

# JA BizTown® Self-Guided Curriculum

## Overview for Educators

*JA BizTown* is Junior Achievement’s capstone curriculum for integrating financial literacy and work and career readiness into the classroom. This student self-guided classroom curriculum culminates with a *JA BizTown* simulation experience. The simulation may take place virtually through JA BizTown Adventures or at an on-site or mobile facility.

The self-guided curriculum provides students a more independent learning experience as compared to the traditional classroom curriculum. Students will engage in a series of interactive screencasts, video and fillable PDF activities. Educators introduce the curriculum assignments to students, schedule check-in points, and provide opportunity for student reflection and discussion. The frequency of student-teacher engagement is flexible. Implementation can be accomplished whether students are in a remote, face-to-face, or hybrid learning environment.

## Getting Started

1. Educators, volunteers, and students will use the JA Connect learning platform to access the self-guided curriculum materials.
  - a. Go to <https://learn.ja.org> (Recommended web browsers are Google Chrome, Mozilla Firefox, Apple Safari).
  - b. Select the green Educators/Students/Volunteers button.
  - c. Enter in your email address as your username, and password.
    - i. JA staff or educators should have enrolled students in advance.
    - ii. For students using a generic JA email addresses, the password is always set to Password123!
    - iii. For students using a working email address: If they forgot or cannot locate their password, they should select the green Forgot Password link to reset their password.
  - d. On the JA Connect home page, navigate to My JA Courses – Capstone – JA BizTown Self-Guided. Select the class name.
  - e. View each session’s materials by expanding each section in the left-hand navigation.
2. Ensure that students have downloaded and/or printed the Student Activity Pages needed for each session. Let students know if you want them to complete the fillable PDFs digitally or if you want them to print the PDFs and write in their responses.
3. Each session contains the following three components:
  - **Onscreen Presentation:** Interactive, instructional content delivered through JA Connect, designed for the student to view on-screen, on their own and at their own pace. The onscreen presentations provide visual representations of concepts or processes and have an interactive design to pace content delivery and increase engagement. All have audio support. They are approximately 5-10 minutes each and require Internet access.

- *Encourage students to allow the audio to finish on screen before completing the activity or moving to the next screen.*
  - *Closed captioning is available.*
  - *Select the Prev/Next buttons to navigate between screens.*
  - **Volunteer Video:** Additional information related to each onscreen presentation, presented by our national network of volunteers. Each video is approximately 2-3 minutes and requires Internet access.
  - **Student Activity Page:** Digital note-taking guides and activities for students to use with each session's onscreen presentations and volunteer videos. Student Activity pages may be downloaded and shared with students as **fillable documents**; they may be submitted to the teacher for assessment purposes.
    - *Make sure that users are not in preview or browse mode within the Internet browser; the file must be downloaded.*
    - *To view and type in responses, use Adobe Acrobat Reader. If Adobe Reader is unavailable, use one of the following extensions:*
      - *Acrobat for Mac: <https://apps.apple.com/us/app/adobe-acrobat-reader-for-pdf/id469337564>*
      - *Chromebook: <https://chrome.google.com/webstore/detail/open-in-pdf-reader/cehiomcamjpnfmemkmpjadaclohoibgo?hl=en>*
      - *Kami for Chromebook: <https://chrome.google.com/webstore/detail/kami-extension-pdf-and-do/ecnphlgnajanjnkcmpancdjoidceilk?hl=en>*
    - *Once users fill in the PDF file, they save as, then re-upload the completed file to the teacher/school centralized platform.*
    - *Although student activity pages can be printed, digital access is recommended.*
    - *Use the pages as a tool to follow up with students, ask discussion or review questions.*
4. Suggested educator – student meetings: The length and frequency of educator-student meetings before, during, and after the *JA BizTown* self-guided curriculum and virtual simulation experience is determined by the educator. However, JA strongly recommends multiple opportunities for supporting student learning.
- Orientation:
    - i. Educator introduces the *JA BizTown* program and engages students in conversation about content related to financial literacy, community and economy, work readiness, and business management.
    - ii. Educator screenshares to demonstrate how to access the self-guided curriculum, how to navigate, and the assigned timeline for completion.
    - iii. Educator provides direction to students about student activity pages –Will or where or how should students submitted the activity pages for a grade? Should students compile them for future use?
    - iv. Educator may encourage or assign an online career interest inventory for student completion. JA recommends [career.ja.org](https://career.ja.org). Students may take the inventory as a guest or register to save their responses.
  - Mid-course / post-session educator – student meetings:

- i. Educator and students meet following each self-guided lesson and completion of the student activity handout OR mid-course, following the completion of three self-guided lessons and completion of student activity handouts.
  - ii. Class review and discussion of vocabulary and concepts presented. This session should provide opportunity for student questions about the content as well as time for educator to assess student understanding and engagement.
- Post self-guided course educator-student meeting:
    - i. Educator and students meet following the completion of all self-guided lessons to review key vocabulary and concepts. Student questions are answered.
    - ii. Educator introduces the *JA BizTown* simulation experience, including a demonstration of how and where to access it.
    - iii. A timeline for completion of the virtual simulation is provided to the students.
  - Post virtual simulation educator-student meeting:
    - i. This session provides opportunity for a debrief of the *JA BizTown* experience.

