Innovate IECC: Create • Engage • Transform

Today's flow: Explore powerful AI tools to transform your teaching materials into engaging, accessible student resources.

Popular AIs & the "Freemium Rotation"

Use multiple AIs to stretch free features

Perplexity

Search-chat that answers with **citations**; great for first-pass research.

Copilot (Microsoft 365)

Microsoft chat that can browse/summarize and do light Microsoft integrations

Claude

Thoughtful long-context writer; makes clean **outlines/tables** and live-editable **Artifacts**.

Gemini

Google-native model tied to **Drive/Docs/Sheets**; solid for **images/charts** and brainstorming.

ChatGPT

Versatile generalist for **drafting, rewriting, and quick code**.

Grok

Real-time, **X-aware** model for trending topics and quick sentiment reads. cs, structured outputs, live-editable **Artifacts**

Perplexity (cited research fast)

Take your existing materials and transform them into multiple engaging formats:

Video Overviews

Web-cited answers with live links (pin/save)
Follow-ups that refine scope & terms
Focuses (e.g., academic/coding/video) + file/URL intake
Collections to group findings for a class/topic
Use it for: source lists, pro/con briefs, quick literature scans, reading questions

NotebookLM: Your Content, Transformed

Take your existing materials and transform them into multiple engaging formats:

Video Overviews

Studio-quality narrated slides automatically generated from your PDF content

Audio Overview

Interactive podcast-style discussions students can "join" and engage with

Study/Mind Maps

Auto-organized concept visualizations for effective review and reinforcement
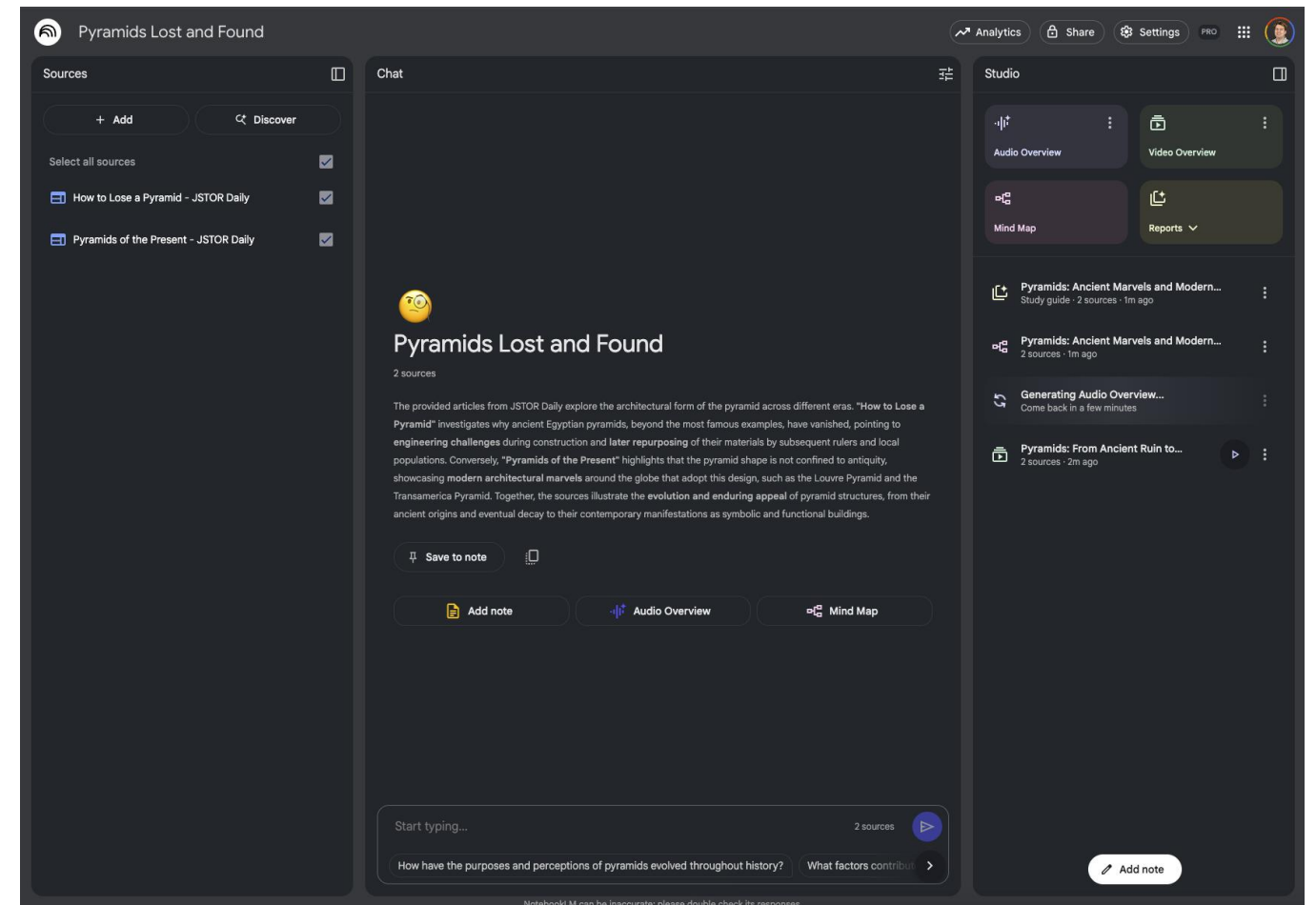
Mini-Playbook: NotebookLM in 3 Steps

