What Your Colleagues Are Saying . . .

"*AI in the Math Classroom, Grades 3–5* is a teacher-friendly, practical guide that shows how generative AI can streamline planning, differentiate instruction, and spark more engaging mathematics teaching and learning. Dr. Nicki Newton's warm, supportive voice makes the tool approachable, ethical, and immediately usable!"

John SanGiovanni
Instructional Facilitatory for Elementary Mathematics,
Howard County (MD) Public School System
Ellicott City, MD

"Finally, a resource that makes teachers' work easier! This book offers sample prompts to make AI your secret weapon to do everything from planning more rigorous lessons to outlining support for multilingual learners, increasing accessibility for neurodiverse learners, enhancing cultural relevance, and more. Even if tech is not your thing, this book is for you!"

Alison J. Mello
Author and Math Consultant
North Attleboro, MA

"Dr. Nicki has created an essential guide that provides educators with step-by-step actions for using AI to increase student engagement and learning in mathematics! She defines and demystifies AI, models effective prompt generation, and offers practical strategies for using AI to deepen our students' thinking while addressing the complexities and ethical considerations of AI. A truly valuable resource for today's mathematics educators!"

Janet Nuzzie
Intervention Specialist, K–12 Mathematics
Pasadena, TX

"*AI in the Math Classroom, Grades 3–5* is a timely and essential read. Education has been slow to adapt to change, often remaining disconnected from both research and the real world. With clarity and purpose, Dr. Nicki Newton bridges that gap, showing educators how to thoughtfully use AI to strengthen practice, save time, and stay current."

TJ Jemison
Education Consultant, TJ Math Consulting
Wilton Manors, FL

"Packed with mind-blowing examples, *AI in the Math Classroom* is a must-read for grades 3–5 math educators! Dr. Nicki Newton offers a practical and comprehensive guide to using AI as a thought partner for planning lessons, routines, and assessments that meet diverse student needs while saving educators hours of time. We are truly fortunate to have her leading the way in this AI revolution!"

Ann Elise Record
Math Consultant, Ann Elise Record Consulting LLC
Manchester, NH

AI in the Math Classroom

Grades 3–5

To Mom and Pops, Always

AI in the Math Classroom

Grades 3–5

25 Enhancements to Make the Tech Work for *You!*

Dr. Nicki Newton

CORWIN Mathematics

CORWIN

FOR INFORMATION:

Corwin
A Sage Company
2455 Teller Road
Thousand Oaks, California 91320
(800) 233-9936
www.corwin.com

Sage Publications Ltd.
3rd Floor, HYLO
103-105 Bunhill Row
London EC1Y 8LZ
United Kingdom

Sage Publications India Pvt. Ltd.
10th Floor, Emaar Capital Tower 2
MG Road, Sikanderpur
Sector 26, Gurugram
Haryana - 122002
India

Sage Publications Asia-Pacific Pte. Ltd.
18 Cross Street #10-10/11/12
China Square Central
Singapore 048423

Vice President, Content and Product: Monica Eckman
Associate Content Director, Mathematics: Erin Null
Senior Product Associate: Nyle De Leon
Production Editor: Tori Mirsadjadi
Copy Editor: Michelle Ponce
Typesetter: C&M Digitals (P) Ltd.
Proofreader: Lawrence Baker
Indexer: Integra
Cover Designer: Gail Buschman

Cover Image: iStock.com/AlanMazzocco, iStock.com/freeject design, iStock.com/Bogdan Populov, and iStock.com/Dreamframer

Printed in the United States of America

Paperback ISBN 979-8-3488-5470-6

Library of Congress Control Number: 2026009951

This book is printed on acid-free paper.

26 27 28 29 30 10 9 8 7 6 5 4 3 2 1

CONTENTS

Visit the companion website at
https://companion.corwin.com/courses/AIintheMathClassroom3-5
for downloadable resources.

