

## Appendices

### Appendix 6: Guidance on the use of artificial intelligence tools

The goal of academic integrity is to make knowledge, understanding and thinking transparent. Students must also master the technical components of academic integrity, which includes learning how to correctly reference and ethically use information, opinions and artificial intelligence (AI) tools.

Such transparency needs to be taught and supported throughout the educational journey so that students understand how knowledge is constructed, as well as their own role in furthering knowledge construction and building understanding. While technical proficiency is crucial, conceptual and ethical knowledge should come first.

Recent technical advancements in AI tools have sparked some concerns in the educational community as students have the potential to use these tools to produce their assessments. In some ways this is not a new academic integrity issue for the IB. These tools can effectively produce a unique essay (or other product) for the student—this can be paralleled to a student buying an essay from the internet or having a third party (such as a parent or tutor) write it for them. As in these cases of another person creating the essay for them, teachers are well placed to identify when it is not the student's own work.

#### 6.1 Teaching students about academic integrity

Opportunities created by AI tools reinforce that academic integrity is an ethical choice that students must make. Students cannot learn about acting with integrity by being given a list of rules for the examination room or learning a particular format for referencing. They learn by talking about what it means to act with academic integrity and seeing it role-modelled around them.

To initiate a conversation about this topic, teachers could consider the links between:

- TOK ways of knowing and acting with academic integrity
- arts, legitimately emulating a particular person's style and acting with academic integrity
- the scientific principle of testing another's hypothesis and acting with academic integrity.

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The key message is that students need to be taught about academic integrity, and discussions about the ethical use of AI are a great classroom exercise.

### 6.2 The IB and AI tools

The IB will not ban the use of AI software. The simplest reason is that it is the wrong way to deal with innovation. Over the next few years, the use of this kind of software will become as routine as calculators and translation programs. It is more sensible to adapt and teach students how to use these new tools ethically.

AI tools do not threaten the underlying principles of what the IB values. Students are expected to research a topic, and with today's technology that likely means starting with an internet search. In assessment, the IB does not (generally) award marks for spelling, punctuation and grammar. Where communication is assessed, we will need to think carefully what this means, but it is more than just having a well-written paragraph and requires considering the key messages for the audience. AI may provide a starting text, but the student will need to understand how and why to refine the text to improve its impact.

AI tools do not represent a crisis in education or assessment. However, in a world where everyone can use software to write newspaper articles, business reports and/or emails to friends, it is a game changer in terms of the skills students need. Instead of being able to produce complete essays, reports, and so on, students need to know how to get the best out of AI tools. For example, to edit text to personalize it, and most importantly, to recognize the inherent bias in what is produced because of the bias in the programming and the material that the AI tool has been trained on from its creators.

The IB aims to avoid joining the “arms race” between AI tools that claims to be able to tell the difference between AI and human authors. It is better to ensure that students can speak about their work with their teachers rather than accusing them of misconduct based on increasing small differences in the predictability of their word choices.

However, students need to be aware that the IB does not regard any work produced—even only in part—by such tools to be their own. Therefore, as with any quote or material from another source, it must be clear that any AI-generated text, image or graph included in a piece of work has been copied from such software. The software must be credited in the body of the text and appropriately

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referenced in the bibliography. If this is not done, the student would be misrepresenting content—as it was not originally written by them—which is a form of academic misconduct.

It is not realistic to prevent the use of these tools as they will rapidly become commonplace, but the IB believes that schools should explain ethical behaviour when using these tools, and why they often are not the most useful piece of software. Students should be reminded that the text currently produced by AI tools is often repetitive and formulaic, and most likely not of good enough quality to be awarded high marks. Some recommendations are as follows.

- Before writing a piece of work, students should find research material—it is entirely reasonable to use a search engine to do this. This research will give them ideas and help shape their arguments.
- Students benefit from having an example of a good essay to look at when drafting their own work. There is nothing wrong with this, although the student must be clear that they are only using it to understand what good essay structures and coherent supported arguments look like, not to copy sections of it.
- Students should be encouraged to ask the software research questions rather than the essay title, and then explore the sources it provides—ensuring they also explore the inherent bias of the results.