01

Upload your content

Start with existing lesson plans, articles, or book chapters

NotebookLM analyzes and understands your content in seconds

02

Generate Video + Audio Overviews

Narrated slides summarize key concepts visually

Interactive audio discussions provide deeper engagement

03

Create Study Maps

Export different versions for differentiated instruction

Provide students with personalized learning paths

Pro tip: *Start with content students find most challenging—transform struggle points into strengths.*

Veo 3: Bring Concepts to Life

▷ Prompt 3×8-second clips

Create visual sequences showing cause → event → effect relationships

▦ Assemble in Google Flow

Combine clips and add simple narration to clarify concepts

↓ Export 30-second explainer

Share directly in class or upload to your LMS for student access

Perfect for: Abstract concepts, historical events, scientific processes

Claude Artifacts: Instant Materials

Interactive Quizzes

Generate assessment materials with immediate feedback

Adjust difficulty levels on the fly based on student needs

Differentiated Reading

Create three difficulty levels from the same source material

Support diverse learning needs while maintaining core content

Role-Play Scenarios

Build interactive simulations students can explore

Edit live in the artifact pane to customize for your class

Time-saver: Generate a week's worth of differentiated materials in minutes, not hours.

Claude Artifacts: Games

Gamification

Turn your problem set into a playable challenge with instant checks
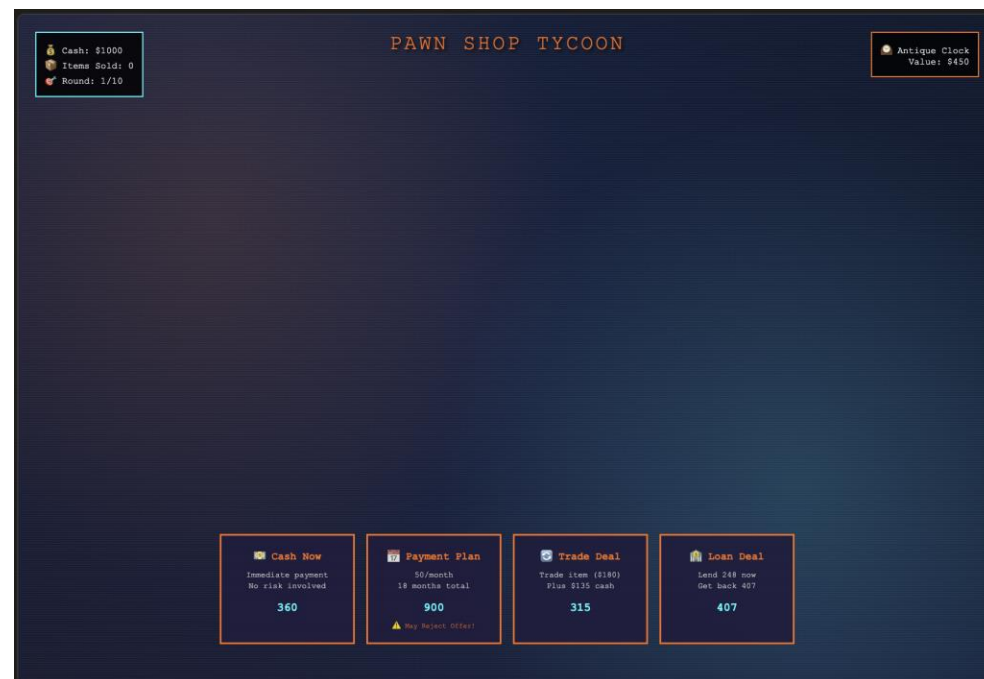
"Fun" Learning