### Self-Guided Curriculum Outline

- Onscreen presentation instructions: Select play within the course to view the interactive presentation
- Volunteer Video instructions: Select play within the course to view the video
- Student Activity Page instructions: Select play within the course to download the PDF to type in responses or print the PDF and write in responses

<b>Unit One: Financial Literacy</b>	
Students identify common terms associated with banking and financial institutions. They will explore the differences between checks, debit cards, credit cards, complete a deposit ticket and maintain a transaction register. This unit consists of 11 narrated screencast modules and 2 volunteer pre-recorded videos, along with student activity pages. Module activities average five to ten minutes in length.	
<b>Lesson One</b>	
<b>1.1 Financial Services Volunteer Video Option One</b>	Objective: Identify services offered by financial institutions
<b>1.2 Financial Services Volunteer Video Option Two</b>	
<b>1.3 Common Terms Used in Banking Onscreen Presentation</b>	Objective: Identify common terms associated with banking and financial institutions
<b>1.4 Common Terms in Banking Student Activity Page</b>	Objective: Identify common terms associated with banking and financial institutions
<b>1.5 Opening a Bank Account Onscreen Presentation</b>	Objective: Complete a bank account application
<b>1.6 Opening a Bank Account Student Activity Page</b>	Objective: Complete a bank account application
<b>Lesson Two</b>	
<b>1.7 Using Checking Accounts Onscreen Presentation</b>	Objective: Demonstrate the ability to write, sign, and endorse a paycheck
<b>1.8 Endorsing Paychecks Student Activity Page</b>	Objective: Demonstrate the ability to write, sign, and endorse a paycheck
<b>1.9 Deposit Tickets Onscreen Presentation</b>	Objective: Complete a deposit ticket
<b>1.10 Deposit Tickets Student Activity Page</b>	Objective: Complete a deposit ticket

<b>1.11 Direct Deposit Onscreen Presentation</b>	Objective: Learn the advantages of choosing direct deposit
<b>1.12 Direct Deposit Student Activity Page</b>	Objective: Learn the advantages of choosing direct deposit
<b>1.13 Maintaining a Transaction Register Onscreen Presentation</b>	Objective: Learn how to write entries for payments and deposits in a transaction register
<b>1.14 Maintaining a Transaction Register Student Activity Page</b>	Objective: Learn how to write entries for payments and deposits in a transaction register
<b>Lesson Three</b>	
<b>1.15 Compare and Contrast Different Payment Methods Onscreen Presentation</b>	Objective: Explore the differences between checks, debit cards, and credit cards and other forms of electronic payments
<b>1.16 Compare and Contrast Different Payment Methods Student Activity Page</b>	Objective: Explore the differences between checks, debit cards, and credit cards and other forms of electronic payments
<b>1.17 Debit Card Transaction Process Onscreen Presentation</b>	Objective: Learn the debit card transaction process
<b>1.18 Debit Card Transaction Process Student Activity Page</b>	Objective: Learn the debit card transaction process
<b>1.19 Making and Recording Electronic Payments Onscreen Presentation</b>	Objectives: Learn how to record and make electronic payments. Record a debit purchase in the transaction register.
<b>1.20 Making and Recording Electronic Payments Student Activity Page</b>	Objectives: Learn how to record and make electronic payments. Record a debit purchase in the transaction register.
<b>Lesson Four</b>	
<b>1.21 Savings Account Onscreen Presentation</b>	Objective: Learn the benefits of using interest-earning savings accounts to save more money
<b>1.22 Interest Earning Savings Accounts Onscreen Presentation</b>	Objective: Learn how to calculate earning interest with the Rule of 72
<b>Unit Two: Community and Economy</b>	
Students will be introduced to the concept of the circular flow of money and goods in an economy. They will identify common terms associated with community and economy, while recognizing the importance of ethics in a community. This theme consists of 6 narrated screencast modules, 4 volunteer pre-recorded videos, and student activity pages.	
<b>Lesson One</b>	
<b>2.1 Circular Flow of the Economy Volunteer Video</b>	Objectives: Identify and distinguish among goods, services, and resources. Demonstrate the circular flow of an economy
<b>2.2 Circular Flow of the Economy Student Activity Page</b>	Objectives: Identify and distinguish among goods, services, and resources. Demonstrate the circular flow of an economy
<b>2.3 Communal Responsibility of Good Citizenship Onscreen Presentation</b>	Objective: Learn about the common terms associated with a community
<b>2.4 Citizen Pledge Student Activity Page</b>	Objective: Learn about the common terms associated with a community
<b>2.5 Ethics Onscreen Presentation</b>	Objective: Define ethics
<b>2.6 Importance of Ethics in the Community Onscreen Presentation</b>	Objective: Recognize the importance of ethics in a community
<b>Lesson Two</b>	
<b>2.7 Free Enterprise Volunteer Video Option One</b>	

