

# Brightpath

## Formative Writing Assessments





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# 1 Brightpath— an overview



Brightpath is an empirically researched assessment process that provides reliable and valid data from teachers' assessments of their own students, using typical classroom tasks.

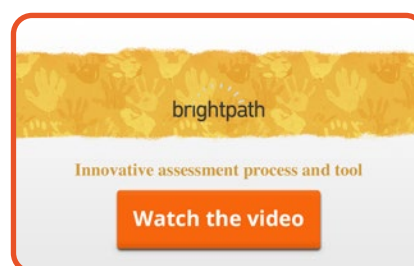
## How do teachers assess their students?

Teachers assess their students by comparing their student's work to the calibrated exemplars. They decide which exemplar a student's performance is closest to, or which two exemplars the performance falls between.

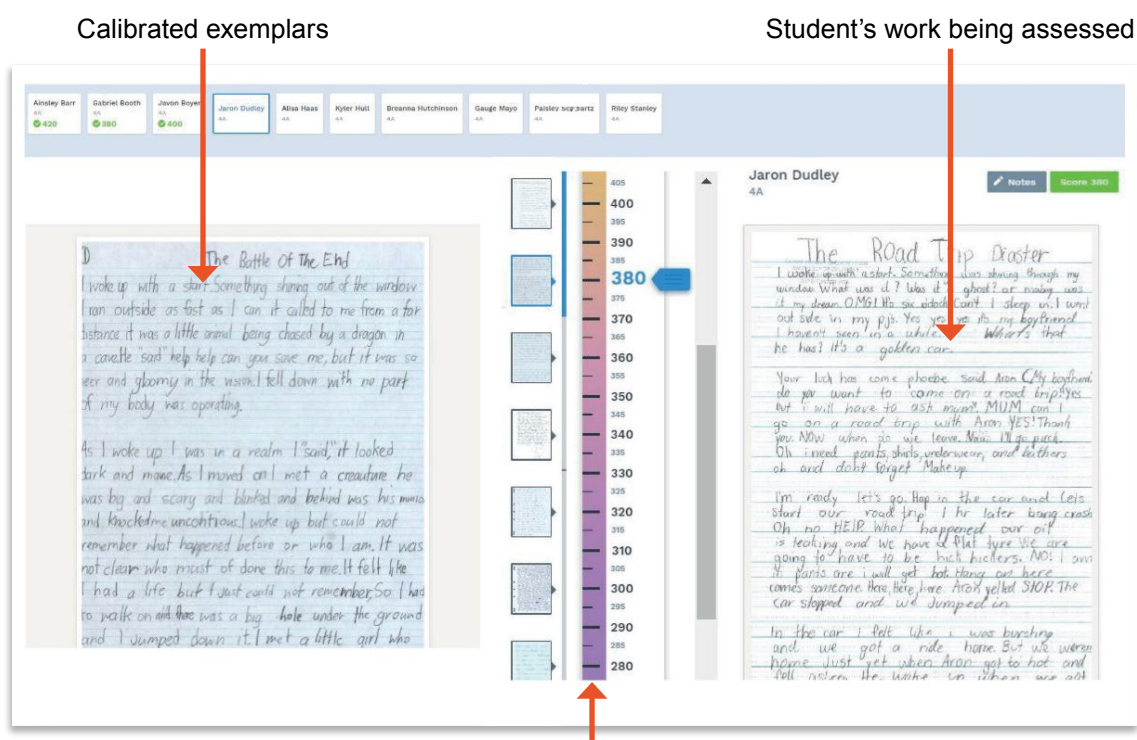
To the right of the scale is the student's work that is being assessed. Once the teacher has decided on the score, she or he selects the green score button and the score is instantaneously captured in the reports.

Figure 1 shows an image of the Teacher's Ruler. In the centre is the Brightpath scale. To the left of the scale are thumbnail images of the calibrated exemplars. The exemplar displayed at a score of 380 is shown on the far left. As teachers work along the scale they can open and read each of the exemplars.

**Click the image below** to watch a video about how school leaders and teachers use Brightpath.



**Figure 1:** Overview of the assessment process used in Brightpath. The Narrative Teacher's Ruler shown.



Teachers compare their students against the calibrated exemplars to score them

## What impact has Brightpath had in Australia, to date?

Brightpath is part of the state testing program in **Western Australia** where schools from all three sectors use Brightpath for formative and summative assessment purposes.

