R.E.A.L.® Discussion

Let's Talk About It:

The Future of Discussion Skills in an AI World

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We're in the midst of a revolution.

More specifically, the Fifth Industrial Revolution – characterized by the goal of "harmonious human-machine collaborations." Underpinned by rapid advances in artificial intelligence, the Fifth Industrial Revolution heralds a world in which the lines between human and machine are blurred and people freely draw upon technology's strengths to improve their lives.

Each industrial revolution has brought complex economic, political, and cultural changes, including to education: how it looks, how it's perceived, and where existing practices and even a broader sense of purpose are disrupted.

This Fifth Industrial Revolution is no different, and signs of change are on the horizon. Though still in their nascence, generative AI tools like ChatGPTpromise to upend education's status quo. Educators, parents, and even students greet the technology with a mix of interest and skepticism as they wonder just what will remain of school as they know it in an AI world.

Instead of battling AI, we're embracing its pros while remaining cognizant of its cons. We know that in a world where AI is everywhere, it's critical to ensure that humans are still able to communicate with one another, still able to connect to one another, and still able to flex the uniquely human muscles that AI does not – and never will – possess.

In an AI world, we believe that human conversation skills and the in-class discussions that develop them are more important than ever.

In this paper, we'll examine:

- **What AI can do** – and how it can help augment class discussions
- **What AI *can't* do** – and how an over-reliance on it can be detrimental
- The true (and new!) **purpose of class discussion** in this brave new world

What AI Can Do for Class Discussion

It's clear that AI will have a role in the future of school – and teachers are (perhaps surprisingly) receptive to that idea.

A 2023 Walton Family Foundation survey found that 61 percent of teachers see legitimate educational uses for ChatGPT. In our conversations with R.E.A.L.® faculty grappling with the impacts of ChatGPT on class discussion, we're hearing a similar sentiment. The teachers with whom we've spoken frequently describe themselves as "intrigued," "curious," and "optimistic" about AI, even as they retain some wariness about how AI can short-circuit the critical thinking and writing processes that are at the heart of great humanities classrooms.

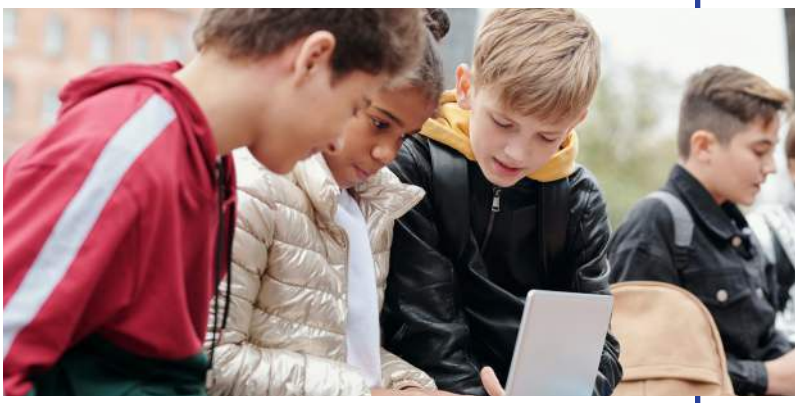
AI can help students prepare for class discussions: by gathering ideas, extracting excellent quotes, reinforcing details, and testing out ideas with a one-on-one conversation in the comfort of their own homes.

"The incredible promise of AI as a way for students all over the world, of all ability levels, to learn is undeniable," writes Wharton professor Ethan Mollick regarding the advent of ChatGPT in his popular substack *One Useful Thing*. **"Education is the most powerful system we have for increasing social mobility, unlocking potential, and improving lives. A tool that can help with this has tremendous implications."**

We know that individualized attention and a sense of mattering are critical first steps in building a school culture where all students thrive. AI-powered tools like ChatGPT can help level the proverbial playing field by serving as brainstorm buddy, coach, and more – and by offering one-on-one support at a scale impossible for individual teachers to match.

When it comes to discussion, students armed with AI can expedite discussion prep – especially when teachers pose simple, context-less questions that are easy for chatbots to understand and answer (eg: "GPT, give me three quotes about the theme of ambition on Macbeth").