Supports mixed-ability groups without rewriting content

Platformer Game

Build interactive simulations students can explore

Edit live in the artifact pane to customize for your class
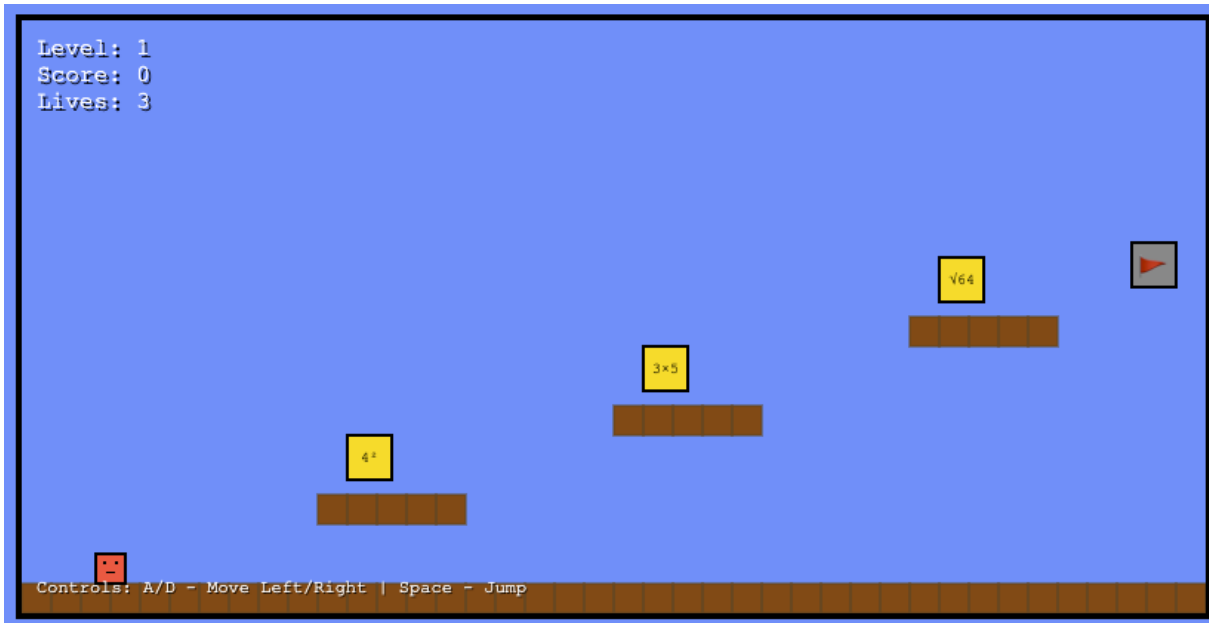
ElevenLabs: Authentic Voices

Transform text into natural-sounding audio for enhanced learning:

- *Create professional narration in ~30 seconds*

- *Support multiple languages for diverse learners*

- *Use character voices for historical or literary perspectives*

- *Export MP3 files for easy attachment to LMS or NotebookLM*

⊘ ***Accessibility win: Audio versions of content support students with reading difficulties and diverse learning preferences.***

Example: *Create a "time traveler" character to narrate historical events from a first-person perspective.*

The Rise of Conversational Voice AI in 2024

Legend:
- Education
- Business Operations
- Personal Assistant
- Companion
- Finance
- Gaming
- Healthcare
- Logistics

