

AI in Action

Tools You Can Use Tomorrow

Richard Reaume and James Desjardins

Shared introduction, then your choice of
breakout



Our hour together

First 30 minutes

Together

Tools we use

Real examples

What makes a result useful

Next 30 minutes

Choose your group

Work with James or Richard

Try a task on your computer

Check and improve the result

Tools we will use and explore

Google

Gemini + Gems
Gemini Notebook
AI Studio / Antigravity

Microsoft

Copilot chat
Copilot agents

Personal assistants

ChatGPT Work / dots
Grok Bot
Meta Muse

The goal: one useful result tomorrow

1

Your task

2

Your sources

3

A real artifact

4

Your check

A lesson, a visual, an app or a finished resource pack



Everyday chat in practice

JAMES / LIVE DEMO

Give it a real task.

Add useful context.

Ask for one revision.

What would you improve in the first answer?

Gemini Gems

JAMES / LIVE DEMO

Save useful instructions.

Try a fresh request.

Refine what you reuse.

Which instructions would you like to stop repeating?

Copilot chat and agents

JAMES / LIVE DEMO

Choose the job.

Name the sources.

Test the response.

What would you want this workflow to produce?

NotebookLM: PDFs into media

RICHARD / LIVE DEMO

Source: verified survey facts

Ask a cited question.
Show the infographic.
Play a short audio excerpt.

Lesson planning: 16 of 48
Synthetic practice data

What would we make next?

Synthetic practice survey / 48 unique records



Lesson planning leads this fictional file: 16 of 48.

Invented self-reports cannot show learning impact or represent real educators.

Ready workshop example

ChatGPT Work: a Maker Day poster

RICHARD / LIVE DEMO

Work preferred / dots alternative

“Make me a playful,
one-page launch poster.
Deliver the PDF.”

Open it. Check a source fact.
Ask for a visual revision.



Ready workshop example

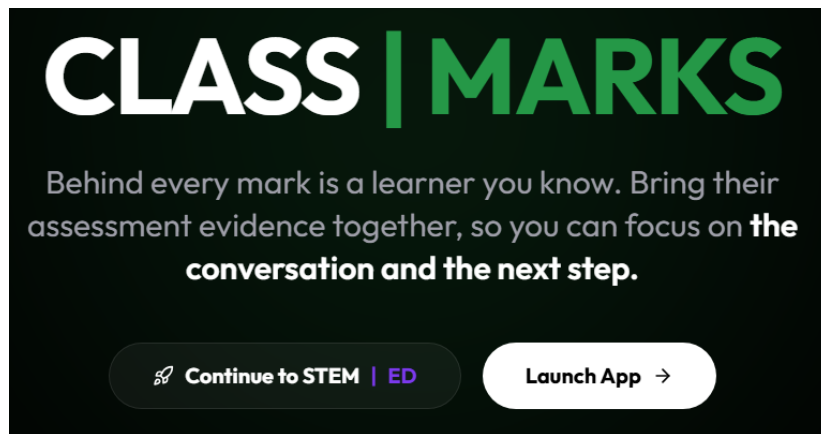
STEM | ED: an app ecosystem built with AI

RICHARD / LIVE DEMO

One real app: **CLASS | MARKS**

A teacher problem.
One working app flow.
A result I can use.

stemed.ca



The workspace around the model matters

Context

Tools

**Visible
actions**

**Reviewed
result**

Judge the whole workflow, including the model.



A result worth keeping survives a check

- Open the source or the finished file
- Check a number, unit or exact link
- Try a control that could expose an error
- Ask for one change and inspect the revision

Now choose your breakout

With James

Everyday chat
Gemini Gems
Copilot options

With Richard

Media, data and apps
Assistants that make files
Choose one of five projects

Two groups. One aim: make something useful.



