

# ARTIFICIAL INTELLIGENCE

A JOINT POSITION PAPER ON  
DIGITAL TECHNOLOGIES IN EDUCATION  
(VERSION 2.0)

QUEENSLAND'S DECISION-MAKING FRAMEWORK



QUEENSLAND  
TEACHERS' UNION  
OF EMPLOYEES

**IEU** Independent  
Education  
Union  
Queensland and Northern Territory Branch



# Digital Technologies in Education

## Queensland's Decision-making Framework

### Context

Artificial intelligence (AI) and digital technologies continue to have a significant impact on teaching and learning practices and specifically the work of education leaders, teachers and students. While there are clear benefits from many advances in technology, the introduction of new ways of learning and working requires careful management to:

- ensure the safety of education leaders, teachers and students
- safeguard the teaching profession
- protect school and systems information and communication technology infrastructure
- preserve the integrity of education systems and their fundamental role in preparing children and young people for full and equal participation in civil life
- call on employment authorities to develop and maintain a register of approved platforms and products, like the Department of Education's *Online Service Risk Review Catalogue*, and
- demand employment authorities develop appropriate delegations of authority, in consultation with Unions and affected employees.

In Queensland, AI and digital technologies are frequently used in an ad hoc manner. Regulation of AI platforms and employer guidelines for digital technology have not kept pace with changes and technology and inadequately address work health and safety or wellbeing implications. There is an urgent need for the teaching profession to adopt this decision-making framework and ensure consultation occurs that addresses the full suite of legal, industrial, professional, and educational issues. Consultation should occur prior to engagement with AI and digital technologies.

*Consultation is not perfunctory advice on what is about to happen. Consultation is providing the individual, or other relevant persons, with a bona fide opportunity to influence the decision maker. Consultation allows the decision making process to be informed particularly as it may affect the manner in which work is undertaken in the course of employment.*

(Commissioner Smith in the *Community and Public Sector Union V Vodafone Network Pty Ltd*)

The guiding principles around the use of AI and digital technologies in education must provide education leaders and teachers with a variety of response options across different contexts and key learning areas (KLAs).





## About this document

At its heart, this AI and digital technology decision making framework urges Queensland's teaching profession to:

**STOP.**                      **CONSULT.**                      **BE SAFE.**

This document has been developed by the Queensland Teachers' Union (QTU) and the Independent Education Union - Queensland and Northern Territory Branch (IEU-QNT). We recognise the legal advice provided by Holding Redlich that recommends:

1. The use of AI and digital technology in schools should be avoided unless it is formally authorised by an employing authority (i.e. Catholic Education, Department of Education, or Independent Schools).
2. QTU and IEU members should read, understand, and strictly adhere to the AI and digital technology policies, procedures, or guidelines provided by their employer.
3. Schools and education leaders, at the local level, should be attributed responsibility and accountability only insofar as the practical implementation of policies, procedures, or guidelines is involved.
4. Governance of AI and digital technology in schools, including data privacy and accountability, must be the responsibility of employing authorities.
5. Policies, procedures, and guidelines must adhere to industrial instruments to ensure teacher workload, particularly regarding record keeping, is not exacerbated.

This Queensland decision-making framework is intended to guide professional decision making in relation to the advent of any new, or advanced, digital technology that is utilised in educational systems and practices. Some 'crossover' will occur within the subsections of this document, as aspects for consideration do not necessarily fall neatly into one category.

We have divided the application of new technologies into three major categories, under a 'traffic light' system:

1. **Green** - Applications that reduce teacher workload and/or support student learning, without undermining the role of the teacher or negatively impacting upon learning. Applications under the green category indicate autonomous, professional decision making by the education leader or teacher.
2. **Amber** - Applications that require consideration to ensure that their adoption does not undermine the role of the teacher or negatively impact upon learning. Applications under the amber category indicate that wider consultation is needed prior to implementation.
3. **Red** - Activities that undermine the role of the teacher and/or negatively impact the learning process and are therefore unacceptable to our members. Applications under the red category, indicate they are considered inappropriate and/or unsafe.

In categorising various activities into these groups, we refer to considerations in the following areas:

- Ethical responsibilities of teachers, schools and education systems,
- Curriculum, pedagogy, assessment and workload matters
- Products and platforms
- Workplace health and safety considerations.

Each of these subsections is preceded by a brief overview of the considerations that decision makers should engage with prior to implementation.

## About this document continued...

We then provide illustrative examples at three levels: the classroom; the school and the broader educational community. We extend our thanks to members who have reviewed and recommended updates for these examples.

The broader community includes entities such as state and federal governments, government and non-government school systems, teacher registration authorities, curriculum and assessment authorities, providers of initial teacher education and developers and providers of digital technology products and platforms, as all of these entities impact upon and engage with teachers and school systems.

Importantly, the examples listed are not intended to be exhaustive and teachers and school leaders should critically evaluate the challenges and opportunities of new technologies as they arise. This critical evaluation will need to occur in an on-going manner and consultation with those affected must occur. Existing consultative processes within education systems might be augmented through the formation of specific, local committees and/or workgroups as required.

Further, those engaged in this work must communicate with unions regarding risks, challenges, and opportunities. This ensures that practices adopted are informed by the profession's voice and reflect the needs of teachers and education leaders, students and the systems in which they are located. It will also inform further iterations of union advice to members and union advocacy around industrial provisions, to ensure that they are both clear and sufficiently flexible to preserve teachers' and education leaders' ability to respond to local teaching and learning contexts.





# ETHICAL RESPONSIBILITIES OF TEACHERS, SCHOOL LEADERS, AND SCHOOL SYSTEMS

## Considerations for Decision Making

### **Equity:**

Schools and education systems play a fundamental role in providing learning experiences that prepare students for full and equal participation in civil life. They have a responsibility to act in ways that protect the wellbeing and safety of students, teachers and the broader community. The learning programs they deliver must support diversity and generate equitable outcomes that are independent of socioeconomic status, school location, or the wealth of the local school community. Any utilisation of AI within the education system must ensure that these principles are not undermined.

### **Access:**

Clearly the capacity of a school, and its students and staff, to meaningfully engage with digital learning technologies is dependent, in the first instance, on access to suitable infrastructure. As such it is incumbent upon governments and school systems to provide this infrastructure and ensure that equitable access is a paramount consideration. This will require increased and sustained investment from the state and federal governments to ensure 21st century classrooms are available to all.

### **Professional and academic integrity:**



Teachers and education leaders must remain the key decision makers within the profession and determine how digital technologies are used to support teaching and learning within their classrooms and schools. Student learning, teaching/assessment processes and academic integrity must remain central considerations in decision making. Business models that outsource learning to for-profit providers or edu-tech platforms are not a feature of these decision-making frameworks.

### **The teacher-student relationship:**

It is critical to acknowledge that equity is not realised through access to digital resources and programs alone. There is a need for careful and considered selection and curation of the resources and to blend these with real-world interactions in ways that facilitate and enable meaningful engagement with the broader educational process. For this reason, teaching and learning is best served when educator and student are co-located, sharing real time and space. There is a diminution in quality when this sharing is disrupted. An over-reliance on technology and underestimation of the importance of in-person interactions is negligent in the sense that it diminishes the overall wellbeing of students and their communities.

# ETHICAL RESPONSIBILITIES OF TEACHERS, SCHOOL LEADERS, AND SCHOOL SYSTEMS






## Considerations for Decision Making (continued)

### Sovereignty of data:

School systems must ensure that the sharing of personal data meets the highest privacy thresholds. Clear limits on: (i) the type of data to be shared; (ii) where and how data will be stored; (iii) the length of time that data may be stored; (iv) the purpose for retrieving data and; (v) personnel who can access the data, must be provided to ensure clarity exists for those managing this matter within schools. Matters of data privacy are not always anticipated at the point where a system, school or teacher initially engages with a given product, and this requires ongoing consideration as the use of platforms and products evolve.



## ETHICAL RESPONSIBILITIES OF TEACHERS, SCHOOL LEADERS, AND SCHOOL SYSTEMS

	 <b>Autonomous decision making</b>	 <b>Requires consultation</b>	 <b>Not supported</b>
<b>The classroom</b>	<ul style="list-style-type: none"> <li>Having students view pre-screened digital material</li> </ul>	<ul style="list-style-type: none"> <li>Having students upload material to public websites</li> </ul>	<ul style="list-style-type: none"> <li>Use of unregulated internet chatrooms by students</li> </ul>
<b>The school</b>	<ul style="list-style-type: none"> <li>Using AI to generate e-mails to other school staff</li> <li>Using AI to write articles for school newsletters</li> </ul>	<ul style="list-style-type: none"> <li>Generation of schoolwide data and artefacts</li> <li>Use of personal hardware (e.g. personal mobile phones) to engage in collegial discussions</li> </ul>	<ul style="list-style-type: none"> <li>Contracting external commercial entities to manage student data</li> <li>Plagiarism that impinges upon Cultural and intellectual property</li> </ul>
<b>The broader education community</b>	<ul style="list-style-type: none"> <li>Using AI to develop frameworks and guidelines for ethical use of resources</li> <li>The development of a transparent process for reporting, investigating, and responding to AI incidents and cyber security breaches in schools.</li> </ul>	<ul style="list-style-type: none"> <li>Generation of collaborative research questions that will be interrogated in school-based studies</li> </ul>	<ul style="list-style-type: none"> <li>Storage of senior assessment data on commercial servers</li> <li>Use of AI tools without consideration of the ethical impacts of this use</li> </ul>