<b>2.8 Free Enterprise Volunteer Video Option One</b>	Objectives: Discover the function of businesses in producing goods and services. Define scarcity. Understand more about free enterprise
<b>2.9 Free Enterprise Student Activity Page</b>	Objectives: Discover the function of businesses in producing goods and services. Define scarcity. Understand more about free enterprise
<b>Lesson Three</b>	
<b>2.10 Paying Taxes Volunteer Video</b>	Objective: Explain why people pay taxes
<b>2.11 Understand Why People Pay Taxes Onscreen Presentation</b>	Objective: Explain why people pay taxes
<b>2.12 Where Do Taxes Go? Volunteer Video</b>	Objective: Differentiate between public and private goods and services. Give examples of philanthropy
<b>2.13 Where Do Taxes Go? Student Activity Page</b>	Objective: Differentiate between public and private goods and services. Give examples of philanthropy
<b>2.14 Calculate Taxes By Multiplying with Decimals Onscreen Presentation</b>	Objective: Calculate Taxes By Multiplying with Decimals
<b>2.15 Calculate Taxes By Multiplying with Decimals Student Activity Page</b>	Objective: Calculate Taxes By Multiplying with Decimals
<b>2.16 Differentiate between public goods and services and private goods and services Onscreen Presentation</b>	Objective: Differentiate between public goods and services and private goods and services
<b>2.17 Differentiate between public goods and services and private goods and services Student Activity Page</b>	Objective: Differentiate between public goods and services and private goods and services
<b>Unit Three: Work Readiness</b>	
Students will learn how their interests and skills can lead to exciting careers. They will have an opportunity to fill out a job application and they will learn about resumes, job interviews, appropriate workplace behaviors, and how to effective teamwork and cooperation can enhance business teams. This theme consists of 3 narrated screencast modules, 3 volunteer pre-recorded videos, and student activity pages.	
<b>Lesson One</b>	
<b>3.1 Interests and Skills Volunteer Video</b>	Objective: Explore their interests and skills
<b>3.2 Interests and Skills Student Activity Page</b>	Objective: Explore their interests and skills
<b>3.3 STEM Careers Volunter Video Option One</b>	Objective: Categorize STEM careers in different types
<b>3.4 STEM Careers Volunter Video Option Two</b>	
<b>3.5 STEM Careers Student Activity Page</b>	Objective: Categorize STEM careers in different types
<b>Lesson Two</b>	
<b>3.6 Complete a Job Application Onscreen Presentation</b>	Objective: Learn how to complete a job application
<b>3.7 Interviews Volunteer Video Option One</b>	Objective: Demonstrate proper interview skills
<b>3.9 Interviews Volunteer Video Option Two</b>	
<b>3.9 Interviews Student Activity Page</b>	Objective: Demonstrate proper interview skills
<b>3.10 Workplace Behaviors Onscreen Presentation</b>	Objective: Demonstrate appropriate workplace behaviors
<b>3.11 Teamwork Cooperation Onscreen Presentation</b>	Objective: Learn how effective teamwork and cooperation enhance business teams



<p><b>Unit Four: Business Management</b> Students will prepare for the <i>JA BizTown</i> simulation. They learn how costs associated with operating a business, selling price, revenue, profit and inventory impacts business. Students learn about characteristics of effective advertising. This theme consists of 7 narrated screencast modules, 1 volunteer pre-recorded video, and student activity pages.</p>	
<p><b>Lesson One</b></p>	
<p><b>4.1 Quality Business Volunteer Video</b></p>	<p>Objective: Learn that businesses that try to meet their customers' needs through continuous improvement will be more successful.</p>
<p><b>4.2 Quality Business Student Activity Page</b></p>	<p>Objective: Learn that businesses that try to meet their customers' needs through continuous improvement will be more successful.</p>
<p><b>4.3 Business Management Onscreen Presentation</b></p>	<p>Objective: Identify different costs associated with operating a business</p>
<p><b>4.4 Business Management Student Activity Page</b></p>	<p>Objective: Identify different costs associated with operating a business</p>
<p><b>4.5 Calculate Business Expenses Onscreen Presentation</b></p>	<p>Objective: Calculate the total business cost for a given set of business data</p>
<p><b>Lesson Two</b></p>	
<p><b>4.6 Define selling price, revenue, profit and inventory Onscreen Presentation</b></p>	<p>Objective: Define selling price, revenue, profit and inventory</p>
<p><b>4.7 Factors affecting selling price of goods/services Onscreen Presentation</b></p>	<p>Objective: Describe factors that affect selling price.</p>
<p><b>4.8 Factors affecting selling price of goods/services Student Activity Page</b></p>	<p>Objective: Describe factors that affect selling price.</p>
<p><b>4.9 Relationship between revenue, costs, and profit Onscreen Presentation</b></p>	<p>Objective: Explain the relationship between revenue, costs, and profit</p>
<p><b>Lesson Three</b></p>	
<p><b>4.10 Advertising Part One Onscreen Presentation</b></p>	<p>Objective: Define advertising</p>
<p><b>4.11 Advertising Part Two Onscreen Presentation</b></p>	<p>Objective: Describe characteristics of effective advertising</p>
<p><b>Unit Five: Simulation and Debriefing</b> Students will participate in a <i>JA BizTown</i> simulation experience, either at an on-site facility or online through the <i>JA BizTown Adventures</i>. Then they will reflect on the activities they participated in during the simulation. Your local JA Area staff will coordinate the simulation details and/or simulation link with your educator. There is no activity to complete in this section of the course.</p>	
<p>JA BizTown Simulation or JA BizTown Adventures</p>	<p>Objectives:</p> <ul style="list-style-type: none"> <li>• Function in job capacity during JA BizTown simulation</li> <li>• Manage personal finances and time</li> <li>• Carry out responsibilities of citizenship</li> </ul>

