VICTORIAN STUDENTS' PARLIAMENTARY PROGRAM (VSPP) 2024: ONLINE PRIMARY SCHOOL CONVENTION

Topic

Should students be taught how to use artificial intelligence tools in the classroom?



TEACHER REFERENCE BOOKLET

INCLUDING SUGGESTED SOLUTIONS

Contents

IMPORTANT INFORMATION	2
CONTEXT OF THE TOPIC	3
LINKS TO CURRICULUM	3
LEARNING INTENTION FOR THESE STUDENT ACTIVITIES	12
SUCCESS CRITERIA FOR THESE STUDENT ACTIVITIES	12
Activity 1: CLASSROOM TOOLS – CREATIVE COLLABORATION	13
Activity 2: WHAT EXACTLY IS AI – IDENTIFYING THE MAIN IDEA	14
Activity 3: WHAT MAY OR MAY NOT BE AI - CLASSIFICATION TASK	16
Activity 4: MORE UNPACKING OF AI - POWERPOINT & REVIEW QUESTIONS	18
Activity 5: NEWSPAPER ARTICLES – ANALYSIS OF THE TOPIC	20
Activity 6: WHAT CAN STUDENTS DO IN THE CLASSROOM WITH AI – 3 MINI TASKS	25
Activity 7: AI AND WHAT THE MEDIA IS SAYING – INVESTIGATION TASK	29
Activity 8: THE EDUCATION MINISTERS AI FRAMEWORK FOR SCHOOLS- READING COMPREHENSION	
ACTIVITY	39
POST CONVENTION ACTIVITIES	42
ADDITIONAL TEACHER REFERENCES	44

IMPORTANT INFORMATION

The pre-convention activities and resources provided to support the VSPP are suggestions only.

They have been developed to help students prepare for the Online Primary School Convention to debate this topic in more detail.

The pre-convention activities and resources provided can be completed independently of each other at the teacher's discretion and choice. This means the teacher may choose to do one, some or all of the activities to help build students' knowledge and help them prepare to be active participants in the Convention.

In using these suggested pre-convention activities and resources, teachers should make themselves aware of the content contained and the complexity of it to ensure it is appropriate for their student cohort and school context.

Teachers should plan for appropriate support to prepare their students for the Online Primary School Convention by adapting, updating, extending, or removing activities (including task instructions) and any resources contained in this pack.

Students are *not* expected to complete all activities prior to participating in the Convention, nor are they expected to complete all post-convention activities.

CONTEXT OF THE TOPIC

We live in a dynamic world that is rapidly changing because of advances in technology especially in artificial intelligence. The integration of AI tools in the classroom is becoming an increasingly relevant topic in education given that AI has become a dominant part of our everyday life and will do so more and more. AI tools have the capacity to improve student learning experiences, develop essential skills for the future workforce and promote creativity and innovation. The debate continues about finding the right balance between students using AI tools to personalise their instructions, meet their specific needs and learning styles with the ongoing issues of safety, plagiarism, misinformation, and bias.

LINKS TO THE CURRICULUM

This topic has strong links to Level 5 and 6 of the Civics and Citizenship, Digital Technologies, and the Critical and Creative Thinking Strands of the F-10 Victorian Curriculum.

Links to Civic and Citizenship

- Students investigate the role of groups in our community and examine the rights and responsibilities of Australian citizens.
- They explore the obligations that people may have as global citizens.

Key Questions that apply to this topic:

- What are the roles and responsibilities of the different levels of government in Australia?
- How and why do people participate in groups to achieve shared goals?

Government and Democracy

Code: VCCCG009

Describe the roles and responsibilities of the three levels of government, including shared roles and responsibilities within Australia's federal system.

Elaboration:

 Clarifying the roles and responsibilities of the three levels of government (local, state/territory and federal)

The link to the topic:

The debate on whether students should be taught how to use AI tools in Victorian classroom involves a complex relationship between the roles and responsibilities of local, state, and federal governments in Australia. Each level of government has something to offer schools to support the integration of AI tools in the classroom. Arguments against students being taught to use AI tools is the cost factor and need for clear guidelines to address the issues of ethics, safety, and plagiarism. At the local council level funding or resources could be provided to support AI programs. At the state government level guidelines and training could be provided for teachers to ensure that AI tools are used in a meaningful and appropriate way by students. At the federal level the government could support national initiatives related to AI education such as funding research projects on AI in education, coordinating efforts across states and territories and promoting best practises in the use of AI tools effectively in the classroom by students. This means that the roles and responsibilities of governments are very much intertwined with the topic of whether students should be taught to use artificial intelligence in the classroom.

Laws and Citizens

Code: VCCCL012

Explain how state/territory and federal laws are initiated and passed through parliament.

Elaboration:

 Discussing where ideas for new laws can come from, for example in response to a community concern

The link to the topic:

The process of creating new laws, especially in response to community concerns about AI tools in schools, is complicated involving several different stakeholders. Ideas for new laws can come from a variety of sources including government officials, policymakers, activists and interested citizens. In the context of AI tools used in schools and classrooms, the need for regulations may arise due to privacy concerns, ethical considerations, the potential bias of algorithms or the impact of the technology on educational outcomes which are potential limitations in relation to this topic.

Citizens, Diversity, and Identity

Code: VCCCC014

Identify who can be an Australian citizen and describe the rights, responsibilities and shared values of Australian citizenship and explore ways citizens can participate in society.

Elaboration:

Explaining personal roles and actions as a citizen in the school and in the community

The link to the topic:

By combining personal roles as citizens and incorporating artificial intelligence tools into classroom learning, students learn not only how to succeed academically, but also how to responsibly navigate technological advances while contributing positively to their community.

Citizens, Diversity ad Identity

Code: VCCCC017

Examine the concept of global citizenship.

Elaboration:

Identifying the obligations people may consider they have as global citizen

The link to the topic:

Global citizenship plays a significant role in the discussion of whether students should be taught to use Al tools in the classroom. The world is becoming increasingly interconnected so it's essential for students to develop skills that will not only benefit them individually, but also allow them to contribute to the global community.

Level 5 and 6 Achievement Standard

Students can identify various ways people can participate effectively in groups to achieve shared goals. Students explain what it means to be an Australian citizen and how people can participate as global citizens. They can analyse contemporary issues and use evidence to support a point of view about civics and citizenship issues. They identify possible solutions to an issue as part of a plan for action.

Links to Digital Technologies

In Levels 5 and 6, students develop an understanding of the role individual components of digital systems play in the processing and representation of data. They acquire, validate, interpret, track, and manage various types of data and are introduced to the concept of data states in digital systems and how data is transferred between systems. This knowledge then forms the foundation of more advanced concepts such as artificial intelligence tools.

