Budget Basics Curriculum Unit

IST 5323 Concepts of Learning and Teaching

Final Project – Option 3

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Budget Basics Curriculum Unit

The economic meltdown over the last few years pushed more than 1.5 million Americans to file for bankruptcy in 2010 alone (MacBeth, 2011). At the root of many of those filings was excessive spending (Zhu, 2008), perhaps due to an inability to make smart money management choices. The economy may be re-stabilizing, but the need for financial education remains. Unfortunately, fewer than half of the United States requires some form of economics or personal finance education in high school (Council for Economic Education, 2010); so many adults are forced to use trial and error to teach themselves about money management.

The objective for this Budget Basics Curriculum Unit is to address financial management at a young age, creating a pattern of financial fitness that will help America's future adults avoid the hardship of money *mis*management. The aim is to use engaging techniques, learner-centered theory, and technology to achieve the desired learning goal: a foundation of financial literacy.

This five-lesson curriculum unit is built on theories from two of education's most respected authorities on learning: Piaget and Vygotsky.

1) Piaget's theory of cognitive development addresses the stages at which humans develop using assimilation and accommodation to rebalance or equilibrate when new stimulus is introduced (Piaget, 1997). This learning theory was chosen as a foundation for the curriculum unit because, while money management knowledge and skills are critical to living in a capitalistic society, it is important to introduce these skills at appropriate and optimal times in development, when the learners are capable of highest receptivity.

2) Vygotsky's principle of Social Constructivism acknowledges the influence of society and focuses on real-world application of knowledge (Vygotsky, 1997). Money management is a fundamental part of day-to-day life in a capitalistic society. The knowledge and skills are applicable to real-world situations for adults, but younger learners also need assistance understanding the application and building a foundation of knowledge. Classroom-based opportunities to practice the knowledge should help. Starting with money management basics at a young age should form a strong foundation for ongoing learning that connects the concepts to the real-world financial transactions that their future holds.

To help address the motivation levels of learners and to appeal to a variety of learning styles, the instruction model for this unit's lessons draws on Gardner's Multiple Intelligence theory, which paints a broader vision of education, using different methodologies, exercises and activities to reach all students, not just those who excel at linguistic and logical intelligence — the areas that have been traditionally addressed in learning (Gardner, 1987).

As already stated, the lessons in this unit are situated in reality: Every member of a capitalistic society should possess knowledge and skills to manage day-to-day financial transactions and make decisions about spending and saving. This unit serves as a foundation for financial literacy development by incorporating a variety of technologies, including Internet research, educational online games, and computer-based cognitive tools. These tools have been incorporated to help address issues of motivation, to engage students in critical thinking, and to allow learners to construct their own knowledge ***with*** as opposed to ***from*** the technology

(Jonassen, Carr, & Yueh, 2006). This theory suggests use of computer-based cognitive tools could make students more invested in the learning, and therefore make the lessons more successful in reaching the stated learning and performance outcomes. Considering the ubiquity of computers and the fact that children between the ages of 8 and 18 use them an average of one-and-a-half hours every day (Kaiser Family Foundation, 2010), it seems wise to deliver instruction with the support of a channel the audience appreciates and is already motivated, moved, or inspired to use (Ryan & Deci, 2000).

Lesson 1: Money Basics, An Introduction

This lesson's objective is to lay the groundwork for the unit, situating the information in reality (Vygotsky, 1997), and appealing to kinesthetic and visual learners (Gardner, 1987) with an online primer on currency and a hands-on demonstration of the Money Savvy piggy bank, an age-appropriate tangible tool children can use to practice money management. The tools will help the instructor facilitate knowledge transfer of the primary components of money management: saving and spending. The Money Savvy Pig will also serve as a building block for each lesson in the unit.

Lesson 2: Saving Makes Cents

This lesson focuses on saving, and its associated activities are intended to appeal to musical, linguistic, and mathematical learners in the classroom (Gardner, 1987). First, Sammy the Rabbit will lead children in a song about saving, and then the instructor will facilitate a discussion about familiar phrases about saving. And finally, the children will pair up at the computers to play an online game called Ed's Bank, which illustrates the importance of saving in an engaging, age-appropriate way.