# CURRICULUM, PEDAGOGY, ASSESSMENT and WORKLOAD MATTERS

## Considerations for Decision Making

### **Curriculum responsibility:**

The federal and state governments have overarching roles in relation to curriculum, via the National Curriculum and Australian Curriculum, Assessment and Reporting Authority (ACARA), and the various (state-based) education systems and the Queensland Curriculum and Assessment Authority (QCAA). These entities must ensure that decisions made related to new and emerging digital technologies are undertaken after rigorous consultation with the teaching profession. Given the rapid pace of change in digital technologies, consultation processes must be ongoing, to ensure the approaches adopted meet the needs of the profession.

### **Curriculum currency and support:**

There is an onus on both state and federal governments to ensure that the curriculum itself is contemporary in terms of content and delivery options. This includes the provision of infrastructure (e.g. broadband access) and physical resources (school buildings and classrooms, electronic devices), as well as the additional resources that will be needed for ongoing professional development, planning and marking time, to support the delivery of a high-quality curriculum.

### **Pedagogy:**

Pedagogical decisions regarding resources and learning experiences provided for any given cohort of students must rest with classroom teachers and, crucially, cannot be replicated by AI or other technologies. Decisions about the use of AI within classroom practice cannot be imposed upon teachers by education systems and must only occur after agreement is reached via those systems' consultation provisions. While an AI tool may be able to generate a lesson plan, assessing its suitability for use with specific students, and making any necessary modifications to enhance the learning experience requires context-specific, intrinsically human interactions between students and teachers.

### **Moderation, assessment and reporting:**



Moderation and assessment/reporting considerations are critical factors in an education environment which includes AI platforms. In this new digital environment, academic integrity must be maintained, with a particular focus upon the assessment cycle. Teachers must be resourced with sufficient time to interrogate the learning process and the assess the artifacts produced by their students. The classroom teacher is uniquely positioned to undertake this interrogation and must remain at the centre of the teaching, learning and assessment cycle. Importantly, moderation is a process of decision making that draws on multiple factors, including understanding student/s context in the application of instrument marking guides. The use of digital technology in this process must take place under the oversight of the teaching profession. Any deployment of technology must not undermine teachers' central role in assessment, moderation and reporting, and must not inhibit beginning teachers from developing the professional knowledge and skills required to make sound pedagogical and assessment decisions.



## **CURRICULUM, PEDAGOGY, ASSESSMENT and WORKLOAD MATTERS**

### Considerations for Decision Making continued...

#### **Workload:**

AI has the potential to assist teachers and school leaders with some workload matters. However, there is a need to be cautious of the propensity of employment authorities to cite the use of technology and new and emerging AI platforms as the panacea for workload matters. Any systemic workload-reduction responses to AI, that are to be utilised in schools to manage workload issues, must be developed in close consultation with teachers and education leaders and the unions that represent them.




#### **Professional development:**

It is critically important that education systems provide the resourcing and time needed to support teachers' access to appropriate, high-quality and ongoing professional development (PD) regarding use of new and emerging digital technologies. This professional development should develop both the capacity to make use of advanced digital technologies and the ability to make sound and ethical pedagogical decisions regarding their use.





## CURRICULUM, PEDAGOGY, ASSESSMENT and WORKLOAD MATTERS

	 <b>Autonomous decision making</b>	 <b>Requires consultation</b>	 <b>Not supported</b>
<b>The classroom</b>	<ul style="list-style-type: none"> <li>• Use of AI to draft homework questions on a specific topic</li> <li>• Generating text for students to critique</li> </ul>	<ul style="list-style-type: none"> <li>• Use of automated essay scoring</li> <li>• Permissions that allow students to look up factual information using internet-connected devices</li> </ul>	<ul style="list-style-type: none"> <li>• Use of chatbots to enable entirely self-directed student learning</li> <li>• Use of AI tools to develop and run on-line learning</li> </ul>
<b>The school</b>	<ul style="list-style-type: none"> <li>• Having AI generate draft unit or lesson plans</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Development and implementation of process-focussed (versus artefact focussed) assessment techniques</li> <li>• Deployment of cheating/plagiarism detection software to screen student work</li> </ul>	<ul style="list-style-type: none"> <li>• Storing learning artefacts on publicly accessible servers</li> <li>• Use of AI tools to develop and run online learning</li> </ul>
<b>The broader education community</b>	<ul style="list-style-type: none"> <li>• Development of new assessment pedagogies that control for student use of AI</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction of process-focussed (rather than artefact-focussed) assessment methods</li> <li>• Rewriting of curriculum to include AI skills and/or AI literacy components</li> </ul>	<ul style="list-style-type: none"> <li>• Use of assessment products owned by external, commercial entities</li> <li>• Development of programs to reduce workload without broad consultation with key stakeholders</li> <li>• Use of AI tools to develop and run online learning</li> </ul>



## PRODUCTS AND PLATFORMS

### Considerations for Decision Making

#### **Platform priorities**

Generally digital platforms are owned by profit-seeking entities, with companies' interests often at odds with the interests of teachers, education leaders, students and the broader community. While there are many diverse examples of digital products and platforms available for use in classrooms, very few of these have been developed for the sole purpose of facilitating high-quality learning experiences. As such, consideration needs to be given to whether the educational use of these products/platforms has the capacity to detrimentally impact upon teaching and learning processes. The interests of private, profit-seeking providers must not be given precedence over education considerations.

#### **Education systems' interests:**

Government and school systems have a responsibility to ensure that educational systems operate in ways that advance the interests of schools, students, teachers and education leaders, and not those of product and platform providers.

#### **Legislative considerations:**

Legislative protection is required to limit the activities of for-profit enterprises and restrict their capacity to take profit from government funding.

#### **Costs:**

Schools and teachers must have access to various products and platforms. The cost associated must be factored into system budgets, rather than passed on to schools, students, parents or teachers and education leaders as individuals.

#### **Protection of data:**



School systems must ensure that the sharing of personal data meets the highest privacy thresholds. Clear limits on: (i) the type of data to be shared; (ii) where and how data will be stored; (iii) the length of time that data may be stored; (iv) the purpose for retrieving data and; (v) personnel who can access the data, must be provided to ensure clarity exists for those managing data within schools. Matters of data privacy are not always anticipated at the point where a system, school or teacher initially engages with a given product, and this requires ongoing consideration as the use of platforms and products evolve.

#### **Outsourcing of expertise:**

Education leaders and teachers, as experts in their field, are uniquely positioned to assess the relative strengths and weaknesses of various technologies. This expertise should be utilised in ways that strengthen and protect their position as trusted and valued professionals, rather than outsourcing to private entities operating in the education sector.

## PRODUCTS AND PLATFORMS






### Considerations for Decision Making (continued)

#### Academic integrity:

Consideration is needed of the degree to which governments and school systems invest in technologies designed to detect inappropriate use of digital technologies by students (e.g. cheating or plagiarism). Ensuring that academic integrity underpins the learning and assessment cycle, and determining how much this can be addressed by changes to teaching, learning and assessment practices, is also required. An important lens through which this must be viewed is the industrial/workload considerations, as changes to these practices are likely to impact upon teachers' workloads.



## PRODUCTS AND PLATFORMS

	 <b>Autonomous decision making</b>	 <b>Requires consultation</b>	 <b>Not supported</b>
<b>The classroom</b>	<ul style="list-style-type: none"> <li>Use of specific, supported apps for classwork or homework</li> </ul>	<ul style="list-style-type: none"> <li>Introduction of BYOD programs in specific year levels or subjects</li> </ul>	<ul style="list-style-type: none"> <li>Uploading student data, or student work, to external servers that are not authorised by the employing authority</li> </ul>
<b>The school</b>	<ul style="list-style-type: none"> <li>Use of employer-controlled record keeping platforms</li> </ul>	<ul style="list-style-type: none"> <li>Using AI to develop professional development plans for staff</li> <li>Using AI to generate reporting comments</li> </ul>	<ul style="list-style-type: none"> <li>Use of platforms that reappropriate teacher work without appropriate attribution</li> <li>Use of providers who take profit from government funding</li> </ul>
<b>The broader education community</b>	<ul style="list-style-type: none"> <li>Using AI to generate a summary of academic research on a particular education topic</li> </ul>	<ul style="list-style-type: none"> <li>Working with academic staff to develop a novel application for a specific learning purpose</li> </ul>	<ul style="list-style-type: none"> <li>Student, teacher and school data made available to external parties that are not endorsed by the employing authority</li> </ul>



