# Critical thinking – core 2: Research skills to support the critical thinker



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## Focus

In this unit, students will develop skills that support critical thinking. They will document their learning journey in a ‘critical thinking portfolio’. The portfolio will be supported with information gathered through students’ research endeavours and represents a body of work that each student develops throughout this core topic. Finally, students will apply their critical thinking skills to analyse misinformation in society.

### Outcomes

A student:

* **CT5-1** distinguishes different modes of thinking and identifies the characteristics and perspectives that are central to critical thinking
* **CT5-2** evaluates a range of evidence to consider bias, generalisation, simplification, stereotyping and fallacies
* **CT5-3** constructs and builds stronger arguments with evidence-based decision making by discerning fact from fiction
* **CT5-4** undertakes research and engages in self-reflection throughout the critical thinking process
* **CT5-5** communicates arguments logically in a range of modes.

Outcomes referred to in this document are from the [Critical thinking course document](https://education.nsw.gov.au/teaching-and-learning/curriculum/department-approved-courses/critical-thinking#/asset2) © NSW Department of Education for and on behalf of the Crown in the State of New South Wales (2021).

### Rationale

Critical thinking is a form of purposeful thinking that emphasises evidence and reasoning. In today’s world, where information is readily available, critical thinking is becoming more important than remembering and recalling facts. Society values critical thinking because it is an interdisciplinary and transferable skill. It means that no matter what path or profession is pursued, critical thinking skills will always be relevant and useful.

Critical thinking skills include the ability to deconstruct, analyse, synthesise and reconstruct ideas while emphasising evidence and reasoning. Those skills are part of every toolkit for success in educational and professional arenas.

The Critical thinking course emphasises the fundamental attributes of critical thinkers and gives students a wide range of opportunities to transfer these skills across multiple disciplines. The course structure encourages students to think about thinking and transcend factual learning.

The core units introduce students to the key features of critical thinking, including how critical thinking is distinguished from other models of thinking. Students will learn about the process of argumentation and apply it to evaluate claims. Students will also gain practical research skills to collect information from various sources and evaluate their credibility.

A choice from the available options engages students in various areas of interest to reinforce the skills learnt from the core units. In addition, the options allow students and teachers to delve deeper into specific scenarios of interest. They will be guided to ask probing questions to strengthen their critical thinking skills and challenge their perceptions of the world around them.

After completing the Critical thinking elective, students will be able to apply critical thinking processes to analyse the strength and validity of information and claims. Those skills are valuable for learning in Stage 6. Critical and creative thinking is a general capability in most Stage 6 courses. By applying their critical thinking skills, students will deepen their understanding of content and skills across many disciplines.

### Aim

The course aims to engage and encourage students to develop their critical thinking skills and recognise the key aspects of a critical thinking mind. They will develop the essential skills to evaluate the vast and diverse amount of information they encounter in their daily lives. This will help them face future challenges in a continually evolving world.

### Purpose and audience

This teaching resource is for teachers delivering or planning to deliver the course. The learning sequence demonstrates how a combination of outcomes can be used to develop teaching and learning activities. It also suggests a range of resources to support teachers when planning and/or teaching the course.

### When and how to use this document

Use this resource when designing learning activities that align with the course outcomes and content. The activities and resources can be used directly or may be adapted based on teacher judgment and knowledge of their students. Core modules must precede options in the delivery of the course, consult the course document for further details on timing of core and options.

## Teacher note

The lesson sequences and suggested activities presented in this resource are examples of activities that can be used to address a sample of student descriptors from the course documents. The length and timing of each activity will be dependent on your class and your professional teacher judgement. The intention is to promote deep thinking and make it visible to students. Some activities may need adjustments to cater for your students’ interests or abilities. EAL/D students who are consolidating their English language skills may still require language scaffolding and support to access the academic vocabulary from the resources provided.

The reflective questions after each sequence are intended to promote thought and discussion for students. Therefore, there is no ‘correct answer’, rather a focus on the thinking used to address it. Some students will need more thinking time to participate in class discussions. In particular, EAL/D students may benefit from discussing complex ideas in their home language or writing down their ideas before participating in discussion.