Your project starts here

RICHARD / ADVANCED PROJECTS

Choose one project.
Download its source files.
Use the supplied prompt.
Open a finished example.



ai-in-action.stemed.ca

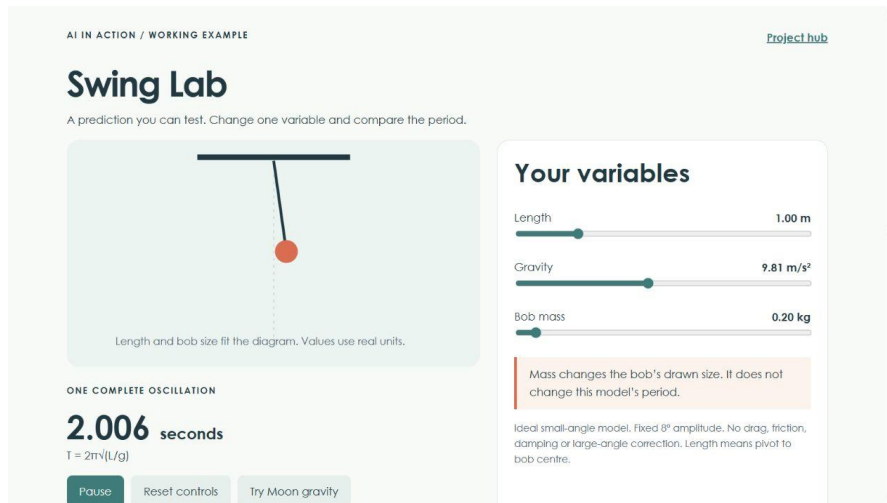
Scan or type the address

From a prompt to a physics app

Describe the investigation

Use the working preview

Change one requirement



The first win: controls that do something you can test



A beautiful app still needs a physics check

1 m

2.006 s

4 m

4.012 s

New mass

**Same
period**

$$g = 9.81 \text{ m/s}^2 \quad T = 2\pi\sqrt{L/g}$$



Five projects. Choose one.

- | | | |
|----|----------------------------|----------|
| 01 | Sources into media | sources |
| 02 | Survey into a visual story | data |
| 03 | Build a physics app | build |
| 04 | Delegate the teaching pack | delegate |
| 05 | Website to finished assets | produce |



Your project work period

08

min

Make

04

min

Check

05

min

Improve

I'll circulate. Show me what exists and what you want to change.

One result. One correction.

Show the thing you made

Describe the revision you would use tomorrow

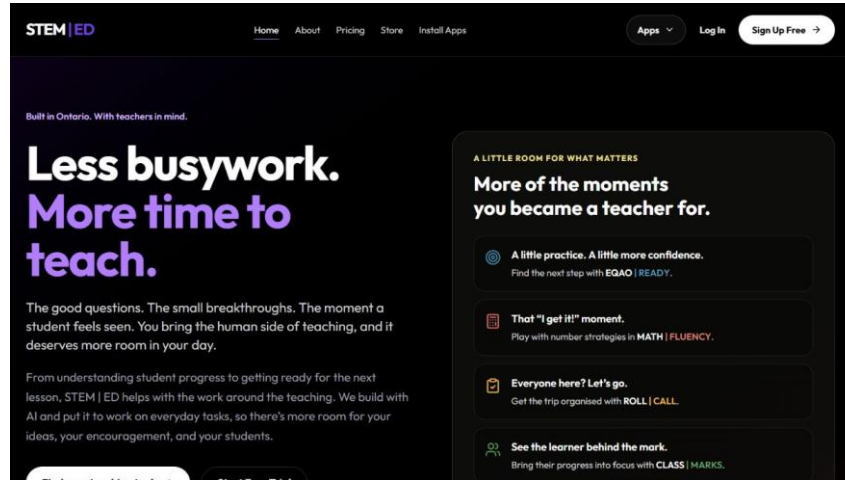
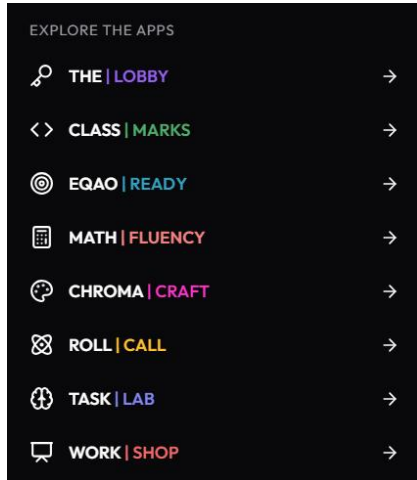
I made _____.