Lesson 3: Smarter Spending

This lesson takes a deeper dive into the concept of spending, a topic that will likely appeal to the mathematical and interpersonal learners (Gardner, 1987). To situate the spending lesson in a real-world example to which children should be able to relate (Vygotsky, 1997; Brown, Collins, & Duguid, 1989), the class will divide into teams and play an online challenge called Lunch Money Game, which tests learners' smart-spending skills.

Lesson 4: Learning About Earning

This lesson puts a focus on intrapersonal learning (Gardner, 1987), challenging students to look inward and discover individual skills that they could turn into moneymaking ideas. Then the lesson taps learning from the prior lessons to probe on what students would/could/should do with earned money.

Lesson 5: Demonstration of Learning and Evaluation

The culminating lesson of this unit gives students the freedom to demonstrate their learning in individual or group projects that reflect understanding of the concept of either saving or spending. The resulting project may take the form of a role-play, a comic, a drawing, or other idea deemed appropriate by the instructor. This final lesson taps Gardner's Multiple Intelligence Theory (1987) and Project-based Learning (Bell, 1987).

References

Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House, 83,* 39-43.

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Piaget, J. (1997). Development and learning. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (2nd ed., pp. 19-28). New York, NY: W. H. Freeman and Company.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67.

Vygotsky, L. S. (1997). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.), *Readings on the Development of Children* (2nd ed., pp. 29-36). New York, NY: W. H. Freeman and Company.

Zhu, N. (2007). Household consumption and personal bankruptcy. Retrieved April 16, 2011, from UC Davis Web site, http://faculty.gsm.ucdavis.edu/~nzhu/papers/personal_bank.pdf

Lesson 1: Money Basics, An Introduction

Purpose of Design

This lesson lays the groundwork for the unit on money management basics, situating the information in reality, per the theory of Social Constructivism (Vygotsky, 1997), and appealing to kinesthetic and visual learners (Gardner, 1987) with the following activities:

1) An online primer on the types of currency.
2) A hands-on demonstration of the Money Savvy piggy bank, an age-appropriate tangible tool children can use to practice money management.

These tools will help the instructor facilitate knowledge transfer of the primary components of money management: saving and spending. The Money Savvy Pig will also serve as a building block and reminder or prior learning for each lesson in the unit.

Intended Audience

The intended audience for this money management unit is third grade. According to Piaget this audience is in the Concrete Operational stage (Piaget, 1997), which allows learners to conceptualize, and create logical structures that help explain physical experiences and solve abstract problems.

Learning Outcomes	Performance Outcomes
● The student will understand why it's important to learn how to manage money. ● The student will know the differences between saving and spending. ● The student will remember the basic units of money in the U.S.	● The student will participate in discussion about money.

These learning and performance outcomes align with the Texas Essential Knowledge and Skills (TEKS) for third-grade math, which specify that a student should know and remember the values of coins and bills (Texas Education Agency, n.d.).

Cognitive and Affective Obstacles to Learning

From a cognitive perspective, children who have not been exposed to tangible expressions of money may experience a longer learning curve. However, chances are that most children at the third-grade level have had some experience with coins and bills, and some may have experienced making a transaction using money. From an affective perspective, the instructor should watch for signs of receiving and responding to the lesson's activities, based on Krathwohl's Affective Domain Taxonomy (Miller, n.d.). The instructor should gauge and accommodate students' willingness to react to stimuli and the level at which the students participate in the learning.

Technologies Employed in the Activity

This lesson requires a computer with Internet access for the instructor and a projection screen so that the whole class can see the online portion of the activity.

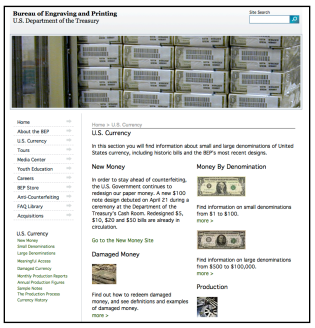
Learning Solution

Part 1: Currency Values

The instructor will begin this lesson and unit by facilitating a short period of discussion about money. Sample questions might include:

- What is money?
- Why do people need money?
- How do people use money?
- What forms does money take? (coins, bills, credit cards, checks, etc.).