Note From the Publisher: The author has provided video and web content throughout the book that is available to you through QR (quick response) codes. To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

Videos may also be accessed at
https://companion.corwin.com/courses/AIintheMathClassroom3-5

PREFACE

Source: istock.com/kali9

Welcome! (It's me, not a robot.)

Hi there! I know you. You're the upper elementary teacher who is juggling fractions, measurement, and decimals all at the same time—while on a unicycle in between bus drop-off, morning recess, and lunch duty. As someone who has been there, having spent more than a few Sunday nights googling "two-step word problems for adding three digits to two digits with regrouping," I wrote this book to help you do some of that juggling much more effectively. This is a book about artificial intelligence (AI) and how you can use it to make your teaching of mathematics—and your life—easier. It's not written by some Silicon Valley coder in a hoodie (ChatGPT 4.0). It's written by me, someone who loves living on the edge of new stuff that makes teaching and learning a better place for everyone to succeed. I am excited to introduce to some—and dive deeper with others—the cool new kid on the block: generative artificial intelligence (GenAI or AI for short). Generative AI can offer all kinds of ways to make your life more "easy, efficient, and

effective," words that my friend Alison says teachers need in their lives (Mello, personal communication January 3, 2025).

WHAT IS THIS BOOK ABOUT?

This book is about how generative AI can change your teaching life in ways that narrow AI already has. Its purpose is to offer practical strategies to teachers for using AI to enhance their math lesson planning with rigor and "student engagement without replacing critical thinking" (AI for Education, 2025). We live in a world that is surrounded by AI. From the time we wake up and tell Siri to turn on the lights, to the time we go to bed and tell Siri to be sure to set the alarm clock for 6:00 a.m. and 6:15 a.m. Much of our lives are ruled by narrow AI—robots that do specific things, just like Siri. But now that GenAI is on the scene, things are changing. GenAI does lots of different things. It can help you draft lesson plans, create games, scaffold word problems for learners with different levels of language proficiency, and craft substitute plans, all in under 30 seconds. It can make fully illustrated PowerPoints about your topic of choice in 5 seconds flat. It can even create and sing a song about any math topic! What? Yes!—Do you want the song to be rock, reggae, or rap?

AI is available to you every minute, 24 hours a day, and it never even needs coffee or chocolate *(and I'm usually very suspicious of people who don't need chocolate to run).* It can make your math teaching life so much easier. It can take on many projects at once, make suggestions about that math unit you're teaching that you never even imagined, differentiate a lesson for every student in your class—even the kid who speaks Nahuatl! It pushes us to think outside of the box. Actually, it pushes us to redesign the box or even get rid of the box! AI gives us a tool and the creative latitude to envision a different kind of math teaching and learning space for all of our students.

And that is what this book is about. This book shares how AI can take your teaching to the next level. It covers how—coupled with your skill and prowess as a teacher—you can use AI as an efficiency tool to differentiate lessons, personalize the curriculum, help with parent letters, help with discussions and descriptions of students' work, move away from "shallow assessments" (National Council of Teachers of Mathematics, 2024), and create engaging ways of knowing and being.

This book is *not* about how to use AI directly with kids in instruction. That is an entirely different topic and not at all what we'll be addressing in

this book. This book is about how AI can and should augment "educators' pedagogical expertise, content knowledge, and knowledge of students" (AI for Education, 2025).

WHO IS THIS BOOK FOR?

If you are an educator of upper elementary students (Grades 3–5), this book is for you. If you are a leader responsible for supporting the people who teach these students, this book is also for you. If you are a teacher educator preparing new educators to teach upper elementary students—this book is for you.