I checked _____.

My next revision is _____.

STEM ED: Simple ideas became apps

STEM | ED



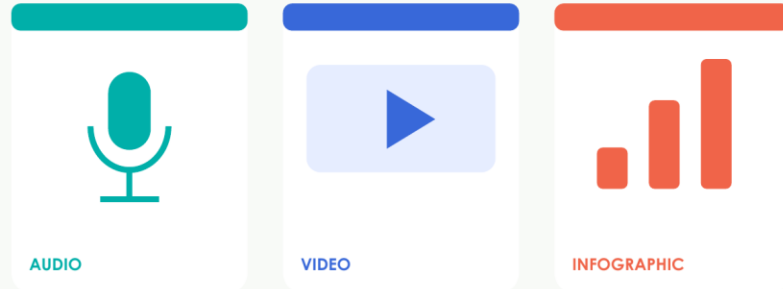
Sources into media

PROJECT 01 / SOURCES

**A checked infographic,
short podcast-style
overview or video
overview.**

Gemini Notebook / NotebookLM

One source folder. Your choice of medium.



Check one fact. Then generate one format.

12–15 min / one first version, one check, one revision



Survey into a visual story

PROJECT 02 / DATA

A landscape
infographic plus the fact
sheet behind it.

Work, dots, Grok Bot or Muse with file
analysis

What would we make next?

Synthetic practice survey / 48 unique records



Lesson planning leads this fictional file: 16 of 48.

Invented self-reports cannot show learning impact or represent real educators.

15–18 min / one first version, one check, one revision

Build a physics app

PROJECT 03 / BUILD

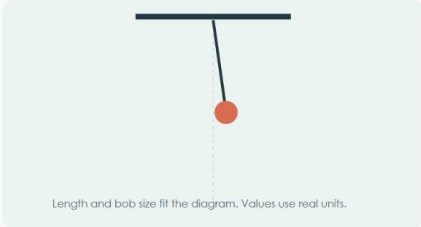
A working Swing Lab with controls you can test.

Google AI Studio Build; Antigravity or
Work as options

AI IN ACTION / WORKING EXAMPLE [Project hub](#)

Swing Lab

A prediction you can test. Change one variable and compare the period.



Length and bob size fit the diagram. Values use real units.

ONE COMPLETE OSCILLATION

2.006 seconds

$T = 2\pi\sqrt{L/g}$

Pause Reset controls Try Moon gravity

Your variables

Length 1.00 m

Gravity 9.81 m/s²

Bob mass 0.20 kg

Mass changes the bob's drawn size. It does not change this model's period.

Ideal small-angle model. Fixed 8° amplitude. No drag, friction, damping or large-angle correction. Length means pivot to bob centre.

