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PREPARED FOR

UNESCO

DIGITAL LEARNING WEEK 2026



TEACHER AGENCY · PRACTICE & RESEARCH

From AI Tool Users to AI Agent Creators

Helping teachers shape AI support for learning.

Haiyang Xin · CocoRobo Ltd.

Paris · 2026

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What is a pedagogical AI agent?

An AI helper set up for a clear teaching or learning goal.

In our work, “pedagogical” means for teaching and learning.

Teachers shape it

They set its role, materials, steps and limits.

It supports learning

It asks questions, guides practice and gives feedback.

Why use one?

Turn a teaching plan into support that can be tested, reused and revised.



English speaking practice · Pingshan

> **The teacher sets the purpose. The agent provides the agreed support.**

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One goal. Two views.

Teacher agency means having the ability and room to make teaching choices.

1 · Practice

How do policy, local support and teacher design work together?

2 · Research

What do teachers learn as they build agents? What helps them keep creating?

1,000+ teachers reached across four Shenzhen districts and partner schools

Our teacher development work: April 2025–April 2026

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Guangdong: shared goals for AI education

Two literacy frameworks + one curriculum outline

2 + 1



Guangdong Department of Education
9 April 2025 · Trial documents

Teacher AI literacy

Teachers' knowledge, skills and responsibilities.

Student AI literacy

Understand and use AI with care and good judgment.

AI curriculum outline

Goals, content and teaching across school stages.

Connect teacher learning, student goals and the curriculum.

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Shenzhen: access and chances to create

A shared starting point

Shenjiao AI brings together 10 approved learning platforms.

Teachers create applications

Three city contests drew over 2,000 teachers.





City platform and teacher application contest

Give teachers access to tools—and chances to build with them.

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Pingshan: help teachers lead AI use

Learn, build and improve

Three groups of teachers moved from prompts to teaching agents.

Teachers decide

In English practice, AI gives feedback. Teachers set the standards.



AI pioneer teacher programme · Pingshan

Write prompts → Build agents → Test and revise

> **Help teachers build AI support and decide how to use it.**

Liyuan: teachers shape the standards



Teachers develop shared practices · Liyuan

Agree on the criteria

Experts draft indicators. Teachers rate them. The team finalizes the set.

Build, test and revise

Turn the criteria into an AI analysis tool. Try it in class and use teacher feedback.

> **Involve teachers in the standards that guide AI.**

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Bao’an: give each agent a clear job

T · Task design

Help the teacher create speaking tasks.

A · Practice and assessment

Act as an AI speaking examiner.

S · Standards

Match activities to the criteria.

K · Feedback

Use learning data to give feedback.

TASK = Tasksheets · Assessments · Standards · Key competences



Ms Luo’s TASK workflow · CocoRobo

> **Start with the teaching method. Then give AI clear roles.**

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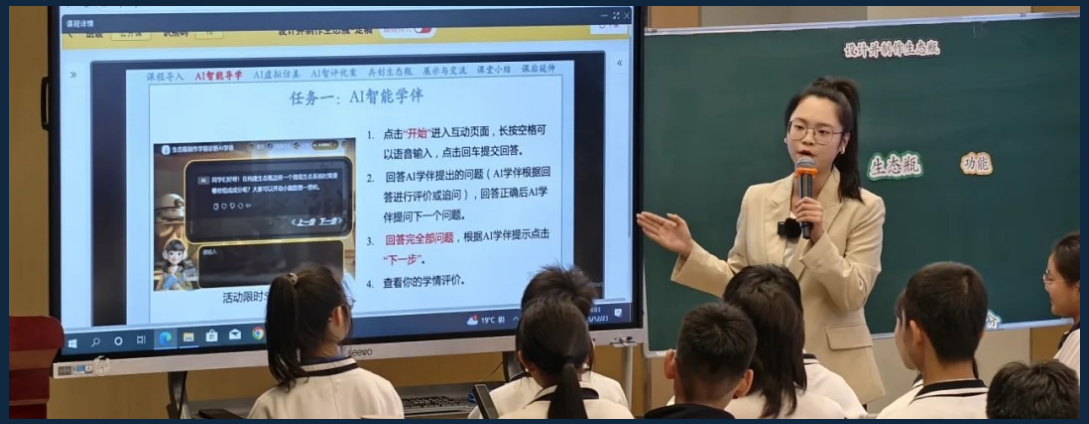
Why does practice need research?

A working example is a start. We also need to understand how it works.



Biology inquiry · Futian Liyuan Primary School

Learn what changes

How do teachers' designs and choices develop?

Understand the conditions

What helps teachers keep creating?

Make lessons useful elsewhere

What needs to change in another school?