And I know, you may be thinking, "But I'm not a very techy person. What can AI really do for me? Do I even have *time* to learn the thing that people keep saying will save me all this time?" Yes. Yes, you do. And you must. If I know anything about the world of teaching children—teaching them multiple subjects, by the way—I know that the demands of your classroom are *beyond.* Not only do you have to think about your pedagogy, lesson plans, scaffolding, small groups, and how to assess your kids, you are also doing that while teaching your students how to become good, kind, caring human beings. The amount of effort you put into teaching students to ask questions, play nicely with others, take turns, persevere when something is hard, get along with others, love learning, and put the caps back onto glue sticks is enormous. AI can't do those things for you, but it can take other things off your plate so that you have time for the most critical part of your job—building relationships, gaining trust, and directing learning.

But hold on a minute! AI also brings up some big questions, like "Will AI make kids stop thinking for themselves?" "Is this *the* robot takeover?" "What about the *hallucinations*?" Okay, there is a lot to consider. It's true, AI is not yet perfect, and there are definitely many pitfalls that a savvy and conscientious user of AI needs to be aware of and responsive to. We'll get to all of that in this book so that you can be a *critical but productive consumer* of AI. But we can't avoid AI. It isn't coming. It's here. We are better off learning how to use it and to *use it well.* I truly believe we are entering the AI revolution. The game has changed. Lesson planning, grading, assessing, workstationing . . . (hehehe) . . . it's all changed. We *must learn* how to use AI, and we must learn to use it responsibly and ethically (*period*). We have a duty to help our students be prepared to thrive in this new AI-infused world, which requires very

different foundational skills and knowledge. Using AI isn't about replacing us (whew!), it's about augmenting what we do and how we do it. It's about empowering us—and our kids—to work *with* the tech in smart, safe, and seriously cool ways that serve us all.

WHAT WILL THIS BOOK DO FOR YOU?

This book is your guide to navigating the ins and outs of AI as it pertains to teaching math in ways that help you work smarter, not harder. It will break down how AI works, why it matters, what it can do for your math instruction, and how to use it smartly and safely. It will teach you how to carefully consider and craft what you put *into* AI or ask it to do, so that *what you get back* is the very thing you need (hint, this is called prompt engineering, and it's the key to everything). This book will give you game-changing, practical, and actionable ideas, activities, and skills that you can try and refine instantly! It will help dispel the fear you might have, increase your comfort and confidence with AI, and give you opportunities to practice safely. No tech degree required—just curiosity and a comfy seat.

WHY I WROTE THIS BOOK

I wrote this book, because the more I used AI the more deeply I realized that the world has shifted. I've been teaching almost 40 years, I started in 1988, and I am now officially a Jetson. I can sit down at a computer, talk to it, ask it to do stuff, and within seconds it is done. When I started teaching, we would roam libraries and educational books stores for brilliant ideas. We would expand on them and make them even better.

Now, beyond the Internet, we have AI. I can't even explain how I felt the first time I realized I could type in a question and it would give me a differentiated, culturally relevant word problem contextualized in the neighborhood where my students live, a measurement escape room designed for fourth graders, *and* a printable poster of 3D shapes—all before my chai got cold.

In this book, I want to explore practical strategies for using AI to teach better, to teach more creatively, to teach more productively, and to teach now, preparing students for an AI-infused world. I want to keep exploring how we do that, all the while building students' cognitive capacity to engage in an ever-changing world. The last thing I want is to give them something that stops them or slows down their thinking. I need them to

think and work with tools that enhance and augment their intelligence. We know that everything is changing faster than we can finish a sentence, so I offer this book as a collection of insights, a conversation starter, and a way to support educators wrestling with how to use GenAI to do better for *all* of our students. It offers ideas and strategies to use AI to improve our approaches to content and pedagogy in an ever-changing world (AI for Education, 2025).

MY PERSONAL AI JOURNEY

I have been playing around with AI for about a year—experimenting and iterating everything, almost every day, literally. I started by just asking general questions and quickly began to realize that this could change my entire teaching world. Then, I started asking for help with math lessons. I started looking at how it could help create assessments and really bump up the level of analysis and interpretation. Next, I began experimenting with what it could do with coaching and giving feedback. I loved it! And I realized very quickly that it made big mistakes and that you get what you ask for—*most of the time*. I discovered how subtle changes in phrasing, context-setting, and step-by-step guidance can dramatically change the output. Great input equals usually great output. This book represents my excitement, joy, and current findings. It emerges from genuine problem-solving sessions, complete with the inevitable failures and breakthroughs that led to the approaches presented here. I present to you battle-tested methods rather than untested theories and *what-ifs*.