The *JA BizTown* program vocabulary is listed below for your quick reference.

### Unit One: Financial Literacy

#### Lesson One

**ATM (automated teller machine):** A machine that allows bank customers to deposit or withdraw money without visiting their bank.

**Balance:** The current amount of money in an account.

**Bank:** A business that offers money-related services to its customers, including loans and checking and savings accounts.

**Board of directors:** A group of people chosen to manage or direct a business or organization.

**Business:** A company that sells goods or services.

**Certificate of deposit (CD):** An investment that earns interest over a specific period of time.

**Check:** A written order to a bank to pay a certain amount of money from a checking account to another person or business.

**Checking account:** A bank account used to pay bills and access funds using checks and debit cards.

**Credit card:** A card that allows the holder to buy goods and services by taking out a bank loan.

**Credit union:** A financial institution owned by its members that provides many of the same services as a bank.

**Debit card:** A card that allows customers to electronically and immediately withdraw funds from their accounts, either in cash or to purchase goods or services.

**Economy:** A system that guides how money is earned and used in a society.

**Electronic payment:** Payments made online or using an app.

**Financial institution:** A business that provides money-related services.

**Loan:** Money borrowed that must be repaid, usually with interest.

**Online banking:** A service that allows customers to perform banking activities using the Internet.

**Safe deposit box:** A bank safe where documents, jewelry, or other valuables are kept.

**Savings account:** An account that usually earns interest and is often used to hold money that is not needed right away.

**Transaction:** A business agreement or exchange.

### ***Lesson Two***

**Bounced check:** A check that is written for more than the amount of money in a checking account.

**CFO:** The chief financial officer is responsible for a business's finances.

**Deposit ticket:** A written record of money put into a checking account.

**Direct deposit:** An electronic transfer of money from one account to another; often used by employers to pay employees.

**Endorse:** To write a signature on the back of a check.

**Income:** The money people earn for their work.

**Net deposit:** The amount of money placed into an account after all deductions, such as cash back, are made.

**Paycheck:** A check received for work completed.

**Personal check:** A check written from a personal checking account.

### ***Lesson Three***

**Accrue:** To have money gain in increments, usually at a set rate.

**Compound interest:** Interest calculated and paid on a balance and on the interest paid previously.

**Interest:** A fee received or paid for the use of money.

### **Lesson Four**

**Credit card:** A card that allows the holder to buy goods and services by taking out a bank loan.

**Debit card:** A card that allows customers to electronically and immediately withdraw funds from their accounts, either in cash or to purchase goods or services.

**Gift card:** A card that is purchased for a certain amount and then used like cash.

**Identity theft:** The crime of stealing someone else's personal or financial information for your own use.

**PIN (personal identification number):** A number required when a person uses a debit card; it ensures others can't access the bank account.

**Prepaid card:** A card that allows you to spend only the amount you have pre-deposited into an account.

**Transaction register:** A booklet for recording money put into (deposited) or removed from (withdrawn) an account.

## **Unit Two: Community and Economy**

### **Lesson One**

**Business:** A company that sells goods or services.

**Capital resources:** Things made by people and used to produce goods or offer services—a factory for example.

**Circular flow:** A model of the movement of goods, services, resources, and money in an economy.

**Citizens:** Members of a town, city, county, state, or country. Citizens have certain rights and responsibilities.

**Civic virtue:** Personal habits and attitudes that promote the well-being of a group.

**Community:** A place where people live, work, and share.

**Consumers:** People who buy and use goods and services.

**Entrepreneur:** A person who uses resources to start a business.

**Ethics:** The standards that help determine what is good, right, and proper.

**Free enterprise:** A system in which economic decisions are made by people and businesses, with little government influence.

