10 AI-Resistant Practices for the Classroom

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When we think about the future of learning we have to include artificial intelligence, in the same way we have to include the internet, computers, etc.

There are two paths that a lot of people are talking about, and we discuss them in depth during my workshop sessions.

One is going Al-resistant. And the other is Al-compatible.

In this video I break down the benefits and drawbacks of each path, and what it looks like to do both in the classroom.

I want to dive a bit deeper into what it looks like to have A.I.-Resistant activities and assessments (and why).

This post will share 10 practices that support A.I.-Resistant learning, and in my follow up article later this week, I'll be sharing 10 practices that support A.I.-Compatible learning.

Both are needed in our world, so let's dig in!

10 A.I.-Resistant Practices for the Classroom

#1: Paper/pencil In-Person

The easiest, and most basic way to go Al-resistant is to keep any learning activity or assessment, both in-person...and paper/pencil.

An in-person assessment that is paper-pencil is very Al-resistant. So is an inperson essay, in-person math problems, and even an in-person brainstorming session. None of these are bad practices, as some would try to make them seem to be. You can use these practices for a variety of purposes, and mostly to see what your students are thinking, and able to do on their own. It's simple. Effective.

Using only these practices presents a number of problems, especially in terms of attention, engagement, and long-term transfer. The remaining practices are more geared towards a world in which students are engaged in learning, not compliant in the process they are forced to go through.

#2: Discussion Game

My students rolled into class like any other day, and not much was changed. The tables were still set up in small groups, the projector was on with their "Do Now" activity on the board. And, the Homework for the week was written for each day.

The only difference was that each seat had a white envelope on it, filled with five cards of all different colors.

Here's the basics. Each student gets a number of different colored cards to use throughout the discussion. They must play each card once, but can play the question card multiple times after using all other cards.

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Red Card = I think

Blue Card = I know (because)

Yellow Card = Pose a Question

Green Card = I feel

Orange Card = Connect (to yourself, to the world, to another text/idea/subject)
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Each card is worth a point (if you want to grade this activity, completely up to you and your classroom/school) and the goal is to replace assessing only the final product (quiz) and instead the process of learning (having an active discussion).

This scaffolds the student-centered classroom in two ways.

First, the game is centered on your subject, concept, content, text for the lesson. Students have to be engaged with that content in order to respond with the above answers and questions (I think, I know because, I feel, Connect, etc). Second, it models the many ways you can contribute to an active learning discussion. This helps the students who may be shy or want to hide during the discussion.

#3: Debate

Another simple, and effective, practice. This can work in any subject area. Students are given some time in-class to prepare to take on a "side" or "perspective" in a debate.

Explain the structure and rules of the debate to your students. A simple format might include:

- Opening statements from each side (1-2 minutes per team)
- Rebuttals (1-2 minutes per team)
- Open discussion (moderated by the teacher, 5-10 minutes)
- Closing statements (1 minute per team)

Split the class into multiple teams, one for the proposition and one for the opposition. Each team should have an equal number of students. If the class is large, you can have multiple debates with smaller groups or assign roles such as researchers, speakers, and note-takers within each team.

Give students time to research their topic and prepare their arguments. During the debate, set up the classroom with teams facing each other. As the moderator, keep the debate on track by following the structured format you introduced. Ensure each student has an opportunity to participate and that the debate remains respectful.

After the debate, hold a reflection session. Ask students what they learned, how they felt about the experience, and what skills they improved. Discuss the importance of understanding multiple perspectives and how to use debate skills in other areas of their lives.

#4: Fishbowl

After a structured debate or playing the discussion game a few times, students began to get into discussions and own the conversation. Yes, they were prodded into answers and asking questions, but the goal of the first step is to get them talking (and have me talk way less).

It worked for our class and for many in our school. But, it was not the final goal. I'd rather not have the carrot (or stick) be the only reason students are talking, so we had to continue moving away from that reason, and also change up the format to one that is less scripted by the cards.

Fish Bowl Prep: Students are to have read, learned, or already delved into a specific text or content before the start of class. This, however, does not need to be homework. It could be learning that happened in a previous lesson or experience. The key is that the students are not learning something "new" during the Fish Bowl, they are instead going to learn from each other during the discussion and share their insights and questions (much like the discussion game).

Classroom Setup: Set up your classroom with two sets of circles. One big circle will be on the outside and then on the inside there will be a smaller circle of four-to-five chairs (depending on class size this could also be three or six chairs).

