

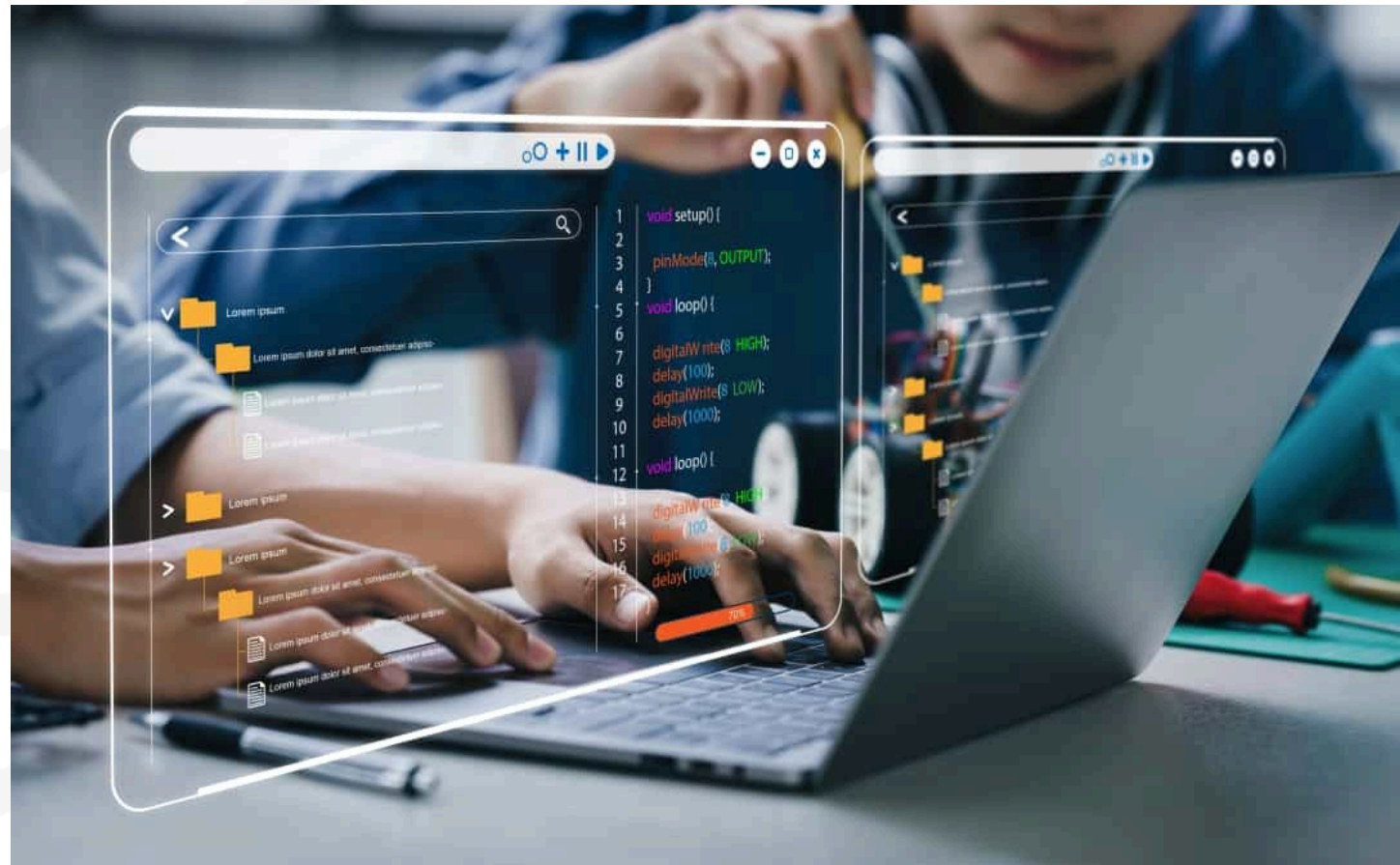
ConsCiênciaIA

Critical AI Education for Everyone

An award-level board game for critical and ethical AI literacy,
designed for middle and high school students in every context



Artificial Intelligence (AI) is shaping the world But millions of students don't understand it



- Students interact with AI every day in social media, search engines, and recommendations
- But they don't understand how it works. They don't question it
- They are being shaped by AI without knowing it



AI is Transforming Education, But Schools Are Not Prepared

- ➔ AI is increasingly transforming education, but teacher training remains limited
- ➔ Lack of infrastructure in public schools makes it difficult to integrate AI into classroom practices
- ➔ Difficulty integrating AI critically and responsibly into education

THE PROBLEM

Limitations of Current AI Education Approaches

Current AI education approaches often fail to balance accessibility, ethics, and critical thinking

1

Technical Focus

Focus on tools and programming skills
Limited critical understanding

2

Lack of Critical Perspective

Ethics and social impact underexplored
Students remain passive users


3

Infrastructure Dependence

Requires internet and devices
Excludes low-resource contexts

How ConsCiência Differs from Existing Approaches

To better understand these limitations, we analyzed existing educational tools and approaches for teaching AI