I think we can do better in teaching and learning. I truly believe that AI changes the game. It is not going away. We have to learn how to use this. So, I dove in deep. I read books, I listened to podcasts, and I read blogs and articles. I also have an AI thought partner, one of my best friends, who I talk with about AI and share new insights often—me from an education perspective and he from a law perspective. I learned. I keep learning. It keeps getting bigger and better every day. I welcome the journey. I am so excited to begin a new leg of it with you!

I didn't write this book because I think teachers need *more* to learn. I didn't write it because I think we just need to get on another bandwagon. Goodness knows we are already full to the brim with must dos, acronyms, and sticky notes. I wrote this because I wanted to share something that felt . . . magical. And not in the "here's a shiny new program that you must

learn how to do right away!"—but in the "I just became an actual Jetson, saved 100 minutes, and didn't lose my mind" kind of way.

You deserve to feel that way, too, and I want you to feel like you're having a good conversation with an old friend. So, put on your comfy clothes, get your favorite beverage, and sit back and get ready to laugh, have fun, and learn lots of cool stuff. Are you ready? Then, let's go!

ACKNOWLEDGMENTS

I thank God, my family, and my friends. I thank my team, especially Gloria and Kiyana. I thank my editor and publisher, Erin Null, for believing in this project from the minute she heard about it and supporting me throughout the work. I thank the Corwin staff for helping to make the book come alive. I thank all of the educators and students that I get to work with every day in this place called school.

ABOUT THE AUTHOR

Dr. Nicki Newton is an education consultant who works with schools and districts around the country and Canada on Grades PreK–8 math curriculum. She has taught elementary school, middle school, and graduate school. Dr. Nicki has a master's of Education and a doctorate of Education from the Department of Curriculum and Teaching at Teachers College, Columbia University specializing in Teacher Education and Curriculum Development. She is greatly interested in teaching and learning practices around the world and has researched education in Denmark, Guatemala, and India. She has written over 45 math books and is excited to be part of the team of writers for the McGraw-Hill new series, *Reveal Math*. Her latest books include *Accelerating K–8 Math Instruction* (Teachers College Press, 2023), *A Teacher's Guide to Math Workshop* (Newton, Mello, & Nuzzie; Heinemann, 2023), *High Dosage Tutoring in Math & ELA* (Newton & Ruyter w/Jemison; Routledge, in press), and *Math Workshop Plus* (Newton & Mello; Corwin, 2025). She is an avid pinner, TikToker, blogger, and tweeter. Dr. Nicki will zoom into any book study group to chat: email her at drnicki7@gmail.com.

Learn more about bringing Dr. Nicki Newton to your school or district at www.drnickinewton.com

Source: istock.com/Ridofranz

CHAPTER 1

AI 101

Not Just for Sci-Fi Anymore

Okay, deep breath. Artificial intelligence (AI)—here we are. Everybody has an opinion. And half of those people have never even used it! AI has been similarly received by the public as any other new technology throughout history—from the book, to the pencil, to the radio, to the overhead projector, to video tapes, to the photocopier, to the Internet, and so on (An, 2021; Blubaugh, 1999; Purdue, 2024). And now, we are having the same discussions about *the robot takeover.* But this is *not* that! This is like one of the very best things that has ever happened in teaching. Ok, let me curb my enthusiasm. It can be. A lot of things can go wrong, and there are a million and one potential pitfalls, but the possibilities are endless for this upending what we can do to reach all learners.