**Goods:** Things people buy and use.

**Human resources:** The labor, skills, and abilities of workers.

**Natural resources:** Things that occur naturally in the world and that are used to make goods or provide services.

**Resources:** The people and things needed to produce goods and services.

**Responsibility:** The quality of being dependable.

**Right:** The freedom to act in a certain way.

**Services:** Work done for others, such as haircuts or car repairs.

**Trade:** The exchange of money, goods, and resources in a market economy.

### **Lesson Two**

**Opportunity cost:** The value of the next best alternative that is given up when a choice is made.

**Producer:** A person who creates or supplies goods or services.



**Product:** A good produced and offered for sale.

**Profit:** The money that is left over after a business pays all its costs.

**Prototype:** A model or sample of a product to be produced.

**Scarcity:** A situation in which people cannot have everything they want because of limited resources.

### ***Lesson Three***

**Democracy:** A form of government in which ultimate power lies with the people, who exercise that power directly or through elected representatives.

**Foundation:** A nonprofit organization supported by donated funds whose purpose is giving money for charitable causes.

**Gross pay:** The amount of money an employee earns before any taxes or other deductions are subtracted.

**Net pay:** The amount of money an employee receives after taxes and other deductions are taken from a paycheck.

**Nonprofit organization:** An organization developed to increase the well-being of others in certain areas, such as education, religion, health, and other good causes.

**Philanthropy:** The effort to increase the well-being of people through charitable giving.

**Private goods and services:** Merchandise and skills offered for a price.

**Public goods and services:** Goods and services provided by a government for the use of all people.

**Taxes:** Payments that citizens and businesses are required to make to a government to pay for goods and services.

### ***Unit Three: Work Readiness***

#### ***Lesson One***

**Career:** Work that matches a worker's interests, values, and abilities.

**Employee:** A person who works for an employer.

**Employer:** A business that hires one or more people, usually for a salary.

**Innovative solutions:** Creative ideas used to solve problems.

**Interests:** Things a person likes to do.

**Skills:** Abilities a person has developed and does well.

**Soft skills:** Skills that represent the way good employees act on the job.

**STEM:** Acronym for science, technology, engineering, and mathematics.

**Teamwork:** The effort of members of a group to work together to achieve a goal.

#### ***Lesson Two***

**Applicant:** A person who requests or seeks something, such as a job.

**Job interview:** A discussion (usually face to face) to determine whether an applicant is suitable for a job.

**Referendum:** A ballot proposal that asks voters whether they want to adopt a new law or change an existing law or policy.

**Resume:** A written summary of a person's work and school experience.

## **Unit Four: Business Management**

### **Lesson One**

**Best practices:** The “best ways” to do something to lead to success.

**Criteria:** The standards used to evaluate alternatives.

**Operating costs:** The total of all expenses needed to run a business.

**Promissory note:** A promise to repay a loan within a certain time period.

**Quality business:** A business that tries to meet its customers’ needs through continuous improvement.

**Ranking:** The process of putting things into a position on an ordinal scale in relation to other similar things.

**Revenue:** The amount of money earned from sales.

**Salary:** The money an employee earns for his or her work.

### **Lesson Two**

**Budget:** A plan for saving, spending, and managing money.

**Inventory:** Goods that a business has in stock to sell.

**Profit:** The amount of money left after all business expenses have been paid.

**Selling price**

The amount of money a buyer pays and a seller receives for the purchase of a good or service.

### **Lesson Three**

**Advertising:** A way of persuading people to want goods or services.

**Jingle:** A catchy tune used to advertise a business or product.

**Logo:** A graphic mark or emblem used to promote a business or product.

**Slogan:** A short, memorable motto or phrase used in an advertising campaign.

## **Unit Five: Simulation and Debriefing**

**Internship:** A short-term, career-related work experience for students, with or without pay.

**Job shadow:** Following a worker who performs job duties.

6<sup>th</sup> grade

100K Challenge

Time frame: 13 – 15 hours of instruction

Topic: Real-world math applications, Design thinking, Household budgets

**Nutley Public Schools**

*Nutley TALENT*

“Nutley Together Achieving Lasting Engagement  
to Build National and Local Talent.”

**Stage 1 – Desired Results**

Nutley TALENT programming design keeps the *Partnership for 21<sup>st</sup> Century Skills Learning and Innovation Skills Framework* and Michael Fullan’s *New Pedagogy for Deeper Learning* at its core. The program, therefore, incorporates 6 C’s:

- Collaboration
- Creativity
- Critical Thinking
- Communication
- Citizenship
- Character

The National Association for Gifted Children provides standards:

- 3.2. Talent Development. Students with gifts and talents become more competent in multiple talent areas and across dimensions of learning.
- 3.4. Instructional Strategies. Students with gifts and talents become independent investigators.
- 4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.

