

**Assessment Tools for Teaching and Learning Technical Report # 46****Summary of Teacher Feedback from the V4 Calibration of asTTle  
Pānui and Tuhituhi Assessments for Curriculum Levels 2 to 6**

Abstract: This report summarises the teacher feedback from the standardisation of around 2,300 pānui (reading) and 1,800 tuhituhi (writing) scripts completed by Māori-medium students in Years 4 to 12 in early 2004. This evaluative feedback is used to improve the quality of assessment materials in pānui and tuhituhi before their publication in the forthcoming asTTle V4 software. The asTTle software allows teachers to customise test difficulty for the ability of their own students.



**Submitted by the Assessment Tools for Teaching and Learning team,**

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## Summary of Teacher Feedback from the V4 Calibration of asTTle™ Pānui and Tuhituhi Assessments for Curriculum Levels 2 to 6

asTTle is funded by the Ministry of Education to Auckland UniServices at the University of Auckland to research and develop an assessment application for Reading, Writing, Mathematics, Pānui, Pāngarau, and Tuhituhi for Years 5-11 (Levels 2-6) for New Zealand schools. We acknowledge this funding, and thank the Ministry of Education for their continued assistance in the development of this project.

This report summarises the teacher feedback from the large-scale standardisation of around 2,300 pānui (reading) and 1,800 tuhituhi (writing) scripts completed by Māori-medium students in Years 4 to 12 in early 2004. This evaluative feedback is used to improve the quality of assessment materials in pānui and tuhituhi before their publication in the forthcoming asTTle V4 software. The asTTle software allows teachers to customise test difficulty for the ability of their own students.

I would like to thank all the akonga (students) and kaiako (teachers) across the country for completing the pānui and tuhituhi tests.

I would like to acknowledge the work of two key asTTle team members in developing both the assessment materials that are evaluated and preparing this research report. Dr Peter J Keegan managed the assessment development and administration process, and wrote this report. The items were checked by and the data for this report were transcribed and collated by Te Ingo Ngaia, a Māori studies student at the University of Waikato.



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Formative evaluation is “designed, done, and intended to support the process of improvement” (Scriven, 1991, p. 20) and is normally carried out “by the staff of the originating institution” (Scriven, 1991, p. 22). Formative evaluation provides improvement-oriented feedback in response to three specific questions, which are (a) Where is the process or product now?, (b) What is the target for the process or product?, and (c) What steps are needed to reach the target? (Clarke, Timperley, & Hattie, 2003). It is critical in the development of a national teacher-controlled assessment tool that evaluative comment is obtained from the intended users. Research on teachers’ conceptions of assessment has shown that teachers are positive about obtaining improvement oriented evaluation of their teaching through student teaching but that they also consider externally mandated assessments as measuring only surface dimensions of learning (Brown, 2002). Thus, feedback from teachers who administer asTTle tasks is elicited in order to enhance teachers’ perception of the validity of the asTTle application. This report describes the formative evaluation conducted during the development of standardised assessment items in Māori literacy for kura/schools and notes how the feedback is used to improve the quality of the assessment materials to ensure maximum impact on teachers’ use and acceptance of the new assessment tools.

The Assessment Tools for Teaching and Learning (asTTle) project delivers a computer based set of tools for classroom, teacher-controlled assessment of student progress in literacy and numeracy at Levels 2 – 6 of the New Zealand curriculum in both English and Te Reo Māori. Specifically, this includes Reading, Writing, Mathematics, Pānui, Tuhituhi, and Pāngarau. Note

that the asTTle Māori medium materials are calibrated to the levels and objectives of the Te Reo Rangitira curriculum rather than those of the Te Reo Māori statement. Version 3 was released by the Ministry of Education to a sample set of secondary schools in early 2004. asTTle Versions 2 and 3 are currently being used as a classroom assessment resource by teachers in both primary and secondary education.

### Methodology

New Zealand students in Years 4 to 12 completed tests of close reading and writing targeted at curriculum levels 2—6 in March 2004. The pānui test papers were of increasing difficulty as student year level increased; thus, Year 4/5 papers had largely Level 2, Year 6/7/8 papers Level 3 and 4 items and Year 10/11/12 papers had mostly Level 5 and 6 items. The tuhituhi papers had tasks intended for use amongst both upper primary/intermediate and secondary school students. Note that the test forms as administered may be balanced in quite a different fashion to what an individual teacher would create using the asTTle application. asTTle permits teachers to customise the difficulty of the test to the perceived ability of the students being tested. For example, a teacher using asTTle can create a test with no or few hard items for a younger or less able group of students and vice versa; instead of having to use a standardised, centrally designed task as these trial papers were.

The trial papers were administered by teachers with their own class of students in a representative sample of schools for the purpose of establishing New Zealand student performance norms. Table 1 shows that about 4,160 students completed the trial papers for pānui and tuhituhi.

Table 1  
*Trial and Calibration Student Sample by Subject*

Subject	Sample Size	Number of Schools	Number of Teacher Responses
Pānui	2,313	85	55
Tuhituhi	1,848	82	51
Total	4,161	167	106

Each teacher who administered the tests was asked to complete a form that structured feedback around key item development and usage characteristics. The key characteristics for which evaluative feedback was sought revolved around the quality of the items, specifically their appropriateness in terms of interest or engagement, difficulty, length of time needed to complete, and around the quality of the instructions supplied with the test forms. In addition, teachers were asked for their own general comments, and were asked to summarise the nature of students' experience and evaluation of the materials. The teacher feedback was used to identify items and instructions that required adjustment in terms of language or length of time prior to publication in asTTle V4.

## Results

The total number of teachers possible to participate in the feedback was calculated as one teacher per 30 students. On that basis, approximately 138 responses could have been expected and 106 were received. This represents about 77% response rate by teachers. Thus, readers can be confident that the feedback reported here represents a reasonably comprehensive body of opinion about the asTTle tests by currently practising Māori-medium teachers.

Responses were in the nature of comments to prepared questions. The comments were generally coded using a “Yes”, “No”, “Both yes and no”, or “No answer”. The category “Yes” indicates a favourable or positive response to the question, a “No” an unfavourable or negative response to the question, and “Both yes and no” indicates a response that contains both positive and negative comments. “No answer” includes comments that were incapable of meaningful interpretation.

### *Content Appropriateness*

This section asked whether the content was appropriate for students' age and ability in the teacher's class (Table 2). Overall, teachers were positive about the content (91% of those answering the pānui question and 86% of those answering the tuhituhi question). Positive

comments about pānui included: “*challenges their thinking*”; “... *mārama ngā mahi*”; “*majority were appropriate to the level of the student*” and “*On the whole yes*”. In tuhituhi teachers’ comments included: “*Ae, information within the task was clear/concise easy to follow*; “*Ae, e pai ana*”; and “*variety of topics provided, yes, the content was appropriate*”.

Table 2  
*Appropriateness of content*

Subject	Number of Responses (Percent)				Total
	Yes	No	Both	No answer	
Pānui	39 (71)	3 (5)	11 (20)	2 (4)	55 (100)
Tuhituhi	32 (63)	6 (12)	12 (23)	1 (2)	51 (100)

There were not many comments about the pānui tasks. Just seven teachers noted the pānui materials were too difficult for some children. One teacher suggested that the language was too difficult and another reported that the vocabulary used in the tasks was new for the students.

The tuhituhi tasks prompted more comments. Teachers noted that those students who were familiar with this type of written activity did better. A very small proportion of teachers (10) commented that the tuhituhi tasks were too difficult for some children (a number noting that children of lesser ability found them difficult). Even fewer (7) stated that the tuhituhi task instructions were difficult for the students to understand and that the students were given additional verbal instructions. Only four primary/intermediate teachers reported that the explanations of what was required for some of the tuhituhi tasks was not clear.

The feedback has been used to review items and prompts to enhance clarity of language. Nevertheless, the power of the asTTle application permits teachers to custom design a test for their own context; a significant advantage over other models of national assessment (Brown & Hattie, 2003).

### *Content Interest and Engagement*

Teachers were generally positive about the interest and engagement of the content in the assessment items and tasks (Table 3), especially for pānui. No negative alone comments were

received. Positive comments about the pānui tests included: “*Yes, topics got children thinking*”; “*tino rawe ngā tūmahi hei wero i te hinengaro o te tamaiti*”; “*majority enjoyed*”; and “*definitely*”.