The Department for Education in **South Australia** has purchased a licence to make Brightpath available to its schools.

The Department of Education in the **Northern Territory** is co-ordinating a large trial with its schools.

Independent Schools, **Queensland** is co-ordinating a trial with its schools.

Diverse schools, from high fee-paying schools in **NSW** and **Victoria** through to small remote schools in the Northern Territory, are using Brightpath and are strong advocates for the value it provides to their schools.

In addition,

- Cawsey, Hattie and Masters referred to Brightpath in their report, *Growth to Achievement on-demand resources for teachers*.

The authors identified Brightpath as one of the few tools, 'aligned with well-constructed learning progressions and capable of providing information about the points students have reached in their learning and the growth they have made over time.'

- The Brightpath writing descriptors were used by ACARA to inform the drafting of the literacy learning progressions and ACARA has acknowledged Brightpath in the most recent version of the learning progressions.

*Brightpath is currently in use in six jurisdictions in Australia*



## What assessments are available?

- **Narrative writing** (Pre-primary/Reception to Year 9)
- **Persuasive writing** (Pre-primary/Reception to Year 9)
- **Information report writing** (Pre-primary/Reception to Year 9)
- **Recount writing** (Pre-primary/Reception to Year 1 or 2)
- **Oral Narrative** (Pre-primary/Reception to Year 1 or 2)
- **Science Investigations** (Year 3 to Year 6)
- **Book review** (Year 3 to Year 8)







## 2 Benefits for schools and sectors

**Brightpath offers schools and sectors the unique opportunity to obtain comparable data which can be used to inform and evaluate school initiatives.**

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### **How does Brightpath benefit systems and sectors?**

Brightpath enables systems and sectors to support teachers with embedding formative assessment into their writing programs. It also enables systems and sectors to better support their schools evaluate their own school initiatives and meet their school accountability requirements.

### **Does Brightpath contribute to more effective teaching of writing?**

Feedback from school leaders is that Brightpath provides valuable in the moment professional learning for teachers. They observe that teachers gain more detailed understanding of how writing develops and this leads to more effective teaching.

In 2019, the School Curriculum and Standards Authority (SCSA) in WA commissioned research to examine how schools that have been actively using Brightpath, performed on the NAPLAN writing assessments, compared to schools that had not been using Brightpath.

The total sample size consisted of 12,177 students from 113 Western Australian Primary Schools.

The study found that students in high-usage Brightpath schools progressed substantially more than students in schools not using Brightpath, specifically an additional 3 months during the period between years 3 and 5.

### **Does Brightpath support existing school and system initiatives?**

Brightpath has been found to support existing school and system initiatives. It is important to point out that Brightpath is different from many assessment and moderation processes commonly used in schools. This is because the assessment process provides reliable or consistent data from teachers within a school and from across schools.

Brightpath also provides a scaled score from the teachers' assessments. Prior to Brightpath, a scaled score could only be achieved through externally imposed standardized testing programs. The Brightpath scaled score allows teachers to view their students' performance relative to younger and older students, track growth in student learning and evaluate their impact on student learning.

One way of thinking about Brightpath is that it combines the strengths of teacher judgement with the strengths of NAPLAN.

### **How does Brightpath complement NAPLAN?**

Both Brightpath and NAPLAN assess development in writing. In NAPLAN, markers assess students' work using a rubric. This marking provides raw scores and psychometric analyses are conducted, after the marking is completed, to generate scale scores. In Brightpath, the scoring process automatically provides scaled scores and, as there is no need for further analyses, the reports are immediately available for teachers and school leaders to use.

Brightpath therefore enables schools to collect reliable data more frequently and from students in non-NAPLAN years.





# 3 Supporting formative assessment



The federal report *Growth to Achievement on-demand resources for teachers* identified Brightpath as one of the few tools capable of providing information about the points students have reached in their learning and the growth they have made.