**Understandings:**

- Students will understand what expenses are typical in a full life.
- Students will understand what their spending priorities are
- Students will learn to collaborate with peers
- Students will understand how to modify their idea to achieve consensus

**Essential Questions:**

- What do families need to spend money on?
- How do families make choices about where to live and what to buy?
- How does a deep understanding of math impact everyday financial decisions?
- How can students begin to empathize with their parents’ financial choices to

<ul style="list-style-type: none"> <li>● Students will make choices about what necessities and luxuries are</li> <li>● Students will understand the positive and negative aspects of living in different settings – urban, suburban, rural.</li> <li>● Students will create a plan to develop their own ideas</li> <li>● Students will learn to visualize expenditures on Google sheets and will learn how percentages work in terms of their actual spending and choices.</li> </ul>	<p>understand their own lives?</p> <ul style="list-style-type: none"> <li>● How can different people come together to make shared decisions in a financial community (i.e. the student group)?</li> <li>● Important: Student-generated questions through a Question Formulation Technique protocol (<a href="http://rightquestion.org">rightquestion.org</a>) ignite thinking and a focus on areas of student interest.</li> </ul>
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- *Students will know how to use their gifts and talents to share ideas, collaborate, analyze and implement their vision.*
- *Students will be able to overcome challenges to collaboration, learn to use available resources, understand how to design for outcomes.*

**Stage 2 – Assessment Evidence**

<p><b>Performance Tasks:</b></p> <ul style="list-style-type: none"> <li>● Brainstorming using mind mapping technique or graphic organizers</li> <li>● Deciding and reporting to the group where the group will live and why</li> <li>● Deciding and reporting to the group on what kinds of spaces suit the students’ interests, needs and choices</li> <li>● Accessing and using information from the United States Department of Agriculture to make decisions about food spending.</li> <li>● Creating a weekly grocery list to match up against USDA recommendations.</li> <li>● Using math to calculate consumption such as how much milk must be purchased based on how many glasses per day each student might drink.</li> </ul>	<p><b>Other Evidence:</b></p> <ul style="list-style-type: none"> <li>● Teacher assesses students ongoing participation, collaboration and clarity of expression</li> <li>● Students with talent are encouraged to use their areas of strength in the budget making process</li> <li>● Students use sites that help them understand everything that is needed to finance a life, from learning that certain cars have higher mileage to the cost of health insurance.</li> <li>● Students create challenging questions that cross academic disciplines.</li> <li>● Teachers notice student self-awareness when collaborating, self-advocating and designing new versions of the budget as inevitable disagreement about spending priorities occurs.</li> <li>● Collaboration during the slide sharing and peer presentation event.</li> </ul>
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- Designing a spread sheet with the line items for the key areas indicated (housing, food, etc) and attributing monthly expenses to each.
- Designing a Google Slide deck to share images, thoughts and choices about the process.
- Presenting a 100 K Challenge workshop to same age peers so that they can be exposed to how math lives in real life, making a budget and sharing choices.
- Engaging in a post-project discussion about what the minimum wage is in New Jersey, understanding the take home pay after taxes and rethinking the budget based on costs of a typical apartment in Nutley and food expenses. Discussions on how many jobs a family might need to meet basic expenses connect students to real life choices about income and expenses.

- Debriefing the budget creating experience:
  1. What did we learn?
  2. What would we improve?
  3. What was successful?
  4. How can we incorporate what we learned into a second iteration of the culmination?
  5. What would we do if we had half the money?
  6. A third? Double? How would these different numbers affect our lives and choices?
  7. What do we wish we knew when we started?

### Stage 3 – Learning Plan

#### Learning Activities:

- Students get into groups of 4 and are told that they are all over 18 years old and that they have the challenge of organizing a budget to live for one year together. They have 100,000 for everything. They only have the clothes on their backs.
- Students begin by brainstorming their values – What is important to them? What kinds of activities do they enjoy doing? What kind of setting is best (urban, rural, suburban)?
- General research – Students begin learning about the cost of housing, food, how it varies from place to place. Every single expense to live for one year must be taken into consideration.
- Consensus – A decision is made where to live. Some students choose to live in a place where taxes are low and others choose to live where they have lots of access to cultural events. Whatever the choice, it must be their agreement.
- Food – Students research the cost of food plans on the United States Department of Agriculture site. <https://www.cnpp.usda.gov/USDAFoodPlansCostofFood> They must make realistic decisions about a range of food options from thrifty to liberal spending



for food. They should begin to think about what they actually eat and match up the spending to that.

- Housing – Will they rent? Will the rent include heat and hot water? How much does cable cost? Will they live in the USA or abroad? Airbnb? It is best to encourage students NOT to live in their own community so that they can become aware of other places, but they can also know about costs in their own community.
- Transportation – Buy a car? What about insurance? Is public transportation best?
- Entertainment – Students should look at the cost of movies, participation in sports, concerts and other activities they enjoy and they should make a line item in their budget.
- Clothing – What will they wear and how will their clothing meet the needs of their chosen climate?
- Charitable Giving – Is there an amount of money that students want to contribute to a cause? Which cause? Why?
- Savings and investment – Would some of the money be put aside for “a rainy day?” Would they like to invest some money? How would they do that? How can people

know

how their investment dollars are spent?

