

APPLIED PATHWAY | AI INNOVATORS EXTENSION

AI Entrepreneurship & Innovation

Student Workbook

From a real problem to a responsible AI-supported innovation pitch.

Grades 9-12

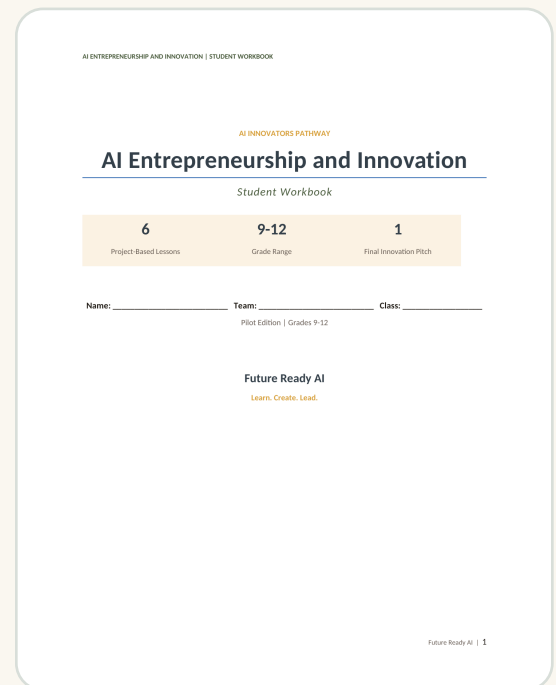
Six project-based lessons

WHAT THIS PREVIEW SHOWS

- Problem and stakeholder discovery
- AI Fit Test and human oversight
- Value proposition and simple business model
- Risk review, prototype, pitch, and reflection

EVIDENCE OF LEARNING

Teams move from verified human need through responsible AI fit, prototype, business model, safeguards, and evidence-based pitch.



SOURCE WORKBOOK

SELECTED STUDENT-FACING PAGES ONLY

Full curriculum, facilitator guidance, answer keys, assessments, and implementation masters remain protected and are shared only through approved implementation or pilot access.

Inside this public preview

AI Entrepreneurship & Innovation | Grades 9-12 | Six project-based lessons

Selected source pages

- **Workbook page 2**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK
- **Workbook page 5**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK
- **Workbook page 8**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK
- **Workbook page 10**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK
- **Workbook page 12**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK
- **Workbook page 14**
AI ENTREPRENEURSHIP AND INNOVATION | STUDENT WORKBOOK

WHY THIS IS A PREVIEW

This PDF is designed for public website review. It shows authentic student-facing curriculum evidence without publishing the complete instructional package. Teacher-only guidance, answer keys, unpublished assessments, implementation masters, and full program sequencing remain protected.

Your Innovation Challenge

Your team will investigate a real school, community, business, or career-related problem; decide whether AI can responsibly support a solution; create a concept prototype; and pitch a realistic next step.

Your responsibility: AI can support ideas and tasks, but people remain responsible for evidence, design choices, safeguards, decisions, and consequences.

What you will produce

- Problem statement and Worth-Solving Scorecard
- Customer and stakeholder discovery evidence
- AI Fit Test, role map, and concept storyboard
- Value proposition and simple business-model canvas
- Responsible AI Risk Review
- Prototype, pitch deck, presentation, and reflection

Pre-Assessment

Complete independently before beginning the module. This is a baseline, not a judgment of prior access to AI.

1. A team starts by choosing a chatbot and then searches for a problem. What should it do first?

- A. Add more AI features
- B. Identify and investigate a specific human need
- C. Create a logo
- D. Estimate advertising revenue

2. Which discovery question is most likely to produce useful evidence?

- A. Would you buy our solution?
- B. Do you like AI?
- C. Tell me about the last time this problem happened.
- D. Is our idea innovative?

3. A stakeholder is best described as:

- A. Only the person who pays
- B. Anyone who may affect or be affected by the solution
- C. Only the technical developer
- D. A person who already agrees with the team

4. When is AI most appropriate?

- A. Whenever it makes a pitch sound modern
- B. When a clearly defined task benefits from pattern recognition, prediction, recommendation, classification, or generation
- C. Whenever ordinary software would work
- D. When no human can review the result

Lesson 1: What Makes a Problem Worth Solving?