Digital Systems

Code: VCDTDS026

Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data

Elaboration:

- Describing digital systems as having internal and external components that perform different functions, for example external components for inputting data including keyboard, microphone, stylus; internal processing components include the central processing unit; external output components including speakers, projector, screen; and data and information storage components include cloud and external devices
- Explaining how data may be transmitted between two digital systems in different ways, for example that wires or cables are used in wired networks and radio waves are used to transfer data in wireless or mobile networks
- Investigating how the internal and external components of digital systems are coordinated to handle data, for example how a keyboard, central processing unit and screen work together to accept, manipulate and present data and information
- Identifying different types of networks that allow data to be sent between digital systems, for example wired, wireless and mobile

The link to the topic:

Understanding the complexity of digital systems is critical to many fields, including artificial intelligence (AI) tools in education. AI tools can be integrated into digital systems to improve the learning experiences of students by providing them with personalized instruction, real-time feedback and computerised grading tools that can assess and evaluate student assignments, quizzes, and exams. This then provides teachers with valuable insight into student progress, to enable them to plan and deliver more effective lessons in the classroom.

Data and Information

Code: VCDTDI029

Plan, create and communicate ideas, information, and online collaborative projects, applying agreed ethical, social, and technical protocols.

Elaboration:

- Applying practices that support the organisation of collaborative problem-solving, for example finding online meeting times that suit all members, and agreeing on ways of protecting files and sharing information digitally with members
- Applying safe practices while participating in online environments, for example checking the
 default privacy settings to ensure maximum protection of personal details, being aware of online
 filtering techniques and policies used at school and at home
- Considering ways of managing the use of social media to maintain privacy needs, for example
 activating privacy settings to avoid divulging personal data such as photographs, addresses and
 names
- Developing a set of 'rules' about appropriate conduct, language and content when communicating online, and using these rules as a basis for resolving ethical dilemmas
- Using digital systems to create web-based information taking into consideration referencing conventions, for example creating a blog, website, or online learning space for sharing ideas
- Using a range of communication tools to share ideas and information, for example participating in collaborative online environments

The link to the topic:

Students require more than just being shown how to use AI tools. They need learn about the ethical use of technology and this is one of the arguments against the teaching of artificial intelligences tools in the classroom. Students need to be responsible in the manner that they use AI tools and to ensure that these tools are used to enhance their learning experiences rather than hinder them. Students can be more informed and empowered users of AI tools in the classroom if there are boundaries and protocols set but again these take time and need stakeholder collaboration to develop and implement.

Creating Digital Solutions

Code: VCDTCD030

Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities.

Elaboration:

- Checking existing solutions to identify features that are transferable to new but similar digital solutions, for example identifying if there are any similarities, such as user age and special requirements, between an existing game and a new game to be created
- Investigating characteristics of user interfaces that are common for particular types of problems, for example, touch screens encourage users to respond more intuitively than keyboards, or the consistent placement of symbols in games to speed up users' responses
- Using and interpreting data, establishing the root cause of a problem, for example using an annotated diagram to identify omissions, duplications or mismatches of data
- Describing in simple terms the nature of a problem and what a solution needs to achieve, for
 example what need the problem is associated with, who the solution is needed for, what data are
 needed and what features the solution would need to include

The link to the topic:

Students can gain valuable skills and knowledge that are increasingly relevant in today's technology driven world by incorporating AI tools in the classroom. There is a need for teachers to instruct students on how to use these tools effectively to enable them to develop their critical thinking and problem-solving skills. But again, the teachers need to be upskilled themselves and given the time to do so, to ensure the effective rollout of AI tools for students to use as part of their learning in an educational setting.

Level 5 and 6 Achievement Standard

Students are equipped to understand the functions of digital system components and how these systems interconnect to create networks for data transmission through the incorporation of artificial intelligence tools in the classroom. Students can learn to identify problems through data analysis, be able to define functional requirements, and devise solutions by creating algorithms. They can learn to integrate decision-making processes, repetition, and user interface design principles into their solutions, including the development of visual programs. This skill set will not only prepare students for advanced digital literacy but also prompt discussions on the importance of teaching students how to utilise artificial intelligence tools effectively in educational settings.

This topic also has strong links to the **Level 5 & 6 Critical and Creative Thinking** Strand of the Victorian Curriculum:

In Levels 5 and 6, the curriculum focuses on developing the knowledge, skills and understanding to test the strength of thinking. Students develop their capacity to deliberately manage their thinking. Students explore common errors that can occur in thinking.

Level 5 and 6 Content Descriptors

Questions and Possibilities

Code: VCCCTQ023

Identify and form links and patterns from multiple information sources to generate non-routine ideas and possibilities

Elaboration:

- Discussing how looking for factors such as underlying skills, causes, or processes can assist in finding links across apparently unconnected sources
- Examining the approach to a particular problem in multiple sources and looking for patterns in approaches, for example in creating a text comparing written, spoken and multi-modal sources for patterns in how they represent a particular aesthetic effect or emotion

The link to the topic:

In today's fast-paced world, the ability for students to identify and form connections and patterns from multiple information sources is critical to produce practical ideas and opportunities. Critical thinking skills, allows students to think outside the box and find innovative solutions to complex problems. By bringing artificial intelligence tools into the classroom, students can improve their critical thinking by analysing large sets of data, identifying trends, and making informed decisions. These tools not only provide students with valuable knowledge, but also prepare them for a technology-driven future where artificial intelligence is continues to play an increasingly important role in various aspects of their lives.

Reasoning

Code: VCCCTR024

Investigate common reasoning errors including contradiction and inconsistency, and the influence of context

Elaboration:

- Using an example to discuss whether different contexts can explain apparent inconsistencies
- Identifying an apparent contradiction in a point of view and discussing whether clarifying what is
 meant would resolve it; for example, as students learn to use AI tools in the classroom,
 they may encounter a scenario where one tool suggests a certain answer while another
 tool suggests a different one. By looking at the context of the problem, students can then analyse
 why these differences might occur and how to critically evaluate the results of AI tools.

The link to the topic:

In the world of critical thinking, it is important to investigate common reasoning errors such as contradiction and inconsistency that can lead us to go off course in our search for the truth. By examining how context shapes our understanding, we can better navigate these difficulties. In today's digital age, students are learning more and more about the use of AI tools in the classroom. Learning how to use artificial intelligence can improve their research skills, make tasks more efficient, and open new opportunities for creativity and problem solving. Integrating AI tools into our education can help students become more effective learners and thinkers in today's technological environment.

