3.3 Develop expert learners:
Explore the construction of knowledge

Key actions: Teachers

- Guide my students to understand that all individuals and groups have their own unique perspective on the world, and that their core beliefs and experiences influence the way they construct and value knowledge.
- Compare and contrast cultural understandings (eg creation stories, attitudes and conceptual understandings from different time periods (eg belief in a flat earth)) to demonstrate that knowledge is a cultural, social and political construct that can change with time and circumstance.
- Stimulate rethinking by introducing contentious issues for students to question their own underlying assumptions and to have the opportunity to change their minds.
- Structure investigations that enable students to identify bias and racist/sexis class conscious attitudes in the community and the media.
- Explore how each discipline has its own focus and constructs knowledge through its own processes and methods (eg compare the way scientists explore and express knowledge of forces with the way an artist would explore and express forces.)
- Challenge my students to consider whether things they say are facts, opinions or a combination.

Key actions: Students

- Listen carefully to others’ ideas and try to see them from their point of view.
- Ask questions: “Would they think this way?”, “Who might say this?”, “Is there another way that someone might see this?”
- Use a variety of different research skills and ask myself: “How reliable is this information?”, “Whose interests are being served?” “What was the author’s purpose here?” and “Is there any bias?”
- Use graphic organisers such as mind maps to work out the links between ideas.
- Challenge students to consider whether the ideas they don’t know by exposing them to new ideas or perspectives.
- Elicit students’ responses to “Why is this worth knowing?”
- Target discussions where students share perspectives and give and receive feedback on their ideas.
- Explicitly teach skills and create opportunities for students to disagree with ideas and/or each other in appropriate ways.
- Teach students to critically analyse information and primary sources of data from a range of sources and for specific purposes.
- Actively seek out online opportunities for students to compare beliefs and perspectives with other learners, wider society and experts.
- Deepen students’ understandings of the past and present as a means of influencing the future.
- Design activities that encourage and actively support students to be ‘applied’ historians, scientists, writers, artists etc.

Aboriginal learners connecting to country

I couldn’t believe it—we had won! We didn’t win just the state competition but the national one as well! What had started as an idea to help our Kaurna students reconnect to their country had blossomed into a full-on community project. Without a shadow of doubt, the learning outcomes and social benefits surpassed all our expectations.

It all started in 2003 when we began to develop a wetland area on the Kaurna Plains school site, with the intention of increasing students’ cultural pride and understanding. Over the next two years, as the students worked and talked together, their shared cultural knowledge grew. They watched their wetlands become a living environment, and their questions flowed.

Like our Kaurna Plains students, most Aboriginal learners live in urban areas and, whilst many still retain a cultural connection to their country, many children and students find it difficult to experience and maintain cultural practices and develop a sense of identity. They live in cultural dislocation, and often ‘learning about’ that identity is the nearest they come to understanding.

Connection to country is evident in the more remote areas of Australia where traditional practices live on, but still there are occasions underpinning different perspectives, search for problems, generate ideas, and develop a critical attitude.

Debates: Pose a question for debate and allow students a class session for research or discussion before the debate. Split this preparation time so that they spend the first half gathering information about only the affirmative arguments, and then the same amount of time on only the negative arguments. The debate is conducted the next day. A topic might be “Human nature: Good or evil?”

Knowledge interrogation: Create opportunities for students to explore assumptions underpinning different perspectives, search for problems, generate ideas, and develop a critical attitude.

Ways to explore the construction of knowledge

Human graph: Each student considers the issue in question, then stands on a spot along a continuum that moves from ‘strongly agree’ through to ‘strongly disagree’. When asked, students justify their position. After hearing others’ views, they may wish to change position.

Thinking scaffolds: Students use strategies such as Venn diagrams to compare and contrast knowledge from different perspectives, times and places.

For more thinking scaffolds, go to <http://www.educause.com/graphorganizer/pdf/vern.html>.

Justice alert
What cultural constructs are dominant? Whose assumptions and core beliefs are affirmed and whose are threatened?

Facet or opinion: This is one way to support students to consider whether things they say are facts, opinions or a combination.

Fact or opinion

<table>
<thead>
<tr>
<th>Topic</th>
<th>Fact</th>
<th>Opinion</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fact Opinion Not sure</td>
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3.2.1 Strategy: Students can follow these steps to clarify their thinking:

3 ideas I want to discuss
2 questions I want to ask
1 action I want/need to take

Knowledge interrogation: Provide opportunities for students to explore assumptions underpinning different perspectives, search for problems, generate ideas, and develop a critical attitude.

Debates: Pose a question for debate and allow students a class session for research or discussion before the debate. Split this preparation time so that they spend the first half gathering information about only the affirmative arguments, and then the same amount of time on only the negative arguments. The debate is conducted the next day. A topic might be “Human nature: Good or evil?”

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Language that teachers can use to explore the construction of knowledge

Imagine yourself as a person from another culture or time. How might you view this issue differently?

Now that you’ve worked with Jane and Lyn, do you have another way of looking at it?

This text is written through the eyes of … How would it look through … eyes?

Can you explain your idea?

Can you see where these theories connect or disconnect?

Now you’ve thought it through, what questions do you have?

This TV program is targeting … What are you noticing? Can you detect a bias?

Why might people think that? What is another view?

Whose voices are being heard and whose are not?

How reliable is the source of this information?

Why have these people reported the information differently?

Here is a bee. What knowledge would be most important to a beekeeper, a gardener, a scientist, a doctor, an artist, a historian, a geographer or a mathematician?

Practice check

Am I modelling open mindedness, willingness to listen and consideration of other points of view?

How do I respond to students’ misconceptions about the world and what strategies do I use to challenge their conceptions?

Do I give opportunities for students to discuss and question new ideas vigorously?

In what ways do I help students construct accurate and useful knowledge about new concepts?

Am I respecting different ways of learning for students with diverse backgrounds and needs?

How do I let students know it’s okay to ask me questions and challenge what is being said? Does my language encourage critical feedback?

Knowledge is presented as fact or the ‘truth’ and open to only one interpretation

Teachers impart knowledge and students listen

Students play ‘Guess what’s in the teacher’s head?’—questions are always asked by the teacher with a predetermined answer in mind

Students are discouraged from discussing or questioning

Students who raise contentious issues or disagree are considered difficult, are discouraged, or are ‘shut down’

The views of the dominant culture strongly influence planning, programming and implementing learning tasks

Notes:

Understanding is developed when key ideas and skills are reiterated, explored and rethought. These key ideas and skills need to have value beyond the classroom and to be linked to real world issues, so that students are engaged in processes of inquiry and problem solving that have some meaning to their own lives and to the issues facing contemporary society.

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