- Google sheets budget – Students create line items to include the above with a month by month analysis and totals.
- Google Slides presentation – Students introduce the class to the values that framed their choices and walk the group through their decisions, using compelling and interesting images to guide their story.
- Reflection – After all presentations, the class debriefs with a rich discussion about their values, challenges, and lessons learned.

### *100 K Challenge Resources*

Economic Policy Institute. Resources to calculate a families' needs

<https://www.epi.org/resources/budget/>

United States Department of Agriculture Cost of Food Report (monthly). Retrieved at

<https://www.cnpp.usda.gov/USDAFoodPlansCostofFood>

<http://moneyandstuff.info/budget-worksheets/> - Worksheet for financial awareness for students

Take Charge America. Resources geared to 5<sup>th</sup> grade but still useful for students as they think about finances. <https://www.takechargeamerica.org/financial-education/teaching-resources/fifth-grade/>

Creating your own lemonade stand. <http://www.ae4rv.com/games/lemonade.htm>

Peapod.com Food Shopping online. Students shop and download their list as a pdf.

Cars.com and other online sites help students search for vehicles.

Trulia: Real Estate Listings, Homes for Sale, Housing Data is one great site to search for homes.

Travelocity, Expedia, Google Flights – Online shopping for flights

Airbnb – Shopping for vacation or extended stays

### Annotated Resource List for Processes and Frameworks Used

- Framework for 21<sup>st</sup> Century Learning. Retrieved from <http://www.p21.org/about-us/p21-framework>

*These resources are crucial to keep in mind the 4cs, ways to assess competencies and cross-curricular connections.*

- K-12 Lab Network at the Stanford D-School. <https://dschool.stanford.edu/resources/>

*A plethora of resources are available at the Stanford University D-School. Materials about how to create a space for design thinking, ways to help students innovate, protocols that make this possible, and the opportunity to connect with K-12 educators that want to incorporate more design thinking into their classrooms.*

- Swan, M., Binns, B and John Gillespie. Design a board game.  
[http://www.mathshell.com/publications/numeracy/boardgame/boardgame\\_teacher.pdf](http://www.mathshell.com/publications/numeracy/boardgame/boardgame_teacher.pdf)

*This 96-page pdf could be a full-year GT curriculum. The examples of games to test, ways to support student thinking and critique are outstanding resources for this unit. Furthermore, the gaming unit keeps our students mathematical development firmly in mind as students understand how to use numbers and sequences in new ways with peers.*

- Juliani, A.J. “Let’s be intentional about innovation.” <http://ajjuliani.com/>

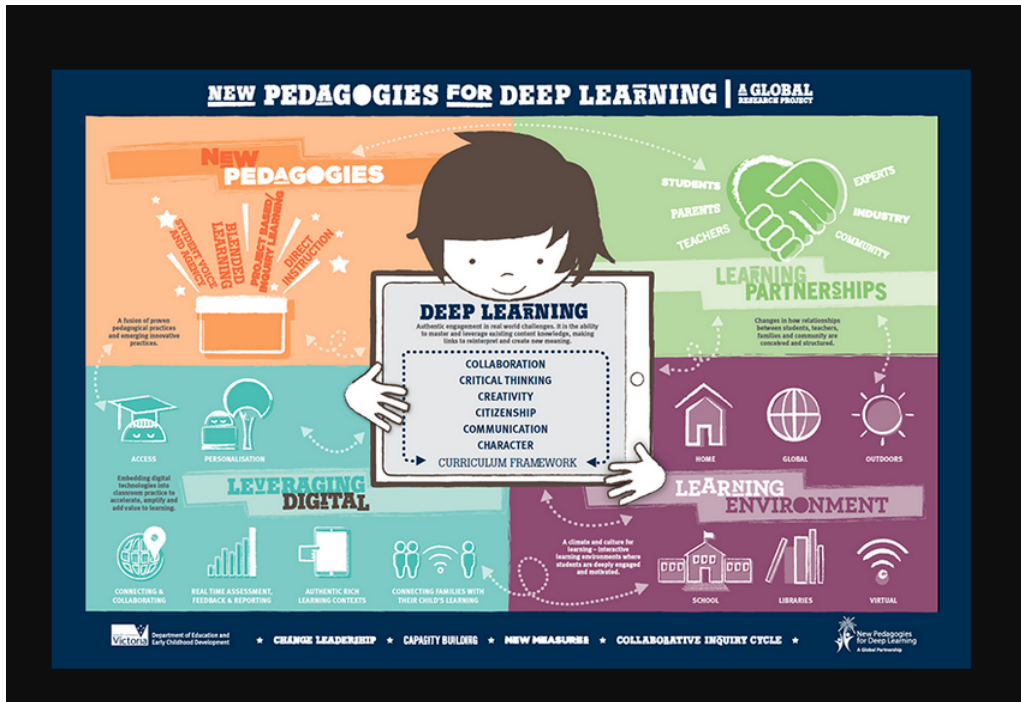
*A.J. Juliani provides a constant stream of resources related to design thinking, innovation, inquiry and engagement. Newsletters, three recent books on project-based learning and design offer continual resources, chances to collaborate with peers across the world (faculty and students) as well as practical tips on how to create lessons that incorporate the 4cs and design thinking.*