Metacognition

Code: VCCCTM029

Investigate thinking processes using visual models and language strategies

Elaboration:

Drawing mind maps for different purposes, such as classifications or to identify connections

The link to the topic:

Mind maps are powerful tools that allow students to visually organize their thoughts. By drawing mind maps for various purposes, such as categorizing information or identifying connections between ideas, students can improve their understanding and retention of key concepts as they explore this topic of whether students should be taught how to use artificial intelligence tools in the classroom.

Level 5 and 6 Achievement Standards

Students can apply questioning as a tool to expand their thinking about the topic of whether they as students should be taught how to use artificial intelligence tools in the classroom. Students become skilled at evaluating reasons and evidence and can construct strong arguments using visual models and language to represent their thoughts and opinions on this topic.

LEARNING INTENTIONS AND SUCCESS CRITERIA FOR THIS UNIT OF WORK

By the completion of these activities' students will be able to:

- understand the importance of Artificial Intelligence and the role it can play for students in education and their learning today
- actively participate in collaborative discussions about the use of AI tools by students in the classroom
- analyse information, think independently and come up with innovative solutions

On the day of the Convention:

- actively participate in the online parliamentary proceedings
- critically assess the steps involved in creating and modifying relevant laws on this topic through parliament
- come to a common understanding of why parliament uses a preferential voting system and/or why in this scenario we use 'first past the post' given the time constraints of the Convention

Students will know they have achieved the learning intentions when they can state the following:

- I can demonstrate a clear understanding of what artificial intelligence tools are and how they can be used in the classroom
- I can effectively communicate my findings and opinions through the completion of written activities and participation and contribution in class discussions
- I can provide arguments for and against the topic that students should be taught how to use artificial intelligence tools in the classroom
- I can identify biases in AI algorithms and assess how reliable the information produced by AI is

On the day of the Convention:

- I will show active engagement in the online parliamentary proceedings by debating during the soap box session
- I can explain the steps involved in creating and modifying law through parliament
- I can confidently and independently vote
- I can show an understanding of why the outcome achieved through voting, is a democratic representation of the people

Activity 1: CLASSROOM TOOLS – PAST AND PRESENT – CREATIVE COLLABORATION

Learning Intentions

We will recall and list the different classroom tools we have used to help us with our learning.

Success Criteria

I can provide a list of the classroom tools I am familiar with and have used in my classes.

Task Instructions:

- **1. Individual Idea Generation –** each student writes down at least 5 classroom tools they use for schoolwork or homework on the sticky notes that the teacher has provided
- **2. Pair and Share –** each student then shares their ideas with another student looking for both similarities and differences
- **3. Group Sharing –** Each pair presents their lists and there is a class discussion of past tools that students have used and current tools that they use to support their learning in the classroom

Examples of past classroom tools include:

- Textbooks
- Calculators
- · Paper and notebooks
- Pens and pencils

Other possible sample responses:

- · Whiteboards and markers
- Art supplies e.g. crayons, paints
- Rulers, protractors, and compasses

Examples of current classroom tools that students use include:

- Computers
- Tablets
- Internet
- Software programs
- Printers

Other possible sample responses:

- Interactive boards or Projectors
- Smart televisions
- Digital cameras

Activity 2: WHAT EXACTLY IS ARTIFICIAL INTELLIGENCE? IDENTIFYING THE MAIN IDEA

Learning Intentions

We will gain a clear understanding of what artificial intelligence is.

Success Criteria

I can show an understanding of what artificial intelligence is and how it works with examples.

Task Instructions:

- 1. As a class provide as many words as you can think of that relate to the term 'artificial intelligence'
- 2. Watch the YouTube clips and come up with clear definitions or explanations of this term that the class agrees on this task can be done individually, or the teacher can assign a group of students to watch each video clip and then the information is shared
- 3. In pairs answer the Question 3 and then share your answer with the rest of the class.

YouTube Links:

- a. What is Artificial Intelligence for Kids | Al for Kids (youtube.com) (1.15 minutes)
- b. Teach Al | Prepare Our Students for The Future (youtube.com) (2.35 minutes)
- c. What is AI? Artificial Intelligence Facts for Kid (youtube.com) (3.07 minutes)
- d. What is AI for Kids? An Introduction to Artificial Intelligence for Kids (youtube.com) (4.35 minutes)

SAMPLE RESPONSES

1. Word Splash - list words linked to the term 'ARTIFICIAL INTELLIGENCE'

- ROBOT
- TECHNOLOGY
- ALGORITHMS
- CHATBOT
- VIRTUAL
- DATA
- MODEL
- ACCURACY
- CLEVER
- ACCURATE
- SIMULATION
- IMITATED
- ENGINEERING
- STEM
- CYBER

2. Common definitions or explanations of what AI is with examples

Al is a field of computer science that aims to create machines that perform tasks that normally require human intelligence. Al systems can process information, make decisions, adapt to new situation, recognise speech and images, play games, and even drive cars.

Al technology is here now with at least 77% of the population currently using it. Al recommends movies for us to watch, stops scams and interprets what we mean to say. We need to realise that today's students are the first generation to grow up with Al. Al tools can do many things just like humans can like reasoning, adapting, recognising patterns, and solving complex problems. By 2025 Al will take over more than half the working tasks so students and teachers need to be Al ready to be the drivers of what Al is used for.

Artificial Intelligence is like a virtual brain that can learn and make decisions on its own like humans. It is a powerful tool that can help us solve problems and make decisions more easily. Think of SIRI and Alexa which are two examples of AI in action. Smartphones and online video games also use AI. But there are risks and challenges if AI tools malfunction. AI needs to be used responsibly and carefully to help us solve huge problems and create a better world. We need to make sure we use AI safely, fairly, and are respectful of peoples' rights and privacy.

Siri, Alexa, self-driving cars, face recognition on smartphones are all technology examples that use artificial intelligence. Al gives the computer the ability to think and learn. Computers can perform tasks typically done by people such as processing language, problem solving and learning. Al is used around us every day. Streaming services, chatbots and search engines like Google all use Al today. There will be a bigger presence in the future of Al. All future jobs will have some connection to Al, so it is important for students to learn about Al tools now.

3. In pairs answer the following question:

How is artificial intelligence different from other technology?

- Al is not limited to one specific function or application
- Al can be integrated into various industries and workplaces
- It can learn and improve over time
- Al uses algorithms to identify patterns in data make decisions based on new information it receives
- There are more concerns about privacy, security, and ethics with Al

Activity 3: WHAT MAY OR MAY NOT BE CONSIDERED ARTIFICIAL INTELLIGENCE -CLASSIFICATION ACTIVITY

Learning Intentions

We will continue to develop our understanding of what artificial intelligence is by looking at specific examples.