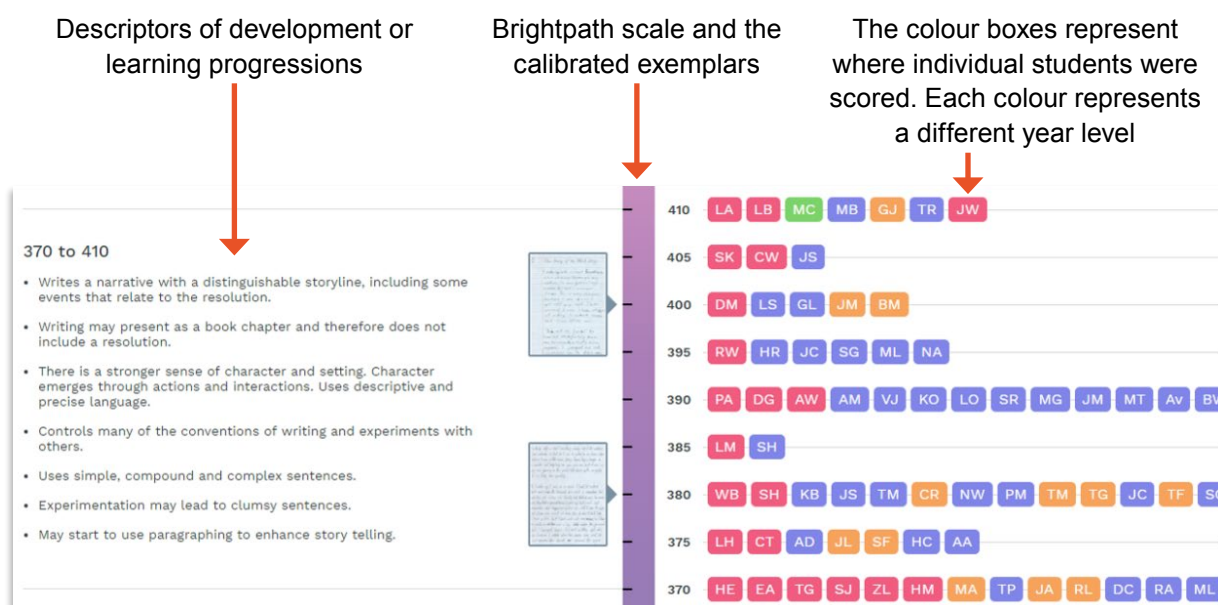
## How does Brightpath support formative assessment processes?

There are a number of reports that help teachers and students look at where students are in their learning, where they need to go and how much progress has been made.

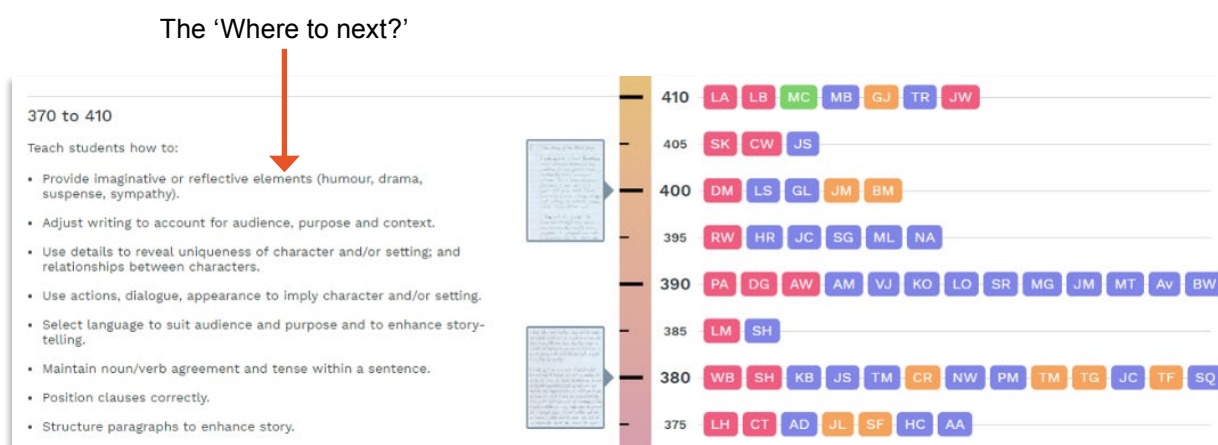
The performance profile (Figure 2) shows students' scores relative to the performance descriptors and calibrated exemplars.

The teaching points display (Figure 3) tells teachers and students what students need to learn next, based on the students' scores.

