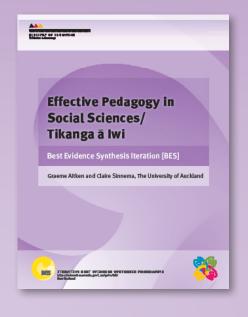
BES CASES: INSIGHT INTO WHAT WORKS Ngā Rangahautanga Kōtuitui Taunaki Tōtika: he kitienga taunaki whai hua

# Use effective teaching to counter the effects of reading difficulties as a barrier to curriculum learning

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.





ITERATIVE BEST EVIDENCE SYNTHESIS PROGRAMME HEI KETE RAUKURA http://educationcounts.govt.nz/goto/BES New Zealand



Te Tāhuhu o te Mātauranga

### **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**

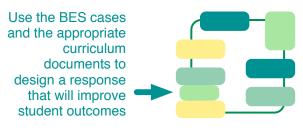
The BES cases overview provides a brief introduction to each of the cases. It is designed to help you quickly decide which case or cases could be helpful in terms of your particular improvement priorities.

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

### Use effective teaching to counter the effects of reading difficulties as a barrier to curriculum learning

In all schools, teachers are faced with the challenge of how best to support students with limited reading skills to access the curriculum. This case shows how a range of interactive teaching strategies accelerated the achievement of students with low levels of literacy. While the focus group is students aged 13 to 14 studying history, the case has relevance for all learning contexts.

See also BES Case 20: Use a participation framework to support students to discuss their problem-solving strategies.

## *Teaching complex historical content to middle school students with learning disabilities*

Source	Gersten, R., Baker, S., Smith-Johnson, J., Dimino, J., & Peterson, A. (2006). Eyes on the prize: Teaching complex historical content to middle school students with learning disabilities. <i>Exceptional Children</i> , 72(3), pp. 264–280.
Introduction	Learners with reading difficulties are often disadvantaged in social sciences by teaching/learning approaches that rely on reading expertise. This can often be seen in their superficial knowledge of key concepts (memorised names and dates, for example) or in the lower expectations that teachers have of them. This study provides evidence of an approach that enabled learners with reading difficulties – and competent readers, too – to develop higher-level, conceptual understandings. In a randomised control trial, the content was delivered in a <i>traditional</i> manner to a control group and <i>interactively</i> to an experimental group. It was found that students with learning difficulties were able to develop complex historical understandings when they could access the content via highly interactive learning opportunities.
Targeted learning outcome/s	<ol> <li>Describe key events in the Civil Rights Movement.</li> <li>Explain the meaning of those events and their significance to contemporary society.</li> </ol>
Learner/s and learning context	This case involved Grade 7 and 8 students (ages 13–14). Half the students were classified as 'learning disabled' (LD), with reading difficulties and problems with organisational strategy. On average, they were reading at a 9- to 10-year age level (several years behind their chronological age) and reading 40% fewer words per minute than their peers. Learning-disabled students were assigned randomly to either the control group or the experimental group.
Pedagogy	<ul> <li><b>Resources</b> <ul> <li>the video <i>Eyes on the Prize</i> (two-hour edited version)</li> <li>relevant extracts from the textbook and from magazines of the era.</li> </ul> </li> <li><b>Description experiences</b> <ul> <li>Both groups: <ul> <li>viewed the video over a period of five weeks in 18 four to 10-minute segments, read written resources, and responded to questions based on the video and those resources;</li> <li>completed four compare-contrast worksheets that drew attention to contemporary comparisons and examples of decisions made by different people;</li> <li>were helped to construct vivid narratives of the period by responding throughout the unit to the question or "How would you feel if [you were in that situation or were that person]?"</li> </ul> </li> <li>The control group (traditional approach): <ul> <li>responded to video-related questions posed by the teacher and students at the end of each day's segment;</li> <li>answered questions on their own, before whole-class discussion;</li> <li>read text passages on their own;</li> <li>completed compare-contrast worksheets on their own.</li> </ul> </li> </ul></li></ul>

3. The experimental group (interactive approach):

This group used exactly the same resources and activities as the control group but in these importantly different ways:

- In addition to the questions at the end of each video segment, the teacher interrupted each segment on three or four occasions to clarify content, respond to student questions, or ask students a question.
- Questions were answered using a think, pair, share approach.
- Text passages were read in mixed-ability pairs, with students reading alternate paragraphs aloud. Pairs were asked to help each other if stuck on a word.
- The compare-contrast worksheets were completed in pairs.

