

Mastering Learning 3: AI

January 2024

DO NOW:

- a) Write the title and the date in your PSHCE books.**
- b) Discuss these 3 questions with the person next to you and feedback to your tutor**
 1. What is AI? (talk with a partner to see if you can define what it is)
 2. How is AI being used in the world today?
 3. How might you use AI to help you with school work?

Artificial Intelligence
made simple
by The Standards People

TASK: As you are watching, make some notes in your PSHCE books.

Watch this short video - please stop at 2.03 (ending with “ethical issues”).

Feedback:
What did you
pick out?

2 mins

What did you pick out? Green pen your notes.

- The use of computing, data and algorithms to emulate human behaviour.
- For example, photographing a mushroom to see if it is edible.
- The AI system has been trained by feeding it lots of information.
- Countless examples already being used; detect illnesses at an early stage, to track deforestation, optimising efficiency of telecoms systems.
- Need to consider the technical, societal and ethical issues of using AI

What are the advantages and disadvantages of using AI for school work?

Make this table in your book (you will need at least half a page as you will be adding to it throughout the lesson)

Working with a partner, start to bullet point some ideas on each side.

Advantages (of AI for school work)

Disadvantages (of AI for school work)

5 mins

What did you come up with?

Advantages (of AI for school work)

- **You can ask AI to explain a topic for you**
- **You can get specific information related to your needs**
- **Using AI will prepare you for many jobs in the future**

Disadvantages (of AI for school work)

- You may be tempted to use it for essay writing, which means you aren't actually learning the content or skills you need for your EUA / GCSE / A Level
- Using AI may actually de-skill you in many tasks such as research
- AI information can be wrong / inaccurate

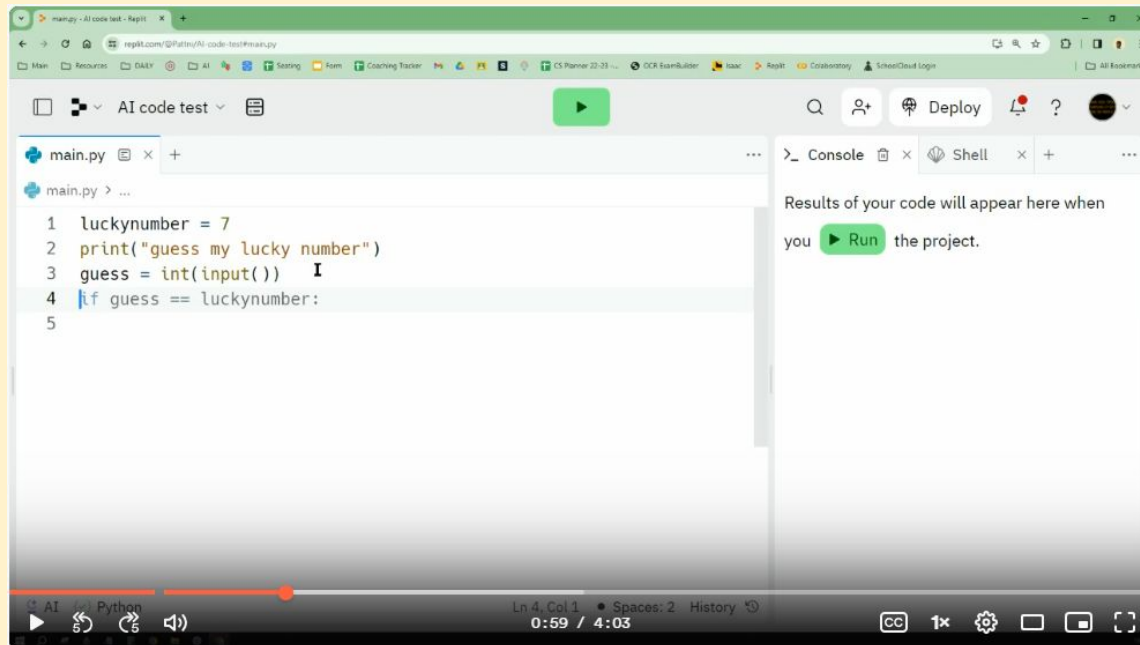
How can AI be useful to you at school?

You are now going to hear about 3 examples of how AI might be used in school.

For each example, please note down specific notes on each side of your table.

Example 1: Artificial Intelligence can be really helpful in Computer Science lessons...

[AI Assistance in Coding: A Double-Edged Sword - Watch Video](#) (CLICK ME)



The screenshot shows a video player interface. The main content is a code editor window titled "AI code test" with a file named "main.py". The code in the editor is:

```
1 luckynumber = 7
2 print("guess my lucky number")
3 guess = int(input())
4 if guess == luckynumber:
5
```

Below the code editor is a console area with the text: "Results of your code will appear here when you **Run** the project." There is a green "Run" button next to the text. The video player controls at the bottom show the video is at 0:59 / 4:03. The video title is "AI Assistance in Coding: A Double-Edged Sword - Watch Video".

- When writing code, you could ask for AI to be your “guide by the side”.
- While typing, AI will work out what it is that you are trying to type, and write the rest of the code for you.....

The screenshot shows a code editor window titled 'Temp1'. The editor has a file named 'main.py' open. The code in the editor is as follows:

```

1 lucky = 13
2 print("My lucky number is", lucky)
3
4

```

A red box highlights the word 'lucky' in the second line of code. A red arrow points from this box to the text 'AI wrote this bit for us !!' at the bottom of the slide. A tooltip is visible over the 'lucky' parameter, showing the Python signature for the print function:

```

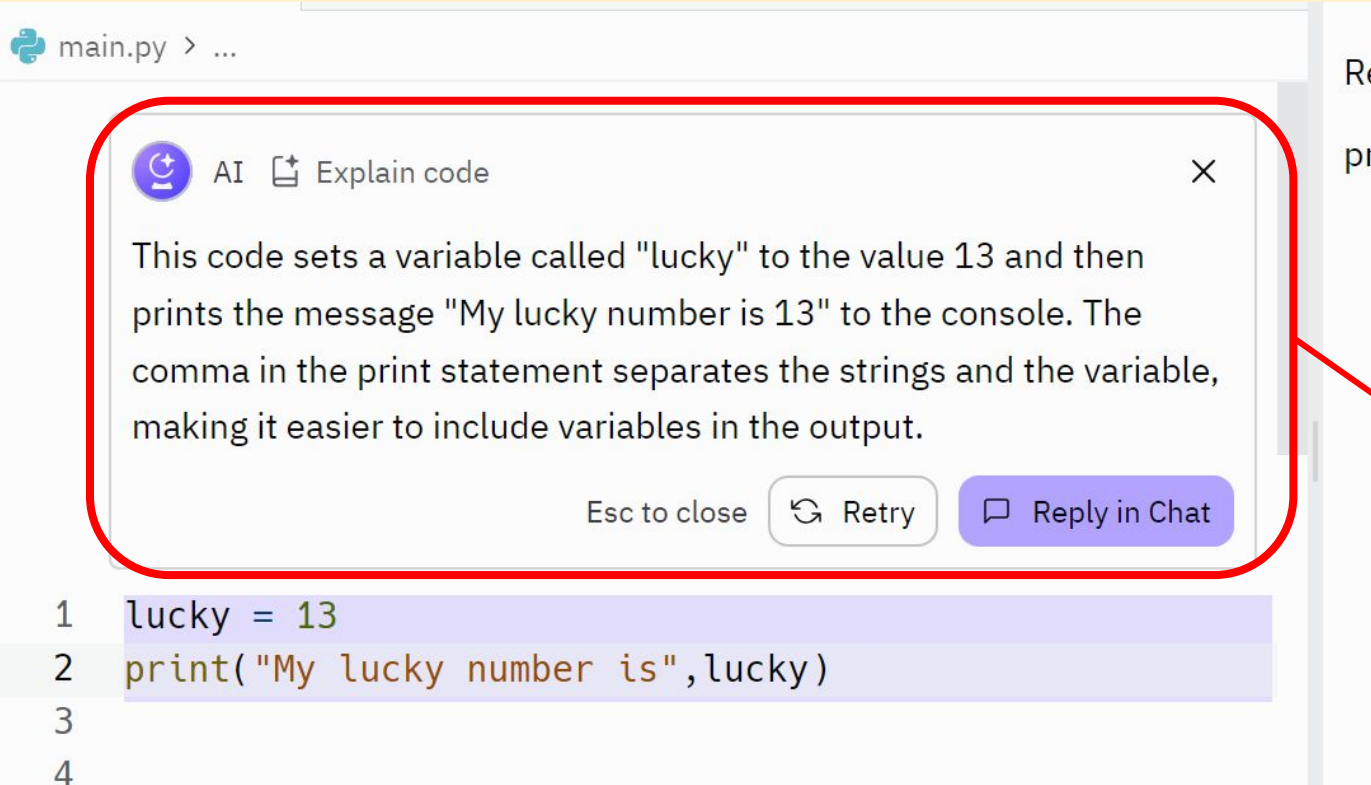
(*values: object, sep: str | None = " ", end: str | None = "\n", file: SupportsWrite[str] | None = None, flush: Literal[False] = False) ->

```

The tooltip also shows a partial completion of the word 'lucky' with a '1/2' indicator above it.

AI wrote this bit for us !!

- When you are looking at someone else's code, AI can read it for you and give its interpretation of what it is trying to do!!! This is super useful for when you are trying to understand some more complex code for the first time.



The screenshot shows a code editor window with a Python file named 'main.py'. An AI chat window is open, displaying an explanation of the code. The code in the editor is:

```
1 lucky = 13
2 print("My lucky number is",lucky)
3
4
```

The AI chat window contains the following text:

AI Explain code

This code sets a variable called "lucky" to the value 13 and then prints the message "My lucky number is 13" to the console. The comma in the print statement separates the strings and the variable, making it easier to include variables in the output.

Esc to close Retry Reply in Chat

AI provided this explanation for the code below !!

All looking great so far.....

HOWEVER.....

You have to keep in mind that if you use AI to do the WORK FOR YOU..... you will not learn enough to pass any exams.

A **HUGE** part of the process of learning to code, is learning about **SYNTAX** errors and how to fix them.

WRITE code YOURSELF.....

MAKE MISTAKES (it is the only way to learn).....

.....and learn HOW to fix them.

- use AI only as a “guide by your side”
- DO NOT use AI to do your work for you.

Keep in mind.....

- AI is as imperfect as humans. It will also get things wrong from time to time.
- Sometimes AI will even make things up, much like humans too!
- If you rely on AI too much in your Computer Science lessons, you may not learn enough to pass an exam. Remember: in GCSE Computer Science you will not have access to a computer in the exam.....so you will not have AI to help you.
- Be responsible with new technology. Do not abuse it. Remember you are here to learn..... And the best way to learn is by making mistakes and learning from them. You are much more intelligent than AI, do not let it take over your learning.

What are the advantages and disadvantages of using AI for school work?

TASK: What can you add to your table from that example?

Advantages (of AI for school work)

- When coding/programming, AI can finish off bits of code for you. It can also explain what code written by someone else is trying to do.
- It can be your “guide by the side”

Disadvantages (of AI for school work)

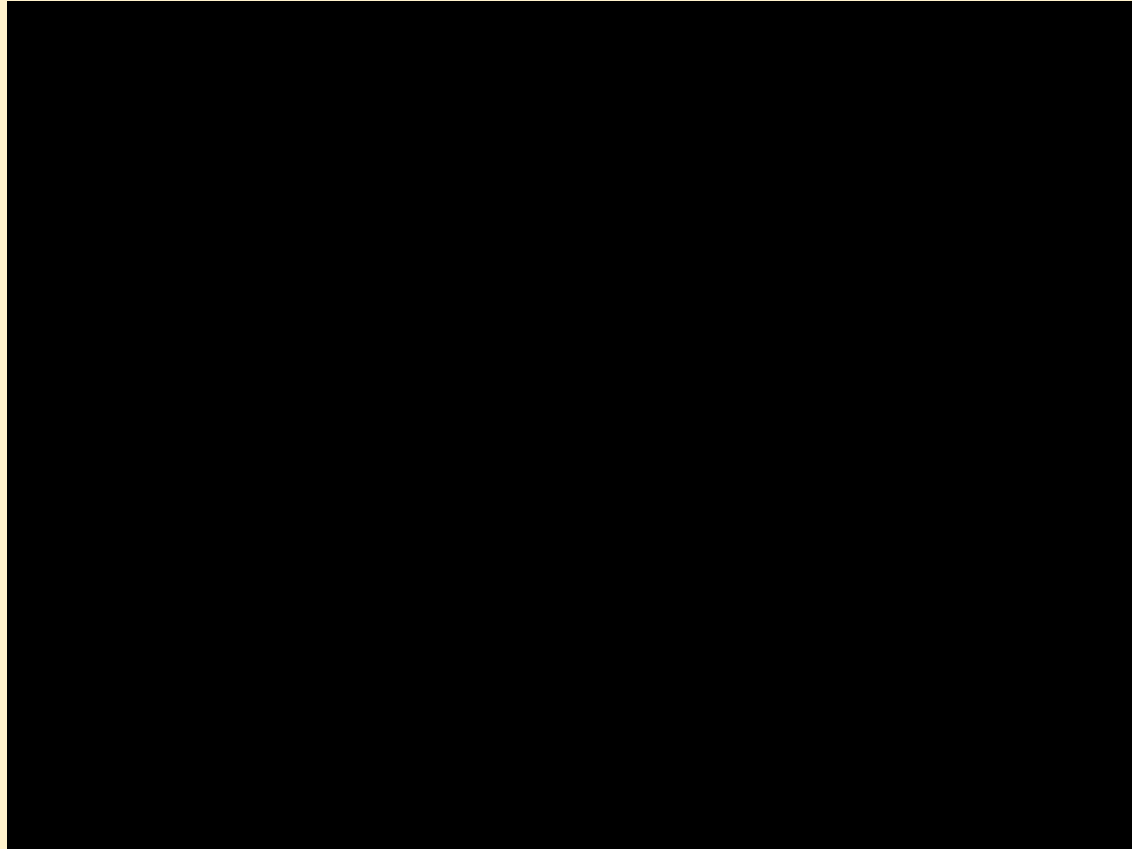
- Using AI to code for you will stop you from making your own mistakes and learning from them. It may stop you from learning enough to code for yourself / pass exams.
- AI gets things wrong!

Feedback:

What did you add from example 1: coding?

5 mins

Example 2: Geography essays



What are the advantages and disadvantages of using AI for school work?

TASK: What can you add to your table from example 2: Geography essays?

Advantages (of AI for school work)

Disadvantages (of AI for school work)

2 mins

What are the advantages and disadvantages of using AI for school work?

TASK: What can you add to your table from example 2: Geography essays?

Advantages (of AI for school work)

- It could be used to help you work out how to structure your essays
- Could help you to add more sophisticated vocabulary

Disadvantages (of AI for school work)

- It may use americanisms
- It may not structure things in the way you want to structure it
- It may not be as specific as you could be yourself - it may not use specific details from YOUR learning

Feedback:

What did you add from example 2: geography essays?

5 mins

Example 3: Economics essays and research

Watch [this short video](#) from Mrs Hilton-Dennis and make some notes into your table.

Example 3: Economics essays and research

Y13 Economists used Chat GTP to generate an essay to identify and assess the economic response of the government to the coronavirus pandemic.

It was able to collect a wide variety of data and information across the internet, thus proving to be very time efficient for research based tasks

Small tweaks to the instructions generated quite different essays

Points were often vague

In general?

It was helpful for gathering information and saved a lot of time in getting an starting point for further research but it didn't produce what the class considered a high grade essay

Some points didn't have much relevance to the question or weren't prioritised well

It does not have enough analysis and precise evaluation.

