Assessing reading: How assessment can be used to target teaching and enhance understanding of reading comprehension

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Abstract

The skills demonstrated by a proficient reader are not easy to untangle. Current research acknowledges that reading comprehension is a highly complex area of ability, one that needs to be understood as the coordination of a number of integrated processes. Using example test questions and data, this presentation explores how assessment can help us make sense of reading comprehension in a way that curricula and commonly used teaching strategies cannot. Assessment is evidence that informs us about the skills involved in the reading process, how they relate to each other, and how they develop in complexity. When assessment is understood in this way, as much more than a tool to compare a student's ability with that of their peers, it can be used to identify what skills individual students are consolidating, and what specific steps will help their development.

Introduction

The skills demonstrated by a proficient reader are not easy to untangle. Current research recognises reading comprehension as a highly complex area of ability, one that needs to be understood as the coordination of a number of integrated processes that are both important and changeable (Conley & Wise, 2011, p. 93; Kendeou et al., 2016, p. 63; O'Reilly et al., 2014, p. 404). Curricula commonly reflect this complexity by covering a wide range of reading components, such as knowledge of text structures, making inferences and evaluating authorial devices. Teaching strategies and resources, such as dialogic reading, think-aloud and reading responses, encourage students to think more deeply about what they are reading and may help teachers to broadly identify where students need support (e.g. whether they are better able to recognise literal than inferential meaning). This paper explores what assessment can offer to our understanding of students' reading ability and how it can support the use of curricula and resources.

Well-designed assessments provide valuable information

Standardised assessments allow teachers to identify where students are performing in a particular learning domain, but the question then becomes – performing in what? In unpacking the 'what', we learn about the integrated reading processes and help to make sense of them. While no assessment could capture the process of understanding what we read in its entirety, a comprehensive, well-designed assessment can provide valuable information about the specific skills and processes that constitute reading comprehension. This specificity serves to elaborate the broader descriptions provided in curricula and provides better targeting for teaching practices. It is not so much a matter of untangling reading processes, but of focusing on one at a time. Due to the integrated and holistic nature of reading comprehension, improvement in one area will inevitably influence others. Note that the term 'skills' is used here to refer to the broader abilities being demonstrated (e.g. locating, interpreting or evaluating) and 'processes' refers to the ways in which these broader abilities are being applied (e.g. making connections to interpret information).

Standardised assessments, like the Progressive Achievement Tests (PAT) and NAPLAN, are still commonly perceived as tools that rate a student's ability in comparison with their peers. This is certainly something standardised assessments do, but as Dylan Wiliam explains, 'any assessment is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers to make decisions about the next steps in instruction' (2011, p. 43). Higher student growth in reading comprehension is achieved when teachers have information about their students' reading progress, and assessment that informs teaching is increasingly acknowledged as an effective way to ensure that instruction is timely and appropriate to students' needs (Conley & Wise, 2011, p. 97; Förster et al., 2018, p. 99). Data-driven instructional decisions are now being encouraged across many schools and systems (Griffin, 2012, p. 2). In the report known as Gonski 2.0. Finding 7 refers to the compelling evidence that 'tailored teaching based on ongoing formative assessment and feedback is the key to enabling students to progress to higher levels of achievement' (Department of Education and Training, 2018). In monitoring students' progress, teachers can identify where there is a need for extra support, adapt instruction as appropriate, and evaluate their approach to teaching the key components more generally. (Anderson & Primary English Teaching Association Australia [PETAA], 2016, p. 108; Förster et al., 2018, p. 98).

Diagnostic insights from assessment data

For teachers to make informed decisions about their students, they require assessment data that capture the skills and processes involved in reading comprehension, and in a way that they can relate to their practice. Assessment data are only diagnostic if they enable educators to identify where support is most needed. This paper explores the diagnostic potential of test questions, and specifically the insight they provide into where students' understanding may be lacking, and the next steps for improvement. Take the following example of a test question.

Seru, Claire and Mike were playing at the edge of the river. Mike dipped his toes into the water, but Seru didn't want to. He said it was too cold. Claire crept up behind Seru and gave him a little push.

What was Claire trying to make Seru do?

To answer this question, a student needs to connect information across the four sentences to infer that Claire's intention was to push Seru into the river. While relating the first and last sentences may be enough to make the inference, recognising Seru's reluctance to enter the water supports a more comprehensive understanding. Forming this understanding requires linking a pronoun reference across two of these sentences, which is an added complexity. If a student has not understood that

Claire intention was to make Seru fall into the river, they have not successfully made the link across sentences. If a teacher wanted to obtain further information about what this student *could* do, a logical step would be to see if they could make a simpler connection within or across a sentence. Take this second example.

Ian threw the ball to Meg. Crash! The vase lay in pieces on the floor.

What happened when Ian threw the ball to Meg?

This is an easier connection to make than in the first example. The sentences are shorter, so a student only needs to maintain the link between ideas across a small section of text, and there are no pronoun references. But a link still needs to be made, relating the action of throwing the ball to the broken vase. If the same student as before answers this question correctly, the teacher would know that they *are* able to make simple links but need to be supported to make more challenging links across longer sections of text, with added complexities such as pronoun referencing.