Although the voice recognition technology isn't there yet, it's also not hard to imagine a world in which AI records and analyzes the class discussion itself: providing a feedback loop, assisting teachers with evidence-based grading, and positioning the class to reflect together – and with real data! – about the dynamics of the last discussion. Early tools like TeachFX (which records teacher vs. student voices and analyzes teacher speech patterns) and Class (which analyzes live discussions in virtual classrooms) have begun experimenting in this direction. In order to make the most of this kind of technology, however, teachers will need new training and tools: this level of specificity and analysis is far beyond how most teachers assess (Did you talk? How many times?) and debrief (How did discussion feel today, class?) discussion today.



What AI *Can't* Do for Class Discussion

Today's AI can parse quotes and analyze themes, and tomorrow's AI will provide discussion transcripts and analytics, but a bot can never replace the deeply human experience – and uniquely human skill – of great discussion.

"For all their impressive abilities, chatbots can also serve up harmful content or answers rife with inaccuracies, biases, and stereotypes," reports The New York Times. "They are also capable of saying things that sound convincing but are, in fact, completely made up." Indeed, Bloomberg reported that generative AI is more biased than its human counterparts. "An analysis of more than 5,000 images created with Stable Diffusion found that it takes racial and gender disparities to extremes – worse than those found in the real world."

AI – moreover, inherently biased AI – can't help students identify the nuances and idiosyncrasies that make real-life conversations meaningful. AI can help students prepare for class discussion by identifying facts: this series of events happened, and something else happened as a result. It can draw parallels between events in disparate texts. It can highlight textual evidence to support a theme.

But here's what it can't do:

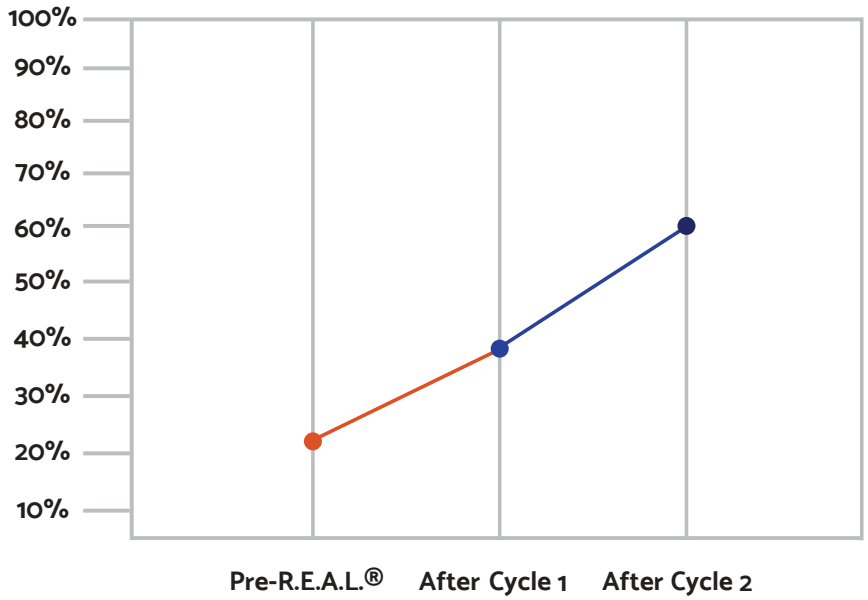
Make students care. Help students find personal meaning in the literature and history they study. Build intellectual and emotional relationships among students in a classroom. Help kids practice reading body language and space, so they can learn to disagree and debate with respect and care for each other. Let a child see when their comment lands the wrong way – and apologize for it. Feel the pride and joy that comes with a live and socially-recognized "lightbulb" moment. Experience the trepidation – and ultimately, the satisfaction – of asking a genuine question of peers that reveals vulnerability and leads to the feeling of being seen and supported. Learn how to truly listen to each other. Control your attention long enough to stay focused on a point – even one with which you disagree.

"I know that if I disagree on something, I can say what I believe in a respectful manner. And, even if I don't understand something, someone will always be there to help me, and no one will judge me."
-8th grade R.E.A.L. student

"I think that learning discussion skills helps me respect other people's opinions more in the 'real world.' Doing discussions helps me learn how to listen and respectfully agree/disagree with my peers."
-10th grade R.E.A.L. student

R.E.A.L.® helps students feel more comfortable disagreeing in discussion.

Over the course of six discussions, we saw a 37 point increase in the number of 9th grade students who report that it is not scary to disagree in a graded class situation.