Then the instructor will navigate the browser to the following URLs to provide a review of U.S. currency and its values:



Websites: http://www.usmint.gov/ http://www.moneyfactory.gov/uscurrency.htm

These government-sponsored websites should be accessible from school computers and should provide the photos and basic information necessary to provide a foundation on U.S. currency.

Part 2: Saving and Spending with the Money Savvy Pig

The instructor will introduce students to the Money Savvy Pig, available for $16.99 online at Amazon or the Money Savvy Generation Website.

Website: http://www.msgen.com/assembled/money_savvy_pig.html

This piggy bank, which is divided into 4 compartments, will allow the instructor to use a tangible tool to describe and visually represent primary concepts of money management. An alternative to purchasing the Money Savvy Pig is to use simple glass jars or clear plastic containers labeled with “saving” and “spending.”

Money Savvy Pig: Each compartment has its own opening

Alternative to Money Savvy Pig

The instructor will lead the class in discussion about the compartments and why they are important parts of money management. Sample discussion questions might include:

- What is saving?
- What is spending?
- What is the difference?
- Is one more important the other?
- Does everyone do both?
- Should everyone do both?
- Which do you prefer: saving or spending?

The instructor will move on to explain that over the next few days, the class will be learning about two of the compartments: saving and spending. In addition, the instructor should spend at least five minutes explaining to the students that they will be creating a project at the

end of the unit to demonstrate what they learned about saving or spending. Throughout the unit, the Money Savvy Pig or saving/spending containers can serve as a handy visual reminder and review at the beginning of each lesson about the primary concepts.

Anticipated Moments of Learning

For most students the review of coins, bills, and their values will be a realization of prior knowledge, which aligns with the first step in Bloom's Taxonomy (Forehand, n.d.). Learning will also occur when the instructor exposes the students to fun facts about the coins and bills through the exploration of the U.S. Treasury government websites. Discussion about the differences between saving and spending should allow students to relate learning to personal experience in order to make connections.

Evaluation

Informal assessment of participation in the discussion and student reaction to the currency values is appropriate for this lesson. This approach should inform the instructor about student understanding of basic money concepts and should help the set the appropriate course for the depth of future instruction direction in the unit.

Lesson 1 References

Forehand, M. (n.d.). Bloom's taxonomy. In M. Orey (Ed.), *Emerging Perspectives on Learning, Teaching, and Technology*. Retrieved April 16, 2011, from http://projects.coe.uga.edu/epltt/index.php?title=Bloom%27s_Taxonomy

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Miller, M. (n.d.). Teaching and learning in the affective domain. In M. Orey (Ed.), *Emerging Perspectives on Learning, Teaching, and Technology*. Retrieved April 16, 2011, from http://projects.coe.uga.edu/epltt/index.php?title=Teaching_and_Learning_in_Affective_Domain

Piaget, J. (1997). Development and learning. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (2nd ed., pp. 19-28). New York, NY: W. H. Freeman and Company.

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Lesson 2: Saving Makes Cents

Purpose of Design

This lesson focuses on the concept of saving, the first compartment of the Money Savvy Pig, and a critical part of the money management and financial literacy goal, since lack of saving contributes to financial hardship in the future. The associated activities are intended to appeal to musical, linguistic, interpersonal, and mathematical learners in the classroom (Gardner, 1987) with the following activities:

1) A song about saving
2) A discussion about popular phrases and sayings about saving
3) An online game challenge that reinforces the need to save as much as possible

These activities will help the instructor facilitate knowledge transfer about the importance of saving. The song, discussion, and online game help situate the concepts in contexts that children will be able to understand and relate to (Vygotsky, 1997), thereby increasing the chance of meaningful learning.

Intended Audience

The intended audience for this money management unit is third grade. According to Piaget this audience is in the Concrete Operational stage (Piaget, 1997), which allows learners to conceptualize, and create logical structures that help solve abstract problems.

Learning Outcomes	**Performance Outcomes**
● The student will understand why developing savings habits is important. ● The student will know basic money management strategies.	● The student will participate in discussion about money. ● The student will demonstrate knowledge of money management strategies through online game play.

These learning and performance outcomes align with the Texas Essential Knowledge and Skills (TEKS) for third-grade math, which specify that a student should be able to use technology and other mathematical tools such as manipulative materials to develop conceptual understanding (Texas Education Agency, n.d.).