> **Use evidence to improve tools, training and classroom practice.**

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A year of practice, evidence and revision

Three teacher groups in Pingshan · April 2025–April 2026

APR 2025

First prompts and agents

SEP 2025

Subject groups and workflows

APR 2026

Deeper study of teacher learning

Evidence: designs, revisions, platform use, surveys and interviews.

4 accepted conference papers

AERA 2026: 2 · ISLS 2026: 2

Ongoing journal work

Boundary Learning synthesis

> **Each round informed the next. Research returns to practice.**

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Building agents makes teaching choices visible

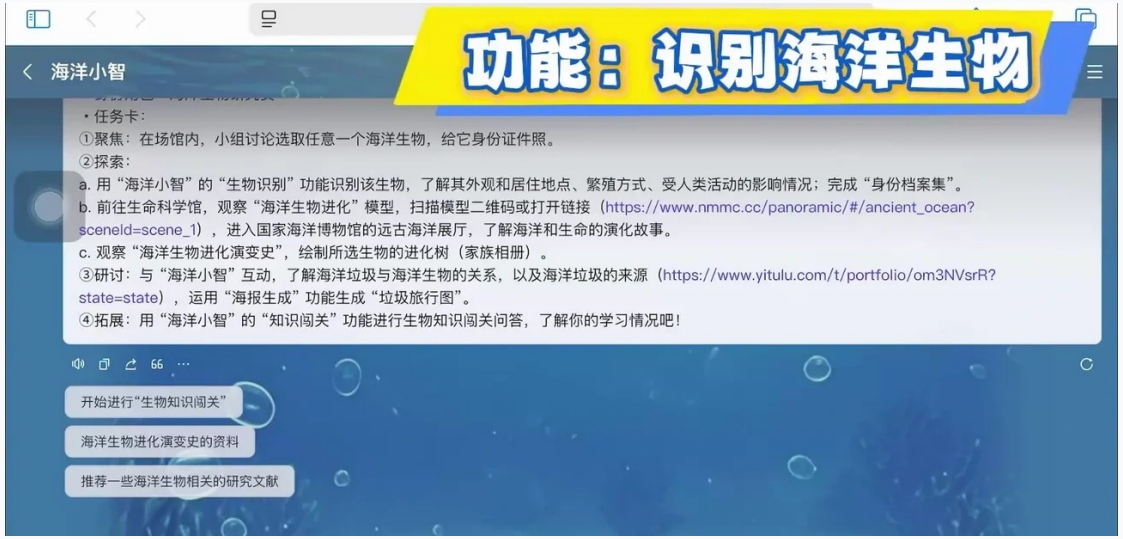
A teaching idea becomes a design that can be tested and changed.

Make choices clear

What should the agent do? What should the student do?

Learn through testing

Test it. Discuss what happens. Improve it.



Teacher-made application · city contest example

Look at what teachers build and revise, as well as what they report.

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Teachers need support to keep creating



Teachers reviewing an English-assessment task · programme material

Some create and revise

Others explore. Some take little part.

Training is only a start

Choice, skills, belonging and school support matter.

> **Give teachers time, trusted peers and people they can turn to for help.**

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Boundary Learning: deciding where AI belongs

Teachers learn to decide when AI should help—and when it should step back.

01 **Task**

Is this a good task for AI?

02 **AI limits**

Can it do the task well?

03 **Responsibility**

Who should make the key decisions?

04 **Design**

What roles, steps and limits should we set?

A working framework, still under development.

> **Example: if AI answers too soon, ask students to try first.**

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Four partners make the work possible

An RPP brings partners together over time to study and improve a shared problem.

CocoRobo · enterprise

Lead the programme; build, improve and support the tools.

University teams

CUHK · HKU · EdUHK: research design, theory and analysis.

Government partners

Local coordination, policy alignment and access.

Schools & teachers

Real needs, classroom trials and teaching decisions.

Together, we connect classroom needs, working tools and research.

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Make the partnership useful in practice

Build teacher agency through shared work.

1 **Start with a shared teaching problem**

Let teachers help define the goals and the questions.

2 **Connect creation, evidence and redesign**

Use findings to change tools and professional learning.

3 **Fund the work between meetings**

Support coordination, technical help and teacher time.

> **Judge success by better teaching choices and usable knowledge.**

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You are welcome in Shenzhen.

Visit our schools. Meet the teachers.
See their work in real lessons.

Shenzhen is honoured to host APEC this year.

APEC Economic Leaders’ Meeting

18–19 November 2026 · Shenzhen, China



APEC China 2026 · official emblem

Contact me to explore a school visit and exchange ideas.

VISIT · SHARE · COLLABORATE

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Let’s keep learning together.

Scan the slides or explore the full submission and research.

Haiyang Xin ·
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Contact me to arrange a school visit.

This presentation

Online slides · current version

Submission materials

UNESCO submission · studies and evidence