

Innovation & Entrepreneurship

Mini-Unit

Grades 6–10 | 3 Weeks | 15 Lesson Plans

Shark Tank–Inspired Format

RESOURCE INCLUDES

- 15 Detailed Lesson Plans
- Market Research Worksheet
- Product Design Canvas
- 10-Slide Pitch Deck Template
- Audience Scoring Rubric
- Investor Panel Facilitation Guide
- Student Business Idea Journal

Empathize	Define	Ideate	Prototype	Test
Understand the user through observation & interviews.	Synthesize findings into a clear problem statement.	Generate a wide range of creative solutions.	Build a rough model to learn by making.	Gather feedback and iterate to improve.

UM Printables

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Market Research Worksheet

Product Design Canvas

Pitch Deck Template (10 Slides)

Audience Scoring Rubric

Investor Panel Facilitation Guide

Student Business Idea Journal

UNIT OVERVIEW

This project-based mini-unit blends **design thinking** and **entrepreneurship** to empower students as innovators. Over three weeks, students identify a real community problem, research market need, develop a product or service idea, create a professional pitch deck, and present to an investor panel in a **Shark Tank–inspired** format.

Grade Level	6–10 (adaptable)
Duration	3 Weeks / 15 Lessons (50 min each)
Format	Project-based, Shark Tank–inspired
Team Size	3–4 students per group
Core Framework	Stanford d.school Design Thinking Process
Final Product	Pitch Deck & Live Presentation to Investor Panel
Assessment	Formative (ongoing) + Summative (pitch & deck)

Essential Questions

- How can design thinking be used to solve real-world community problems?
- What makes a product or service viable in a competitive market?
- How do entrepreneurs communicate the value of their ideas to stakeholders?
- What role does empathy play in creating solutions that people actually need?

Unit Learning Objectives

By the end of this unit, students will be able to:

- Apply the five stages of design thinking (Empathize, Define, Ideate, Prototype, Test) to a real-world problem.
- Conduct market research to validate a community need and identify target users.
- Develop a product or service concept using a structured design canvas.
- Construct a compelling 10-slide pitch deck that communicates problem, solution, market, and ask.
- Deliver a persuasive oral presentation tailored to an investor audience.
- Evaluate peer presentations using a structured scoring rubric.
- Reflect on the entrepreneurial process and personal growth as an innovator.

STANDARDS ALIGNMENT

ISTE Standards for Students

- 1.4 Innovative Designer — Students use a deliberate design process for generating and testing ideas.
- 1.5 Computational Thinker — Students develop and test solutions to problems.
- 1.6 Creative Communicator — Students communicate clearly and express themselves creatively.
- 1.7 Global Collaborator — Students explore local and global issues and use collaborative technologies.

Common Core ELA Anchor Standards

- CCSS.ELA-LITERACY.SL.6-10.4 — Present claims and findings, emphasizing salient points in a focused, coherent manner.
- CCSS.ELA-LITERACY.SL.6-10.5 — Include multimedia components and visual displays to clarify information.
- CCSS.ELA-LITERACY.WHST.6-10.7 — Conduct short research projects to answer a question, drawing on several sources.

21st Century Skills

- Critical Thinking & Problem Solving
- Creativity & Innovation
- Communication & Collaboration
- Information, Media & Technology Literacy
- Flexibility & Adaptability
- Initiative & Self-Direction

MATERIALS & SUPPLIES

Per Student

- Student Business Idea Journal (included)
- Market Research Worksheet (included)
- Product Design Canvas (included)
- Sticky notes (multiple colors)
- Access to internet-connected device for research

Per Group

- Poster paper or whiteboard space for brainstorming
- Prototyping materials: cardboard, tape, scissors, markers, recyclables
- Access to presentation software (Google Slides, PowerPoint, or Canva)

Teacher / Classroom

- Projector or interactive whiteboard
- Timer for pitch rehearsals and presentations
- Audience Scoring Rubric printouts (one per audience member)
- Investor Panel Facilitation Guide (included)
- Optional: Sample Shark Tank episode clips

UNIT AT A GLANCE

Week	Theme	Lessons	Key Deliverable
1	Design Thinking & Problem Discovery	1–5	Problem Statement & User Persona
2	Ideation & Product Development	6–10	Product Design Canvas & Value Proposition
3	Pitch Preparation & Presentation	11–15	Pitch Deck & Shark Tank Presentation

WEEK 1

Design Thinking & Problem Discovery

Lesson 1

Launch — What Is Innovation?

50 min

Learning Objectives

- Define innovation and entrepreneurship in a student-friendly context.
- Identify real-world examples of innovation that solved community problems.
- Explain the difference between an invention and an innovation.

Key Vocabulary

- **Innovation** — A new idea, method, or product that creates value and solves a problem.
- **Entrepreneurship** — The process of turning an innovative idea into a viable product or service.
- **Invention** — Creating something entirely new; innovation applies it to create value.

Materials

Whiteboard/chart paper, sticky notes (2 colors per student), Shark Tank clip (3–5 min), Student Business Idea Journals.

Lesson Sequence

Phase	Time	Activity
Hook	8 min	Show a short Shark Tank clip of a kid/teen entrepreneur. Class discussion: What problem did this product solve? Why did the inventors create it?
Direct Teach	10 min	Define Innovation vs. Invention vs. Entrepreneurship on the board. Provide 3 real-world examples. Emphasize: Innovation = Invention + Market Value.
Guided Practice	12 min	Sticky Note Sort: Students write 5 everyday items on sticky notes. Sort into "Invention" or "Innovation" on a class T-chart.
Independent Practice	15 min	Journal Entry #1: "Innovation in My World" — Identify one problem they or their community face and brainstorm what kind of innovation could solve it.
Closure	5 min	Share-Out: 3 volunteers share their community problem. Preview Lesson 2: Empathy.