The course supports the opportunity to explore a range of areas within the scope of critical thinking. It is recommended that teachers refer to the [Controversial Issues in Schools policy](https://education.nsw.gov.au/policy-library/policies/pd-2002-0045) when selecting topics for discussion.

After completing Core 1, students should be able to recognise critical thinking and identify the characteristics and mindsets of a critical thinker. Core 2 allows them to build on their research skills and apply their critical thinking to various scenarios and situations. Differences in assumed cultural or background knowledge should be considered. Students may need more support to be introduced to questioning and self-directed tasks.

The primary focus of Core 2 is on skills associated with research and constructing arguments or ideas based on gathered evidence. The content area the research is conducted in is not defined and can be directed by student interest or teacher expertise.

Students will also construct and maintain a learning portfolio as a part of the learning in Core 2, building on the work of becoming a reflective thinker from Core 1. Students should be given regular time to reflect and record their ideas in their learning portfolio. Ideally, this should not be a formal assessment task but an opportunity for students to reflect and record their growth during the course. Teacher-directed or peer feedback could also be a part of this process.

Aboriginal and Torres Strait Islander peoples should be aware that this document may contain images, voices or names of deceased persons in photographs, film, audio recordings or printed material.

## Learning sequence 1

### Creating and maintaining a portfolio

Students develop an electronic portfolio to document their learning journey in this elective. This portfolio will be used for the core and options units in the elective.

…the portfolio, by definition, encourages the learner to gather information about learning from multiple sources, including critical reflection and self-assessment, it engages students in intellectually challenging, creative, rigorous work. It is both process and document, stimulating reflection, collaborative mentoring, and emphasis on documentation of learning through detailed outcomes. (Zubizarreta 2008:5-6).

**Note:** The student learning descriptor suggests using an electronic portfolio. However, as this may not be possible for all students, suitable arrangements should be made to accommodate them, such as using a written template (with adjustments where necessary) that models the electronic version.

This lesson sequence is designed to develop students’ understanding of the purpose of learning portfolios, also referred to as an e-portfolio. Students should be encouraged to explore and select an appropriate method to demonstrate the progression of their thinking. [Learning portfolio](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/583#:~:text=Find%20out%20more%20resources%20%20%20%20Title,overview%20of%20e-Portfolios%20by%20George%20Lo%20...%20) templates are available from the NSW Department of Education.

A selection of student activities is provided for your consideration below.

#### Student activities

Consider the learning on critical thinking you have done so far in this course. You may have a range of products to showcase as your learning achievements. Do you think the products help convey the work, learning and time you have spent on it? For example, think about an athlete who has won a gold medal at the Olympics – does the final event indicate the work they have put in to get there? Discuss this as a class.

Watch the following clip [Helen Chen Talks Learning Portfolios (5:37)](https://www.youtube.com/watch?v=izHEORSUKwE). As you watch the clip consider the following questions and activities:

* What does student 1 say is a benefit from using e-portfolios?
* What can a portfolio showcase better than a final product?
* At the conclusion of the video, present your ideas to the class.
* Why do you think universities and some corporations are placing a greater focus on portfolios (learning, professional, design, and so on)?

Research different methods and templates which can be used to keep an e-portfolio for the class. Present your findings to the class, indicating why you would recommend the platform and how it will help them best showcase their learning.

Design a template/learning portfolio you think would help you communicate your learning progress in this course. The target audience will be your peers, teachers and parents. What elements would you include and why?

**Reflective question:** How do you think using a portfolio can give readers a better understanding of your skills and learning?

## Learning sequence 2

### Research skills

Students engage in research-related activities to gather information on critical thinking.

**Note:** Students completed a substantial amount of work on understanding critical thinking in Core 1. This descriptor extends their ideas of what critical thinking means and how it can be applied. There are opportunities to further enhance or consolidate their ideas about critical thinking whilst developing their research skills.

A selection of student activities is provided for your consideration below.

#### Student activities

The extract below from Wikipedia is about critical thinking. Conduct research into the suitability of the extract in explaining critical thinking. Annotate over the extract and adjust as you think is necessary. Include a reason/s for any changes you make, including a link to the reference source you used and why you think it is a useful source to use. If you think the resource is good and requires no changes, explain your reasoning, and include links to sources that support your thinking.