	Available in Portuguese	Unplugged	Target Audience (10-17 years)	Print-and-Play*	Modular	Ehtical/Social Dilemmas
AI Audit (UNICAMP)	✓	✓	✗	✓	✗	✓
AI Bingo	✗	✓	✗	✓	✗	✗
CoderMindz	✗	✓	✓	✗	✗	✗
PrimaryAI	✗	✗	✗	✗	✗	✓
ARIN-561	✗	✗	✗	✗	✗	✗
	✓	✓	✓	✓	✓	✓

*print-and-play = available online for free

Some Existing AI Education Approaches



Example of audit cards (business, harm, and features)

AI Audit

- A card game focused on ethical auditing of AI systems.
- **Limitation:** limited classroom accessibility.



Board game components used to simulate AI concepts

CoderMindz

- Physical board game that introduces AI concepts.
- **Limitation:** limited ethical and social focus.



Interactive interface showing AI-based ecological decision-making scenarios

PrimaryAI

- Digital platform that engages students in problem-solving scenarios.
- **Limitation:** Requires digital infrastructure.

➔ Most approaches address isolated aspects of AI education, but rarely accessibility, ethics, and critical thinking together.

THE SOLUTION

ConsCiência: A Playful Approach to Critical AI Education

ConsCiência is a **physical board game** that transforms AI literacy into a collaborative, discussion-based learning experience. No constant internet or digital devices required. Just cards, conversation, and critical thinking, making it accessible to schools regardless of infrastructure or resources.



Why ConsCiência Works

ConsCiência combines accessibility, ethical reflection, and collaborative learning into a single unplugged experience.

Collaborative Interaction

Based on discussion and argumentation

Encourages active participation

Unplugged Approach

No constant internet or devices required

Accessible to low-resource schools

Ethics-Centered Learning

Focus on bias, privacy, and social impact

Promotes critical understanding

Modular Design

Adaptable to different contexts and levels

Flexible for educational use

Physical Elements of the Game

Players move across the board by answering AI-related questions, debating ethical dilemmas, and completing collaborative challenges



Each card category encourages critical thinking, discussion, and real-world reflection about Artificial Intelligence

Physical Elements of the Game



Five Card Types, One Powerful Experience



Ethics

A city starts using facial recognition cameras to identify people on public streets. However, the system makes unfair mistakes and wrongly accuses innocent individuals. Which ethical principles were violated?

- A) Fairness and system reliability. ✓
- B) Freedom of expression and individual autonomy.
- C) Intellectual property and cybersecurity.
- D) Innovation and environmental sustainability.

8 points



Knowledge

What happens when you use Google Translate to convert a sentence from Portuguese to English?

- A) The system uses Artificial Intelligence to learn language patterns. ✓
- B) An English teacher writes the translation instantly.
- C) The app copies the sentence exactly as it is.
- D) The phone sends the sentence to another user for translation.

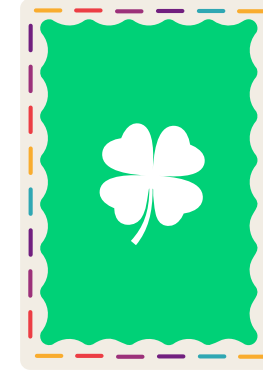
5 points



Creativity

A video platform prioritizes content that generates more comments, making certain topics appear more frequently. What Artificial Intelligence (AI) concept explains these recommendations?

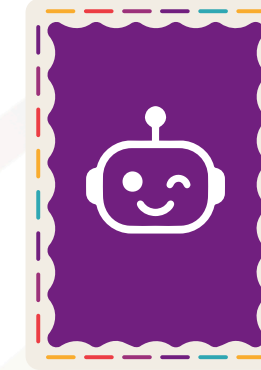
- User engagement (3 points)
- User interaction analysis (2 points)
- Pattern recognition (3 points)
- Increased visibility of popular content (2 points)



Luck

You trained an Artificial Intelligence to organize your studies and it worked better than expected!

Roll the dice again.



Practice*

Point your mobile device camera at the QR code!

*Optional QR codes on cards that unlocks digital content, bridging physical and digital learning for classrooms with connectivity

Designed for Real Educational Contexts



Middle and High School Students

Ages 10–17

Teachers and Mediators

Flexible classroom application

Public and Low-Resource Schools

Designed for accessible implementation



Modular and adaptable learning experience

VALIDATION

Tested. Engaged. Proven.



ConsCiência was **field-tested with students and educators** in real classroom environments, showing strong engagement, participation, and learning outcomes.

➤ **High engagement**
Students remained actively involved throughout gameplay.

➤ **Learning through discussion**
Students demonstrated understanding through peer interaction and argumentation.

➤ **Educator-approved**
Teachers described the game as engaging and curriculum-aligned.