Assessment

Formative: Review Journal Entry #1 for understanding of innovation vs. invention and identification of a relevant community problem.

Differentiation

- Provide a word bank/sentence starter for the journal entry.
- Allow verbal response or drawing instead of writing.
- Challenge advanced students to classify their sticky notes as incremental vs. disruptive innovations.

Tip: Keep the energy high! This lesson sets the tone for the entire unit.

Learning Objectives

- Understand the role of empathy in the design thinking process.
- Conduct informal observations and interviews to identify community needs.
- Distinguish between personal annoyances and genuine community problems.

Key Vocabulary

- **Empathy** — The ability to understand and share the feelings of another; crucial for human-centered design.
- **User** — The person who experiences the problem you are trying to solve.
- **Community Need** — A gap or problem that affects a group of people in a shared environment.

Materials

Student Business Idea Journals, Empathy Map template (projected on board), chart paper, markers.

Lesson Sequence

Phase	Time	Activity
Hook	7 min	Empathy Test: Show an image of a confusing door handle (Norman Door). Ask: "Who is at fault—the user or the designer?"
Direct Teach	10 min	Introduce the Empathy Map (Says, Thinks, Does, Feels). Model how to fill it out using a common school problem (e.g., crowded hallways).
Guided Practice	10 min	In pairs, students choose a school stakeholder and role-play an interview. Partner A asks questions; Partner B fills out a mini Empathy Map.
Independent Practice	18 min	Walkabout / Observation: Students spend 10 minutes observing a specific area of the school. Return to seats and complete a full Empathy Map in their journals.
Closure	5 min	Reflection: Write one sentence answering: "How did looking through someone else's eyes change the problem I want to solve?"

Assessment

Formative: Review Empathy Maps for depth of observation and ability to separate personal assumptions from observed user needs.

Differentiation

- Pre-assign observation locations to avoid confusion.
- Provide a list of interview questions for struggling learners.
- Challenge advanced students to interview an actual stakeholder rather than just observing.

INVESTOR PANEL FACILITATION GUIDE

This guide provides everything you need to facilitate a successful Shark Tank–style showcase. Whether your panel consists of teachers, administrators, local business owners, or peer judges, this guide ensures a smooth, rigorous, and positive experience for everyone.

1. Panel Setup & Roles

A standard panel of 3–5 judges works best. Assign the following roles to ensure efficiency:

Role	Description
Lead Investor	The teacher or lead judge. Manages the timer, calls the next group, and directs the flow of Q&A.; Ensures all judges get a chance to speak.
Numbers Guru	Focuses their questions on the Business Model and Market slides. Asks about pricing, costs, profit margins, and market size.
User Advocate	Focuses their questions on the Problem and Solution slides. Asks about empathy, user needs, and why the product is better than competitors.
Wildcard (Optional)	Can ask anything! Often focuses on the team, the pitch delivery, or offers "out-of-the-box" feedback. Great role for guest judges.

2. Session Format

Phase	Time	Action
Pitch	3–5 min	Team presents their 10-slide deck uninterrupted. Timer holds up a "1 Minute Warning" card. Strictly cut off at 5 minutes.
Q&A	2–3 min	Panel asks rapid-fire questions. Students must answer as a team. Encourage "passing" to a teammate rather than guessing.
Feedback	1 min	Judges give one "Shark Bite" (constructive criticism) and one "Golden Nugget" (praise). No deliberation yet.

3. Investor Question Bank

Use these questions to probe the depth of student understanding. Categorize them to match your panel roles:

Problem & Solution (User Advocate):

- How did you discover this problem? Did you interview real people?
- What is the biggest weakness of your current solution?
- If your product didn't exist, what would your user do instead?

Market & Business (Numbers Guru):

- How did you calculate your cost per unit? Did you include labor?
- Why did you choose this pricing model over a subscription model?

- How many units do you need to sell to break even?

Competition & Team (Wildcard):

- You mentioned [Competitor X]. What stops them from copying your idea tomorrow?
- What is your team's biggest weakness, and how will you overcome it?
- If I give you \$1,000 today, exactly what is the first thing you spend it on?

4. Deliberation & Awards

After all groups have pitched, give the panel 5–10 minutes to review their Audience Scoring Rubrics and deliberate. To make the showcase exciting, consider offering awards beyond just "1st Place":

Award Title	Criteria
The Big Deal Award	Highest total score on the rubric. The most well-rounded, investable pitch.
Most Innovative	The product that best applies design thinking to create something truly unique and creative.
Shark Bait Award	The most polished, confident, and persuasive delivery. The team that "sold" it best.
Heart of Gold	The product that best demonstrates deep empathy and solves the most meaningful community problem.

MY BUSINESS IDEA JOURNAL

Directions: This journal is your personal space to track your ideas, reflect on your learning, and document your journey from problem to pitch. You will use this in class every day. Keep it organized—your final presentation will pull ideas directly from these pages!

My Name: _____ My Team: _____

JOURNAL ENTRY 1: INNOVATION & EMPATHY

Complete during Lessons 1 & 2.

1. What is the difference between an invention and an innovation? Give an example.

2. List 3 problems you have noticed in your school or community.

- 1.
- 2.
- 3.

3. Empathy Focus: Choose one problem. Who does it affect most? Interview or observe them. What do they SAY, DO, THINK, and FEEL?

Says:
Does:
Thinks:
Feels: