



AI FOR BETTER BASICS

How busy teachers
can use AI to benefit
every learner in their
classroom.



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INTRODUCTION: THE BIGGEST MISCONCEPTION ABOUT AI

There is a tragic misconception that prevents many teachers and their classes from benefiting from Artificial Intelligence.

The misconception is this: they believe they must use new technologies to do new things.

They may attend a conference and hear of a tech-savvy teacher who uses AI to simulate a real-time conversation with Plato or Shakespeare. They may hear of teachers using AI to create elaborate escape rooms for their students or construct a text-based role-playing game where the students have to start the Renaissance.

While all of those learning experiences sound fantastic, that's not my vision for AI in education—at least, it's not a big part of it.

My vision for AI in education isn't pushing pedagogical boundaries but doing the basics better.

I've had the privilege of spreading this vision among thousands of educators over the last year: AI for better basics.

We need to clear up the misconception that new technology requires new practices. In reality, we can use new technology to perform the same evidence-based, highly valuable tasks that we know benefit our students.

I'm talking about things like:

- Differentiating text
- Retrieval practice
- Getting feedback

Is there evidence for getting your class to talk with AI Plato? Maybe. There are, however, a list of studies as long as my arm showing the educational benefits of adjusting texts so students can actually decode them.

Over the course of this eBook, I'll show you how to use AI to do the basics of education to a standard and volume that was previously impossible.

By the end, you'll have all the tools you need to use AI to benefit every learner in your classroom.

I've split the book into two parts. Firstly, we'll go over the basic principles of AI use. Secondly, we'll look at the basic practices: differentiating text, retrieval practice, and creating rubrics.

Don't be put off by the word 'basic'.

The word itself comes from the word 'base', meaning starting point or foundation.

The basics are nothing to be ashamed of; in fact, they are exactly what our students need.

Let me show you how to use AI for better basics.

A handwritten signature in black ink, appearing to read 'Paul Matthews', with a long, sweeping flourish extending to the right.

Paul Matthews



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**C O N C L U S I O N
W H E R E T O F R O M H E R E ?**

PART ONE:

BASIS PRINCIPLES

BASIC PRINCIPLES: HOW TO PROMPT

Imagine I approached you and said, “Please write me comprehension questions for *The Adventures of Huckleberry Finn*”

You’d probably look at me quizzically and ask a few questions:

- Who is my audience?
- How many questions do you want?
- Which part of the book do you want the questions about?
- Do you want short-answer, multiple-choice, fill-in-the-blank, or all the above?

What you’re seeking is context.

As it turns out, there are about a thousand different ways to write comprehension questions for a text. Knowing the context means we can produce something that is relevant and ready to use.

In the same way, when we prompt an AI, we need to give it context.

I've often said AI is a great tool, but it's a terrible 'guess-what's-in-my-head' machine. We have to clearly explain what we need.

The best way to do this is by using a formula or format for your prompts. This ensures you give all the information necessary to get output that is useful and at least directionally correct.

My two favourite prompt formulas are the RTF method and the CARE method. I have unpacked each of these methods over the following pages.

Remember, prompting the AI well is the key to getting useful and directionally correct.

The RTF Method

Role – Tell the AI the role it is adopting.

Task - Tell it what to do.

Format – Tell it how you want the information.

This is how I would structure a prompt if I wanted AI to write comprehension questions for me:

(ROLE) - Act as an expert year 8 English teacher.

(TASK) Give me a list of comprehension questions based on chapter 1 of The Adventures of Huckleberry Finn **(FORMAT)** Include 4 multiple choice questions, 4 short answer questions, and 4 extended response questions.

I use the RPF method 90% of the time. It's simple, quick, and yields great results. If you're just starting out with AI, this is a great place to begin.

The CARE method

Context – Give the AI the context of your request.

Action – Describe what you want it to do.

Result – Clarify the result you would like from the AI.

Example – Give an example of what you’re looking for.

This is how I would structure the prompt if I was getting AI to write the comprehension questions for me.

(CONTEXT) You are a year 8 English teacher. **(ACTION)** Create a list of 10 comprehension questions based on the first chapter of The Adventures of Huckleberry Finn. **(RESULT)** Create four multiple-choice questions and six short-answer questions. **(EXAMPLE)** An example of a multiple choice question is “How much money did Tom and the narrator get each from their find? A) Six thousand dollars B) A thousand dollars C) Six hundred dollars D) Sixty thousand dollars Answer: A) Six thousand dollars” and an example of a short answer question is “According to the narrator, why did Miss Watson get mad at him?”

As you can see, this is a much longer prompt than the RTF style, but you may find that the extra effort of providing an example saves you time in the long run.

BASIC PRINCIPLES: GIVE AI TASKS, NOT JOBS

During a recent workshop, I had teachers try and create a test for their students using AI.

It was Josh's first time using AI, and he asked it to create an end-of-unit test on Newton's laws of motion.

Not being a science teacher myself, I wasn't sure what to make of the output, but it was clear that Josh wasn't impressed. Not only wasn't the output great but fixing it seemed more hassle than just writing it from scratch.

That's when I told Josh about the difference between jobs and tasks.

Every job is made up of several tasks. AI isn't great at jobs, but it's fantastic at tasks.

On our next try, we divided the year 10 science test into three parts: multiple-choice, short answer, and extended response.

With a few iterations, Josh had 10 multiple-choice questions he was happy with. Then, he moved on to the short answer questions. He asked for 10 short-answer questions and chose the best four (more on this later), then did the same for the extended response.

AI works best when you give it tasks, not jobs.

Your best chance of having a resource that works for you and your learners comes when you take the AI through the job one task at a time.

Let me give you two examples of jobs we can break down into tasks.

Job: Create a lesson.

Tasks:

- Introduction with an engaging hook.
- Key points for direct instruction.

- Key activity, skill, or exercise to be undertaken.
- An I do/we do/you do example of the exercise above.
- A rubric for self or peer assessment of the exercise.
- An exit ticket.

Job: Create an end-of-unit test.

Tasks:

- Create multiple-choice questions.
- Create short answer questions.
- Create extended response questions.
- Create case study questions.
- Create a cheat sheet with key information for the above questions.

If I were creating a lesson plan or an end-of-unit test with AI, I would simply go through the list of tasks one at a time.

This is one of the best ways to set yourself up for success with AI.

BASIC PRINCIPLES: GIVE YOURSELF OPTIONS

This is one of the most underappreciated tips for using AI, and it involves the mental model you use to think about AI.

Think of AI as an advisor.

This means instead of asking for an answer, you ask for options.

If I was looking for a key idea or story to launch my lesson with, I wouldn't ask for one; I'd ask for eight. Then, using my professional knowledge and discernment, I'd choose the best one.

Again, if I wanted four multiple-choice questions, I wouldn't ask for four; I'd ask for eight and choose the best four.

The philosophy that underlies this practice is simple: you're the expert. You're the professional.

When it comes to creating resources for your class, there are a raft of things you have that AI tools don't:

- Intuition
- Discretion
- Experience
- Pastoral instincts
- Content knowledge

I've had some educators push back and say AI has far more content knowledge than they do. They're right to a point.

The AI may know more about WWII than I do, but I know what I taught my class over the last week. I know the emphases we drew out and the stories we told.

The materials you create aren't generic resources for generic students. They are tailored resources for your students. As such, make sure you use AI for options, not answers.

Artificial Intelligence always works best when combined with your organic intelligence!

PART TWO:

BASIC PRACTICES

BASIC PRACTICES: DIFFERENTIATING TEXT

If I had written this eBook in Greek, it wouldn't matter how logical or well-presented it was; you would have no idea what I was writing.

We all know of students who are reading so far below grade-level that an unadjusted reading may as well be written in Greek.

While we have always known that text differentiation is important, the time penalty is often prohibitive.

It just takes too long.

Spending 30 minutes differentiating a text that students will spend 10 minutes reading is a low-value proposition for time-poor teachers.

Now, with AI, there has never been an easier time to make sure students can access their readings.

Let me give you an example of how I would structure a prompt for text differentiation using the CARE format.

*Example prompt: (**CONTEXT**) Act as a (year/subject) teacher. (**ACTION**) Simplify the language in the text I have pasted below in triple colons*. Consider the following options: Use simple words in place of complex words, shorten sentence length, and replace idioms with clear and literal language. Do not introduce any new content, and do not omit any key ideas. Keep your output a similar length to the original text. (**RESULT**) Produce the adjusted text in paragraphs that cover the same content as the paragraphs in the original text. (**EXAMPLE**) An example of a well differentiated sentence is changing “When students are given the opportunity to choose their own texts they are more likely to be motivated and engaged in their reading.” To “When students pick their own books, they’re more interested in reading”*

::: [insert text to be adjusted]:::

Note that although the context you give the AI will impact the reading level produced, you'll find that you'll do a lot of heavy lifting with iteration.

This is where you will go back and forward with the AI and tweak the output. You may say things like:

- Create an even simpler version.
- This was too simple, make it slightly more complex.
- Ensure that you keep the same number of paragraphs as the original.
- Please include two dot points after every paragraph summarising the key points of the paragraph.

Spending two minutes differentiating texts before a lesson will benefit your learners more than you know.

Lastly, feel free to teach your students how to differentiate texts with AI. This will put them in the driver's seat in their reading, and allow them to adjust the reading level of texts that they come across in their own time.

BASIC PRACTICES: RETRIEVAL PRACTICE

Retrieval practice is simply testing knowledge and understanding after learning has taken place.

Teachers and students who employ retrieval practice as a learning technique have demonstrated enhanced long-term retention and the ability to apply knowledge to novel scenarios*.

For many teachers, retrieval practice falls into the same basket as text differentiation. The benefits are well understood, but the time to create the resource simply isn't there.

Now, with AI, a fit-for-purpose low-stakes test can be created in less than a minute.

*Agarwal, P. K., Bain, P. M., & Chamberlain, R. W. (2012). The value of applied research: Retrieval practice improves classroom learning and recommendations from a teacher, a principal, and a scientist. *Educational Psychology Review*, 24, 437-448.

Let me give you an example of how I would structure a prompt for retrieval practice test creation using the CARE format.

*(**CONTEXT**) Act as a (year/subject) teacher. (**ACTION**) Create a test for students based on the material in triple colons. Include 10 multiple choice questions, five short answer questions, and four essay questions. (**RESULT**) Produce the text with clear subheadings, grouping the multiple choice questions together, the short answer questions together, and the essay questions together. (**EXAMPLE**) An example of a multiple choice question is “How much money did Tom and the narrator get each from their find? A) Six thousand dollars B) A thousand dollars C) Six hundred dollars D) Sixty thousand dollars Answer: A) Six thousand dollars” and an example of a short answer question is “According to the narrator, why did Miss Watson get mad at him?” An example of an essay question is “Reflect on Huck's struggles with right and wrong in the first chapter. How do his actions and thoughts challenge traditional notions of morality, considering both societal norms and his own sense of autonomy?”*

In the principles section of this book, I told you to give yourself options. Quiz creation is a great place to put that principle into practice.

If you need four multiple-choice-questions, ask for eight. If you want one essay question, ask for five.

Remember, AI is here to give you options, not answers. You're the professional; you know your school, students, and content.

Get options from AI then choose the ones that work for you.

BASIC PRACTICES: GETTING FEEDBACK FROM AI

Feedback is crucial for anyone learning anything.

The more feedback a learner has, the more opportunities for course correction, criticism, and encouragement.

I'm a big believer in training students to get feedback on their work from AI.

This isn't about replacing the teacher. Anyone who has spent time in a classroom knows that teachers are irreplaceable.

When I speak to teachers, I tell them AI isn't here to take their job, it's here to help them do a better job.

The truth is that our students could use more feedback than we're able to give them. By leveraging AI, we can put them in a targeted, personalised, feedback rich environment.

This is the prompt I would give to students to use AI to get feedback:

*(**ROLE**) Act as a friendly and encouraging tutor who gives me feedback on my work. (**TASK**) I am going to paste in a [TASK - e.g. essay, short story etc.]. I want you to assess this for [Criteria - e.g. logical cohesion, connection to the theme of the essay, spelling and grammar etc.]. Give me 6 points of actionable feedback. Include examples of where and how my work could be improved. (**FORMAT**) Present the information in dot points.*

CONCLUSION

WHERE TO FROM HERE?

You are now equipped with the basic principles and practices to use AI to benefit every learner in your classroom. Well done!

If you'd like to talk further about AI at your school, I'd love to chat. I've left some contact details on the next page

I'm an experienced consultant with an educational background, and I can work with you to secure great outcomes for your staff, students, and school community.

Happy teaching!

Paul Matthews

A stylized, handwritten signature in black ink that reads "Paul Matthews". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

GET IN TOUCH



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