See, AI is this robot that has literally been trained on everything out there—including reading educational blogs, journals, books, and other documents (in the trillions) nonstop for years. It responds based on your questions (aka "prompts"). It will talk to you, expand your ideas, ask if you need more, and make tons of cool suggestions.

Now, is it perfect? Absolutely not. AI definitely has its "what is *this?*" moments. For example, sometimes it hallucinates, meaning it gives wrong information. And sometimes it overgeneralizes and over summarizes information because it doesn't yet know how to prioritize what to focus on or discern what is most important. But it can be guided. You can prompt it. You can say, "Try again, make the picture without the words" (it still struggles with pictures and words . . . often outputting gibberish). But no one is perfect, and it keeps getting better every day. Some people just keep giving gibberish! Remember, we will explore AI's pitfalls and red flags throughout the book. But if you're still thinking, *"Wait—what exactly is AI? I don't trust it. It does the work for the kids, and they don't have to think!"* you're not alone.

Let's unpack it.

CHAPTER OVERVIEW

In this chapter, we will

- Clarify what AI is and what it is not
- Offer some basic examples of what AI can do for you in terms of planning your mathematics lessons
- Share some of AI's pitfalls and words to the wise to help you avoid missteps
- Bust some of the peskier myths about AI

Let's unpack it!

WHAT AI *IS* . . . AND WHAT IT DEFINITELY *ISN'T*

AI stands for *artificial intelligence*. At the broadest level, AI refers to computer systems that can perform complex tasks normally done by human-reasoning, decision-making, creating, and so on. It performs tasks under varying and unpredictable circumstances without significant human

oversight and can learn from experience and improve performance when exposed to new data (National Aeronautics and Space Administration, 2024). AI is good at finding patterns quickly because it can process vast amounts of information rapidly and efficiently.

In other words, AI has been trained on *a lot* of information, which it then can organize and scan all at once, allowing it to craft answers to whatever you ask it. AI is like a digital version of *that* teacher—you know, the one who has a file for absolutely everything and each is laminated. *When did she even have the time to do that?*

Here's what AI *is* from a teacher's point of view:

- A super helpful assistant who can give you ideas about math intervention groups, write weekly math newsletters, make an anchor chart for your guided math group with learning goals *and* success criteria, and whip up a set of scaffolded subitizing multiplication flashcards
- Someone (okay, something) who's available 24/7 and never steals your favorite pens
- Great at saying, "Here you go . . ." and then always makes more suggestions and asks, "Do you want something more?" "Would you like. . . . ?" to which I usually say *yeeeesss*.
- This is the thing—AI does have limitations. It is only as good as what it has been trained on, *and* it's only as good as the clarity and specificity you use when you ask it questions. You have to tell it *exactly* what you need, and then it can figure out the rest and add bells and whistles and lots of glitter.

Here's what AI *is not*:

- It's not here to replace you (because you are irreplaceable).
- It isn't human and cannot possibly know your students the way you do.
- It's not going to stop Table 4 from talking nonstop.

But could it help you write a *standards-based, differentiated, culturally and linguistically relevant* math lesson on fractions with word problems and three different scaffolded reading levels in, like, 10 seconds?

Yes. And that's the kind of help I am *very* here for.

You may be asking, "Wait—is this the same thing that keeps showing me dog videos?"

It's a good question. And the answer is *sort of.*

AI already likely shows up in your life in many ways, such as the following:

- When you are on Amazon.com, and the website knows you *definitely* want to buy more purple pens
- When Siri turns on your lights when you go home
- And yes, the fact that TikTok automatically shows you all the new third-grade teacher videos when you go on

These scenarios describe what is called predictive AI. "Predictive AI involves using statistical analysis and machine learning to identify patterns, anticipate behaviors and forecast upcoming events" (Mucci, n.d.). The algorithm that dictates the next YouTube video to come up in your queue is a good example of predictive AI.