Critical thinking is the analysis of facts to form a judgment. The subject is complex; several different definitions exist, including the rational, skeptical, and unbiased analysis or evaluation of factual evidence. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem-solving abilities, as well as a commitment to overcome native egocentrism and sociocentrism (Wikipedia contributors 2022).

Academics and experts have different perspectives on critical thinking. Reflect on the research and the evaluation you completed on the Wikipedia extract. How can the research you read shape your worldview?

**Extension activity:** Students evaluate why it is difficult to define critical thinking after conducting their research.

**Reflective question:** To what extent are well-developed research skills necessary for building and shaping your understanding?

## Learning sequence 3

### Media discernment

Students develop skills in interrogating information sources, including information on the internet and in print media.

**Note:** Careful consideration must be made when choosing internet and print media information sources. While some topics may be interesting to students, they could become controversial when used as a teaching activity. It is recommended that teachers refer to the [Controversial Issues in Schools policy](https://education.nsw.gov.au/policy-library/policies/pd-2002-0045) before choosing a topic area.

Teachers may wish to pre-teach key ideas and vocabulary in this task.

A selection of student activities is included for your consideration below.

#### Student activities

We all live in the information age, and we have access to a wide range of options on ideas, opinions and content knowledge on any topic. Complete the tasks below to analyse a media article.

* What type of questions would you ask the source if you imagined the source to be a person?
* Individually or in pairs, produce a minimum of 3 questions you would ask the author about their research to evaluate the validity of their claims.
* Share your questions with the class. Are there similar questions you all would ask, or are they different?
* List 3 questions you would ask and rank them in order of importance. Justify the ranking to the class.

**Note:** Tables 1 and 2 can be used to help students think deeper about the questions they would ask and why. These could be modified as a list of considerations for students whilst planning their questions.

Table 1 – individual question planning table

|  |  |  |  |
| --- | --- | --- | --- |
| Question | Purpose of the question | Strength of question | Limitation of question |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Add more lines if necessary during your planning stage for Table 1.

Table 2 – top 3 questions for interrogating a source

|  |  |  |
| --- | --- | --- |
| Position | Question | Rationale |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

**Extension activity:** This activity promotes deeper thinking about information sources by examining the information providers on the internet. The context is the United States House Judiciary subcommittee on antitrust.

The leaders of 4 of the world's most powerful tech companies appeared before a United States House Judiciary subcommittee on antitrust law. The following clip contains highlights provided by The Telegraph.

Access [Highlights: Mark Zuckerberg's Congress grilling (3:47)](https://www.youtube.com/watch?v=T_Jt-0b6M1w) and respond to the questions:

* What are some of the most powerful questions asked?
* What do you think was the purpose of the line of questioning used?
* Why is it important to ask these types of questions concerning providers of information and the information itself?

**Note:** The following activity suggests students create a presentation for their peers. This could be modified to include pair or group work. Teachers may wish to provide examples of success criteria or what good presentations look like. Longer video clips may be reduced to the first 5-7 minutes.

Design a presentation that is part of a [gallery walk](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/555#.Yd5Y99Ik-tI.link) for your peers who are not studying critical thinking. This presentation should demonstrate how to evaluate the information or opinions on popular social media applications. The style or medium you choose to present is up to you. Think about your audience and what clear message you want them to know. The following TED Talk may help you with ideas: [How we can protect truth in the age of misinformation (14:55)](https://www.ted.com/talks/sinan_aral_how_we_can_protect_truth_in_the_age_of_misinformation#t-735608).

**Note:** You may want to show only some sections of the above TED Talk to your class given its duration.

**Extension activity:** This clip also links with content from Core 1 ‘evaluate the barriers to critical thinking, including thinking biases and cognitive fallacies.’ This linking back should help students build the importance of critical thinking and its impact on research and how to evaluate information. You may want to show only some sections of this clip to your class given its duration [What to trust in a "post-truth" world (17:39)](https://www.ted.com/talks/alex_edmans_what_to_trust_in_a_post_truth_world).

**Note:** The following activities are examples designed for students to recognise the difference between perception and the reality of data and question how data and information are represented. Additional resources on the misrepresentation of data may be found on [top drawer teachers](https://topdrawer.aamt.edu.au/Statistics/Misunderstandings/Misleading-graphs) and [Use the news in the maths classroom](https://www.abc.net.au/education/media-literacy/use-the-news-in-the-maths-classroom/12717398).