Teachers may have experienced problems when a student has been given an example essay that too closely matches what they are being asked to do. Consciously or unconsciously, the student can start to copy the content of the essay rather than using it to create their own work. Therefore, during the writing or creative process of any piece of work, the IB expects teachers to use the same processes they would use whenever they suspect that the work submitted is not the student's own and is not identifiable by plagiarism detection software—for example, work written by a third party or paid service.

Note that language acquisition is an exception to the rule about marks not being awarded for spelling, punctuation and grammar. However, it is probably impacted more by developments in translation software.

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### What does the IB expect when a teacher checks the authentication box to confirm that work is the student's own?

- The teacher has seen the student develop the work over a period of time—IB coursework is not designed to be completed in a single evening.

This is the best approach in ensuring that the work belongs to the student, and it also encourages best practice in writing coursework.

- The student can explain their work sufficiently—to give confidence that it has been created by them.
- The student is clear when they are quoting other people's ideas and when they are claiming an idea or conclusion as their own work—this is the expected way of referencing.
- The teacher confirms the quality of the final piece of work is in line with what they would expect the student to be able to produce.

Teachers are the best placed to know what a student is capable of and when a piece of work appears not to have been written by that student. If teachers are not convinced that the work is the student's own, it must not be submitted to the IB. If it has been written for them by their parents/guardians, sibling, tutor or obtained from an essay mill, the IB is less likely than the teacher to be able to identify this. The IB is very effective in spotting similar work used by students in different schools—for example, two students buying the same essay off the internet. While tools are being developed to detect essays written by AI tools, it is likely to be a while before they are reliable enough to be the sole evidence of academic misconduct that leads to a student losing their grade for the subject concerned.

It is a school's decision on how to deal with a student who submits work that is not their own, as per the school's academic integrity policy. For example, are students allowed to submit entirely new work, to rewrite it under supervision, or do they lose the opportunity to submit anything?

The IB's only requirement is that work that is not the student's own cannot be submitted for assessment; it does not accept a marking penalty for such work. Teachers must keep in mind that if a student does not submit coursework, then the IB will not award a grade in that subject.

### How should teachers guide their students when using AI tools?

Students should be informed of the following rules.

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- If they use the text (or any other product) produced by an AI tool—be that by copying or paraphrasing that text or modifying an image—they must clearly reference the AI tool in the body of their work and add it to the bibliography.
- The in-text citation should contain quotation marks using the referencing style already in use by the school and the citation should also contain the prompt given to the AI tool and the date the AI generated the text.

The same applies to any other material that the student has obtained from other categories of AI tools—for example, images.

### Using software to improve language and grammar

There are software programs available to help authors improve the quality of the language they use, from simple spell checkers to complex tools that rewrite sentences. IB assessments usually do not evaluate the quality of language or spelling so there is limited benefit in using such tools.

- The exception is in language acquisition, where marks are awarded for sentence structure. In these subjects the use of such tools is **not** permitted.
- The IB awards bilingual diplomas, and universities and schools look at the language subjects that are taken in for proof of being able to work in that language. Therefore students are **not** permitted to write essays in one language and then translate them to be submitted to the IB in another language. For subjects other than language acquisition, the use of spell checkers and bilingual dictionaries is acceptable.
- The IB will always consider the use of software to support access and inclusion requirements for students. Please refer to the [Access and inclusion policy](#) for more details.
- The IB allows students to use basic tools to support their spelling and grammar when this is not what is being assessed.

### Confidence in IB results

The IB and IB World Schools are partners in maintaining the value (currency) of IB grades to be trusted by institutions. The IB needs to trust schools to do due diligence, and schools can trust the IB to take its responsibility seriously in the interest of their students.