High school math teacher Dan Meyer puts it eloquently in his Substack *Mathworlds*. He writes: **"Students attend school to answer two questions. 1. Who am I? 2. How do I do this? … I hope we both agree that AI chatbots are more useful for one of those questions than the other. I hope we both agree that students should not type 'Who am I?' into ChatGPT or Khanmigo. No good will come."**

He goes on to explain his view that fears of AI completely upending education are overblown, because, simply, "for most K-12 students, those two questions are the same question. They are not different questions. When I raise my hand with a question about 'How do I do this?' I am also asking the question, 'Who am I?' When my classmates or teacher or tutor listen to my ideas about math, when they tell me my ideas are valuable or smart or can be improved, I am learning not just about mathematics but about myself in relation to other people. Every minute students spend with a chatbot is a minute not getting an answer to one of the two questions they came to school to answer.

Whenever students learn 'how do I do this?' **with another person**, they are getting answers to both."

Tools like ChatGPT can answer students' "how" questions easily. They can answer many discussion questions teachers pose in advance of in-class conversations. They can identify who said what quote in which book. They can even, to a certain extent, identify why certain discussion questions are important.

But they simply cannot answer that pivotal, existential question. Only students themselves, in the company of peers and teachers, can do that.

The question for educators is: in a world dominated by AI, how can we use class time to experience what it means to be human together – and build uniquely human skills?

The Three Purposes of Class Discussion in an AI World

It's reasonable to ask: in a post-Fifth Industrial Revolution world, where machines and people work together in harmony, do we **need** class discussions? More broadly: do people need to learn how to communicate with one another? **Our answer: a resounding yes.** *Especially* in a world dominated by machines that serve individual needs, discussion skills are a critical force for social good. Students can – and must! – learn these skills, and recognize their power, in school.

The genesis of AI may have tweaked the rules of class discussion, but it hasn't changed the game itself. Class discussion becomes about more than checking whether students have done the reading. It becomes about teaching the art of live communication and ultimately preparing kids to connect with other humans within and beyond school. When AI is a given, class discussion becomes about communication skills, not content: it's about process and reflection, not checking a box. In an AI world, there are three clear purposes of class discussion.

Purpose #1: Class Discussion Can Teach Students Communication Skills and Intellectual Resilience

Teachers, researchers, and kids themselves have made it clear: for today's students, in-person conversation is difficult, stressful, and even frightening. In-person conversations require a certain release of control, thanks to the real, live people who share unexpected thoughts, tell unexpected jokes, make unexpected gaffes, and pull unexpected facial expressions. Preparing for and reacting appropriately to the many layers of in-person conversation, then, is challenging – much more challenging, of course, than conversing with a chatbot using prompts teens themselves choose.

Today's students know an important truth: AI will not wince, yell, cry, block, or cancel them based on what they say. Chatbots, thus, are perhaps a more comfortable conversation partner – but they don't do the hard work of preparing students for the intimacy and art of conversations that define real life.

Interestingly, though, there is value in doing the hard work of learning how to communicate in person **because** it is hard – and because the payoff of the challenge is not just a workplace skill but the emotional satisfaction of human connection. As educator Eric Hudson writes in his Substack *Learning on Purpose*, "If we look at Lev Vygotsky's Zone of Proximal Development or Mihaly Csikszentmihalyi's concept of Flow, students learn when they take on challenging tasks that are emotionally satisfying and involve the guidance of a skilled partner like a teacher, tutor, or peer. Designing learning experiences for challenge is different than simply making things hard."

Class discussion can be such an experience, thoughtfully designed to challenge students in a safe space, guided and prompted by a trained practitioner. The result, for students, can be overwhelmingly positive. Hudson explains: "Camille Farrington's research (among many other examples) shows belonging, relevance, and confidence in success all contribute to deeper learning because they are factors in 1) the student's trust in the teacher and in the value of the task and 2) their motivation to try something new or hard."

Trust is the operative word here. **Done well, class discussion is an exercise in trust-building:** students trust the teacher to assess them fairly, to intervene appropriately, and to provide feedback they need to grow. Students learn to trust each other to listen, to show up authentically, to ask questions, and to build something together that none of them could by themselves.