Sometimes, our perceptions of data are not authentic. In pairs, attempt the quiz on [Gapminder: You are probably wrong about](https://www.gapminder.org/).

* Record 3 facts that you found the most surprising and explain why.
* Recall how these facts have been portrayed in the media. What role does the media play in shaping our perceptions?

News creators make choices in presenting and sharing their stories. Select some of the questions from the conceptual framework presented in [Use the news: In media and across the curriculum](https://www.abc.net.au/education/media-literacy/use-the-news-media-arts/11534142) website to analyse a range of news media.

Use the table below to compare 2 news articles written about the same topic.

Table 3 – comparing information across a range of sources

|  |  |  |  |
| --- | --- | --- | --- |
| Information source and date | Credentials of the person or body presenting information or ideas | Similarities with other sources of information | Differences from other sources of information |
|  |  |  |  |
|  |  |  |  |

Develop a plan of action you would provide to other students to assist them in researching a topic.

Support your plan of action with clear reasoning, using examples from your research.

**Reflective question:** How does the quality of the sources you evaluate impact on your ability to form ideas and make judgements?

## Additional information

**Resource evaluation and support**: Please complete the following [feedback form](https://forms.office.com/Pages/ResponsePage.aspx?id=muagBYpBwUecJZOHJhv5kbKo2q_ZUXlHndJMnh2Wd8NUOUk0VTIzUDVVSlVFQVM5MkdOMkJGTjVKNCQlQCN0PWcu) to help us improve our resources and support.

The information below can be used to support teachers when using this teaching resource for Critical thinking.

### Assessment for learning

Possible formative assessment strategies that could be included:

* Learning intentions and success criteria assist educators to articulate the purpose of a learning task to make judgements about the quality of student learning. These help students focus on the task or activity taking place and what they are learning and provide a framework for reflection and feedback. [Online tools](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/622) can assist implementation of this formative assessment strategy.
* Eliciting evidence strategies allow teachers to determine the next steps in learning and assist teachers in evaluating the impact of teaching and learning activities. Strategies that may be added to a learning sequence to elicit evidence include all student response systems, [exit tickets](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/543), mini whiteboards (actual or [digital](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/575)), [hinge questions](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/560#.Y9w1CT4W5as.link), [Kahoot](https://app.education.nsw.gov.au/digital-learning-selector/LearningTool/Card/621), [Socrative](https://app.education.nsw.gov.au/digital-learning-selector/LearningTool/Card/587), or quick quizzes to ensure that individual student progress can be monitored and the lesson sequence adjusted based on formative data collected.
* Feedback is designed to close the gap between current and desired performance by informing teacher and student behaviour (AITSL 2017). AITSL provides a [factsheet to support evidence-based feedback](https://www.aitsl.edu.au/teach/improve-practice/feedback#:~:text=FEEDBACK-,Factsheet,-A%20quick%20guide).
* [Peer feedback](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/549) is a structured process where students evaluate the work of their peers by providing valuable feedback in relation to learning intentions and success criteria. It can be supported by [online tools](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Browser?cache_id=1d29b).
* Self-regulated learning opportunities assist students in taking ownership of their own learning. A variety of strategies can be employed and some examples include reflection tasks, [Think-Pair-Share](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/645), [KWLH charts](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/562), [learning portfolios](https://app.education.nsw.gov.au/digital-learning-selector/LearningActivity/Card/583) and [learning logs](https://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fapp.education.nsw.gov.au%2Fdigital-learning-selector%2FLearningActivity%2FCard%2F583%23.Y9mUe70AtNc.link&data=05%7C01%7Cjarrad.cox1%40det.nsw.edu.au%7C78bb6b78546e49db320908db03dc2ab4%7C05a0e69a418a47c19c259387261bf991%7C0%7C0%7C638108016365147499%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=QUoEhf3iE9UFjozdEOADptOPXgldK%2BF2tWZlcJ3DBsY%3D&reserved=0).

The primary role of assessment is to establish where individuals are in their learning so that teaching can be differentiated and further learning progress can be monitored over time.