Further research would be necessary for a high level understanding

Specific thanks to Rofay and Liz for their useful insights

What are the advantages and disadvantages of using AI for school work?

TASK: What can you add to your table from example 2: Geography essays?

Advantages (of AI for school work)

Disadvantages (of AI for school work)

2 mins

What are the advantages and disadvantages of using AI for school work?

TASK: What can you add to your table from example 3: Economics

Advantages (of AI for school work)

- Can be a very efficient way of collecting research

Disadvantages (of AI for school work)

- You really have to know what to put in to the instructions to the AI
- Points it make can often be vague / not precise
- Can often bring in irrelevant information
- Not good for analysis / evaluation
- Doesn't produce a high quality essay

Feedback:

What did you add from example 3: Economics essays and research

5 mins

When is use of AI considered to be malpractice / cheating?

Although AI can be really useful in so many ways at school (as you have seen!), you have to be aware that using AI in any type of coursework is considered malpractice and could lead to serious consequences!

Current Guidance from the Joint Council for Qualifications.

The guidance underscores the importance of **preventing student misuse of artificial intelligence in academic assessments.**

- It highlights existing measures within educational centers, emphasizing that **submitted work must be the students' own.**
- **Misuse of AI constitutes malpractice, subject to severe sanctions.**
- Both students and staff should be aware of AI risks, and **students must ensure submitted work is truly their own**, acknowledging any AI-generated content.
- Teachers should only accept genuinely student-produced work and **investigate doubts about authenticity.**



There will be severe consequences to the misuse of AI. All work submitted as part of an exam or assessment must be 100% your own work.

Exam Boards

Exam boards use software to detect AI use. Turnitin is one of the more popular ones they use.

Exam boards rely on Moderators and Classroom Teachers to detect AI use. Your teachers are **duty bound** to inform the exam board if they suspect any form of AI or plagiarism.

Whether the candidate admits to using AI or not the exam board will weigh the probabilities and **sanction as appropriate.**



Teacher declaration

I declare that the work submitted for assessment has been carried out without assistance other than that which is acceptable according to the rules of the specification.

Assessor name			
Assessor signature		Date	





Enterprise and Marketing Coursework

- Concerns raised by the Moderator.
- Two candidates had submitted work that seemed they had used AI.
- One candidate admitted to using AI. They tried to justify it by saying that it was no different from asking the teacher for help. The AI had pulled material from various places on the Internet.
- Both candidates had their marks reduced. The exam board did not accept the fact that it was the same as asking the teacher. The second candidate did not admit to anything but still had marks reduced. The exam board said that it was a high probability that they had used AI.

Real life example 2

Candidate declaration

I certify that the work submitted for this assignment is my own. I have clearly referenced any materials used in the work. I understand that false declaration is a form of malpractice.

Candidate signature		Date	
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Media Studies coursework submitted by a candidate.

- The style of writing was different from their usual style.
- The classroom Teacher alerted the exam board.
- The exam board investigated and based on probability they penalised the student by reducing their marks.
- The student admitted to using AI for parts of their work, almost 70%.

Do's and Don't of AI

Can you sort the following into Dos and Don'ts of AI?

Use AI to improve the language or style of your answer (e.g. make it sound more sophisticated)

Ask AI to explain the key ideas behind something you don't understand

Ask AI to write an essay or answer for you

Ask AI to summarise ideas or longer written pieces so you can understand them better

Ask AI to simplify language so that you can understand complex ideas

Ask AI for facts or information that is used but not checked at any point against other reliable sources.

Do's and Don't of AI

ANSWERS:

Challenge: Can you think of any more?

DONT

Use AI to improve the language or style of your answer (e.g. make it sound more sophisticated)

Ask AI to write an essay or answer for you

Ask AI for facts or information that is used but not checked at any point against other reliable sources.

DO

Ask AI to explain the key ideas behind something you don't understand or simplify language.

Ask AI to summarise ideas or longer written pieces so you can understand them better

Use AI for preliminary research (like a google search) which you then check.