Cognitive and Affective Obstacles to Learning

From a cognitive perspective, third-grade students should be able to grasp the concepts in this lesson as they correspond to a developmental stage that accommodates abstract thinking. From an affective perspective, some students may place a lesser value on the concept of saving if this has not been a focus at home, where they are likely most exposed to money management practices. According to Krathwohl's Taxonomy, this pre-existing value may affect a student's

willingness to react and respond to the information presented (Miller, n.d.). This value may also affect intrinsic motivation to learn (Ryan & Deci, 2000).

Technologies Employed in the Activity

This lesson requires a CD player and computers with Internet access for students.

Learning Solution

The instructor will start the lesson by reintroducing the Money Savvy Pig or saving/spending containers and reminding students of the prior lesson. Then the instructor will point to the "Save" compartment of the piggy bank and explain that this lesson is all about saving.

Part 1: Saving Song

The instructor will lead a short period of direct instruction on saving, which should include the following principles:

- What is saving?
- How people save
- Where people save
- The fact that saving is important because it gives people freedom and choices

Then the instructor will play an age-appropriate song about saving. While the instructor may choose any age-appropriate song, there are several options on the Sammy the Rabbit CD titled, "Mission 1: Celebrate Saving." The songs "S-A-V-E" and "Change Adds Up" are just two examples. The Sammy the Rabbit CD is available for $9.99 at http://itsahabit.com/. The instructor may choose to print the words to the songs on the board and if appropriate, to encourage students to sing along.

CD Cover

Website: http://itsahabit.com/

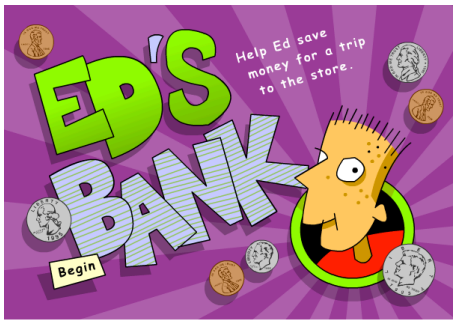
Part 2: Saving Sayings

The instructor will host a discussion about saving phrases, including what they mean and whether or not students think they are true and why. Sample phrases might include:

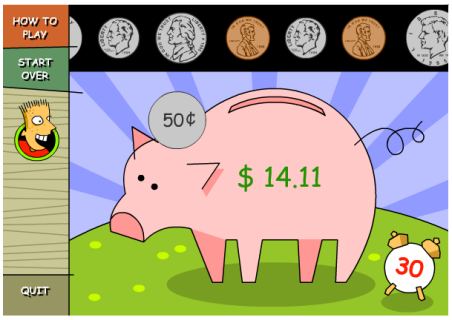
- “A penny saved is a penny earned.”
- “The safest way to double your money is to fold it over once and put it in your pocket.”
- “Money changes everything.”
- “Money is the root of all evil.”
- “Money doesn’t grow on trees.”
- “A fool and his money are soon parted.”
- “Put your money where your mouth is.”
- “Money doesn’t buy happiness.”

Part 3: Savings Challenge

The instructor will direct students to the classroom computers and either individually or in pairs, the students will navigate to the URL: http://www.practicalmoneyskills.com/games/. This online game called Ed’s Bank challenges students in an arcade style game to save as much money as possible.



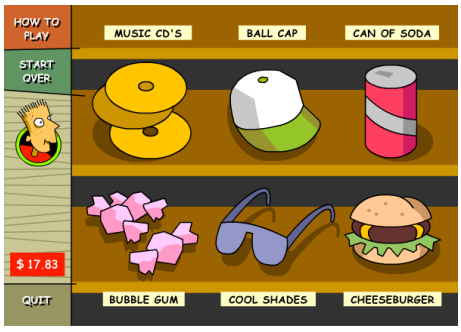
Home page



Game play: User drags and drops coins into the bank

After a few rounds of saving, the student can choose to visit the online store to spend the money. Allowing students to visit this level in the game will provide an introduction to the next lesson’s focus on spending.

Feedback and option to shop



Store

Anticipated Moments of Learning

The challenge of saving as much as possible may be a new concept to some students. Considering that on a typical day, children consume about 4.5 hours of television (Kaiser Family Foundation, 2010), they are more likely bombarded with messages to spend. This activity, which puts a positive, interactive spin on savings, may cause disequilibrium (Piaget, 1997) and motivate a student to seek equilibration and, therefore, learning.