"In the beginning of the year, I was scared to talk and thought I would be wrong. Now I know that my peers won't judge me for what I say."
- 7th grade student

98% of students say they know how to respectfully disagree during discussion after only nine R.E.A.L.® Discussions.

Students are 5X more likely to feel heard by their classmates during discussion after nine R.E.A.L.® Discussions.

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Purpose #2: Class Discussion Shows Students The Power of Off-Screen Connection in a Screen-Bound World

Although experts debate exactly which social skills can be developed through a screen, it is clear that in-person, screen-free time is essential for wellbeing. Screen-free interactions build both the self-awareness and awareness of others that kids need to truly connect with each other.

There's simple biology at play here. As a 2013 Scientific American article reported: "[a]cross many studies of mammals, from the smallest rodents all the way to us humans, the data suggests that we suffer greatly when our social bonds are threatened or severed…We may not like the fact that we are wired such that our well-being depends on our connections with others, but the facts are the facts."

The human need to connect is, thus, not something people can choose to turn on or off. It's a fundamental, foundational part of our humanity. The Social Baseline Theory (SBT), first discussed by psychologists James Coan and David Sbarra, posits that the human brain treats social connection as a resource, which, like food, water, and shelter, promotes safety. To put it bluntly: humans need to connect – physically and emotionally – in order to survive.

Research reflects the connection between social connection and physical and mental well-being. As researchers Robert Waldinger and Marc Schulz write in their book *The Good Life: Lessons from the World's Longest Scientific Study of Happiness*:

"To say human beings require warm relationships is no touchy feely idea; it is a hard fact. Scientific studies have told us again and again: human beings need nutrition, we need exercise, we need purpose, and we need each other […] after eighty four years of study and hundreds of research papers there is one simple message: positive relationships are essential to human well-being" (29).

K-12 school is an excellent crucible for these very positive relationships. As technology becomes more omnipresent, these places and the adults who lead them become even more critical in helping children develop skills that aren't just helpful for their education and careers – they're essential for their future well-being.

"The skills that you need to live a healthy life right now I just think are very different than they were even 15 or 20 years ago," says NAIS President Debra Wilson on a summer 2023 episode of the New View EDU podcast. **"You look at the number of people who are in hybrid work things, or they're always teleworking. We know that human connection is actually really important for people. It's hard to do that if you're working at your computer on a desk in your house 8-12 hours a day. And frankly, it's not great for communities if we lose these connections with each other."**

School, then, increasingly needs to become the place that prepares children for real life – and to succeed and connect in real life, even as technology erects more and more barriers to connection. "Everyone is concerned that AI is the education armageddon," says Wilson. "I actually don't think it is. I think it allows teachers to double-down on the relationships piece and to really demonstrate the kind of outcomes that we're looking for in terms of people."

Peter Nilsson, former Head of School at King's Academy and current editor of The Educator's Notebook, foresees a similar shift in the role and purpose of in-class education. "Class time is for social and relational learning, for personal and collective meaning-making," he says. Let chatbots help, guide, and quiz students at home – school is now for something more important, more foundational, and – yes – more human.

To make class discussion a true exercise in social and relational learning, it needs to be interactive, collective, and personal.

It's not enough for students to sit on their computers, taking notes in a Google doc while their classmates speak. When this happens, it indicates that children think the overarching purpose of discussion is the content of the conversation, not the actual act of discussing. Rather, teachers need to emphasize the importance of uniquely human discussion skills – and they need to be endowed with the tools necessary to teach these discussion skills to their students.

"I think that I have learned to listen more to others. I learn more then. And everyone deserves to have their voice heard."
- 6th grade R.E.A.L. student

"I feel more comfortable stating my own opinion. I also realize that my classmates are actually interested in what I have to say."
- 9th grade R.E.A.L. student

The Three Purposes of Class Discussion in an AI World

Purpose #3: Class Discussion Cultivates Interdependence – and Ultimately Teaches Kids That They 'Matter'

Class discussion teaches kids the skills they need to connect, which is essential for their health and the health of their broader communities. Class discussion does something more personal, too: it teaches kids that they *matter*.

Interdependence – the experience of mattering to each other – is a prerequisite for healthy relationships. An over-emphasis on individual achievement – the only kind of achievement that can be gleaned from interacting solely with AI – can undermine relationships and create pressure to achieve alone.

