Integrate indigenous knowledge into the curriculum

This is one of a series of cases that illustrate the findings of the best evidence syntheses (BESs). Each is designed to support the professional learning of educators, leaders and policy makers.
BES cases: Insight into what works

The best evidence syntheses (BESs) bring together research evidence about ‘what works’ for diverse (all) learners in education. Recent BESs each include a number of cases that describe actual examples of professional practice and then analyse the findings. These cases support educators to grasp the big ideas behind effective practice at the same time as they provide vivid insight into their application.

Building as they do on the work of researchers and educators, the cases are trustworthy resources for professional learning.

Using the BES cases

The BES cases overview provides a brief introduction to each of the cases. It is designed to help you quickly decide which case or cases could be helpful in terms of your particular improvement priorities.

Use the cases with colleagues as catalysts for reflecting on your own professional practice and as starting points for delving into other sources of information, including related sections of the BESs. To request copies of the source studies, use the Research Behind the BES link on the BES website.

The conditions for effective professional learning are described in the Teacher Professional Learning and development BES and condensed into the ten principles found in the associated International Academy of Education summary (Timperley, 2008).

Note that, for the purpose of this series, the cases have been re-titled to more accurately signal their potential usefulness.

Responsiveness to diverse (all) learners

The different BESs consistently find that any educational improvement initiative needs to be responsive to the diverse learners in the specific context. Use the inquiry and knowledge-building cycle tool to design a collaborative approach to improvement that is genuinely responsive to your learners.

Integrate indigenous knowledge into the curriculum

The pass rate for Aboriginal secondary school students in a culturally responsive social studies class was twice that of comparable students in a “traditional” class.

This case, situated in Canada, explains how important a culturally responsive teaching approach was to the success of indigenous learners from low socio-economic status communities. The case contrasts cultural discontinuity in teaching and learning with teaching that creates educationally powerful connections with indigenous learners’ cultural identities.

See also BES Case 7: Establish culturally responsive relationships with students to reduce disparities and raise achievement.
Cultural continuity


Introduction

Kanu investigated two grade 9 social studies classes over the course of a year, comparing a ‘culturally responsive’ teaching approach with a ‘traditional’ approach. In the culturally responsive, or enriched, class, the teacher (Mr B) explicitly integrated Aboriginal knowledge and perspectives into the content, resources, teaching, and assessment strategies. In the traditional class, the teacher (Mr H) did not deliberately and consistently integrate Aboriginal knowledge and perspectives.

While this was not strictly an experimental study, there were marked differences in the outcomes for the Aboriginal students from the two classes in terms of social studies test scores, conceptual understanding, and motivation for attending. Integration of Aboriginal cultural knowledge and/or perspectives was linked to improved learning for all students but especially for Aboriginal students.

Targeted learning outcome/s

Both teachers reported that their teaching goals included developing their students’ conceptual understanding of social studies topics, such as human rights, and their ability to apply learning beyond the lessons.

The learning objectives in the enriched class were carefully designed to embed Native perspectives. The teacher aimed for students to understand:

- the importance of respect in Native cultures, the vital role of elders, the importance of family and community to Native identity, the importance of spirituality in learning and education and in the lives of many Native peoples, the various effects of European contact and settlement on Native peoples, and Native contributions to Canadian society (2006, p. 124).

Learner/s and learning context

There were 31 Aboriginal students (Ojibway, Dene, Cree, Metis, and Sioux) involved in this study, all from low socio-economic status backgrounds. Fifteen were in the ‘enriched’ class, and 16 in the ‘regular’ class. Both classes had social studies twice per week.

During the course of a school year, 63 observations were made of the enriched class and 34 of the control class (these were recorded in note, audio, and video form). Thirty-one Native students and ten non-Native students were interviewed. Further data were obtained from students’ written work and reflections, teacher and student journals, and records of attendance and participation.
The enriched class (Mr B) – a culturally responsive approach

The learning opportunities for the students in this class put Aboriginal perspectives at the centre.

These opportunities included:

- storytelling, with access to ‘counter-stories’;
- learning scaffolds, such as examples and experiences;
- activities that involved observational learning instead of listening to teacher-talk;
- talking/problem-solving/sharing circles in which everyone had a chance to contribute but was not forced to do so;
- members of the Aboriginal community coming in as guest speakers;
- the use of visual-sensory modalities (such as overhead transparencies);
- the use of journal writing as an alternative to oral presentations in front of the class.

The teacher emphasised and valued the students’ existing knowledge base. To facilitate understanding, he tried to ensure that no unnecessarily complex language was used in teaching content or in tests.

Mr B had superior knowledge of unit topics, Native issues, and history. He actively sought to strengthen his own understandings in these areas and to embed Aboriginal perspectives into his programme.

The regular class (Mr H) – a traditional approach

The teacher:

- where convenient, occasionally introduced Native content and perspectives into a curriculum that remained largely Eurocentric;
- relied solely on a textbook for Aboriginal material.

Mr H believed in the principle of inclusion but felt uncomfortable focusing on Aboriginal perspectives because he believed that to do so would be unfair to students from other minorities.