Evaluation

Informal assessment of participation in the discussion and game play is appropriate for this lesson. This approach should inform the instructor about student understanding of the concept of saving and should help the set the appropriate course for the depth of future instruction direction in the unit.

Lesson 2 References

Gardner, H. (1987). The theory of multiple intelligences. *Annals of Dyslexia, 37*(1), 19-35.

Kaiser Family Foundation Study. (2010). *Generation M^2: Media in the lives of 8- to 18-year-olds*. Retrieved April 16, 2011, from http://www.kff.org/entmedia/mh012010pkg.cfm

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Lesson 3: Smarter Spending

Purpose of Design

This lesson focuses on the concept of spending, the second compartment of the Money Savvy Pig. The associated activities are intended to appeal to mathematical and interpersonal learners in the classroom (Gardner, 1987) with an online game that situates the lesson in an age-appropriate example to which children should be able to relate (Vygotsky, 1997; Brown, Collins, & Duguid, 1989) — buying lunch in the school cafeteria. The class will divide into teams and play the Lunch Money Game, which challenges learners to spend smart.

Intended Audience

The intended audience for this money management unit is third grade. According to Piaget this audience is in the Concrete Operational stage (Piaget, 1997), which allows learners to conceptualize, and create logical structures that help decompose numbers in order to solve problems requiring precision, estimation, and reasonableness.

Learning Outcomes	Performance Outcomes
● The student will know basic money management strategies.	● The student will participate in discussion about money. ● The student will demonstrate knowledge of money management strategies through online game play.

These learning and performance outcomes align with the Texas Essential Knowledge and Skills (TEKS) for third-grade math, which specify that a student should be able to use technology to develop conceptual understanding and be able to use strategies including rounding and to estimate solutions to subtraction problems. (Texas Education Agency, n.d.).

Cognitive and Affective Obstacles to Learning

There should be no major obstacles to learning with this lesson. From a cognitive perspective, third-grade children should be able to grasp the concepts in this lesson as they correspond to a developmental stage that accommodates abstract thinking. From an affective perspective, students should be motivated to play an online game.

Technologies Employed in the Activity

This lesson assumes there will be enough computers in the learning environment for all the students to be able to work either individually or in pairs, and that the computers will be able to display Flash-generated content. Students will be accessing the following URL: https://content.usaa.com/mcontent/static_assets/Media/magazines_game_lunch_money.swf

Learning Solution

The instructor will start the lesson by reintroducing the Money Savvy Pig or saving/spending containers and reminding students of the prior lesson. If times allows, the instructor should encourage students to discuss their experiences with the online game Ed's Bank. Sample discussion questions might include:

- What did you learn about saving?
- What makes saving easy?
- What makes saving difficult?
- What does saving allow you to do?

Then the instructor will remind students about the part of Ed's Bank that gave them an opportunity to spend the money they saved during the game. Pointing to the "Spend" compartment of the piggy bank, the instructor will explain that this lesson is all about spending.

In a brief discussion about how students spend their money, the instructor will mention the school cafeteria as a place where students spend money every day. Then the instructor will direct the students to open a browser window and navigate to the following URL: https://content.usaa.com/mcontent/static_assets/Media/magazines_game_lunch_money.swf

The Lunch Money Game challenges learners to budget $15 to last for a full school week of cafeteria lunches. Tips throughout the game help learners make smart spending decisions as they attempt to "win" by having money left over at the end of the week.

Home page

The game provides tips and auto tallies the money spent after each "day," providing feedback for the user to make informed spending decisions.

Ending pages: Spent too much (left); Stayed within $15 budget (right)

The instructor will walk around the room, assisting individuals or pairs as they play the game. After game play ends, the instructor will engage students in a short discussion about their performance. Sample questions might include:

- Who was able to make their money last all week?
- What strategies worked to make the money last all week?
- What strategies didn't work?
- Did you make food choices based on price or how much you liked the item?

Anticipated Moments of Learning

Learning will occur when the students either succeed or fail at making the lunch money last for five days. Self-pacing of the game and imbedded feedback provided after each decision should also support learning. This learning may occur after multiple rounds of game play and testing of strategies.