For us teachers, the real MVP right now is generative AI (*let's call it GenAI because we're cool like that).* GenAI is the current wonderkid of the tech world. It doesn't just copy and paste content from the Internet. It actually creates brand new things. GenAI "can produce original text, images, video, audio, or software code in response to a user's prompt or request" (Stryker & Scapicchio, 2024). It uses advanced machine learning models, known as deep learning algorithms, to mimic human cognition. These models analyze vast datasets to recognize patterns and relationships, enabling them to understand and respond to natural language requests with relevant content (Stryker & Scapicchio, 2024).

This means GenAI can create stories, songs, pictures, and lesson plans and even code things like websites and apps. How does it do this? It's been trained on *a lot* of examples and has become really good at spotting patterns. So, when you ask it to write a silly poem about polygons or design ten frame flashcards, it uses the entirety of the diet it has been fed to *whip up* something fresh. In other words, generative AI is a tool that can *generate* content for you, like poems, songs, guided math lessons, emails, and

newsletters (bless it). There are now many different GenAI interfaces you can choose from, including Microsoft CoPilot, DALL-E 3, Claude, Midjourney, and Runway ML. You have surely heard of the most well-known one. That would be ChatGPT.

Potential Pitfalls and Words to the Wise

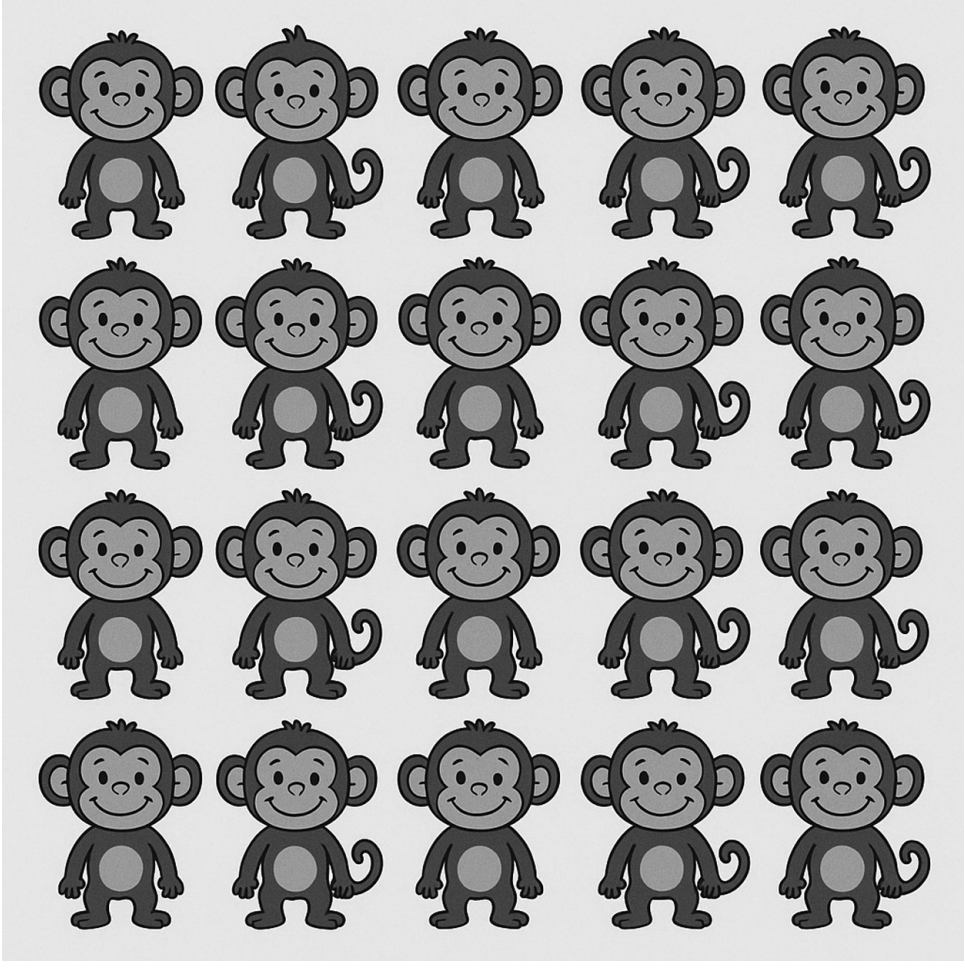
Copyright Violation and Protection

It is important to note that GenAI doesn't come without concerns, one of which has to do with copyright infringement of the content that goes into training GenAI platforms. There have been many lawsuits brought forth from authors, artists, performers, news media, and others claiming that their original work was used to train large language models (LLMs) without permission. It is important to exercise care in anything you create, as it may contain material that is copyrighted. It's also important to know that—at least in the United States—you can't copyright or claim as your own anything that is created with AI. This of course comes with certain personal and ethical considerations.

WHAT IS CHATGPT?

ChatGPT is a generative AI chatbot developed by the American company OpenAI. It uses what is known as an LLM to mimic human interaction that helps users guide the conversation using prompts to get information and get to a desired length, format, style, and level of detailed language (Roumeliotis & Tselikas, 2023). Because it was initially offered to the public for free use, it was the first to become widely popular and is credited with creating the AI boom that started in late 2022. ChatGPT is basically the teacher buddy who always says, *"I've got a resource for that!"* but unlike a simple search engine that gives you a list of possibly matching resources, it actually will comb through all the information it holds to put together patterns and create a response—or even content—for you, in response to whatever you ask of it. And because it is predictive, it will ask for elaboration, such as whether you want the content in a PDF or a Word document, and in what color, and with clipart? For example, I can ask it for a 4 by 5 array of monkeys and get it in a second (Figure 1.1).