**Figure 2:** The Brightpath performance profile shows students' scores relative to the performance descriptors and exemplars.



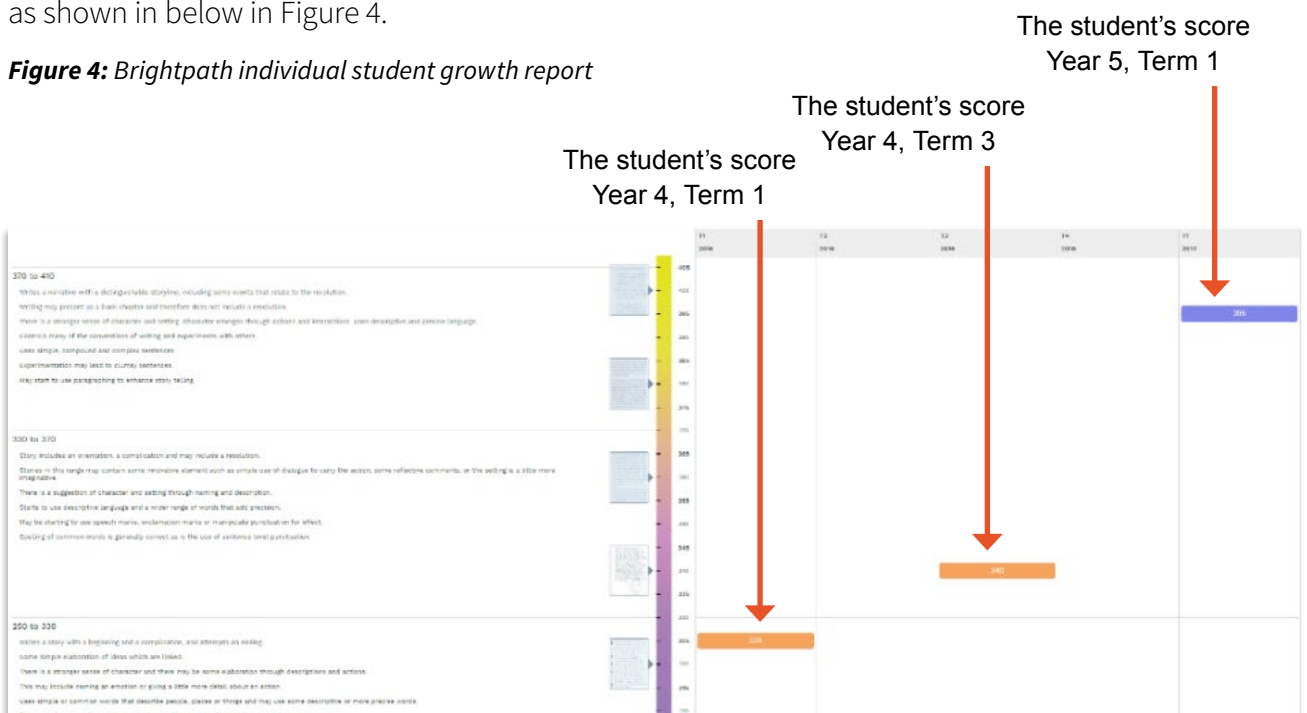
**Figure 3:** Brightpath performance profile also shows teachers and students what the student needs to focus on.



## Reporting for teachers and students

Teachers can also view individual student progress, as shown in below in Figure 4.

**Figure 4:** Brightpath individual student growth report



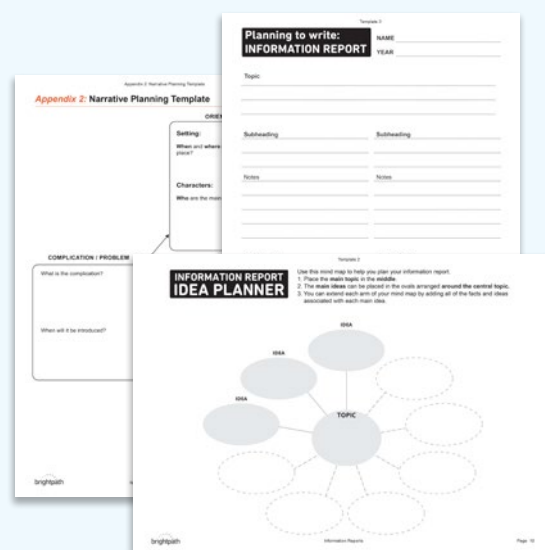
The teacher in this classroom has used Brightpath's student profile scores and the Teacher's Ruler to show her students how they scored and what they need to focus on.





