports team or after-school chess club.)*

ACTIVITY 4 – Business Assignment:

- ▶ This PowerPoint lesson is not interactive. It provides more details about the business expenses found in the budget (see slides 5 to 7). This will help students when they adjust the budget according to unexpected changes.
- ▶ The lesson also includes the relevant academic language to help students learn about a business budget.



Academic Language

Income, budget, revenue, expenses, fixed expenses, variable expenses, profit



Teacher Talk Moves

Discussion:

- ▶ Do you think your suggested adjustment is more of a short-term or long-term solution to the unexpected financial change?
- ▶ Which expense(s) within the budget would you want to know more about?
- ▶ In the budget, where do you think there may be an opportunity to use money more wisely?
- ▶ Aside from adjusting the budget, what else could you do to respond to this unexpected change?
- ▶ What do you think about borrowing money and incurring debt? What are some pros and cons to consider before making this decision?

Journal:

- ▶ How does your household think about debt and finances?



Tips

- ▶ The assignments are open-ended to encourage student choice and diverse reasoning. Oftentimes, there are multiple ways to adjust a budget. Guide students to be creative, to ask questions about a particular expense, and to explain their rationale.
- ▶ As your students progress to the end of the activities, encourage them to think beyond the budget by using the questions found in the “Teacher Talk Moves” box. By this point, they may encounter more unknowns about the situation and the budget. So, it is not as important to show specific calculations or to balance the budget perfectly. Rather, encourage students to ask questions and do research. Help students to become more comfortable with the unknowns. In real life, we often have more unknowns than answers, even in financial planning.
- ▶ You can use the assignment options as a differentiating tool in your class. Different student groups can be assigned to a different activity. Then, the students can present their work to the whole class.
- ▶ You can ask students to represent the budgets on a Google Sheet or Excel sheet and do their calculations using the software.



Remote and Rural

- ▶ How do expenses in your region differ from those in more populated areas, such as cities? Teachers can either facilitate student research or discussion.
- ▶ Some students may prefer household budgeting, as households and communities may have priorities. Adjust the activities accordingly, so students can make it relevant to their own lives.



Urban

- ▶ Some students may prefer individual budgeting. As young adults, they may be budgeting for themselves for the first time. Adjust the activities accordingly, so students can make it relevant to their own lives.

Section III. Additional Resources



Financial Literacy Resources for Grades 4 to 8

United for Literacy developed financial literacy resources for students in Grades 4 through 8. These resources were developed in partnership with the Ontario Ministry of Education. They align with the Ontario Mathematics curriculum. You will find a complete list of the resources in Appendix C. They can be used for review or as a scaffolding tool. You can download the resources at: www.unitedforliteracy.ca/resources.



Personal Budget Planners

Students and families can access the following personal budget planners developed by United for Literacy. The planners can be used in class or at home to help students manage their personal finances; this encourages real-life application. You may download the planners from the United for Literacy webpage: www.unitedforliteracy.ca/resources.

1. Personal Monthly Budget Planner

This budget planner includes an income tracker for two sources of income.



Tips

- ▶ Students can calculate the difference between budgeted and actual expenses with this formula:
 $\text{Difference} = \text{Budget} - \text{Actual}$.
- ▶ For the monthly summary:
 $\text{Monthly Difference} = \text{Total Income} - \text{Actual Expenses}$.
- ▶ A positive number shows underspending, and a negative number shows overspending.

2. Personal Monthly Budget Planner & Income Tracker

This budget planner is similar to the previous one and includes an income tracker for multiple sources of income. You will find an example on pages 3-4 of the planner.

3. Personal Yearly Financial Planner

This financial planner helps students see their spending and how it impacts their longer-term financial goal. Students will first create a monthly budget using one of the budget planners above. Once they determine the monthly difference, they can input this number in the financial planner. See the “Tips” box on the previous page for the formulas.

Money Management Worksheets

The “Managing Your Money” worksheet series will show students the basic concepts of money management. In some areas, there are no right or wrong answers; they come 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 United for Literacy webpage:

www.unitedforliteracy.ca/resources.



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**

Section IV.

Online Resources and More



Teachers should use the following resources at their discretion to meet the needs of your students.

Online Resources

[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.

[Calculator.net – Financial Calculators](#)

Free financial calculators for mortgages, loans, investments and more. It includes interactive graphs, tables, and in-depth information. This company is based in Texas so the information is provided within the American context.

[EconEdLink](#)

Suitable for K-12. A great website for teachers to access classroom resources, and parents to download family activities. It explores concepts like fair trade, non-profits, making choices, wants vs needs, etc. An initiative by the Council for Economic Education in the USA.

[Investopedia](#)

A financial website based in New York City, USA, that provides definitions, advice, comparisons of financial products, and more. The information is provided within an American context.