Students from both groups were assessed on three measures, but only the LD students were assessed using the content interview. This interview was an acknowledgment that a written assessment would not adequately capture what these students understood.

	LD students			Non-LD students		
Assessment measure	Control group	Experimental group	Effect size	Control group	Experimental group	Effect size
Content interview (out of 30)	21.9	26.1	.72			
Written exam (out of 20)	6.3	9.3	1.0	10.1	12.0	.76
Matching test (out of 18)	13.6	15.6	.62	16.4	17.1	.35

Summary of results (	(mean	scores)
----------------------	-------	---------

LD students in the experimental group outperformed LD students in the control group on all measures. Effect sizes for the content interview and written exam were large.

Non-LD students in the experimental group outperformed non-LD students in the control group, indicating that the approaches used specifically for the benefit of LD students also benefited non-LD students.

Using curriculum resources that students found accessible improved the learning of all students – significantly more so when this was done in conjunction with interactive approaches.

It was the interactive assessment measure (the content interview) that gave the LD students the best opportunity to demonstrate their learning. Compare, for example, Jaime's answers to the question "Why did *Eyes on the Prize* begin with the Emmett Till segment?"

### 1. Jaime's response (written examination)

Because he got deformed from the [unclear]. And he was from the South and had an open casket ceremony.

#### 2. Jaime's response (content interview)

4.	same s response (content inter view)		
	Jaime:	Maybe because that started the Civil Rights Movement.	
	Interviewer:	How did it start it?	
	Jaime:	Maybe they just got mad about it and decided to do something about it.	
	Interviewer:	Who got mad?	
	Jaime:	The African Americans. And so because they killed him. They killed Emmett Till. And they were like tired of it so they like tried to do something.	
	Interviewer:	OK. What did they try to do?	
	Jaime:	They would like try to go on to marches and stuff. They were so they would be able, wouldn't be like discriminated.	
	Interviewer:	Tell me a little bit about Emmett Till. Who was he and what happened?	
	Jaime:	He was a boy from the North. They weren't really racist up there. So he wasn't used to that. In the South, he went down to visit and he talked to a European American and he got killed for just doing that.	
	Interviewer:	And then what happened to the people who killed him?	
	Jaime:	They didn't get they weren't accused of it. But later TV like stations paid them to tell the truth, their side of the story. And they said that they didn't kill him.	
te h	ow much riche	er the interview response is, though not initially. Note also that the incremental	

Note how much richer the interview response is, though not initially. Note also that the incremental nature of the interaction enabled Jaime to demonstrate his knowledge of the content. He did not, however, explicitly answer the required question, so he scored in the middle range.

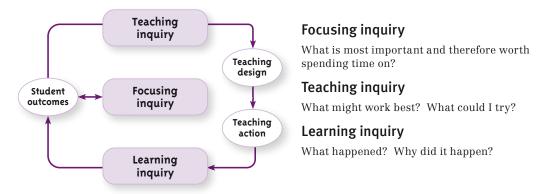
### Pedagogy

Outcomes

The learning of LD students (and others) is assisted by:

- carefully structured activities that enable sustained interactions between partners with different levels of ability;
  - deliberate repetition of the same information from different sources (in this case, the video and extracts from a textbook and magazine);
- the use of empathy questions (such as "How would you feel if ...?") to help students personalise historical events;
- the use of brief discussion (in this case, at intervals during the video screening, which appeared not to interrupt the flow of the content);
- allowing students to demonstrate their understanding in oral interviews.

The evidence presented in this case can be used to inform teachers' inquiries into their own practice.



### Inquiry

Implications

for

pedagogy

Suggested questions:

- Thinking about your last social sciences lesson, choose two students to focus on, one with reading difficulties, the other a competent reader. How would each have experienced that lesson? How well did each achieve?
- How might learning difficulties (such as limited reading skills) impact on students' developing understandings of complex historical concepts?
- What characteristics of the interactive (experimental) approach might explain the difference between Jaime's written and interview responses?
- How did the approaches used in this case differ from your own past efforts to:
  - sustain interactions between partners?
  - repeat information?
  - use empathy questions?
- Which of your learners do you think would most benefit from an approach like the one exemplified by this case?