Opportunity scan: List at least five problems you notice in school, community, work, or daily life. Do not name a solution yet.

Worth-Solving Scorecard

Candidate problem	Evidence (1-4)	Impact (1-4)	Frequency (1-4)	Access to people (1-4)	Feasible scope (1-4)	Total

Selected problem: Who experiences it, when/where does it happen, and what impact does it create?

What do we know from evidence? What are we assuming? What must we learn next?

Problem statement: [People] experience [specific problem] in [context], resulting in [impact], as shown by [evidence or learning need].

Lesson 3: How Can AI Support the Solution?

AI Fit Test

Question	Yes / No / Unsure	Evidence or reasoning
Is there a specific task that AI can perform or support?		
Does the task involve patterns, prediction, recommendation, classification, or generation?		
Is relevant, lawful, and appropriate information available?		
Would ordinary software, a checklist, search, or a human service work better?		
Can important outputs be verified before action?		
Can a person meaningfully review, override, and explain the result?		
Is the likely benefit proportionate to the risk and resources?		

Decision: AI is / is not appropriate because...

AI Role Map

Input	AI-supported task	Output	Verification	Human decision/action

What must the system never decide or do alone? What is the non-AI fallback?

Lesson 4: Value Proposition and Business Model

Value proposition draft: For [specific people] who [need/problem], our [solution] helps them [benefit] by [how], unlike [current alternative].

Clear, Credible, Compelling Test

Test	Peer feedback	Revision
Clear: Can a listener explain it in their own words?		
Credible: Is it supported by discovery evidence?		
Compelling: Does the benefit matter to the intended people?		

Simple Business-Model Canvas

Canvas area	Team response
Problem	What verified problem are we addressing?
Customers, users, and beneficiaries	Who uses, decides, pays, benefits, or may be affected?
Value proposition	What meaningful outcome will improve?
Solution and AI role	How does it work, and what limited task does AI support?
Channels and engagement	How will people learn about, access, and use it?
Key partners and resources	What people, expertise, data, technology, permissions, or relationships are required?

Lesson 5: Responsible Innovation Review

Rate each risk: likelihood 1-4 and severity 1-4. Risk priority = likelihood x severity. A low number does not eliminate responsibility.

Risk area	Guiding question	L	S	Priority	Safeguard / owner
Purpose and necessity	Is the AI feature necessary and proportionate?				
Privacy and data	What is collected, inferred, stored, shared, or retained? What can be minimized?				
Bias and fairness	Who may be underrepresented, misclassified, stereotyped, or treated unequally?				
Access and inclusion	What language, disability, device, connectivity, cost, or support barriers exist?				
Accuracy and transparency	How will people know AI is involved, verify output, and understand limits?				
Harm and misuse	How could this fail, mislead, exclude, manipulate, or be used for another purpose?				
Human accountability	Who reviews, decides, overrides, responds, and documents?				
Appeal and remedy	How can a person question a result, get help, and correct harm?				
Monitoring and stop rules	What will be checked, and what would trigger a pause or removal?				

Highest remaining risk: Who could be affected, what evidence is missing, and what must happen before further testing?

Revised concept: What did your team limit, add, remove, disclose, or place under human control?

Lesson 6: Build and Pitch the Solution

Prototype planner

Prototype type	What it should demonstrate	Materials/tools	Who will test it	What we will observe

- Paper screens or interface sketch
- Storyboard or service journey
- Clickable slide mockup
- Workflow demonstration
- Role-play or service blueprint
- Physical model or annotated concept poster

Test notes: One strength, one confusion, one question, and one revision:

Eight-Slide Pitch Planner

Slide	Purpose	Our key message / evidence
1	Solution and team	Name, one-sentence promise, team
2	Problem worth solving	People, context, impact, evidence
3	Discovery	What stakeholders do now, needs, constraints, insight
4	Solution and AI role	Experience, AI-supported task, alternative considered
5	Value proposition	Benefit, differentiation, reason to trust
6	Business/community model	Delivery, partners/resources, costs, sustainability, success
7	Responsible innovation	Top risks, safeguards, human owner, appeal/fallback
8	Prototype and next test	Demonstration, feedback, revision, specific ask