In her book *Never Enough: When Achievement Culture Becomes Toxic and What We Can Do About It*, Jennifer Breheny Wallace connects the idea of interdependence to the psychological concept of mattering. She footnotes psychologists Morris Rosenberg and Adam Flett in studying the correlation behind *mattering* and high self-esteem in adolescents and articulates seven ingredients to feeling like you matter: **Attention** (feeling that you are noticed by others), **Importance** (feeling like you are significant), **Dependence** (feeling like you are important because others rely on you), **Ego Extension** (recognizing that others are emotionally invested in you and care what happen to you), **Noted absence** (feeling like you are missed if you aren't there), **Appreciation** (feeling like you and your actions were valued), **Individuation** (being made to feel unique, special, and known for your true self) (Wallace: 53-54).

AI cannot spark these seven components. Chatbots can do little more than *tell* students they matter – if, that is, they receive prompts that ask them to do so.

Beyond making students feel good – a valuable and valid goal in and of itself – the mattering mindset fosters success well beyond class discussion.

Matthew Barzun, former US Ambassador, Tech Entrepreneur, and Media Leader, argues in *The Power of Giving Away Power* that interdependence has been an unconventional and winning leadership strategy in politics, business, medicine, law, religious leadership, and community life for over a century. He argues that great leadership comes from giving away power – essentially, from showing others they matter and cultivating independence on any team you lead.

One framework Barzun surfaces comes from Mary Parker Follett, an early 20th century business guru who coached business leaders to adopt the following norms for every discussion (Barzun, 62):

- **Expect to need others: you are making something together that you couldn't do alone.**
- **Expect to be needed: you are there for a reason, so show up with your whole self.**
- **Expect to be changed: expect to leave the meeting not quite the same person as when you entered.**

Barzun makes a compelling case for how these principles unlock innovative business thinking. As educators, though, we see how clearly they reinforce the necessity of mattering, independence, and class discussion. Learning how to share and receive ideas in real life, in real-time, helps children understand their power and truth. That creates foundational confidence that lasts in school, in their careers, in their personal relationships, and in their communities.

Three Purposes of Discussion in an AI World:

- **Teaching Discussion Skills for School, Life, and Society**
- **Teaching the Art of Face-to-Face Interaction in a Screenbound World**
- **Teaching Interdependence in an Individualized Age**

The Skills Students Need to Succeed in an AI World are Teachable

With AI behind every screen and in every pocket, simply having class discussions is no longer enough. Now, educators need to think of class discussion as something greater than the sum of its parts: as an ongoing lesson in the value of challenges, as an exercise in developing interpersonal connections, and as a medium for showing kids that they truly matter. Meeting with students to discuss what happened in a text doesn't do these things effectively – and it doesn't present a necessary antidote to the skills that pervasive AI threatens.

Teachers need a new tool, a new framework, a new approach to discussion. At R.E.A.L.®, we're building that very system, which teaches teachers how to teach discussion skills. We're passionate about this work, because we know that students can learn the foundational life skills they need now more than ever through a program that supports and elevates their voices, teaches them how to listen, and challenges them to disagree respectfully. We know these skills are teachable, because we see teachers who've undergone R.E.A.L.® training teaching them in schools.

Discussion is a dying art in our tech-centric, polarized world, so it's time to get tactical about teaching it. Teaching kids how to have discussions must be a priority in schools today – their health and our future society depend on it.

"We know that real discussion is a deeply human experience and uniquely human skill," says R.E.A.L.® Discussion Founder Liza Garonzik. **"Even amidst AI, discussion will still be how the world works: it leads to complex decision-making in schools, government, business, medicine, law, domestic life – the list goes on. Talking and listening to each other is how we trust, love, question, and come to know each other. In aggregate, these skills define society, broadly – but they also matter for individual well-being, especially in adolescence."**

R.E.A.L.® Discussion

As Jim Moore, English Department Chair at Blair Academy, says:

"In a ChatGPT World, R.E.A.L.® has given us a framework to document and celebrate the deeply human processes of idea generation, oral engagement, and writing that builds directly on class discussion. This is, of course, where we have always wanted to be: at the opening of young minds."

That's where we want to be, too, and it's where we find ourselves. If you're interested in joining us on our mission to teach, measure, and celebrate the deeply human skills that go into great discussion, we'd love to chat.

Reach out today to learn more.

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