Feedback that focuses on improving tasks, processes and student self-regulation is the most effective. Students engaging with feedback can take many forms including formal, informal, formative, summative, interactive, demonstrable, visual, written, verbal and non-verbal.

[What works best update 2020](https://education.nsw.gov.au/about-us/educational-data/cese/publications/research-reports/what-works-best-2020-update) (CESE 2020a)

### Differentiation

Differentiated learning can be enabled by differentiating the teaching approach to content, process, product and the learning environment. For more information on differentiation go to [Differentiating learning](https://education.nsw.gov.au/teaching-and-learning/professional-learning/teacher-quality-and-accreditation/strong-start-great-teachers/refining-practice/differentiating-learning) and [Differentiation](https://education.nsw.gov.au/campaigns/inclusive-practice-hub/secondary-school/teaching-strategies/differentiation).

When using these resources in the classroom, it is important for teachers to consider the needs of all students in their class, including:

* **Aboriginal and Torres Strait Islander students**. Targeted [strategies](https://education.nsw.gov.au/teaching-and-learning/aec/aboriginal-education-in-nsw-public-schools) can be used to achieve outcomes for Aboriginal students in K-12 and increase knowledge and understanding of Aboriginal histories and cultures. Teachers should utilise students’ Personalised Learning Pathways to support individual student needs and goals.
* **EAL/D learners**. EAL/D learners will require explicit English language support and scaffolding, informed by the [EAL/D enhanced teaching and learning cycle](https://education.nsw.gov.au/teaching-and-learning/curriculum/literacy-and-numeracy/resources-for-schools/eald/enhanced-teaching-and-learning-cycle) and the student’s phase on the [EAL/D Learning Progression](https://education.nsw.gov.au/teaching-and-learning/curriculum/multicultural-education/english-as-an-additional-language-or-dialect/planning-eald-support/english-language-proficiency). In addition, teachers can access information about [supporting EAL/D learners](https://education.nsw.gov.au/teaching-and-learning/curriculum/multicultural-education/english-as-an-additional-language-or-dialect/planning-eald-support/english-language-proficiency) and [literacy and numeracy support specific to EAL/D learners](https://education.nsw.gov.au/teaching-and-learning/curriculum/literacy-and-numeracy/resources-for-schools/eald).
* **Students with additional learning needs**. Learning adjustments enable students with disability and additional learning and support needs to access syllabus outcomes and content on the same basis as their peers. Teachers can use a range of [adjustments](https://education.nsw.gov.au/teaching-and-learning/disability-learning-and-support/personalised-support-for-learning/adjustments-to-teaching-and-learning) to ensure a personalised approach to student learning. In addition, the [Universal Design for Learning planning tool](https://education.nsw.gov.au/teaching-and-learning/learning-from-home/teaching-at-home/teaching-and-learning-resources/universal-design-for-learning) can be used to support the diverse learning needs of students using inclusive teaching and learning strategies. Subject specific curriculum considerations can be found on the [Inclusive Practice hub](https://education.nsw.gov.au/campaigns/inclusive-practice-hub).
* **High potential and gifted learners**. [Assessing and identifying high potential and gifted learners](https://education.nsw.gov.au/teaching-and-learning/high-potential-and-gifted-education/supporting-educators/assess-and-identify#Assessment1) will help teachers decide which students may benefit from extension and additional challenge. [Effective strategies and contributors to achievement](https://education.nsw.gov.au/teaching-and-learning/high-potential-and-gifted-education/supporting-educators/evaluate) for high potential and gifted learners help teachers to identify and target areas for growth and improvement. In addition, the [Differentiation Adjustment Tool](https://education.nsw.gov.au/teaching-and-learning/high-potential-and-gifted-education/supporting-educators/implement/differentiation-adjustment-strategies) can be used to support the specific learning needs of high potential and gifted students. The [High Potential and Gifted Education Professional Learning and Resource Hub](https://schoolsnsw.sharepoint.com/sites/HPGEHub/SitePages/Home.aspx) supports school leaders and teachers to effectively implement the High Potential and Gifted Education Policy in their unique contexts.

All students need to be challenged and engaged to develop their potential fully. A culture of high expectations needs to be supported by strategies that both challenge and support student learning needs, such as through appropriate curriculum differentiation. (CESE 2020a:6).