Success Criteria

I can identify objects that belong to the AI group and others that do not.

Task Instructions:

Classify the following list of objects into the two columns- AI and not AI. Remember some of the listed objects may belong to the 'it depends' category based on the technology that is now available.

Objects:

SMARTPHONE	SPEECH TO TEXT SOFTWARE	UV BLOCKING LENSES
LIGHT SENSOR	VISUAL RECOGNITION DEVICE	GOOGLE HOME
FACIAL RECOGNITION SOFTWARE	SOLAR PANELS	PENCIL SHARPENER
ROBOT	INSTAGRAM	SPELLCHECK
SELF DRIVING CAR	FLASHLIGHT	NETLFIX
PRINTER	CALCULATOR	HOMESECURITY SYSTEM
FITBIT	AEROPLANE	ALEXA OR SIRI
WEATHER APP	FREEZER	СНАТВОХ
CAMERA	GPS	FORNITE ONLINE GAME
GOOGLE MAPS	WATER FILTER	WIND TURBINE

SAMPLE RESPONSE

ARTIFICIAL INTELLIGENCE

- SMARTPHONE
- FACIAL RECOGNITION SOFTWARE
- ROBOT
- SELF DRIVING CAR
- SPEECH TO TEXT SOFTWARE
- VISUAL RECOGNITION SOFTWARE
- INSTAGRAM
- GPS
- GOOGLE HOME
- SPELL CHECK
- NETFLIX
- ALEXI OR SIRI
- CHATBOX
- FORTNITE ONLINE GAME
- GOOGLE MAPS
- AEROPLANES
- WIND TURBINES

NOT ARTIFICIAL INTELLIGENCE

- LIGHT SENSOR
- PRINTER
- SOLAR PANEL
- FREEZER
- CALCULATOR
- FLASHLIGHT
- WATER FILTER
- UV BLOCKING LENSE
- PENCIL SHARPENER

IT DEPENDS ON CATEGORY:

- HOME SECURITY SYSTEM SOME DO AND SOME DO NOT DEPENDS ON THE SYSTEM
- FITBIT DEPENDS ON THE BRAND
- WEATHER APP IT IS BEING USED MORE AND MORE
- CAMERA TRADITIONAL CAMERAS RELY ON MANUAL SETTINGS

Activity 4: MORE UNPACKING OF AI - POWERPOINT AND REVIEW QUESTIONS

Learning Intentions

We will continue unpack what artificial intelligence is through the PowerPoint point presentation to consolidate our understanding of what artificial intelligence is.

Success Criteria

I can demonstrate a better understanding of artificial intelligence by answering the questions linked to the PowerPoint on this topic.

Task Instructions:

Review the <u>PowerPoint presentation</u> on the Convention topic and then answer the questions that follow to demonstrate your understanding of artificial intelligence.

SAMPLE RESPONSES

COMPREHENSION QUESTIONS LINKED TO THE POWERPOINT

- 1. How do smartphones use AI?
 - Through face recognition for security authentication or verification
 - Through voice recognition and assistance like Siri, Google Assistance and Cortana
 - By predicting text suggestions
 - By high quality photos and videos that can be improved
- 2. At is any **technology** such as a **robot** or **computer** that has been **programmed** to have human like **intelligence.**
- 3. Tick the box in each row to show whether the statement is True or False

Statement	True	False
Al is only used in medicine		. ~
Most cars that have a GPS use AI	\checkmark	
YouTube doesn't use Al		✓
Al is used by all banks today	\checkmark	
Al has not become part of our daily lives		✓

^{*}Student answers will vary

4. Can you think of something that AI cannot do now? Explain your answer.

Al cannot show emotions or preferences. It does not have a favourite colour or season and is unable to describe scenarios like how we feel when we see a sunset or a rainbow after it rains. Artificial intelligence does not feel like humans. Al can only perform tasks and think intelligently.

5. What other uses of AI would you like to see in the future? Explain your answer

Maybe to cook and clean so that my parents can spend more time with me and my siblings. The ability to be more creative and to understand human behaviour. To be able to make more ethical decisions.

Activity 5: NEWSPAPER ARTICLES - ANALYSIS OF THE TOPIC

Learning Intentions

We will understand the arguments for and against students being taught how to use artificial intelligence tools in the classroom.

Success Criteria

I can outline the arguments that can be made to support or oppose students being taught how to use artificial intelligence tools in the classroom.

Task Instructions:

There are three fictional newspaper articles provided for this activity.

Two of the articles (Issue #1 and #2) contain arguments that are either <u>for</u> or <u>against</u> the Convention topic. For this part of the task list the relevant arguments in the appropriate table column with the heading 'argument guide'. Then provide a short summary of what you think the key points are.

For the third article (Issue #3) – the opinion piece to young readers - complete the mind map by identifying the key points this article makes.

You will then participate in the class discussion about the importance of students mastering basic skills before being allowed to use artificial intelligence tools such as ChatGPT in the classroom.

Monday 3 June 2024

NEWS TODAY

Issue #1

NEWS



Our special investigation into the truth behind Artificial Intelligence or AI as it is known has discovered that AI technology can work nonstop and is less likely to make errors or mistakes. AI can often solve problems quickly and can be programmed to do repetitive tasks easily without any interruptions or stopping. Our report has found that AI robots can perform tasks that would be dangerous for humans such as deep ocean or space exploration. Decisions can if fact be made quicker and remember that AI does not require sleep or rest.

In today's digital age it is important to prepare our students to be familiar with AI tools in an educational environment. This means that students will be ready for future jobs as they will

be using AI in a range of jobs and careers. AI can help make learning more personalized to meet specific needs of each student giving them quick feedback and matching the learning with what the student needs.

Artificial intelligence can help students with critical thinking and problem-solving skills, so they learn to look at figures and data, interpret results and make informed decisions. Using AI tools can help students improve their digital literacy skills so that they can read and understand information and data in today's world.

In fact, AI tools in the classroom can help students be more creative, to find new ways of thinking, problem solving and creating content.

Tuesday 4 June 2024

NEWS TODAY

Issue #2

NEWS



Our new investigations have shown that AI technology can break, and malfunction and it can be expensive to develop and maintain. AI is limited to only knowing what it has previously been shown. It does have human like intelligence, but it cannot copy or understand human emotions.