## Supporting student learning growth

Teachers can readily share the assessment information with their students, if they feel it's appropriate. There is a **report for students** (Figure 5) and there are **resources** that teachers can use in the classroom.



**Figure 5:** Report to students

### Student reports

[Report To Parents](#)
[Report To Student](#)

Calendar year:

2017

Term:

Term 2

Academic year:

Year 3

Scale:

Narrative Scale

Student:

Vern Abshire

### Report To Student

Narrative Scale, Year 3, Term 2 2017

#### Vern Abshire

Title of the scale and date:

Narrative Scale, 03 July, 2017

Student's Brightpath score:

400

← The student's score

What you did well:

↶

↷

B

I

☰

☷

- Writes a narrative with a distinguishable storyline, including some events that relate to the resolution.
- Writing may present as a book chapter and therefore does not include a resolution.
- There is a stronger sense of character and setting. Character emerges through actions and interactions. Uses descriptive and ;
- Controls many of the conventions of writing and experiments with others.
- Uses simple, compound and complex sentences.
- Experimentation may lead to clumsy sentences.
- May start to use paragraphing to enhance story telling.

← Performance descriptors (what you did well)

Now start to:

↶

↷

B

I

☰

☷

- Provide imaginative or reflective elements (humour, drama, suspense, sympathy).
- Adjust writing to account for audience, purpose and context.
- Use details to reveal uniqueness of character and/or setting; and relationships between characters.
- Use actions, dialogue, appearance to imply character and/or setting.
- Select language to suit audience and purpose and to enhance story-telling.
- Maintain noun/verb agreement and tense within a sentence.
- Position clauses correctly.
- Structure paragraphs to enhance story.

← Teaching points (what you need to do next)

Teacher's comments:

↶

↷

B

I

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☷

I like the way your dialogue contributed to your story.



# 4 Helping schools to evaluate students' growth in learning



## Brightpath enables teachers to evaluate their students' growth in learning.

### How does Brightpath help schools evaluate student growth in learning?

It is particularly challenging for school leaders and teachers to know, and demonstrate, how much progress students are making. Brightpath represents a significant breakthrough in enabling teachers to evaluate their students' growth in learning. The pre- and post-test report (Figure 6) shows the distribution of student scores across two rounds of assessment.

The lower histogram, in the display, shows the distribution of scores the first time the students were assessed, and the upper histogram shows the distribution of scores the second time the students were assessed. The tables list the pre- and -post-test means and standard deviations, and the effect size calculation.

**Figure 6:** Pre- and post-test report





# 5 Supporting school accountability requirements



## Brightpath enables school leaders to evaluate their school's performance.

### How does Brightpath support schools with meeting their accountability requirements?

There are a number of reports that help school leaders and teachers evaluate whole school performance. Figure 7 shows a report that allows school leaders to view the data from all year levels in their school on the same scale.

**Figure 7 (Below):**

*This figure displays distributions for each year level.*

- Each box in the histogram shown below represents the number of students given that score, on the scale.
- Each year level is shown on a different vertical axis and is depicted in a different colour.
- School leaders can see the spread of ability at a year level as well as the overlap of ability across year levels.