[Mac’s Money Centre – McMaster University](#)

The Student Success Centre at McMaster University in Hamilton, Canada 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.

[Napkin Finance – Learn About All Financial Terms](#)

A site of infographics! Important financial concepts are illustrated on an online napkin. Easy to understand, engagement, and beneficial for visual learners.

[Ontario Teachers’ Federation – Financial Literacy Resources](#)

Suitable for K-12. InspireFinancialLearning.ca is an initiative of the Ontario Teachers’ Federation. It provides teachers with effective tools and strategies to teach about the world of personal finances. Most of their resources are cross-curricular and are compatible with the Ontario curriculum.

[PracticalMoneySkills.com](https://www.practicalmoneyskills.com)

A wide range of financial literacy topics from budgeting to credit score to buying a car or a home. This is Visa’s award-winning financial literacy program, based in the USA. It is possible to select “Canada” to access Canadian content.

[PracticalMoneySkills.com – Grades 9-12 Lesson Plans](https://www.practicalmoneyskills.com/grades-9-12)

This is a section on the same web site that provides detailed lesson plans covering a wide range of topics with teacher’s guide, student activities, and PowerPoints.

Apps for Mobile Phones and Tablets

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.

Credit Karma

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

Currency – Offline currency converter

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

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 Loblaws’ owned locations (e.g., Real Canadian Superstore, Loblaws, No Frills, etc.). Pick-up in store.

Flipp

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

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 plan and a paid plan.

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.

Reebee

Browse the latest flyers and deals from 100+ retailers.

Xe Currency & Money Transfer

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



Appendix A: Grade 9 Financial Literacy Curriculum Expectations

Grade 9 Core Expectations

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.1** identify a past or current financial situation and explain how it can inform financial decisions by applying an understanding of the context of the situation and related mathematical knowledge
- **MTH1W (Grade 9 Mathematics, De-streamed) F1.2** identify financial situations that involve appreciation and depreciation, and use associated graphs to answer related questions

■ *Related Expectations*

BAT4M (Financial Accounting Principles) analyse methods of amortization (e.g., straight-line, declining balance, units of output) and their effects on financial statements

BAN4E (Accounting for a Small Business) describe the different methods of calculating depreciation (e.g., straight-line, declining balance, units of output)

- **MTH1W (Grade 9 Mathematics, De-streamed) F1.3** compare the effects that different interest rates, lengths of borrowing time, ways in which interest is calculated, and amounts of down payments have on the overall costs associated with purchasing goods or services, using appropriate tools

■ *Related Expectations*

BB10 and BB20 (Introduction to Business) calculate the total cost of a variety of loans (e.g., balance carried on credit cards, car loan, mortgage)

GLC20 (Career Studies) C2.2 compare different forms of borrowing and identify some of the risks and benefits associated with each (e.g., federal student loans, provincial student loans, OSAP, loans or bursaries, etc.)

CIE3M (Individual and the Economy) B4.4 analyse the choices (e.g., cash, credit, loan, lease) to determine the best method of payment for major consumer purchases (e.g., home, car, tuition, holiday, electronics)

Grade 9 Core Expectations continued

→ **MTHIW (Grade 9 Mathematics, De-streamed) F1.4** modify budgets displayed in various ways to reflect specific changes in circumstances, and provide a rationale for the modifications

■ *Related Expectations*

HIF1O and HIF2O (Exploring Family Studies) B1.2 distinguish between needs and wants, and identify needs, wants, values, and goals that may develop during adolescence

HIF1O and HIF2O (Exploring Family Studies) C2.3 describe and demonstrate financial strategies and the financial literacy skills necessary to manage financial resources to meet personal and family financial goals



Appendix B: Glossary List of Ontario Secondary Course Codes

The glossary list shows only the secondary courses that are identified as a “core” expectation or “related expectation” in our resource development process:

Grade	Course Code	Course Name
9	MTH1W	<i>Mathematics, Grade 9, De-streamed</i>
	BB10	<i>Introduction to Business, Grade 9, Open</i>
	HIF10	<i>Exploring Family Studies, Grade 9, Open</i>
	CGC1P	<i>Issues in Canadian Geography, Grade 9, Applied</i>
10	BB120	<i>Introduction to Business, Grade 10, Open</i>
	HIF20	<i>Exploring Family Studies, Grade 10, Open</i>
	GLC20	<i>Career Studies, Grade 10, Open</i>
	CHV20	<i>Civics and Citizenship, Grade 10, Open</i>
11	CIE3M	<i>The Individual and the Economy, Grade 11, University/College Preparation</i>
	TTJ30	<i>Transportation Technology: Vehicle Ownership, Grade 11, Open</i>
	CHA3U	<i>American History, Grade 11, University Preparation</i>
	GWL30	<i>Designing Your Future, Grade 11, Open</i>
	MEL3E	<i>Mathematics for Work and Everyday Life, Grade 11, Workplace Preparation</i>
	MBF3C	<i>Foundations for College Mathematics, Grade 11, College Preparation</i>
	MCF3M	<i>Functions and Applications, Grade 11, University/College Preparation</i>
	MCR3U	<i>Functions, Grade 11, University Preparation</i>