We have uncovered that AI tools in the classroom do raise ethical considerations or what we call 'doing the right thing'. These issues relate to data privacy, bias or prejudice in algorithms that create unfair outcomes and a lack of transparency in decision making which teachers must address in the classroom.

Using AI tools in the classroom may require more resources to train teachers and to obtain the necessary technology to make sure that all students have the same access to these tools. Schools need to rethink their curriculum or what they teach and how the AI tools will meet these curriculum standards, to plan lessons and content for students.

Teachers and other staff will need more training to build their skills and knowledge to then be able to help students use AI tools in the classroom properly. This takes time and money which some schools may not have causing disadvantage and inequality.

SAMPLE RESPONSES

ARGUMENT GUIDE

For:

- Can work non- stop
- Less likely to make errors or mistakes
- Can solve problems quickly
- Can be programmed to do repetitive task easily and without interruptions
- Can perform tasks that are dangerous for human to do
- Does not take breaks
- Will help student be better prepared for the world and for future jobs
- Can make classroom learning more personalised to meet the specific needs of students with quick feedback
- Can help student improve their skills in critical thinking, problem solving, data interpretation
- Can help with the digital literacy of students

Against:

- Can break and malfunction
- Be expensive to set up and maintain
- Cannot copy human emotions
- Limited to know what it has previously been shown
- Raises issues of data privacy, ethics, biasness and may lead to unfair outcomes
- Teachers need to more training to help students use the AI tools and this is costly and time consuming
- Need to rethink school curriculum and the delivery of lessons and assessments
- Schools that do not have the money to invest in AI will be left behind increasing inequality in education standards

Conclusion: (Student answers will vary)

One example:

The use of AI tools has many benefits but also some drawbacks. Its introduction into the classroom needs to be well planned, with the provision of necessary resources to address some of the issues such as the cost of the technology, privacy issues and how to ensure students work is still their own.

Wednesday June 5 2024

NEWS TODAY

Issue #3

OPINION

Hi there Young Readers of News Today,

Do you ever feel like learning is like a big puzzle and you need patience, time and skill to work out how to fit the pieces together? Well, there is a new piece that we can add to the learning puzzle called **ChatGPT**, which is an example of Generative AI. It is a super smart robot that can answer all your questions. But do not get too excited as you still must **master** your basic skills to be able to use your virtual buddy better whether it is in the classroom or at home.

Generative AI like ChatGPT is a super cool tool that can help you with all sorts of things like answering questions, writing stories and it can even chat with you and me like a real person. BUT a 5th or 6th grader needs to have become capable in the right skills before they have access to Generative AI.

Firstly, learning how to spell words correctly and using proper grammar is very important. Generative AI can sometimes autocorrect mistakes but if we rely on it too much, we might forget how to spell simple words on our own. It's like having a calculator to do all your maths so you forget to do basic addition or subtraction in your head.

Secondly using Generative AI to write your essays or stories can make you lazy. You may stop trying to do your best to come up with creative ideas and well written, thought-out sentences. Remember it is important to practice your writing skills, so you can become better writers on your own.

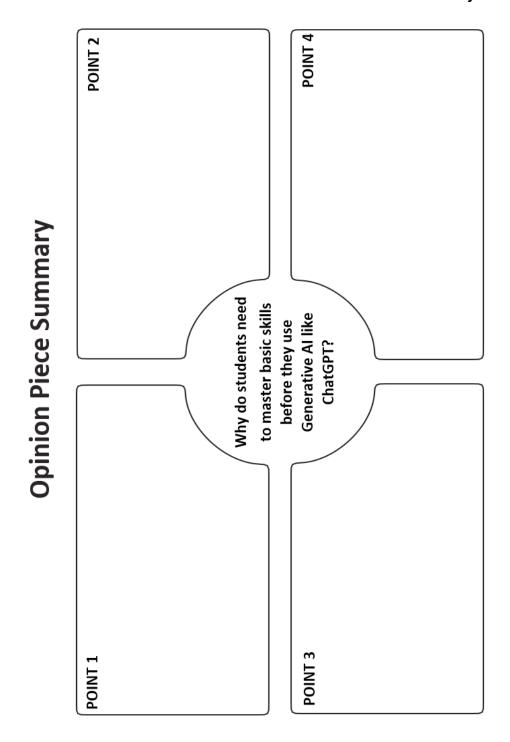
Generative AI can give you the answers when you ask it, but the answers may not always be right. If you have not mastered the basic skills, you might believe everything it writes.

Lastly talking to Generative AI like Chat GPT instead of your friends or teachers may make you miss out on important social interactions. ChatGPT is supersmart but it cannot replace the warmth and understanding that comes from talking to a real person. We need to remember to connect with others face to face. Also, ChatGPT does not know you so **do not** share personal information to stay safe online.

So, my young readers keep reading, writing and thinking to become experts at these skills and only then should you use Generative AI like ChatGPT when you have become whizzes.

Dianne Smartly

NEWS TODAY CHIEF WRITER



SAMPLE RESPONSES FOR THE OPINION PIECE WRITING TASK

*Student answers will vary:

Point 1:

Learning how to spell and use proper grammar is a good skill to have before using ChatGPT as a classroom learning tool.

Point 2:

Relying on ChatGPT to write essays or stories can make students lazy and uncreative.

Point 3:

ChatGPT can give students the answers, but they may not always be correct, which is why students need to master their basic skills before using this artificial intelligence tool for their schoolwork.

Point 4:

ChatGPT is a helpful learning tool for students, but it cannot replace real friends and should not be given personal information to enable students to stay safe online.

Activity 6: WHAT CAN STUDENTS DO IN THE CLASSROOM WITH AI – THREE MINI TASKS

Learning Intentions

We will understand some of the AI classroom tools we can use to help us with our learning.

Success Criteria

I can explain what ChatGPT is and how it can be used in the classroom.

Task Instructions:

Complete each of the three tasks which involve watching two YouTube Clips and reading student comments about the use of AI tools to be able to write your own opinion on the use of these tools as part of your learning.

1. Behind the News

Open the following link, watch the clip, and complete the table:

ChatGPT - Behind the News (abc.net.au) (4m 28s)

SAMPLE RESPONSES

List the opinions of each of the following people in relation to the use of ChatGPT in the classroom:

Person	Opinion
Dr Feras Dayoub – University of Adelaide	Dr Dayoub believes that AI tools like ChatGPT will
	make sense, be clear and helpful as it is fed heaps of
	data from books, conversations, and websites. She
	believes that a lot of companies see the benefits in
	using AI technology and will replace humans in the
	workforce. But while AI tools can produce
	information it has limitations as it does not have the
	ability to know what is true and what is not.
Lisa Rodgers – Western Australian Education	Lisa believes it is more important to know what the
Department	students know, what they have mastered and if there
	are gaps in their knowledge so the university has
	blocked AI tools from their education network to
	prevent copying and complacency.
Professor George Siemen - University of South	Professor George Siemen recognises that it a tool
Australia	that students have access to, and we need to
	integrate it into the curriculum as more AI tools will
	be developed.