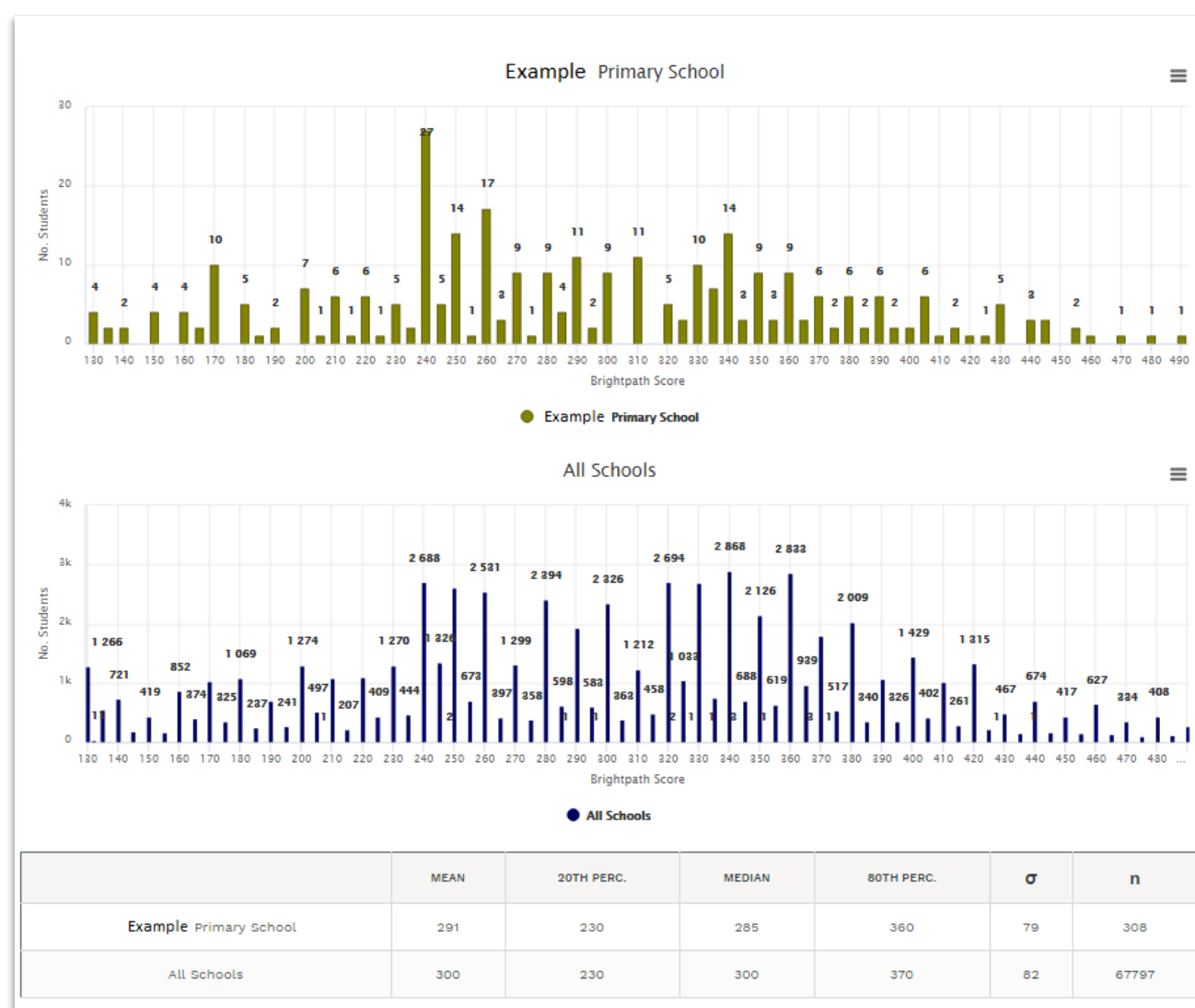


## Schools leaders can compare their school's performance with that of other schools

Figure 8 below shows a report that allows school leaders to view their school performance relative to the All Schools' performance.



**Figure 8: School level comparisons**





## A summary of the benefits of Brightpath



Brightpath uses typical classroom tasks.



Brightpath develops teachers' assessment skills. School leaders often refer to Brightpath ***as in the moment*** professional learning.



Brightpath provides teachers with information as to what they need to teach next based on how they assessed their students.



Brightpath helps teachers differentiate learning.



Brightpath enables school leaders to use their teachers' assessments to rigorously evaluate their school performance.



[www.brightpath.com.au](http://www.brightpath.com.au)