Figure 1.1 • *Monkey Array*



Source: Created with ChatGPT

It doesn't always get it perfect, but it gives you a solid starting point. Chapter 2 will give you examples of what AI can generate based on your prompts and how to refine what you ask it for the best outcomes.

Under the hood, AI is not actually *thinking*—it's more like playing a super advanced guessing game. It looks at all the stuff it's "read" (aka, been trained on) and says, "Hmm . . . based on everything I've seen, what *should* come next?" It's not magic, but honestly, it *feels* like it when you're tired and it's 11:30 p.m. on Sunday night, and you still haven't done the newsletter for the week. And you turn it on, and it whips up a parent letter on fractions in

fourth grade with pictures and ideas to practice at home in 2 seconds flat. It's not perfect, and it doesn't know your class like you do, but it's one heck of a sidekick when you're in survival mode.

If you're interested in some additional context, this QR code will take you on a deep dive with me on understanding AI's history.

Audio Clip 1.1: A Deeper Dive Into AI's History

https://qrs.ly/emh50du

To read a QR code, you must have a smartphone or tablet with a camera. We recommend that you download a QR code reader app that is made specifically for your phone or tablet brand.

IS IT ALL FUN AND GAMES? SOME SOBERING SECOND THOUGHTS

It is important to note that while generative AI can be really cool and useful, it comes with some real limitations and valid concerns that savvy users need to be aware of. First, it sometimes "hallucinates," meaning it can often give misinformation to varying degrees. Sometimes it's just slightly off, and in some cases, it is totally fabricated information. Second, AI can only produce from what it was fed. It is trained by humans on information that inherently includes human bias, so it is notorious for mirroring back that same bias and promoting stereotypes found within human society (Greene-Santos, 2024).

Third, as previously mentioned, it raises many questions about copyright, originality, and attribution, and there are many ethical concerns about AI's misuse (Appel et al., 2023). Fourth, depending on how you use AI in your school, you have to understand the concerns around students' privacy, how students' data are identified and used, and how it aligns to state and federal privacy laws (Soares, 2024). Finally, there are also a lot of concerns about the environmental impact, particularly around massively increased electricity demand, carbon dioxide emissions, and water consumption; the building of large data centers in locations that exacerbate issues of social injustice; and the toxic mining and processing of raw materials to make the supercomputers that power AI (Zewe, 2025).