Y-axis: Hours of AI Voice Conversations
X-axis: Jan 2024, Feb 2024, Mar 2024, Apr 2024, May 2024, Jun 2024, Jul 2024, Aug 2024, Sep 2024, Oct 2024, Nov 2024, Dec 2024
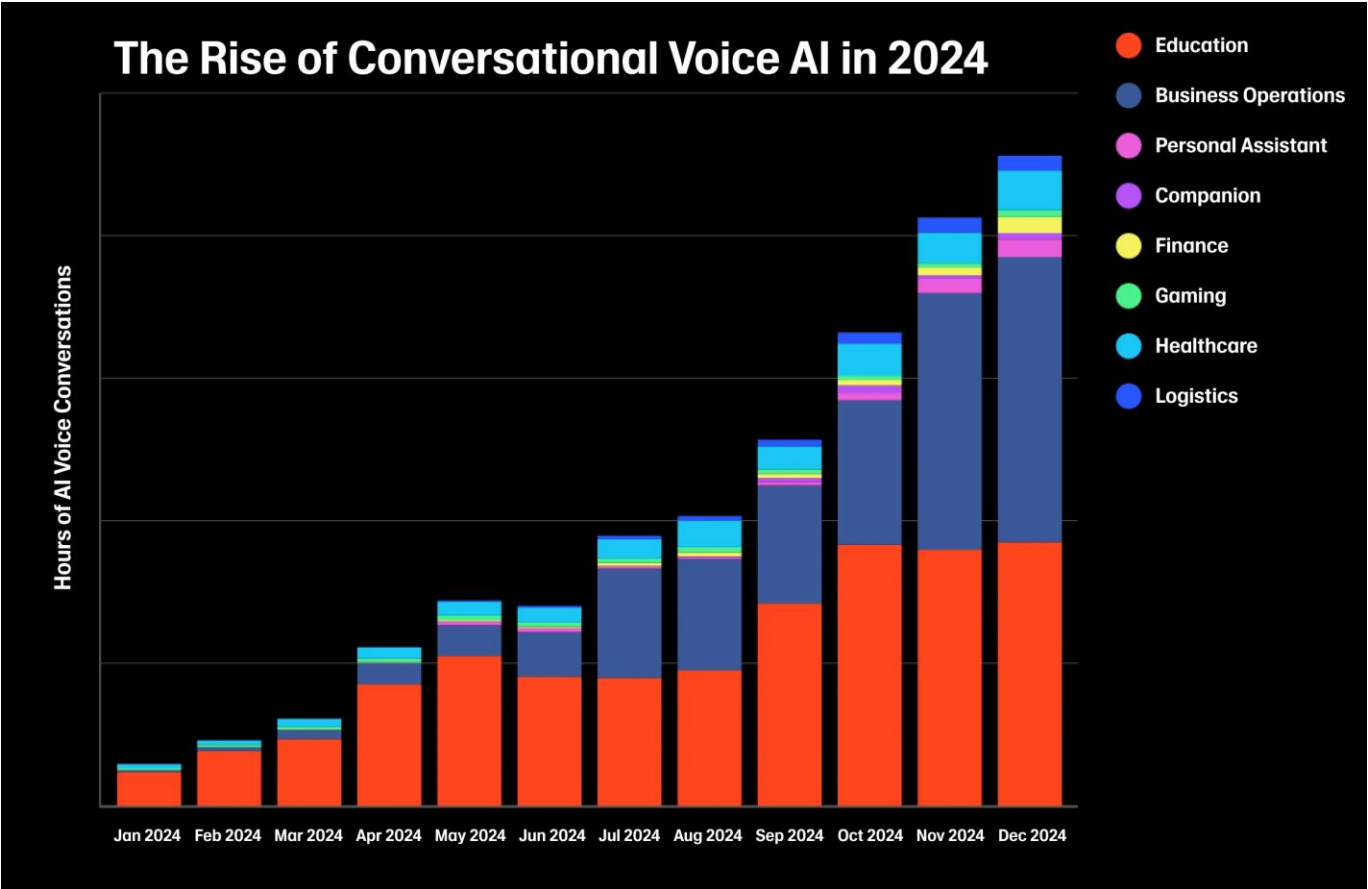
The Power Stack: 10-Minute Lesson Recipe