2. PILOT PROGRAM IN USA

Open the following link, watch the news report, and answer the questions that follow:

Al education tools are helping students learn, grow and gain confidence (youtube.com) (3.31 minutes)

a. What AI tool is being used by the students in the First Elementary School in New York?

Th Al tool being used by students is Khanmigo provided by the Khan Institute, and it delivers a tutor assistance service.

b. Has it been a successful pilot program? Why/Why not?

The pilot program at First Avenue Elementary School in New York has been highly successful allowing students to ask questions and be motivated to pursue different learning options.

c. What feedback did the 7th Grader provide about the AI tool the class was using?

The student was excited to use the AI tool as it made it easier for her to understand maths problems.

d. How has Anna Serans, the teacher adapted to using the AI tool in her classroom?

Anna Serans had initial reservations about using the AI tool with her students in the classroom, worried that it would not help them. But over time she has become more comfortable with this tool as it provides additional guidance to students rather than just giving them the answers.

e. What do the safety protocols built into the AI tool do?

Send immediate alerts to teachers of any student inappropriate chats so that it can be dealt with.

- f. Would you be keen to use this AI tool? Give reasons for your answer
- * Student answers will vary one sample answer is provided

Yes, as the new AI tools are here to stay, so it is time to embrace what is available. Khanmigo seems to be very student friendly helping students with their learning and skills in a variety of subjects.

3. STUDENT FEEDBACK ON THE USE OF ChatGPT in the classroom

The following comments have been sourced from the article in the New York Times about the use of AI in the classroom:

Link:

What Students Are Saying About Learning to Write in the Age of A.I. - The New York Times (nytimes.com)

Read the comments and then answer the questions that follow:

In order to write, we must first be able to think on our own which allows us to be self-sufficient. With the frequent use of A.I., our minds become reliant on given information rather than us thinking for ourselves. I absolutely believe that learning to be a good writer still matters even in the age of Artificial Intelligence.

— <u>Jordyne</u>

When you write any sort of persuasive essay or analysis essay, you learn to communicate your ideas to your audience. This skill can then be applied to your daily life. Whether it's talking to your teachers, writing an email to your boss, or sending a text message to your friends, writing and communication is a fundamental ability that is needed to clearly and concisely express yourself. This is something that A.I. cannot help you with.

— <u>Mara F.R.,</u>

I firmly believe that learning good writing skills develops communication, creativity, and problem-solving skills. A.I. can also be used as a tool; I have used it to ask practice questions, compare my answers, and find different/better ways to express myself. Sure, having my essay written for me in seconds is great, but come time for an interview or presentation later on in my life I'll lack the confidence and ability to articulate my thoughts if I never learn how.

— *CC*

Sometimes I use A.I. programs such as ChatGPT to help with typing and communication. The results vary, but overall, I find it helpful in generating creative ideas, cleaning up language, and speeding up the writing. However, I believe it is important to be careful and filter the results to ensure accuracy and precision. AI tools are valuable aids, but human input and insight are still needed to achieve the desired quality of written communication.

— <u>Zach</u>

I have never personally used ChatGPT as I believe no robot can recreate the creativity or authenticity humans achieve in writing ... Even with growing advances in technology, AI can only create with the information it already knows, which takes away the greatest quality writers have: creativity.

— Stella

In my opinion, learning to be a good writer absolutely still matters in the age of AI. While artificial intelligence can assist with certain aspects of writing, such as grammar and syntax checking, it cannot replace the creativity, critical thinking, and emotional intelligence that we human writers bring to the table. Another reason is that storytelling, persuasion, and the art of crafting a compelling narrative are skills deeply rooted in human intuition and empathy. A good writer can connect with readers on a personal level, inspiring thoughts, feelings, and actions. AI may enhance efficiency, but it cannot replicate the authentic voice and unique perspective that a human writer brings to their work.

— <u>McKenzie,</u>

Question:

How comfortable are you using an AI tool like ChatGPT to help you with your schoolwork and homework. Give reasons for your answer.

*Write your opinion and then share it with another student in the class.

*Students answers will vary

Example of a Positive Response:

I am excited at the prospect of using AI tools to help me with my schoolwork and learning. It is easy to use and will allow me to improve my skills in a variety of subjects. It will reduce the time I spend on study and allow me to balance my studies with leisure and family activities.

Example of a Negative Response:

I am concerned that AI tools will make me more reliant on technology rather than allow me to think for myself. I may be tempted to copy some of the information I access through AI tools like ChatGPT and then I may get into trouble at school for plagiarism.

Activity 7: ARTIFICIAL INTELLIGENCE IN EDUCATION AND WHAT THE MEDIA IS SAYING -INVESTIGATION TASK

Learning Intentions

We will understand the arguments and evidence that is available through the media on the use of AI tools by students in the classroom.

We will draw some conclusions on whether students should be taught to use AI tools in the classroom.

Success Criteria

I will understand the arguments for and against the use of AI tools by students in the classroom.

Task Instructions:

Read the article/articles (1-3) you have been given and answer the questions that follow. Alternatively, complete the mind map that has been provided by listing 4 key points in each box that the/each article makes about the use of artificial intelligence as a classroom tool for students.

Differentiated Task:

Task Instructions:

Read Article 4 and demonstrate your understanding of the key points by completing the Multiple-Choice Quiz under the link to the article.

SAMPLE RESPONSES

Article 1:

Artificial intelligence in schools shouldn't be feared. It can be a force for positive change (theage.com.au)

Questions:

1. What does the heading of the article suggest to you?

The heading suggests that artificial intelligence in education has the potential to bring about beneficial outcomes rather than promote fear or anxiety. The use of AI tools by students in the classroom can lead to improved learning experiences and positive academic progress.

- 2. List some of the arguments the journalist makes in favour of the use of AI tools by students.
 - Al provides tools to modernise an outdated education system.
 - Al tools provide parents with the ability to help their children with their studies.
 - Al tools make creative writing more engaging for students using an interactive process.
 - All can help students with their language studies as an accessible language tutor.
 - Al can be a secondary tutor for homework assistance.
 - All can help with unpacking technology by providing coding tutorials that are accessible to students.