You can find more information and detail about the pitfalls of AI at the following QR code.

Audio Clip 1.2: Pros and Cons of AI for Teachers

https://qrs.ly/iuh50dv

AI MYTHS BUSTIN' TIME

With the explosion of AI into the mainstream and all the hype that has followed, there are a lot of myths around AI as well, so let's take a second to tackle those.

- **"AI is going to replace teachers!"** Nope. Can AI rock a math read-aloud? Put together the spring play, where everybody is a different insect? Understand when a kid needs a hug more than a math problem? That would be a big no.
- **"AI knows everything."** Also no. It sounds confident, but it can be very wrong. As mentioned, it even makes up information, kind of like Mario, who insists that he has a pet spider with twelve legs.
- **"AI is going to make kids lazy."** AI is going to do exactly what you let it do. As educators, we have to design assignments where AI can enhance the thinking that is being done, not do the actual thinking.
- **"It's cheating."** When we are talking about students' use of AI, there are definitely concerns to be aware of. But here we are talking about your use of it as a teacher. It is a tool, not a replacement for what you do. Would we say using a copier rather than using a mimeograph machine and getting purple ink all over your hands is cheating? Nope. This is the same.

END-OF-CHAPTER PEP TALK

Ultimately, if used correctly, GenAI has the "power to enhance, not replace, the cognitive lift and meaningful learning" that can take place in the 3–5 math classroom (AI for Education, 2025). When used well, AI changes the very nature of your teaching! It's your 24/7 assistant who always has a fun

idea, a quick just-right resource, a new way to think about something, or ready-to-go activities that are personalized and differentiated instantly. Your assistant has trained on *all* the books, websites, articles, newsletters, anchor charts, and more and can draw on all of that to help you. Remember, it can't read your mind. You have to tell it exactly what you want, and you'll get gold. Say, "Give me an escape room that focuses on measurement for fourth grade," and AI delivers. But if you just type "escape room math," it might hand you something meant for a high school algebra class—or, worse, something involving glitter with no clear learning goal. If you write it clearly, it will make a division anchor chart, write a math story, and draft next week's parent newsletter. Boom, you get it in 3 seconds, no chocolate required!

Key Takeaways

- **AI is a tool, not a takeover.** It won't replace us—it'll support us in ways that save time and reduce the workload.
- **3–5 is a great place to start.** We teach digital natives who can roll with the flow and try out new ideas.
- **You don't need to be a tech wizard.** It's easy to get started. Just sit down and ask it to do something for your current unit of study.
- **This book is your roadmap.** You'll find practical and actionable ways to get started. We are easing into the idea of using AI.
- **You're still *the* magic.** AI can assist, but *you're still the one* who makes the magic happen. No bot can replace that.

ACTION PLANNING QUESTIONS

Individual Focus

1. What is your current comfort level with AI—curious, cautious, or comfortable?

(Continued)

(Continued)

2. What is one teaching task you wish someone else could do for you? (Hint: AI probably can!)

3. What excites (or worries) you about starting to use AI tools in a 3–5 setting?

4. What would it mean for your teaching (and your *life*) if AI helped you save just 30 minutes a day?

Professional Learning Community (PLC) Discussion

1. In what ways do you already use technology with your students throughout the grade? How would you like to improve it?

2. How will your PLC help to get the conversation started and support each other in exploring AI-enhanced math at your grade level?

Actionable Next Steps

1. **Start Small:** What's one thing you can do to get started with AI this week? Go ahead—write your prompt, and test it out!
2. **Build Your Toolkit:** In your PLC AI toolkit, have everyone share what they did to get started.
3. **Document Success:** Talk about what you explored, how you felt, and what you might do next. Maybe even take a screenshot of your first explorations and document them in a digital scrapbook.
4. **Stay Curious:** Think about what you want AI to do for you and for the grade. Go on a scavenger hunt in your PLC.