Evaluation

Informal assessment of participation in the discussion and game play is appropriate for this lesson. This approach should inform the instructor about student understanding of the concept of spending and should help the set the appropriate course for the depth of future instruction direction in the unit.

Lesson 3 References

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32-42.

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Lesson 4: Learning About Earning

Purpose of Design

This lesson focuses on earning. The associated activities are intended to appeal to interpersonal and intrapersonal learners in the classroom (Gardner, 1987). Challenging students to look inward, this lesson allows students to identify individual skills and interests that they could turn into moneymaking ideas and share those ideas with the class. The lesson taps learning from the prior lessons to probe on what students would/could/should do with earned money.

Intended Audience

The intended audience for this money management unit is third grade. According to Piaget this audience is in the Concrete Operational stage (Piaget, 1997), which allows learners to conceptualize, ask questions, explain things, and mentally manipulate information.

Learning Outcomes	Performance Outcomes
● The student will know how to connect personal skills and interests with moneymaking opportunities.	● The student will participate in discussion about money. ● The student will develop moneymaker ideas. ● The student will contribute to a class wiki. ● The student will prepare and present to the class a moneymaker idea he/she has developed.

These learning and performance outcomes align with the Texas Essential Knowledge and Skills (TEKS) for third-grade math, which specify that a student should be able to problem-solve using language and communication as well as formal and informal reasoning to make connections within and outside mathematics. (Texas Education Agency, n.d.).

Cognitive and Affective Obstacles to Learning

From an affective perspective, the instructor should be prepared in case the students are reluctant to share particular interests or skills, especially in a mixed gender group. Allowing the class to work individually or in self-selected groups and use of the class wiki may help eliminate this potential affective obstacle.

Technologies Employed in the Activity

Learners may wish to use the Internet to search for moneymaking ideas for children. A kid-safe source is Family Fun.

Website: http://familyfun.go.com/playtime/money-checklist-kid-biz-moneymaker-706410/

Students will need to be able to access and use a wiki during the brainstorm portion of the activity. This lesson also requires PowerPoint, which students will use to prepare for presentations. This activity assumes there will be enough computers in the learning environment for students to access individually or in groups.

Learning Solution

The instructor will start the lesson by reintroducing the Money Savvy Pig or saving/spending containers and reminding students of the prior lessons on saving and spending. Then the instructor will explain that this lesson is all about earning, and will facilitate a discussion about how people earn money. Discussion topics might include jobs that students' parents or older siblings hold, jobs that students have been paid to do, and the difference between jobs that provide products versus services.

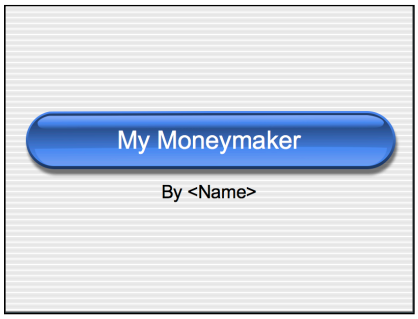
Then the instructor will steer the discussion toward individual interests and skills, asking the class to volunteer their own. The instructor will write these ideas on the board, while discussing and noting how these skills and interests might be turned into moneymaking ideas. Examples:

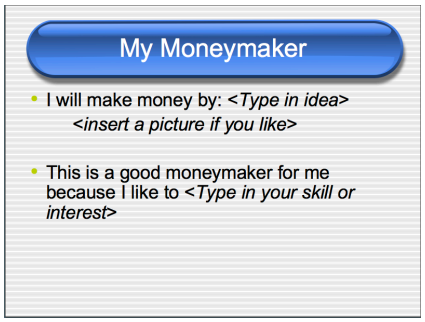
- A student who likes to spend time outdoors and enjoys pets might translate into a dog-walking business.
- A student who has proven to be very responsible might be able to earn money picking up a neighbor's mail while on vacation.
- A crafty student may be able to make and sell beaded jewelry.