- Wise, Susie. Design Thinking in Education: Empathy, Challenge, Discovery, and Sharing

*Edutopia is a wonderful source for educators' experiences with design thinking. Susie Wise's article is but one example of many on the site.*

- Deeper Learning as a Frame

The 6 Cs of Deep Learning are incorporated by asking questions, focusing on competencies, using Question Formulation Technique (QFT, [rightquestion.org](http://rightquestion.org)), respectful group norms, mind mapping, intellectual risk taking, infusion of purpose/service



- Question Formulation Technique is used throughout the process. All materials and teacher resources are available at [rightquestion.org](http://rightquestion.org)

6th Grade

Impact Project

Time Frame: 20-25 hours of instruction

Topic: Research, Design Thinking, Social Engagement, Entrepreneurship, Student Engagement

Nutley Public Schools

“Nutley Achieving

Lasting Engagement

to Build National and Local Talent.”

## STAGE 1: DESIRED RESULTS

Nutley TALENT programming design keeps the Partnership for 21st Century Skills Learning and Innovation

Skills Framework and Michael Fullan’s New Pedagogy for Deeper Learning at its core. The program, therefore, incorporates 6 C’s continually by using strategies, protocols and practices that enhance the following:

Collaboration  
Creativity  
Critical Thinking  
Communication  
Citizenship  
Character

The National Association for Gifted Children standards:

3.4. Instructional Strategies. Students with gifts and talents become independent investigators.

4.3. Leadership. Students with gifts and talents demonstrate personal and social responsibility and leadership skills.

4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.

## STAGE 2: ASSESSMENT EVIDENCE

### Understandings:

- Students will learn that they can create information through research
- Students will connect their wonderings with studies
- Students will learn the skills and tools needed to organize research questions
- Students will use research questions to guide discoveries that lead to information creation.
- Students will realize that the results of research, i.e. research products, may take many forms - research papers, presentations, art installations, paintings, Ignite speeches, TED type talks, lessons delivered to a class, community outreach...

### Essential Questions:

- What does it mean to investigate?
- How can I ask good questions?
- How can students create original information?
- Is it possible for students to have an impact on their community?
- How can design thinking help me with research?
- How can my learning connect to what I am interested in?
- How do researchers find the themes in original data?
- How does qualitative data tell me about the world?
- How does quantitative data tell me about the world?

- What is the role of bias in research and development?
- How can a researcher gather findings?
- How can graphic organizers help communicate findings?

## STAGE 3: LEARNING PLAN

### *The Journey of Research* From Idea to Impact

#### 1. We start with wondering.

Questions like: How can people overcome fear? How do 6<sup>th</sup> grade students feel about learning? How can an elementary school student help the world?

#### 2. We create “Research Questions” or “RQs” that ask one or several questions that help guide our investigation.

These questions do not ask for one or two word answers, but they are worth answering:

Why are some people kind?  
How can people understand what other people are thinking?  
How do people influence classmates?  
Why do people eat junk food?

#### 3. We investigate.

There are many ways to research, but here are some:

- We can use good online research tools that bring us to educational sites (Universities, text book or school supplied sites)
- We can read books or articles.
- We can interview experts by phone, videoconferencing or in person.
- We can interview the people who might have information about what we want to know because they have experienced something related to it (interviews are taped, typed up or there are notes taken)
- We can create a “focus” group (a small group that is asked a series of questions by a group leader (facilitator) and the results are taped, written down and then reviewed for common themes or ideas that keep repeating.
- We create a survey and then make graphs, images or tables to share the results

#### 4. We **analyze** our results and **reflect** (big thinking and sorting through what we have gathered).

5. We **create** a research product: a paper, a Google Slide Deck, a book, a sculpture, a film, a presentation, a model, a poster, a dance, an online image or poster. There is no limit to what we can create as a result of what we have wondered and investigated.

6. We **share** our work with some audience – classmates, younger students, teachers, the community at a public event, the Board of Education, Nutley Commissioners, parent experts, or we offer a class or create a workshop. Again, there is **no limit** to what we can share as a result of what we have wondered and investigated.

### Resources



The Journey of Research.

<https://docs.google.com/document/d/12nZoi9CbpJyqQR3QR08VDW8xwiFBDKOZB8VjjDXPh48/edit#>

The Genius Hour: Where Passions Come Alive. <http://geniushour.com/>

Genius Hour Elementary. <https://www.edutopia.org/article/genius-hour-elementary-school>

Launch into Design Thinking. <http://thelaunchcycle.com/>

You get to have your own genius hour: An excellent video for students

<https://www.youtube.com/watch?v=COF-bqZuE-I>

6 Principles of Genius Hour in the Classroom.

<https://www.teachthought.com/learning/6-principles-of-genius-hour-in-the-classroom/>