Grade	Course Code	Course Name
12	BAT4M	<i>Financial Accounting Principles, Grade 12, University/College Preparation</i>
	BAN4E	<i>Accounting for a Small Business, Grade 12, Workplace Preparation</i>
	CIC4E	<i>Making Personal Economic Choices, Grade 12, Workplace Preparation</i>
	BTX4E	<i>Information and Communication Technology in the Workplace, Grade 12, Workplace Preparation</i>
	GLS4O	<i>Advanced Learning Strategies: Skills for Success After Secondary School, Grade 12, Open</i>
	GLE4O	
	GLE3O	
	BDV4C	<i>Entrepreneurship: Venture Planning in an Electronic Age, Grade 12, College Preparation</i>
	CIA4U	<i>Analysing Current Economic Issues, Grade 12, University Preparation</i>
	HIP4O	<i>Personal Life Management, Grade 12, Open</i>
	BBB4M	<i>International Business Fundamentals, Grade 12, University/College Preparation</i>
	MEL4E	<i>Mathematics for Work and Everyday Life, Grade 12, Workplace Preparation</i>
	MAP4C	<i>Foundations for College Mathematics, Grade 12, College Preparation</i>

Appendix C: Financial Literacy Resources for Grades 4 to 8

These materials are available on the United for Literacy website at:

www.unitedforliteracy.ca/resources.

Grade	Teacher's Resource & Lessons	Activity	Description
Grade 4	Grade 4 Financial Literacy Resource Guide		Includes instructional activities, games, online resources, and project ideas for students, families, teachers, and community organizers.
	Lesson: Grade 4 Money in Words & Numbers	Grade 4 Grocery Shopping Performance Task	Students practice adding and subtracting dollars on a grocery shopping trip!
	Lesson: Grade 4 Where Is My Money?	Grade 4 Managing Your Money: Weekly Budget	Students will learn four categories of money management: spending, saving, donating, and investing.
Grade 5	Grade 5 Financial Literacy Resource Guide		Includes instructional activities, games, online resources, and project ideas for students, families, teachers, and community organizers.
	Lesson: Grade 5 Money in Words & Numbers	Grade 5 Grocery Shopping Performance Task	Students practice adding, subtracting, and estimating dollars and cents on a grocery shopping trip!
	Lesson: Budgeting – Where Is My Money?	Grade 5 Managing Your Money: Weekly Budget	Students will learn the basics of budgeting and do it for one week.
		Understanding Credit and Debt Performance Task	Students will learn that credit cards are a form of debt in this multi-media activity.
Grade 6	Grade 6 Financial Literacy Resource Guide		Includes instructional activities, games, online resources, and project ideas for students, families, teachers, and community organizers.
		Account Features and Details Graphic Organizer	Students will research and compare various account features and fees using this graphic organizer.
		Creating Financial Goals Activity	Students will create personalized financial goals for saving, earning, investing, and donating.
		Factors Influencing Financial Goals Performance Task	This activity will help students identify barriers and opportunities to reach their financial goals.
		Getting to the Real Meaning Activity	This activity will strengthen students' conceptual understanding of lending, borrowing, trading, and donating.

Grade	Teacher's Resource & Lessons	Activity	Description
		Match the Definitions Activity	
		Finance Vocabulary Crossword	Students will identify financial words and their meanings.
		Finance Vocabulary Wordsearch	
		Types of Payments Graphic Organizer	Students will research and learn about the advantages and disadvantages of different types of payments.
		Types of Payments Scenarios Activity	Students will analyze different scenarios and choose the best type of payment method.
Grade 7	Grade 7 Financial Literacy Resource Guide		Includes instructional activities, games, online resources, and project ideas for students, families, teachers, and community organizers.
	Lesson: Foreign Currencies and Exchange Rates	Foreign currencies and Exchange Rates Practice Activity	Learn and practice converting foreign currencies to Canadian dollars and vice versa.
	Lesson: The Finance of Adulting (Teacher Version and Student Version)	The Finance of Adulting: Monthly Budget Planner	An interactive and multi-media lesson where students follow their avatar and make real-time financial decisions. Students will create and adjust monthly budgets, how budgeting affects long-term financial planning, and how interest rates affect debt and investments.
		The Finance of Adulting: Yearly Financial Planner	
		Decision Influencers Graphic Organizer	This graphic organizer will guide students to think about the societal and personal factors that influence their financial decisions.
		Calculating Interest Rates and Fees Practice Activity	Use this worksheet to deepen students' understanding of interest rate calculations and its impact on debt and investment.
		Debt and Investment Comparison Chart	Using this graphic organizer, students can compare interest rates and fees charged by various accounts, loans, or investments.