3. What should parents do in relation to the use of these AI tools?

Parents should speak to their children about plagiarism and cheating, helping them to understand that AI is a tool for learning. Students are still required to put effort into their studies and improve their understanding of content. AI tools do offer help to students to help them with their learning and growth.

Article 2:

Artificial intelligence such as ChatGPT to be allowed in Australian schools from 2024 | The Guardian

Questions:

1. What decision did the Education Ministers in Australia make regarding artificial intelligence and education?

The Education Ministers made the decision to allow artificial intelligence including ChatGPT to be used in all Australian schools from January of this year. This will enable all students to be on the same playing field having access to these AI tools regardless of whether they attend a private or public school.

2. Why does each Australian state have different laws in relation to education?

The Australian Constitution divides law-making powers between the Commonwealth and the states. Education comes under the authority of the states and territories with each having the power to make decisions regarding education policy, curriculum, funding, and administration. This means that each state will create its own rules and policies regarding the use of AI tools by students in the classroom. Some effort is made at the Commonwealth level to promote consistency through initiatives like the Australian Curriculum and this Framework for AI in Schools, however differences still exist due to decisions on education being made at the state level.

- 3. List two findings of research into the use of AI tools by students in the classroom.
 - Al tools can provide intelligent tutoring systems for students.
 - Al tools can provide more personalized and targeted learning materials that can help educate at risk students.
- 4. What do schools need to do to support the use of more AI tools in the classroom?

Schools need to upskill teachers to be able to support the introduction and use of AI tools in the classroom. Some professional development or additional training should be done nationally across Australia so that it is available to all teachers in their schools.

Article 3:

Al can help - and hurt - student creativity (theconversation.com)

1. Provide one argument for and one argument against the use of Al tools like ChatGPT in the classroom by students.

One argument in favour of the use of Al tools like ChatGPT by students it that they can be useful brainstorming tools that can help generate student ideas and inspire creative exploration.

One argument against the use of AI tools is that these tools can hold back student's creative thinking skills and self- confidence in their schoolwork.

2. How do students view the use of AI to help them with their schoolwork?

Students found the AI tools helpful, almost like having another brain. But they also thought that using these tools provided them with an easy option and did not let them think on their own. Students are using AI more and more for help with schoolwork whether for drafting essays, learning new languages, or studying history or science. Essentially there are mixed feelings with some happy to use AI tools to support their learning and others concerned about over reliance and in some way holding them back in their learning.

3. What are the current challenges or issues that schools face with AI?

Working out problems and being able to critically evaluate ideas is still reliant on the efforts of humans. Current ownership of material, issues of plagiarism and misleading information are challenges that schools face with AI. There are also ethical considerations and finding a balance between the use of AI technology while still enabling student creativity.

Article 4:

Al is getting very popular among students and teachers, very quickly (cnbc.com)

Multiple Choice Quiz - Solutions

1. What percentage of teachers are familiar with ChatGPT according to the poll mentioned?
a. 65% b. 79% c. 92% d. 54%
2. How much did the percentage of K-12 students familiar with ChatGPT rise to?
a. 37% b. 48% c. 75% d. 62%
3. What percentage of teachers use ChatGPT at least weekly?
a. 20% b. 46% c. 68% d. 55%
4. Which group had the most favourable view of AI chatbots according to the poll?
a. Teachers b. Students c. Undergraduates d. Parents
5. Who has been working with Newark, New Jersey's school district to test ChatGPT for education?
a. Sam Altman b. Greg Brockman c. Sal Khan d. Ethan Mollick
6. What is the estimated range of cost per user for school districts using AI according to Khan?
a. \$5-\$15 b. \$35-\$45 c. \$20-\$30 d. \$50-\$60

7. How many nours per week did knan's research save teachers?
a. 2-5 hours b. 10-15 hours c. 5-10 hours d. 15-20 hours
8. What is one major reason teachers gave for not using AI?
a. Lack of interest b. Lack of resources c. Lack of training d. Lack of time
9. What is the focus when considering technology in education according to Khan?
a. Cost b. Use case c. Brand d. Availability
10. Which group showed a decline/drop in favourability towards AI chatbots?
a. Students b. Parents c. Undergraduates d. Teachers
11. What percentage of teachers received training on AI chatbots according to the poll?
a. 10% b. 50% c. 25% d. 75%
12. How do teachers mainly use AI according to the poll?
a. Create ideas for classes b. For personal use only c. Create promotional content d. None of the above
13. What is Mollick's overall sentiment towards AI in education in the long term?
a. Neutral b. Positive c. Negative d. Indifferent

- 14. What did Khan say about the use of Al tools for teachers?
- a. It adds more burden
- b. It saves time
- c. It complicates teaching
- d. It has no impact
- 15. What is the main concern regarding Al and cheating in education?
- a. Increased workload
- b. Decreased accuracy

c. Potential cheating

d. Lack of monitoring

SAMPLE RESPONSES if students complete the mind map activity instead of the comprehension questions.

Student answers will vary

Article 1:

- Al can provide tools that revolutionize an outdated education system
- Al tools have a variety of valuable uses in the classroom from animating artwork, to teaching another language to even being a tutor to students
- There are ethical issues with using AI in the classroom like students using the tools to cheat
- Still need to consider the value of these AI tools in improving student learning and outcomes

Article 2:

- Artificial intelligence including ChatGPT will be allowed to be used by students in all schools from 2024
- Students are already using these tools so it's better for them to learn to use them properly
- Australia needed to implement a national policy on the use of AI tools in schools so that all students were able to have the same access
- Early research has shown that AI tutoring can help students especially those students who are at risk

Article 3:

- Artificial intelligence tools like ChatGPT can be both a friend for students, or a foe (enemy)
- AI can be a useful tool in the classroom to help with brainstorming ideas for example
- Students think that AI tools can give them an easy option to do schoolwork as they do not have to think
- Students are using AI tools more and more to help them with their classroom learning but they need guidance to avoid cheating, or using incorrect information when doing schoolwork

Article 4: (summary or article can be provided if teacher chooses this activity)

- More and more teachers in America are using AI tools in the classroom
- Students have provided positive reviews about the use of Al chatbots
- Interestingly older teachers and parents were less likely to have confidence in using AI tools effectively
- Article provides a range of date about teacher, student and parent feedback

Activity 8: THE EDUCATION MINISTERS AI FRAMEWORK FOR SCHOOLS-Reading Comprehension Activity

Learning Intentions

We will understand the Minister for Education's AI framework which is being released across Australia schools this year.

Success Criteria

I can explain the key point of this media release.