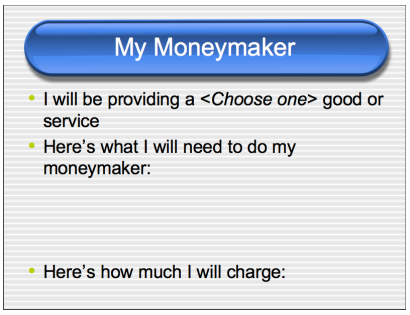
Students will be instructed to work individually or in groups to come up with moneymaker ideas they might be able to execute. As they brainstorm moneymaker ideas, students should add them to a class wiki, ideally set up by the instructor prior to the lesson. This wiki can serve as an information store that represents the knowledge students are building through their research, brainstorming, and collaborative discussions. *Note:* The instructor may allot some time showing students how a wiki works if this technology has not previously been used in class.

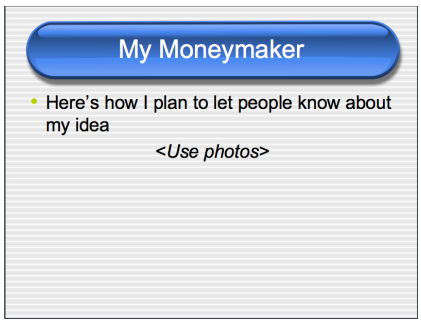
Students will develop each idea, justify why it's a good idea (based on skills and interests), figure out how to pay for any raw materials needed to launch the idea, decide how much to charge for the service or product, propose how to let others know about their business,

and be prepared to present ideas to the class. The presentations should take the form of PowerPoint. The instructor should provide a PPT template (see sample, below) that students use to fill in information.









Discussions after the presentations will focus on what students would do with the money they earned. This discussion presents a good chance to reference previous lessons about saving and spending. The instructor will guide students back to the wiki to record and collaborate on the discussion regarding what to do with earned money. The instructor may guide them to build lists of pros and cons for their spending and saving decisions. The wiki should offer a chance for students to self-construct, self-pace, and regulate the knowledge building (Jonassen, Carr, & Yueh, 2006), but also serves as a form of Computer-Supported Collaborative Learning (CSCL), which enhances learning through peer interaction and group sharing (Resta & Laferriére, 2007).

Anticipated Moments of Learning

Learning will happen when students realize and reflect upon the fact that their skills, talents, and interests can translate into jobs that generate earned income. This learning, which is situated in real-life experiences and taps the zone of proximal development (Vygotsky, 1997), will be an important foundation for future discussions about career planning and development they learned in meaningful ways.

Evaluation

The instructor will evaluate students' presentations using a rubric. Presentations should include: a well-developed idea, start-up cost considerations, justification for the idea based on skills or

interests, and advertising and promotion solutions. The instructor will also evaluate the quality of individual student contributions to the class wiki.

Lesson 4 References

Gardner, H. (1987). The theory of multiple intelligences. *Annals of Dyslexia, 37*(1), 19-35.

Jonassen, D. H., Carr, C., & Yueh, H.-P. (1998). Computers as mindtools for engaging learners in critical thinking *TechTrends, 43*(2), 24-32.

Piaget, J. (1997). Development and learning. In M. Gauvain & M. Cole (Eds.), *Readings on the development of children* (2nd ed., pp. 19-28). New York, NY: W. H. Freeman and Company.

Resta, P., & Laferrière, T. (2007). Technology in support of collaborative learning. *Educational Psychology Review, 19*(1), 65-83.

Texas Education Agency. (n.d.). Texas Essential Knowledge and Skills for Mathematics, Chapter 11. Subchapter A. Elementary. Retrieved April 16, 2011, from http://ritter.tea.state.tx.us/rules/tac/chapter111/ch111a.html

Vygotsky, L. S. (1997). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.), *Readings on the Development of Children* (2nd ed., pp. 29-36). New York, NY: W. H. Freeman and Company.

Lesson 5: Demonstration of Learning and Evaluation

Purpose of Design

The culminating lesson of this curriculum unit taps Gardner's Multiple Intelligence Theory (1987) and Project-based Learning Theory (Bell, 1987) to give students the freedom to demonstrate their understanding of saving or spending in individual or group projects that may take the form of a role play, a comic, a drawing, or other idea deemed appropriate by the instructor.

Intended Audience

The intended audience for this money management unit is third grade. According to Piaget this audience is in the Concrete Operational stage (Piaget, 1997), which allows learners to conceptualize and explain things.

Learning Outcomes	Performance Outcomes
● The student will know the differences between saving, spending and earning. ● The student will know basic money management strategies.	● The student will produce a final project that demonstrates a tangible expression of concepts learned in the unit.