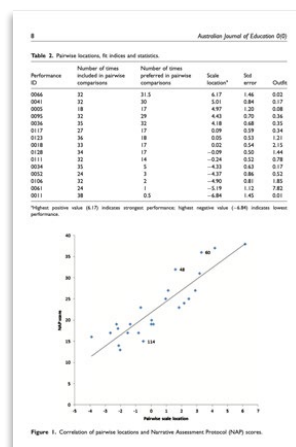
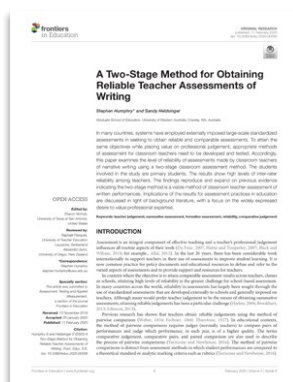
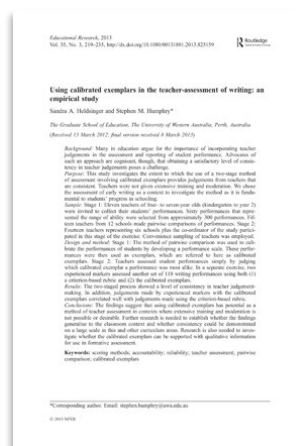


# 6 The research behind Brightpath



## What is the research behind Brightpath?

Dr Stephen Humphry and Dr Sandy Heldsinger researched and developed a methodology of obtaining reliable and valid data from teachers' assessments of their own students using typical classroom tasks. The researchers began this work twenty years ago when they were responsible for the Western Australian state testing program and they continued their research through the University of Western Australia. Humphry and Heldsinger have custom built software, called Brightpath, to make the assessment process readily available to schools.



## Research to calibrate scales

The researchers, with the assistance of classroom teachers, calibrate student work performances to develop an assessment scale.

The first step is to devise assessment tasks that will elicit performances from students that reveal development in the construct being assessed. Teachers from a wide range of schools then assess their students and collect their performances.

The next step is to calibrate the scale. A small number of expert teachers participate as judges in an exercise which involves them comparing many hundreds of pairs of performances, each time judging which performance in each pair demonstrates more ability, in terms of the construct being assessed. Typically, this process uses between 150 and 300 performances.

The data are analysed and if there is a high separation index, i.e. very strong agreement between the judges as to the relative ordering of the performance, further research is conducted to develop the scale ready for teachers to use.

An expert team undertakes qualitative research to develop the performance descriptors. This involves analysing all calibrated performances to identify and describe key features of development. Whilst undertaking this work, the team also selects the performances at key points on the scale which will function well as exemplars.

The final stage of work involves developing materials to support teachers with assessing their own students.

Published research about Brightpath. (See page 20)

## Research articles

1. *Unleashing the power of assessment: Placing assessment back in the hands of teachers*, Anderson, A., Heldsinger, S., & Humphry, S., In: Journal of Higher Education Theory and Practice. In publication.
2. *A Two-Stage Method for Obtaining Reliable Teacher Assessments of Writing*, Humphry, S. & Heldsinger, S., 11 February 2020 <https://www.frontiersin.org/articles/10.3389/feduc.2020.00006/full>
3. *A Two-Stage Method for Classroom Assessments of Essay Writing*, Humphry, S. M. & Heldsinger, S., 18 Jul 2019, In: Journal of Educational Measurement.
4. *Raters' perceptions of assessment criteria relevance*, Humphry, S. & Heldsinger, S., 1 Jul 2019, In: Assessing Writing. 41, p. 1-13
5. *Applying a Thurstonian, Two-Stage Method in the Standardized Assessment of Writing*, McGrane, J. A., Humphry, S. M. & Heldsinger, S., 2 Oct 2018, In: Applied Measurement in Education. 31, 4, p. 297-311
6. *A two-stage assessment method for assessing oral language in early childhood*, Humphry, S., Heldsinger, S. & Dawkins, S., Aug 2017, In: Australian Journal of Education. 61, 2, p. 124-140
7. *Common Structural Design Features of Rubrics May Represent a Threat to Validity*, Humphry, S. & Heldsinger, S., 2014, In: Educational Researcher. 43, 5, p. 253-263
8. *Using calibrated exemplars in the teacher-assessment of writing: an empirical study*, Heldsinger, S. & Humphry, S., 2013, In: Educational Research. 55, 3, p. 219-235
9. *Using the Method of Pairwise Comparison to Obtain Reliable Teacher Assessments*, Heldsinger, S. & Humphry, S., 2010, In: The Australian Educational Researcher (AER). 37, 2



# Contact details

**Dr Sandy Heldsinger**

[Sandy@brightpath.com.au](mailto:Sandy@brightpath.com.au)

**+61 8 9322 7429**

**+61 8 409 341 557**

[www.brightpath.com.au](http://www.brightpath.com.au)