I understand the importance of this document in relation to my own learning and school.

Task Instructions:

Read the media release and answer the questions that follow. Alternatively complete the task on Page 28 and 29 also on the media release.

Link:

Al framework for schools released | Ministers' Media Centre (education.gov.au)

SAMPLE RESPONSES

1. Who made up the task force that produced this Framework?

The Framework was considered and agreed on by all the Education Ministers. The Taskforce was made up of members from the Australian Government, States and Territories, The Australian Education Research Organisation, the Australian Institute for Teaching and School Leadership and Education Services Australia.

2. Explain the purpose behind this Framework.

The purpose is to help guide school communities so that they can enjoy the potential benefits to the teaching and learning that AI offers and at the same time reduce the risks. Schools are discouraged from using AI products that sell student data.

3. Identify two key issues that are important in this framework? Why do you think they are important?

Al tools can personalize education and make learning more exciting and effective. It can help teachers and school communities gain more from new technology. This can only benefit the students as we live in a highly sophisticated technological society that is dynamic.

- 4. List **three** arguments in favour of using more AI in the classroom.
 - Al will be part of the work and lives of students, so they need to be educated about its appropriate
 use.
 - All can change education, change marking, assessment, and lesson planning.
 - All can take the educational experience to a whole new level to engage students and be more relevant to them.
- 5. Do you support this decision to increase the use of AI in the classroom? Why/Why not
- *Students responses will vary two possible options have been provided.

The purpose behind the Framework is to help schools use AI in a safe and effective way. It is about making sure that students and schools are safe and secure when they use these tools. The Federal and state governments understand the opportunities that AI provides students and teachers and want to ensure that schools have strict guidelines and policies to get the balance rights. So yes, I support this decision.

Or

No, I do not support this decision as more research needs to be conducted before the rollout of AI tools occurs in schools for students and teachers to use. There are privacy, security and safety issues that need to be considered. Schools and students cannot rely on AI to promote social skills, critical thinking skills, creativity, and social interactions. More pilot programs need to be run in schools to identify where the issues are before it becomes a nationwide Framework.

Alternative Task: Solutions

a. Fill in the blank with the correct words from the table below:

privacy	security	safety	national
outcomes	wellbeing	transparency	<i>,</i>
fairness	accountability	school	review

- 1. The Australian Framework for Generative Artificial Intelligence in Schools has been created to help **school** communities to use generative AI in a safe way.
- 2. Key to the Framework is the privacy, security and safety of students.
- 3. The Framework focuses on teaching and learning <u>outcomes</u>, human and social <u>wellbeing</u>, <u>transparency</u>, <u>fairness</u> and <u>accountability</u>.
- 4. The Framework was developed by the **National** Al Schools Taskforce.
- 5. The Framework will be **reviewed** at least every 12 months or as needed.

- b. Multiple Choice Questions: Choose the correct answer from the choices for each question.
- 1. What is the purpose of the Australian Framework for Generative Artificial Intelligence in Schools?
- a. To promote the use of generative AI in schools

b. To assist school communities in using generative AI safely

- c. To ban the use of generative AI in schools
- d. To collect student data for commercial purposes
- 2. Which of the following is NOT a key priority of the Framework?
- a. Privacy, security and safety of students
- b. Teaching and learning outcomes
- c. Human and social wellbeing

d. Making lots of profit for AI companies

- 3. Who is involved in developing the Framework?
- a. The Australian government only
- b. The National AI Schools Taskforce
- c. Education unions and AI experts

d. All the above

- 4. How often will the Framework be reviewed?
- a. every 6 months

b. Every 12 months

- c. Every 2 years
- d. As it is needed
- 5. What is the Albanese Government's' broader work related to the Framework?
- a. Developing a national AI strategy
- b. Banning the use of generative AI in schools

c. Safe and Responsible Al

d. Promoting the use of generative AI in schools

POST CONVENTION ACTIVITIES

Activity 1: Letter to your School Council

Write a letter on behalf of your class to your school council arguing why students should be taught more about artificial intelligence tools based on your experiences at the Convention. Aim to write about 150-200 words using examples of AI tools that you think both teachers and students would benefit from.

Activity 2: Personal reflection essay

Write a personal reflection essay about the topic that contains information about what you have learnt and where you stand on the use of artificial intelligence tools in the classroom.

Steps to writing a reflection paper:

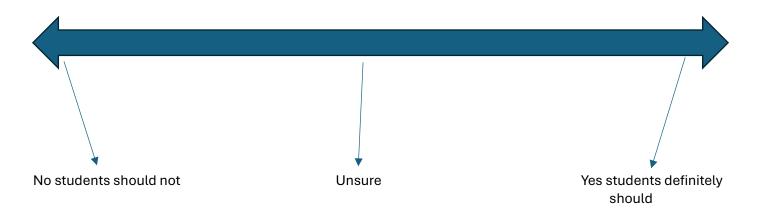
- 1. Think about the Convention topic.
- 2. Write down your thoughts and reactions to this topic.
- **3.** Organise your thoughts in a logical structure so that it has an introduction, body paragraphs and a conclusion.

Share with the rest of your class or another student.

Activity 3: Quick final reflection

Decide which of the three options below best reflects or shows your opinion about this topic after completing the pre-convention activities, set by your teacher and participating in the online primary school convention.

Topic: Should students be taught how to use artificial intelligence tools in the classroom?



ADDITIONAL TEACHER REFERENCES:

You may find these resources helpful to unpack the topic as you prepare for the Convention with your students.

High school students are using a ChatGPT-style app in an	Focus of article is on the South Australian
Australia-first trial (theconversation.com)	governments trial of EdChat which is like
	ChatGPT in 8 public schools.
5 questions schools and universities should ask before	Focus of article is on 5 key questions that
they purchase AI tech products (theconversation.com)	schools and universities should ask before
	buying Al products for students to use.
How Al Could Save (Not Destroy) Education Sal Khan	Excellent presentation that should be watched
TED (youtube.com)	by Sal Khan the founder and CEO of Khan
	Academy who provides a range of arguments
	about why AI tools can be positive for both
	students and teachers
Al Movies, Books, and Podcasts to Discuss in the	Excellent resource that provides a list of
Classroom Common Sense Education	movies, books and podcasts that have an Al
	focus with discussion questions. Could be a
	good post-convention activity as the material
	has age-appropriate references.
How this Victorian school is embracing generative AI in the	Focus is on how John Paul College in Victoria
classroom News & Insights Informa Australia	has implemented AI in the classroom referring
	to ethics, how teachers use it and the
	boundaries they have set with students.