How it Works: When students come into class they will grab a seat. Don't worry where they sit as all students will eventually get into the middle of the circle (The Fish Bowl) for the discussion. The **inside circle** does the talking and discussing. They should be prepared but focus on having an active conversation using the techniques learned in the discussion game. The **outside circle** takes notes on the inner discussion. This could be scaffolded by the teacher to focus on specific areas of the conversation, or more wide open like taking notes during a lecture. Depends on your situation for how you want to prep students for the outside not taking.

Every five minutes you'll want to replace the inner circle with new students to discuss. They can pick up where the previous discussion left off, or start new.

Two keys to making this work. First, as a teacher, you must not prompt or get students talking. The goal is for them to have a productive struggle in the beginning and then get into a flow. Second, depending on your class you may want to pick the fishbowl groups ahead of time to get a good mix of students for the discussion. This, of course, is your preference as the teacher.

Finally, you can assess this conversation in a few ways, but I'd focus more on the active discussion part than what was said at first. Then as you do it more often and students become comfortable you can change a rubric to have different assessment pieces that reflect the content of the discussion.

#5: Finish My _

Divide students into small groups of 3-5. Grouping can be done randomly or based on ability levels, depending on your goals.

Clearly explain the rules and objectives to the students. There are three variations you can use:

A. Finishing Each Other's Sentences (Writing Activity)

- 1. **Starting the Story**: Give each group a piece of paper and a sentence starter. For example, "Once upon a time, in a land far away..."
- 2. Writing in Turns: The first student writes a sentence to continue the story, then passes the paper to the next student, who adds another sentence. This process continues until everyone in the group has contributed multiple times.
- 3. **Sharing the Stories**: Once the stories are complete, have each group read their story aloud to the class. Discuss the different directions each story took and what made them interesting or creative.

B. Finishing Each Other's Insights (Critical Thinking Activity)

- 1. **Starting with a Statement**: Provide each group with a thought-provoking statement or question. For example, "The best way to solve environmental problems is..."
- 2. **Adding Insights**: The first student writes their insight or answer, then passes the paper to the next student, who adds another point, elaborates on the previous one, or offers a different perspective.
- 3. **Group Discussion**: After everyone has contributed, the group discusses the combined insights. They can summarize their thoughts and share them with the class.

C. Finishing Each Other's Math Problems (Math Activity)

- 1. **Starting the Problems**: Give each group a worksheet with several multi-step math problems, with each problem's initial step completed.
- 2. **Solving in Steps**: The first student completes the next step of the problem, then passes the paper to the next student, who continues with the subsequent step. This continues until the problem is solved.

3. **Reviewing Solutions**: Once all problems are solved, groups can check their answers together. Discuss any discrepancies and the steps taken to arrive at the solutions.

After the activity, hold a class discussion to reflect on the experience:

- What did students learn from working together?
- How did they handle any disagreements or challenges?
- What strategies did they find most effective?

This no-tech activity promotes collaboration, critical thinking, and creativity among students—and is super-flexible in how you structure it, depending on your grade level and subject-area.

#6: Skit

This was one of my favorite ways as a teacher to get kids thinking, creating, and using their hands, bodies, and expressions.

Acting out a "skit" for something you are working on, reading, or trying to learn about helps in many ways.

Allow groups time to brainstorm ideas and plan their skits. Encourage them to think creatively about how to convey their understanding through dialogue, actions, and props. Provide guiding questions such as:

- What are the key points we need to cover?
- How can we make the skit engaging and informative?
- What roles will each group member play?

Have each group write a script for their skit and begin rehearsing. Encourage them to include:

- Introduction: Briefly introduce the topic or setting.
- **Body**: Develop the main content, showcasing their understanding through dialogue and actions.
- **Conclusion**: Summarize the key points or provide a resolution

Allow students to gather or create simple props and costumes that enhance their skits. Make it fun! Then set up a performance area in the classroom. Each group takes turns performing their skit in front of the class.

You can do this in multiple subject areas.

- **Science**: Demonstrating a scientific process or concept, such as the water cycle or photosynthesis.
- **History**: Acting out a famous historical event, or a key moment from various vantage points.
- Literature: Performing a scene from a novel or play, or creating an original skit that explores a theme from a book they've read.
- **Math**: Illustrating a mathematical concept, such as fractions, geometry, or solving word problems through a real-life scenario.

By acting out skits, students can engage deeply with the material, demonstrate their understanding in a dynamic way, and develop important skills in communication, collaboration, and creativity.

#7: Outdoor/Explore - Found Learning

Another simple practice. Get outside.

Explore how nature connects to your subject area.

Create poems with "found" poetry/words.

Do a class challenge.

The list goes on. All of the outdoor learning options are Al-resistant and great for the mind, body, and soul!

#8: Defend Your Learning

Let's say students are doing science or math homework. They have questions to answer and should explain or show their work.