Grade	Teacher's Resource & Lessons	Activity	Description
Grade 8	Grade 8 Financial Literacy Resource Guide		Includes instructional activities, games, online resources, and project ideas for students, families, teachers, and community organizers.
	Lesson: Business Planning	Financial Literacy Culmination Assessment	Create a long-term financial plan by coming up with a business plan. This is the guiding document for the Grade 8 culmination project, which integrates the listed lessons.
		Business Long-Term Budgeting Activity	This activity guides students to calculate revenue, expenses, and profit for their business.
	Lesson: Budgeting	Budgeting Performance Task Level-1	Students practice budgeting based on a scenario.
		Budgeting Performance Task Level-2	Students practice advanced budgeting based on a scenario.
		Six Styles of Budgeting Activity	Students will learn about the six common styles of budgeting in this multi-media activity.
	Lesson: Customer Incentives	Customer Loyalty Program Graphic Organizer	Students will learn, research, and compare different loyalty programs using this graphic organizer. Students can also create their own loyalty program for their business plan.
	Lesson: Investments and Debt	Investments and Debt Practice Activity	Students will learn about simple and compound interests and the impact these have on investments and debt.
	Lesson: Currencies and Exchange Rates	Currencies and Exchange Rates Practice Activity	Use this activity to practice converting between foreign currencies and adding the associated fees.
	Payment Methods Graphic Organizer	Use this graphic organizer to compare the advantages and disadvantages of various payment methods when using foreign currencies.	
All Grades	Lesson: How to Use Money Manipulatives	Manipulative Mat	This is a hands-on activity where students follow the interactive lesson to learn how to use money manipulatives. They are encouraged to represent money values in multiple ways.

Citations



- Child Abuse Prevention, Treatment & Welfare Services: Children's Bureau. (2021, January 15). *Benefits of Being Financially Stable*. Retrieved August 24, 2022, from www.all4kids.org/news/blog/benefits-of-being-financially-stable
- Duncan-Andrade, J. (2007). Gangstas, Wankstas, and Ridas: defining, developing, and supporting effective teachers in urban schools. *International Journal of Qualitative Students in Education*, 20(6), 617-638.
- Fernando, J. (2022, August 15). *Financial Literacy Definition*. Investopedia. Retrieved August 24, 2022, from www.investopedia.com/terms/f/financial-literacy.asp
- Gee, J. P. (2004). *Language and Identity at Home. Language and Learning: A Critique of Traditional Schooling*. New York: Routledge.
- Hayes, A. (2022, June 22). *Nasdaq*. Investopedia. Retrieved August 24, 2022, from www.investopedia.com/terms/n/nasdaq.asp
- Ladson-Billings, G. (1995). But That's Just Good Teaching! The Case for Culturally Relevant Pedagogy. *Theory into Practice*, 34(3), 159-165.
- Mercer, N. (2002). Development through Dialogue. In *Words and Minds: How we use language to think together*. London and New York: Routledge.
- Moll, L. C. (1998). Fund of knowledge for teaching: a new approach to culture in education. *Keynote Address: Illinois State Board of Education*.
- New York Stock Exchange. (2022, August 21). In *Wikipedia*. en.wikipedia.org/wiki/New_York_Stock_Exchange
- Oudshoorn, A. (2018, March 27). *Financial Homelessness Prevention*. The Homeless Hub. Retrieved August 24, 2022, from www.homelesshub.ca/blog/financial-homelessness-prevention
- Ontario Ministry of Education. (2010). *Growing success: Assessment, evaluation, and reporting in Ontario schools* (1st ed.). Toronto: Queen's Printer for Ontario.
- Ontario Ministry of Education (2022). *Curriculum and Resources*. Retrieved Nov. 17, 2022 from: www.dcp.edu.gov.on.ca/en/curriculum#secondary
- Top Hat. (2020, December 16). *Growth mindset definition and meaning*. Retrieved August 24, 2022, from tophat.com/glossary/g/growth-mindset/
- Toronto Stock Exchange. (2022, August 12). In *Wikipedia*. en.wikipedia.org/wiki/Toronto_Stock_Exchange
- Weiner, L. (2006, September). Challenging Deficit Thinking. *Educational Leadership*, 64(1), 42-45.
- Woodson, C. G. (1933). *The miseducation of the Negro*. New Jersey: Associated Publishers.
- Whysel, B. (2018, June 27). *3 Vicious Cycles: Links Among Financial, Physical and Mental Health*. Forbes. Retrieved August 24, 2022, from www.forbes.com/sites/brettwhysel/2018/06/27/3-vicious-cycles/?sh=127a00f2540d