Upload source to NotebookLM ——— **1**

30 seconds

2 ——— Generate Video Overview

2 minutes

Generate Audio Overview + transcript ——— **3**

2 minutes

4 ——— Create Study Map

1:30 minutes

Veo 3: build 3 connected clips ——— **5**

3 minutes

6 ——— Claude: quick quiz
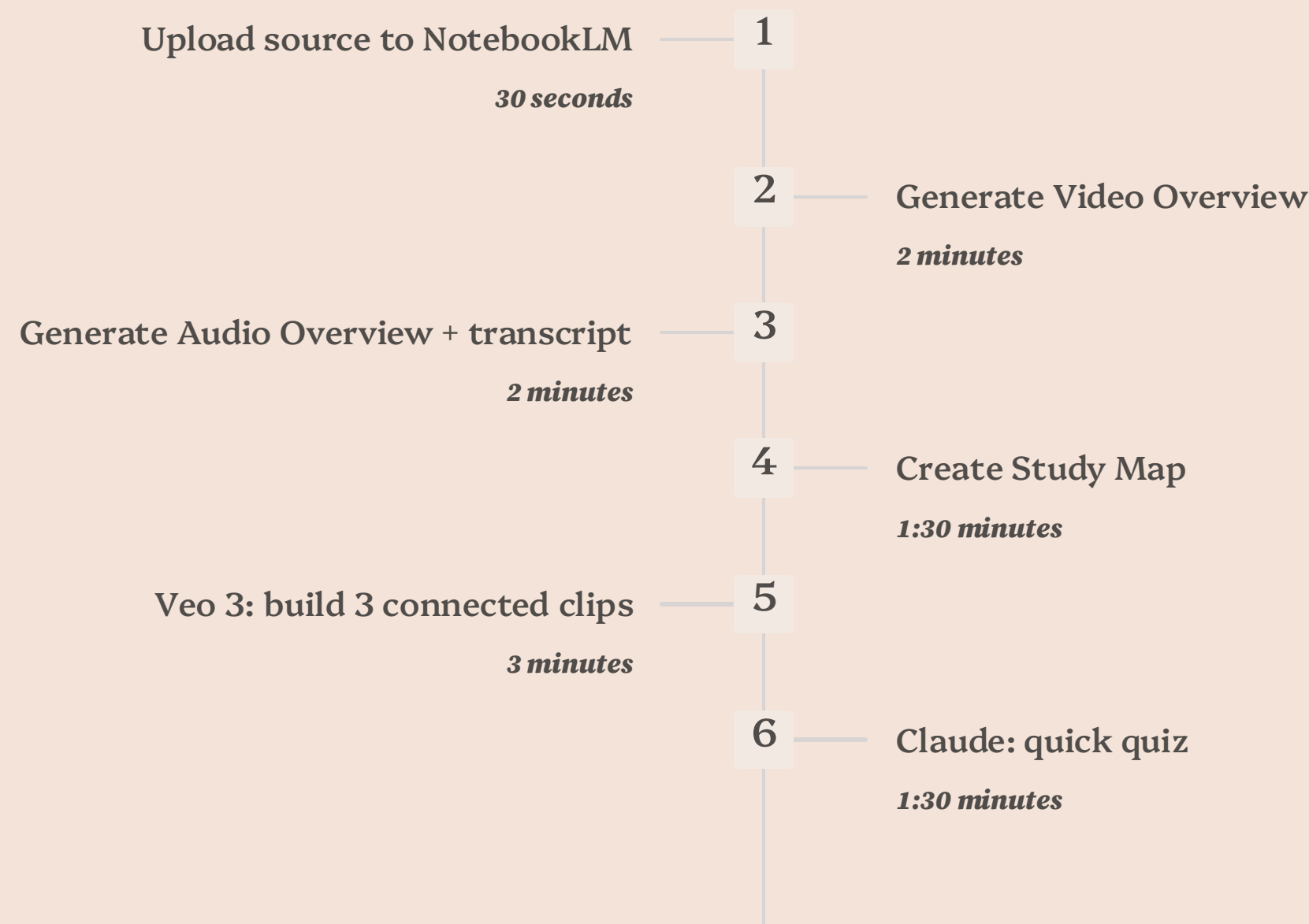
1:30 minutes

In just 10 minutes: From a single source to 7 classroom-ready resources that work together!

You Pick the Topic

One subject → seven classroom-ready outputs

You name the subject.

Any course

Live demonstration

We pull one source. Article/PDF/webpage

Watch the pipeline build your content.

Leave with resources tailored to your specific teaching needs

Our goal: You walk away with practical solutions for your most challenging teaching moments.

Accessibility by Design (QM 8.3 / 8.4)

These tools help you meet Quality Matters standards while saving time:

Multiple Format Support

- *Captions: NotebookLM Video Overview*
- *Transcripts: Audio Overview (Interactive)*
- *Alt text: Auto-descriptions for visuals*

Inclusive Design

- *Differentiated reading levels*
- *Multiple means of engagement (UDL)*

Universal Design for Learning

📝 *Built-in compliance: These tools automatically incorporate accessibility features, helping you meet standards without extra work.*

Resources

- *CETL AI Resources:* https://iecc.edu/node/2714

- *Student Resources (Development):* https://iecc.edu/node/3231

- *Semester based AI course in Canvas*

- *IECC CETL: email Mike Conn or myself*