In tuhituhi positive comments included: “*offered variety*”; “*the use of different genres was good*”; “*children enjoyed, success with story of a fun incident*”; and “*tino pai ngā kaupapa rerekē, te tuhi kōrero e pā ana ki ngā wā katakata*”. Another four suggested that the children may have responded better to different stimuli.

Table 3  
*Content interesting and engaging*

Subject	Number of Responses (Percent)				Total
	Yes	No	Both	No answer	
Pānui	42 (76)	-	10 (19)	3 (5)	55 (100)
Tuhituhi	26 (51)	-	24 (47)	1 (2)	51 (100)

### *Teacher Instructions*

Teachers were generally very positive about ease and usefulness of the teacher administration instructions for both pānui and tuhituhi, with the vast majority of teachers agreeing (Table 4). Only one teacher stated that the pānui instructions were “*rather ambiguous*” while one other noted that they were “*too detailed*”. Three tuhituhi teachers reported that they gave additional (oral) instructions to their students. Two teachers noted that some students were disadvantaged by not having done this type of activity before.

Table 4  
*Teacher Instructions*

Subject	Number of Responses (Percent)				Total
	Yes	No	Both	No answer	
Pānui	48 (87)	2 (4)	2 (4)	3 (5)	55 (100)
Tuhituhi	46 (91)	2 (4)	3 (5)	-	51 (100)

### *Level of Difficulty*

Teachers were asked whether the difficulty level of the items, passages, or tasks was appropriate for all students. Two thirds of the teachers believed the tuhituhi tests had appropriate difficulty, while a third of teachers were similarly positive about the pānui instructions (Table 5).

Table 5  
*Appropriate Level of difficulty*

Subject	Number of Responses (Percent)				Total
	Yes	No	Both	No answer	
Pānui	23 (40)	10 (18)	10 (18)	2 (4)	55 (100)
Tuhituhi	32 (63)	8 (16)	10 (13)	1 (1)	51 (100)

Teachers most commonly reported (pānui  $n = 14$ , tuhituhi,  $n = 22$ ) that some tasks were appropriate for some students and others not suitable for students of lesser ability or lower year levels. Three teachers reported that the tuhituhi tasks for too difficult for some children. One teacher reported that some of the vocabulary in the tasks was difficult for their students. Several commented that some students found it difficult to grasp what exactly they were supposed to in response to a few tuhituhi tasks.

Some of the teachers' comments can be understood by the lack of teacher control over the materials in the tests they were sent; a feature that would be overcome in the asTTle™ application. While the overall percentage of teachers giving positive responses was much lower for this particular question, it is important to note that this reflects that it is difficult to design a single test paper from a distance that is suitable for all students in any one teacher's class. The difficulty level of the test randomly assigned to a class, despite adjustment to fit the expected ability of each year level, was either too easy or too hard depending on the teacher's class. Again it is worth reiterating that in the released asTTle software, teachers will be able to customise assessments for the ability of not only whole classes but also for individual students.

#### *General Comments*

The general comments reflected largely positive views with a sample of teachers (pānui  $n = 9$ , tuhituhi,  $n = 10$ ) complimenting or thanking the asTTle team for preparing well structured papers. Comments about pānui included “*he rawe ngā ngohe*”; “*Interesting. Will use asttle CD Rom more frequently now*”; “*mihi ki ngā tamariki, i puta ngā hua pai*”; and “*ka nui te mihi*”. Similar comments were reported about tuhituhi “*well structured paper*”; “*the variety of topics to encourage*



*pupils to write were well presented and enterprising. Some excellent topics*”; and “*He tino pai ēnei mahi mō ngā tamariki o rumaki*”.

The only additional comment was that several teachers suggested that dialectal terms could be added to the tasks.

### Concluding Comments

The asTTle test items and materials in pānui and tuhituhi were generally well received by teachers in terms of content, interest, and engagement, and for the instructions supplied to teachers. The major concern was that some materials were not appropriate for some students of lesser ability or lower year levels. However, with the asTTle software, teachers will be able to design and administer custom designed tests for the ability of classes and students and thus get around the fault of a centrally designed and administered assessment not fitting all environments equally.

Furthermore, the feedback indicates clearly that users can have confidence in asTTle’s assessment material to engage and motivate students to show their true performance, provided teachers have administered tests of an appropriate difficulty level, given appropriate time to complete, and administered them at an appropriate point in the teaching programme.

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