Thinking Critically! Acting Responsibly!

Critical Thinking

Students learn to question and analyze AI systems

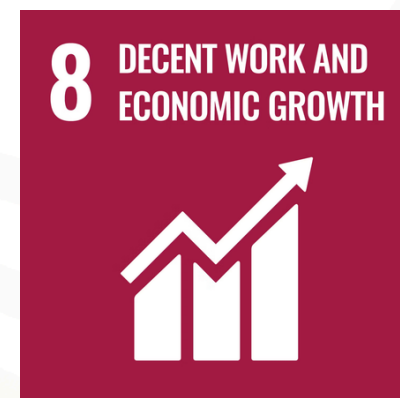
Argumentation

Gameplay encourages discussion and collaborative reasoning

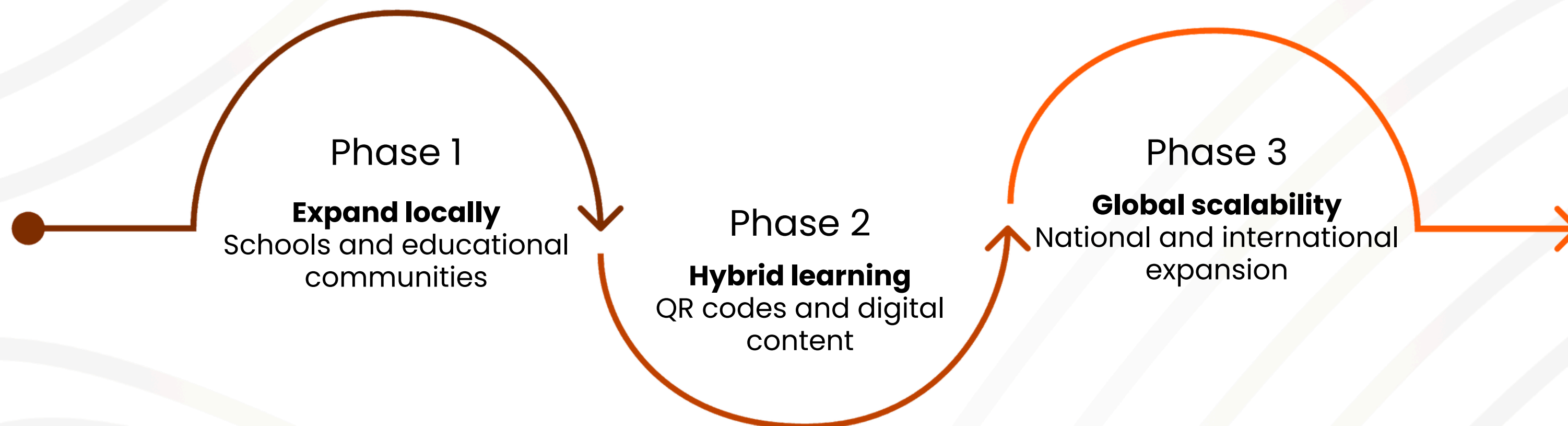
Responsible Use

Students develop a grounded understanding of ethical AI use
in their daily lives

Supporting inclusive and ethical AI education through the SDGs



Scaling Critical AI Literacy



ConsCiência is not just a game, it is a **movement toward equitable access and critical AI education**. Our vision is to reach every school, every student, regardless of resources or connectivity.

AI Literacy Must Go Beyond Access

AI education must build **critical consciousness**, the ability to question, challenge, and shape the technologies that shape us.

ConsCiênciaIA is our answer: a game, a conversation, and a foundation for a generation that does not just use AI, but **understands it**.

CONSCIÊNCIA

ETHICAL AI EDUCATION

ACCESSIBLE TO EVERY CLASSROOM



Developed by: Josiane Batista, Pamela Berti Braz, Maria Clara de Jesus e Gustavo

Ribeiro Costa

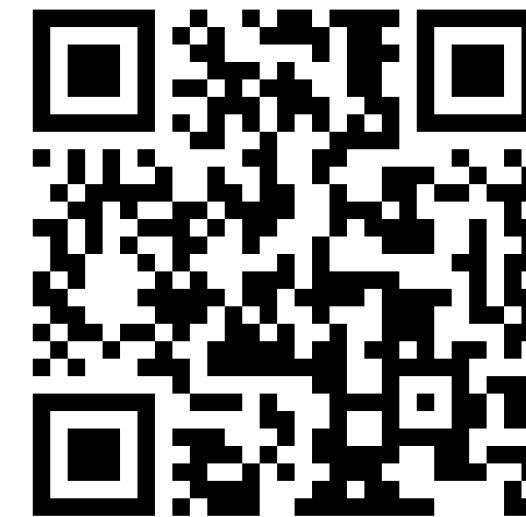
Supervisor: Prof. Dr. Robson Parmezan Bonidia



ConsCiênciaIA

Play. Explore. Reflect.

Learn More



ConsCiênciaIA Experience



InteliGente Project