### About this resource

All curriculum resources are prepared through a rigorous process. Resources are periodically reviewed as part of our ongoing evaluation plan to ensure currency, relevance and effectiveness. For additional support or advice contact the Teaching and Learning Curriculum team by emailing secondaryteachingandlearning@det.nsw.edu.au.

**Alignment to system priorities and/or needs**:

This resource aligns to the School Excellence Framework elements of curriculum (curriculum provision) and effective classroom practice (lesson planning, explicit teaching).

This resource supports teachers to address [Australian Professional Teaching Standards](https://educationstandards.nsw.edu.au/wps/portal/nesa/teacher-accreditation/meeting-requirements/the-standards/proficient-teacher) 2.1.2, 2.3.2, 3.2.2, 7.2.2.

This resource has been designed to support schools with successful implementation of new curriculum, specifically the NSW Department of Education approved elective course, Critical thinking © 2021 NSW Department of Education for and on behalf of the Crown in right of the State of New South Wales.

The resource is produced to assist schools with promoting and implementing the course for the first time. As the course may be taught by teachers from a range of key learning areas, the resource is designed to support teachers from a variety of KLA expertise.

**Department approved elective course**: Critical thinking

**Course outcomes**: CT5-1, CT5-2, CT5-3, CT5-4, CT5-5

**Author**: Curriculum Secondary Learners

**Publisher**: State of NSW, Department of Education

**Resource**: Teaching resource

**Related resources**: Further resources to support Critical thinking can be found on the [Department approved elective courses](https://education.nsw.gov.au/teaching-and-learning/curriculum/department-approved-courses/critical-thinking) webpage including course document, sample scope and sequences, assessment materials and other learning sequences.

**Professional Learning**: Join the [Teaching and Learning 7-12 statewide staffroom](https://education.nsw.gov.au/teaching-and-learning/curriculum/statewide-staffrooms) for information regarding professional learning opportunities.

**Universal Design for Learning Tool**: [Universal Design for Learning planning tool](https://education.nsw.gov.au/teaching-and-learning/learning-from-home/teaching-at-home/teaching-and-learning-resources/universal-design-for-learning). Support the diverse learning needs of students using inclusive teaching and learning strategies.

**Consulted with**: Aboriginal Outcomes and Partnerships, Inclusion and Wellbeing, EAL/D.

**Reviewed by**: This resource was reviewed by Curriculum Secondary Learners and by subject matter experts in schools to ensure accuracy of content.

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**Evidence Base**:

‘The long-term vision is for a curriculum that supports teachers to nurture wonder, ignite passion and provide every young person with knowledge, skills and attributes that will help prepare them for a lifetime of learning, meaningful adult employment and effective future citizenship’ (NESA 2020:xi).

The development of the course and the course document as part of department approved electives aims to respond to the goals articulated in NESA’s curriculum review. Consistent messages from the review include:

* ‘flexibility’ was the word most used by teachers to describe the systemic change they want
* teachers need more time to teach important knowledge and skills
* students want authentic learning with real-world application.

This teaching resource provides teachers with some examples of explicit and authentic learning experiences. The option to adjust these learning sequences leads to ‘increased local decision making in relation to the curriculum’ as this ‘is associated with higher levels of student performance’ (NESA 2020:52).

The suggested strategies for teaching and learning align with the principles of explicit teaching. ‘The evidence shows that students who experience explicit teaching practices perform better than students who do not. Explicit teaching reduces the cognitive burden of learning new and complex concepts and skills, and helps students develop deep understanding’ (CESE 2020a:11).

## References

**Links to third-party material and websites**

Please note that the provided (reading/viewing material/list/links/texts) are a suggestion only and implies no endorsement, by the New South Wales Department of Education, of any author, publisher, or book title. School principals and teachers are best placed to assess the suitability of resources that would complement the curriculum and reflect the needs and interests of their students.

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AITSL (Australian Institute for Teaching and School Leadership (2017) ‘[Feedback Factsheet](https://www.aitsl.edu.au/teach/improve-practice/feedback#:~:text=FEEDBACK-,Factsheet,-A%20quick%20guide)’, AITSL, accessed 6 February 2023.

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