These examples provide some indication of the insight that can be gained from interrogating the skills and processes required to comprehend text. To answer these questions, a student is required to interpret information (skill) by making connections across adjacent sentences (process). These examples also illustrate that the process of making connections increases in difficulty. At the simplest level, it involves linking explicit ideas within a sentence or across simple sentences. For proficient readers, it could involve making links across an extensive piece of text, where ideas are subtle or technical or there is some other complicating factor. This progression is important; knowing where a student is at in their ability to perform this process is only useful if you have some idea of where they need to go next. As current research suggests, assessment in reading comprehension should support teachers in understanding the key components that underpin growth (Anderson & PETAA, 2016, p. 108; Förster et al., 2018, p. 98; O'Reilly et al., 2014, p. 404).

Such a deepening of teachers' understanding can have significant implications for classroom practice, in particular by informing their evaluation of a student's ability in a variety of common activities. Retell of a text (either through think-aloud or other approaches) is one such activity that is often used to evaluate student's reading comprehension skills. But when retelling or recalling what they've read in their own words, students are using a range of processes that may be challenging to distinguish. For example:

- Can they identify the main idea and differentiate it from the details?
- Can they logically sequence events?
- Can they link cause and effect to make sense of events?
- Can they rephrase ideas using different vocabulary and sentence structure?

Asking a student to retell what they have read is a useful task, but it can be challenging for teachers to know what they are looking for and how to support a student who may struggle with the task. As test questions tend to focus on one of these processes at a time, assessment data have the potential to inform which of these areas a student may have most difficulty with. Take the following example.

Geckos range from about 8 to 15 cm in length, have a long snout and a long, thin tail. Their skin colour can be grey or pinkish and some have patterns. They have soft bodies and scales. They use the suction pads on their toes to stick to walls and other objects.

What does this paragraph tell us about geckos?

- what they eat
- where they live
- what they look like
- how long they live for

By recognising that this paragraph is about what geckos look like, a student has been able to categorise the explicit clues in the paragraph by relating them to a simple summary. This student could be challenged in a variety of ways, such as by performing a similar task with less prominent clues and perhaps with a different text type. A student who is unable to answer this question has not been able to relate the clues to the summary provided and could therefore be given a much simpler related task, such as organising familiar items into categories (e.g. food, animals, activities).

A different kind of question, such as sequencing events in a narrative, would provide information about a different process. If a student sequences events in a linear narrative, they may have demonstrated the ability to recognise a summary of the events, or synonymous matches for key words, depending on the question. If the temporal structure of the text is not linear, the student may have interpreted some challenging conjunctival or adverbial phrases to recognise this. If they could identify the main idea of a text from a list that includes less important details from the text, they have demonstrated an ability to make this distinction. While all these tasks relate to the general skill of summarising, they each target a specific reading process that offers guidance for the teacher about 'where to next'.

Assessments are springboards to further investigation

Understanding these processes and their progression means understanding how student ability can be evaluated and supported. It means that there are steps that can be taken – steps based on evidence – to assist students who are currently identified as failing to meet the expected level of performance represented in curricula. Low levels of reading comprehension ability need to be caught early. Evidence suggests that students who enter secondary school with a low reading capacity will find it difficult to engage with the material taught in school and are therefore likely to fall further behind. Further, this struggle is likely to continue beyond their education into employment (Griffin, 2012, p. 2; Kendeou et al., 2016, p. 63; Woodford, 2016, p. 43).

Using assessment to learn about and support students in reading comprehension is not without its challenges. Time-poor teachers are unlikely to be able to interrogate every question in an assessment for every student, and there is no guarantee that this interrogation would be fruitful in every instance. Assessments are best considered as springboards to further investigation, and the data can be explored intermittently, depending on the teaching focus at the time. The data can, and must, be part of a process of ongoing formative assessment and feedback, rather than a conclusion about students' achievement levels. It can also be usefully organised to simplify the investigative process. Reading questions can be categorised not only according to the broader skill areas (e.g. locating, interpreting and evaluating), but also according to the dominant process required to answer the question (e.g. making connections, generalising and summarising, comparing and contrasting, recognising authorial devices and so on).

Conclusion

Assessment data can also assist teachers to identify the developmental sequence of typical skill acquisition by looking at the relative difficulty of items and the complexity of the texts. The examples provided in this paper illustrate the range and focus of reading skills and processes that underpin a quality described proficiency scale or learning progression. Assessment in reading comprehension should support teachers in understanding the key components that underpin growth (Anderson & PETAA, 2016, p. 108; Förster et al., 2018, p. 98; O'Reilly et al., 2014, p. 404). The Gonski report (Department of Education and Training, 2018) refers to the usefulness of evidence-based learning progressions in setting performance expectations, understanding and reporting progress, informing teaching and learning and promoting educator professional development. When the learning progression or described scale is the focus point, test questions and their texts serve as illustrations of the different levels. These descriptions would ideally encourage a shared language that extends current understanding of reading comprehension and elaborates curriculum statements (such as the references to 'comprehension strategies' across the Literacy strand at different year levels). (Australian Curriculum and Reporting Authority [ACARA], 2018). This deepening of understanding could be shared with students, who would come to better recognise their own development and have clear goals to work towards.

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