Maybe it's a Lab Report or a few Word Problems. In either case, we typically would hand these to the teacher, who would grade the final product, turn it back to the students, and move on to the next assignment or activity.

This isn't just how my classroom works. It's how most classrooms work, and many curricula and scope/sequences are built on this premise.

Now that artificial intelligence tools exist to help students master these types of assignments in no time, it can become difficult for a teacher to really understand whether or not the students have a solid understanding, or if they are using AI tools to assist.

Here's where we can use "Defend Your Learning".

This is my favorite way to use this strategy. During the assignment or homework, students will use Loom (or any other screencasting tool) to record their work and explain/defend their steps, answers, and thinking.

The benefit of this strategy is that we get to see and hear what the students are thinking and their process.

It is also AI-Resistant because the explanation and defense are done by the actual students in their voice.

Better yet, when students share their defense with their peers they can get comments, emoji responses, and feedback right inside the Loom video that is sent to their email.

Teachers can comment as well, or respond with a video of their own as a follow-up!

#9: Hands-On Experiments

Another practice we should do even MORE of while living in a world of artificial intelligence is hands-on experiments.

These are often saved for Science classes, but let's make sure we are getting hands-on in all different subject areas.

You could learn fractions with pizza, geometry with string, or dive into programming with design sprints.

Create a poetry walk, use story dice, or start map-making.

The list is endless!

#10: Ask MagicSchool.ai (or any LLM) for suggestions

What if we used artificial intelligence to come up with AI-Resistant activities and assessments?

Yes! I do this all the time and you should as well. MagicSchool has a specific prompt that walks you through this process.

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🍖 Magic Too	ls		AI-Resistant Assignments
🍓 Raina (Cha	atbot)		Receive suggestions on making assignments more challenging for Al chatbots
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Want to see what AI came up with for suggestions?

See the below excerpt from my conversation with ChatGPT 40:

As artificial intelligence (A.I.) continues to evolve and integrate into various aspects of our lives, educators face new challenges and opportunities in the classroom. While A.I. tools can enhance learning, it's essential to develop teaching practices that remain resilient to over-reliance on technology. Here are ten A.I.-resistant practices to help maintain a balanced and effective learning environment:

1. Foster Critical Thinking

Encourage students to analyze, evaluate, and create rather than merely recalling information. Use open-ended questions, debates, and problem-solving activities that require deep thinking and reasoning beyond what A.I. can provide.

2. Promote Hands-On Learning

Incorporate experiential learning through lab experiments, art projects, and other hands-on activities. These experiences engage students in ways that A.I. cannot replicate, fostering creativity and practical skills.

3. Encourage Collaborative Learning

Facilitate group work and peer-to-peer interactions. Collaborative learning helps students develop interpersonal skills, empathy, and the ability to work in diverse teams—qualities that A.I. cannot emulate.

4. Develop Emotional Intelligence

Focus on activities that build emotional intelligence, such as group discussions, role-playing, and reflective writing. Emotional awareness and regulation are critical skills that A.I. struggles to understand and teach.

5. Integrate Real-World Problem Solving

Create projects that connect classroom learning to real-world issues. Encourage students to tackle community problems, environmental challenges, or global concerns, requiring them to apply their knowledge in practical, meaningful ways.

6. Emphasize Metacognition

Teach students to think about their thinking. Activities that promote self-reflection, goal setting, and self-assessment help students develop a deeper understanding of their learning processes, making them more independent and less reliant on A.I.

7. Use Socratic Seminars

Engage students in Socratic seminars where they discuss and question complex texts or ideas. This method promotes deep understanding and critical thinking, encouraging students to explore different perspectives and develop their viewpoints.

8. Encourage Creativity and Innovation

Design activities that foster creativity, such as brainstorming sessions, design thinking projects, and creative writing. Creativity involves unique human experiences and expressions that A.I. cannot replicate.

9. Focus on Process Over Product

Shift the emphasis from final products to the learning process. Highlighting the importance of drafts, revisions, and reflections helps students appreciate their growth and understand that learning is an ongoing journey.

10. Build Strong Teacher-Student Relationships

Develop meaningful relationships with your students. Personal connections and mentorship are irreplaceable aspects of teaching that A.I. cannot provide. Knowing your students well allows you to tailor your teaching to their individual needs and foster a supportive learning environment.

Conclusion

While A.I. offers valuable tools for education, these practices ensure that the human elements of teaching and learning remain central. By focusing on critical thinking, hands-on experiences, collaboration, emotional intelligence, and other human-centric skills, educators can create a classroom environment that leverages the strengths of both human and artificial intelligence.