

AI-Assisted Generated Teaching Materials

A Vibe-coded Personal Teaching Workspace for Mandarin Teachers

AI 辅助生成教学材料

基于 Vibe Coding 的中文教师个人工作台原型



Teacher Pain Points 教师备课痛点

Heavy Workload 繁重工作

Many lessons to prepare each week, with constant material adaptation needed.
每周课程多，备课压力大，材料需不断调整。

Diverse Lesson Types 多样课型

Language, culture, and review classes — similar frameworks, but materials differ each time.
语言课、文化课、复习课，框架相似但材料各异。

Time-Consuming Search 耗时搜索

Hours spent finding flashcards, worksheets, games, and cultural materials.
大量时间花在寻找词卡、练习纸、游戏和文化材料。

AI Gaps AI 的局限

General AI generates text but doesn't support a full teaching workflow.
普通 AI 可生成文本，但不支持完整备课流程。



THE IDEA · 想法

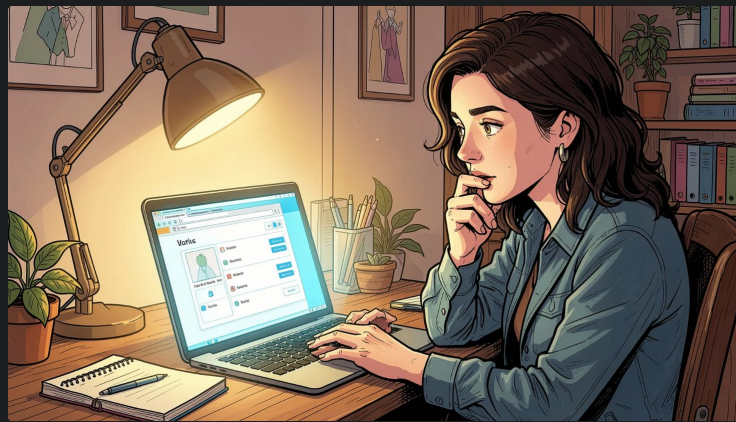
Can Vibe Coding Build a Personal Teaching Workspace?

能不能用 Vibe Coding 搭建中文教师个人工作台？

The goal is not to replace teachers —but to support daily lesson preparation with a personalized digital workspace.

目标不是替代教师，而是支持教师日常备课。

我开始思考：能否用自然语言指令，让 AI 帮我搭建一个真正懂中文课堂需求的工具？



What is Vibe Coding? 什么是 Vibe Coding ?

Using **natural language** to guide AI tools in building or improving a website or app —no advanced programming required.

用自然语言指令引导 AI 工具搭建或优化网站/应用。

Lovable

Quickly creates a visual app/website prototype from an idea.

根据想法快速生成可视化网页/应用原型。



Cursor

Helps edit code, fix bugs, and improve project details.

帮助修改代码、修复 bug、优化项目细节。

Codex / Claude Code

Acts as a coding agent —adds features, fixes issues, and works across files.

像编程代理一样，可以加功能、修问题、修改多个文件。

Vercel

Deploys a local website and creates a public web link.

用于部署网站，把本地网页变成公开链接。

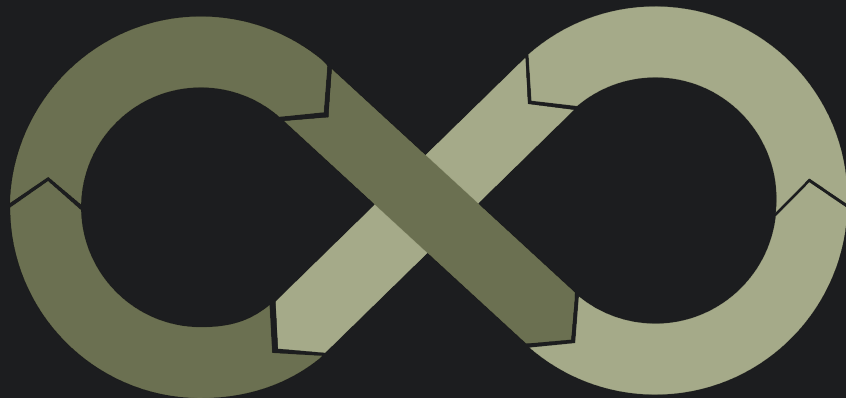
- **Key Insight 核心意义:** Teachers can become tool designers even without strong programming skills. 教师即使不擅长编程，也可以成为教学工具的设计者。

PROCESS 流程

My Workflow 我的工作流

Teaching Need

Write Prompt



Local Testing

AI Codes

I worked as a **teacher - designer** —translating real classroom needs into software functions through an iterative loop of prompting, testing, and refining.