Outcomes

Data show that, in terms of their understanding of social studies concepts, higher-level thinking, and self-confidence, regularly attending Aboriginal students in the enriched class achieved more highly than their counterparts in the regular class. For example, one student was able to describe what he had learned in a human rights unit in this way: “I now see the banning of Aboriginal ceremonies in the past as cultural genocide, and I can defend my position on that if asked…”

More than 80% of the students in the enriched class passed their assessments on social studies content, compared with just 44% of those in the control group, as the table shows:

<table>
<thead>
<tr>
<th>Social studies achievement of regularly attending Aboriginal students</th>
</tr>
</thead>
<tbody>
<tr>
<td>The enriched (culturally responsive approach) class</td>
</tr>
<tr>
<td>Pass rate (%)</td>
</tr>
<tr>
<td>Average mark (%)</td>
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<tr>
<td>Mark range (%)</td>
</tr>
</tbody>
</table>
Outcomes

Attendance levels were not higher for the enriched class, but it is important to note that the students who did attend regularly often cited the integration of Aboriginal perspectives as a reason for their regularity. For example:

*I look forward to this class every week. You learn something new about Native issues, like successful Native professionals, politicians, and businesses, and this whole idea of urban reserves in Winnipeg … suddenly you don’t feel that bad about yourself any more.*

*We are learning a lot about Native issues in this class, and about other indigenous cultures. For example, I enjoyed the video Whale Rider which was about Māori culture in New Zealand. It has some similarities with Cree culture.*

By contrast, students in the regular class, when asked to explain what made them consistent attenders, said they came to school because they were required, or forced, to do so:

*If I don’t get my attendance slip signed by Mr. H I will lose the government financial assistance I am getting for attending classes.*

When interviewed, students in the enriched class attributed their improved achievement to the following elements in Mr B’s approach:

**Connection**

*Make connections to students’ lives*

- Cultural continuity: their understanding was broadened and deepened by the introduction of Aboriginal content and perspectives. The teacher supported social studies learning with Aboriginal literature, myths, and legends and stories by First Nations authors. He used videos and print material on Native issues and perspectives, including material on the Indian Acts and how they impacted on Aboriginal peoples’ human rights.
- They were given opportunities to make connections between what they were learning about others’ culture and their own lives:
  *We are learning a lot about Aboriginal issues in this class, and about other indigenous cultures. The video [Whale Rider] we saw about Māori culture in New Zealand has some similarities with Cree culture and it showed us how cultures adapt to change (p. 35).*
- Counter-stories. For example, material about the Iroquois Confederacy was used to counter the myth that Aboriginals did not have an organised form of government before the arrival of the Europeans. Counter-stories (provided by the research team, the teacher, and the students’ own research) took students beyond the scope of their textbooks and deepened their understandings:
  *Our discussion of the Aboriginal interpretation of the 1876 Indian Act provided a different perspective and that really opened my eyes … I cannot believe that Aboriginals were not allowed to leave their reserves without a permit.*
- Classroom displays and resources that made Aboriginal culture visible.
- Learning scaffolds, including demonstrations and illustrations from Native culture, that provided support for conceptual understandings.

Students also remarked on how valuable they found it to be able to draw on the knowledge of the Ojibway and Cree research assistants.

**Alignment**

*Align experiences to important outcomes*

The researchers noted that Mr B willingly attended workshops in an effort to enhance his own knowledge and understanding of Aboriginal issues and history. This had an impact on his students:

*He knows a lot about Aboriginal cultures/issues/content and he is always bringing these into Social Studies (Aboriginal student, p. 37).*

Students spoke positively of the way in which their teacher explained important ideas in clear, simple language. Another factor that made his teaching effective was his revisiting of key content, particularly in preparation for assessments.
## How the learning occurred

| Community | Students responded well to the opportunities they were given to work in supported small groups and to take ownership and lead decisions in those groups. They also found one-on-one interactions with the teacher valuable. Discussion circles were facilitated in ways that ensured equal, respectful, and non-threatening opportunities for students to share ideas with each other:  
*I feel respected in this class. Mr B always insists that we listen to each other and respect what each of us has to say* (2007, p. 37).  
Productive student relationships supported the learning of both Aboriginal and non-Aboriginal students:  
*He has a positive attitude toward us and he wants us to do well. He gets really mad when we don’t do our assignments* (2007, p. 37). |
| Community | Build and sustain a learning community |
| Interest | Strategies used by the teacher included stories, discussion circles for sharing views and ideas, visits from Native guest speakers, and field trips to Aboriginal communities (to experience a pow-wow and a sweat-lodge). The positive impact of these experiences was emphasised by students. |
| Interest | Design experiences that interest students |

## Implications for pedagogy

The theoretical framework that motivated this study, and which Kanu uses to explain the findings, is that of cultural discontinuity. This framework is built on the idea that students’ cultural socialisation affects how they learn in the school system – and how they “negotiate, mediate, and respond to curriculum, instructional strategies, learning tasks, and communication patterns in the classroom” (2007, p. 24). While discontinuity, or cultural mismatch, sets children up for failure, continuity of home and school cultures increases the chance of success. Kanu emphasises the critical role that teachers have in strengthening cultural continuity. Their knowledge, attitudes, and instructional approach have the power to make a positive difference for students:

Successful integration [of cultural perspectives] requires sensitive, caring teachers who are knowledgeable about Aboriginal issues and topics and pedagogical strategies (or are willing to acquire such knowledge) and value them sufficiently to integrate them into their curricula on a consistent basis (2007, p. 37).
The evidence presented in this case can be used to inform teachers’ inquiries into their own practice.

**Focusing inquiry**
What is most important and therefore worth spending time on?

**Teaching inquiry**
What might work best? What could I try?

**Learning inquiry**
What happened? Why did it happen?

Suggested questions:

- What knowledge do you have, or need to acquire, in order to maximise cultural continuity for all your students?
- Do you / how could you engage students with counter-stories and ideas that go beyond what is readily available in textbooks and other published resources?
- How might your students describe your relationship with them? Would they use the terms ‘respectful’ and ‘caring’?
- Do you integrate cultural knowledge – reflecting all the cultures represented in your class – into your teaching in a deliberate, consistent manner, or only incidentally?