## WORKPLACE HEALTH AND SAFETY

### Considerations for Decision Making

#### **Legislative considerations:**

Section 19 of the Workplace Health and Safety (WH&S) Act requires employers, when introducing any new initiatives that could have WHS implications, to consult with workers on these matters. There must be active consultation with workers during the design, implementation and review phases of new work practices. Safer systems of work can and should be implemented if consultation concludes it is necessary. The impacts of new digital technologies and AI upon education leaders, teachers and students will require education systems to develop ongoing systems of consultation and review, as is their obligation under the Act.

#### **Workload issues:**

Digital technologies, and AI tools in particular, are cited as useful in terms of reducing workload and increasing the capacity of teachers and schools to develop and implement rich, high-quality learning experiences for students. They are cited as aiding in the management of various elements of the teaching and learning process. However, their adoption comes with risks and has the potential to exacerbate workload issues. Consideration of the workload associated with the incorporation of new digital technologies into work practices must include the time, professional development, and WH&S implications of these practices. In addition, the expectation that teachers and schools adopt new practices, should be undertaken after consideration of how meaningful the new practice/extra work might be in terms of its relevance to the core business of teaching and learning. Importantly, how the system is going to resource and support its implementation is a key factor for deliberation.

#### **Cyber safety:**

The health, safety, and wellbeing concerns of online modes of education include the limited capacity of schools to monitor student, education leader and teacher safety. Further, schools have limited capacity to protect education leaders, teachers and students from malware and cyber-attacks, and from sites that aim to groom or radicalise youth, disseminate adult material such as pornography, or provide avenues for bullying. The proliferation of devices in classrooms could be used to photograph or record students and/or teachers without appropriate consent. Government and education systems' policies and protocols must ensure that adequate and appropriate protections are in place and that the systems adopted are not solely reliant on individuals to establish safe ways of working.

#### **Physical and psycho-social implications:**



The increased use of digital technologies introduces new WH&S challenges. These include an increase in biomechanical injuries, as a result of prolonged exposure to poorly designed workspaces, and new psychosocial hazards, due to expectation that staff members are available 24/7 to respond to work matters. The right-to-disconnect means that employees have the right to refuse unreasonable employment related contact out of hours. The gradual reduction in executive function and emotional regulation skills in those that spend extensive periods engaged with digital technologies, is an additional risk. These new WH&S concerns must feature in the development and review of systems of work that incorporate AI.




# WORKPLACE HEALTH AND SAFETY



## Considerations for Decision Making (continued)



### WORKPLACE HEALTH AND SAFETY

	 <b>Autonomous decision making</b>	 <b>Requires consultation</b>	 <b>Not supported</b>
<b>The classroom</b>	<ul style="list-style-type: none"> <li>• Use of school-owned digital devices to record experimental data in lessons</li> <li>• Education leader or teacher exercising the right-to-disconnect</li> </ul>	<ul style="list-style-type: none"> <li>• Use of students' own digital devices to record experimental data in lessons</li> </ul>	<ul style="list-style-type: none"> <li>• Teachers using personal digital devices or accounts to communicate with parents</li> </ul>
<b>The school</b>	<ul style="list-style-type: none"> <li>• Offering e-sport options</li> <li>• Installing electronic whiteboards in classrooms</li> </ul>	<ul style="list-style-type: none"> <li>• Installing large numbers of internet-connected devices in a single classroom</li> <li>• Education leaders and teachers managing social media from a personal device</li> </ul>	<ul style="list-style-type: none"> <li>• Responding to teacher shortages by increasing reliance on AI, without a registered teacher controlling the learning space and, particularly in the context of distance learning models, replacing classroom instruction</li> </ul>
<b>The broader education community</b>	<ul style="list-style-type: none"> <li>• Participation in online professional communities</li> <li>• Use of generative AI tools that support individual autonomy and dignity</li> </ul>	<ul style="list-style-type: none"> <li>• Allowing academics, or other external experts/coaches access to school networks</li> </ul>	<ul style="list-style-type: none"> <li>• Outsourcing teaching to external, online providers</li> <li>• Use of generative AI tools that might harm a person's wellbeing or safety</li> </ul>