This activity aligns with the TEKS for third-grade art, which specify students should be able to "identify sensory knowledge and life experiences as sources for ideas about visual symbols, self, and life events and create artworks based on personal observations and experiences" (Texas Education Agency, n.d.).

Cognitive and Affective Obstacles to Learning

To avoid students feeling overwhelmed by this lesson, the instructor should provide coaching, plenty of time to brainstorm and complete the project, and encourage collaborative work and shared responsibility.

Technologies Employed in the Activity

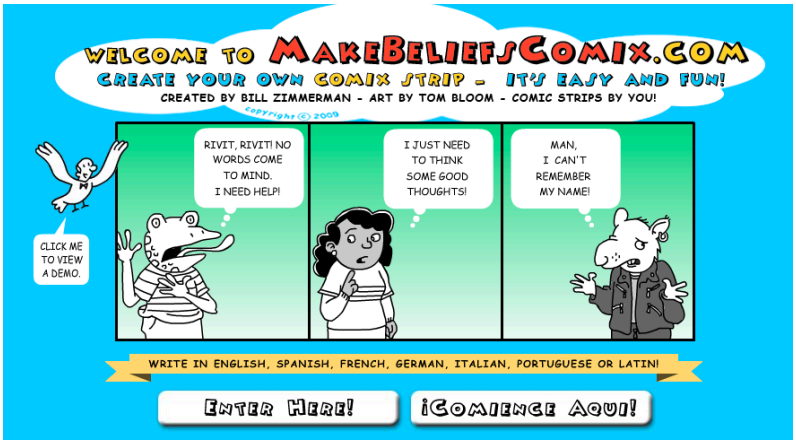
Introduction of the assignment in this lesson requires a computer with Internet access. Depending on the project chosen, the students may or may not require computer access and age-appropriate computer-based cognitive tools. Most of the work will be completed outside of class.

Learning Solution

The instructor will start the lesson by reintroducing the Money Savvy Pig or saving/spending containers and reminding students of the prior lessons on saving, spending, and earning. Then the instructor will explain that the final lesson should be a creative expression of something learned in the unit, and will facilitate a discussion about project options students may want to

pursue. The list may include the following options, many of which can be considered computer-based cognitive tools or mind tools (Jonassen, Carr, & Yueh, 2006):

- A typed essay about saving or spending
- A short video about saving or spending
- A comic about saving or spending



Students can use the Web-based comic creator tool at http://www.makebeliefscomix.com/

- A typed detailed plan for saving up for something
- A typed detailed plan for a moneymaker idea (besides the one developed in Lesson 4)
- A digital drawing about saving or spending

Students can use the Web-based drawing tool at http://www.onemotion.com/flash/sketch-paint/

- A typed story written about something purchased and why it was a good decision
- Another technology-based idea deemed appropriate by the instructor

The instructor will spend class time demonstrating these cognitive tools to the class and may choose to create a handout of these options and others. Students may work individually or in groups. Class time will also be spent brainstorming projects, which will be completed outside of

class, and due in a time frame deemed appropriate by the instructor. All students will inform the instructor of their project choices before starting work on them.

Anticipated Moments of Learning

Learning will occur as the students review the concepts and actively choose to focus on one around which to create a final project. Their choice will likely generate a need to delve deeper into the subject, and that investment along with the use of computer-based cognitive tools, should help them construct meaning (Vygotsky, 1997), cement concepts, and situate the learning in a more meaningful context (Brown, Collins, & Duguid, 1989).

Evaluation

Formal assessment in the form of a rubric will be appropriate for this lesson. The instructor should also consider informal assessment, reflecting on the students' participation throughout the unit and considering the level of motivation, enthusiasm, and creativity students brought to the classroom each day the lessons were delivered.

Lesson 5 References

Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The Clearing House, 83,* 39-43.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*(1), 32-42.

Gardner, H. (1987). The theory of multiple intelligences. *Annals of Dyslexia, 37*(1), 19-35.

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Vygotsky, L. S. (1997). Interaction between learning and development. In M. Gauvain & M. Cole (Eds.), *Readings on the Development of Children* (2nd ed., pp. 29-36). New York, NY: W. H. Freeman and Company.