



# Cambridge IGCSE™

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**FIRST LANGUAGE ENGLISH**

**0500/22**

Paper 2 Directed Writing and Composition

**February/March 2021**

INSERT

**2 hours**

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## INFORMATION

- This insert contains the reading texts.
- You may annotate this insert and use the blank spaces for planning. **Do not write your answers** on the insert.



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This document has **4** pages. Any blank pages are indicated.

Read **both** texts, and then answer **Question 1** on the question paper.

**Text A: Tomorrow's teachers**

*The following text is an article about the use of Artificial Intelligence (AI) in schools.*

Robots will replace teachers by 2027, according to some leading education experts. They have suggested that autonomous systems will replace us in jobs for which we are unsuited. Robots already clean nuclear sites and work in construction jobs but machines are also replacing finance experts and outperforming doctors.

Teachers, however, must deliver lessons which engage every child in the classroom. Some students may have problems that complicate that process. Others have parents who are too involved, or not involved enough. Teachers must navigate these hurdles while meeting frequently changing curriculum requirements. In short, the job demands that teachers have superhuman levels of empathy, resilience and organisation. 5

We must recruit 20 million teachers worldwide if every child is to have access to quality education; it's easy to see the appeal of robotic teachers to fill these gaps. It takes a lot of time and money to automate an entire profession but after the initial costs digital teachers wouldn't need to be paid, wouldn't need days off and would never be late for work. Changes to the syllabus can be simply uploaded across an entire fleet of AI instructors, and the systems would never make mistakes. 10

However, we still have some way to go before such instructors enter our classrooms. Teachers rely on social interaction to figure out what their students need and so far no digital system can compete with a human in this realm. Maybe no robot will ever be good enough to replace teachers completely. 'I do not believe that any robot will develop the vast repertoire of skills and abilities that a human teacher possesses,' says Rose Luckin, a leading researcher in AI. 15

AI could have a collaborative role in the education system, however. What if AI could act as an extra pair of hands in the classroom? This AI assistant could manage routine tasks and even help teachers to find online lesson plans most likely to work, based on the details of the students and the school's specific curriculum. 20

AI could give teachers a greater insight into their students' needs by collecting and analysing information about each student. Teachers would know which students weren't getting enough sleep, if they had inadequate diets, if they were suffering from stress — information that can affect a student's performance but is difficult to tease out in the classroom. If a student needed extra attention, they could work with an AI-powered intelligent tutoring system that adjusts its approach to match the student's learning style. 25

Convincing parents, teachers, and students to embrace AI in education will be the real challenge and teachers may resent having their skill set devalued. The process will likely take decades, not years. 30

**Text B: *Eight reasons to welcome AI in the classroom***

*The following text outlines some advantages of using Artificial Intelligence (AI) in the classroom.*

1. Intelligent tutoring systems are not a far-off vision of the future – they already exist in a practical capacity. They can function without a teacher present and can challenge and support the learner using different algorithms.
2. Virtual reality assisted learning extends the boundaries of the classroom. Realistic virtual environments can provide learners with a richer understanding of their learning material and prepare them for a working world where AI will soon dominate. 5
3. Software that can instantly grade student essays is a significant benefit. Every graded essay adds to a central database to which future essays can be compared.
4. AI can alert teachers to patterns where students submit answers which are often wrong and can help make teachers more effective. 10
5. AI can learn students' habits and propose the most efficient study schedule for them. Should the machine encounter a problem or question that is out of its programming a human will be contacted to step in.
6. AI will be able to import a syllabus and generate a textbook filled with useful content. This makes for an incredible amount of customisation of learning catered to the needs of the students. 15
7. Virtual humans, another form of AI, can work 24 hours, 7 days a week on repetitive and time-consuming tasks that no human enjoys doing.
8. AI programs that augment the educational experience for learners with disabilities are already in development. These can give learners with special needs a greater sense of autonomy. 20

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