15–18 min / one first version, one check, one revision

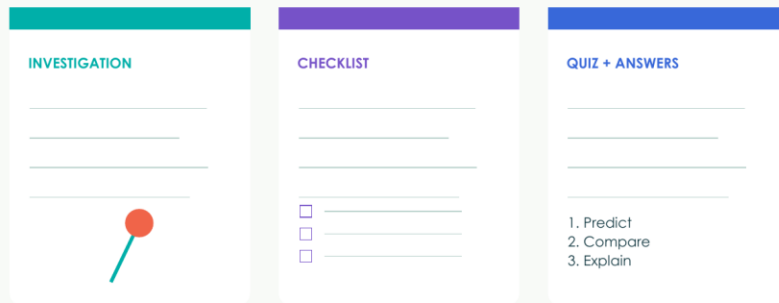
Delegate the teaching pack

PROJECT 04 / DELEGATE

**A student investigation,
teacher checklist and
quiz with answers.**

ChatGPT Work, dots, Grok Bot or
Muse with file tools

A complete teaching pack



The image displays three sample pages from a teaching pack, each with a distinct header color: teal for 'INVESTIGATION', purple for 'CHECKLIST', and blue for 'QUIZ + ANSWERS'. The 'INVESTIGATION' page features four horizontal lines for text and a red dot with a teal line at the bottom. The 'CHECKLIST' page has four horizontal lines, with the first three preceded by empty checkboxes. The 'QUIZ + ANSWERS' page has four horizontal lines, with the last three preceded by numbers 1, 2, and 3.

Open the files. Check agreement. Ask for a real revision.

15–18 min / one first version, one check, one revision

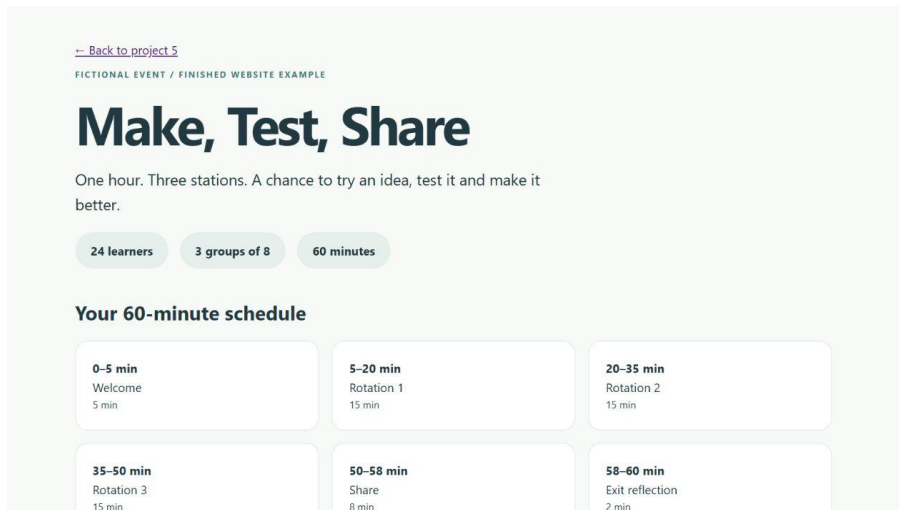
Website to finished assets

PROJECT 05 / PRODUCE

A PowerPoint, PDF, Word document or one-page website.

Work, dots, Grok Bot or Muse with browser and file tools

15–18 min / one first version, one check, one revision



[-- Back to project 5](#)

FICTIONAL EVENT / FINISHED WEBSITE EXAMPLE

Make, Test, Share

One hour. Three stations. A chance to try an idea, test it and make it better.

24 learners 3 groups of 8 60 minutes

Your 60-minute schedule

0–5 min Welcome 5 min	5–20 min Rotation 1 15 min	20–35 min Rotation 2 15 min
35–50 min Rotation 3 15 min	50–58 min Share 8 min	58–60 min Exit reflection 2 min

A workspace that can finish the job

Sources to media

Gemini Notebook

Prompt to working app

Google AI Studio or Antigravity

Data or finished files

Work, dots, Grok Bot or Muse

Visible computer actions

A workspace with actual browser tools

Use an account you already have. Check its tools first.

Ready examples when you need them

Media

A four-frame storyboard

Survey

An infographic and checked fact sheet

App

A working local Swing Lab

Assistant

An example teaching pack

Website

Finished assets from one source