我更像一个"教师设计者", 把课堂需求转化为网页功能, 通过不断迭代优化工作台。

Prototype Overview 原型总览

Teacher Timetable 教师课表

Weekly schedule at a glance.
一目了然的周课表。

Lesson Framework Generator 课程框架生成器

Auto-build structured lesson plans.
自动生成结构化教案。

Teaching Aids Generator 教具生成器

Flashcards, worksheets, and games.
词卡、练习纸与游戏。

Knowledge Base 知识库

Upload and search teacher guides.
上传并检索教师指南。

Floating Pinyin Helper 悬浮拼音助手

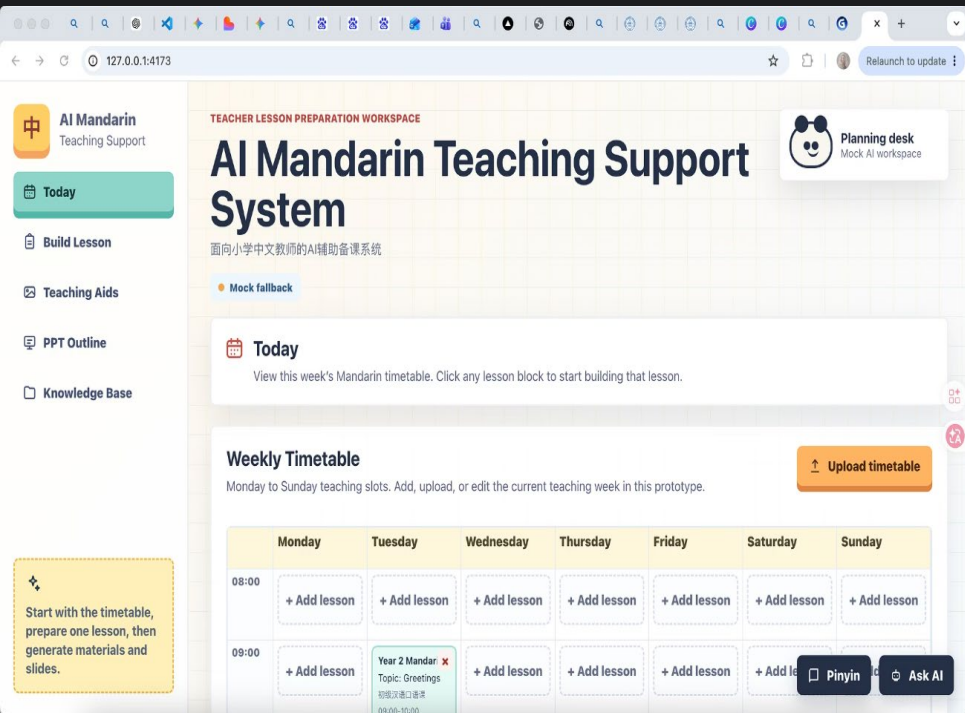
Instant pinyin support anywhere.
随时获取拼音支持。

Floating AI Helper 悬浮 AI 助手

Contextual AI assistance on demand.
按需获取情境 AI 帮助。

DEMO · 演示

Short Demo 简要演示



What I'll Show 演示内容

- Weekly Timetable 每周课表
- Build Lesson Page Build Lesson 页面
- Knowledge Base 知识库
- Teaching Aids Generator 教具生成器
- Floating Pinyin / AI Helper 悬浮拼音 / AI 助手

① **Current Stage 目前阶段:** Early local prototype — not yet a finished product.
本地早期原型，还不是成熟产品。

Future Development & Conclusion 未来展望与总结

Future Possibilities 未来可能

- Attendance Records 考勤记录
- Student Performance Records 学生表现记录
- Lesson Reflection 课后反思
- Teaching Material Library 教学材料库
- Behavior Notes & Personal Dashboard 课堂行为记录与个性化工作台

Conclusion 总结

AI can support not only **content generation** , but also **teaching workflow design** .

Vibe Coding gives teachers a new way to design small digital tools based on **real classroom needs** .

AI 不仅可以生成教学内容，也可以参与教师工作流程设计。
Vibe Coding 让教师可以基于真实课堂需求，设计小型数字教学工具。