# Broadening Curriculum Coverage of Queensland Years 3, 5 and 7 Tests in Aspects of Literacy and Numeracy



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## **FOREWORD**

This is a research report that deserves attention. It is well organised, balanced in its approach and detailed in its investigation. It is a credit to the Queensland School Curriculum Council and to those responsible for it.

Ideally assessment and curriculum work as an integrated force seeking with the help of teachers to achieve our educational objectives. Of course, the ideal is just that — an ideal. In practice assessment and curriculum have been all too separate.

Curriculum has been seen in the past as bodies of knowledge. Too rarely has curriculum been clear about what specific standards (skills and applications) are required of students at given grade levels. Those standards have, in the past, been crudely and incompletely operationalised not by curriculum but by examinations and other assessment devices.

In our emerging era, there are substantial changes towards clearer curriculum standards and assessment that mirrors those standards. English is not only Spelling and Reading Comprehension although they are relatively easy to assess. Mathematics is not just having the right answer to arithmetic skills although that is a worthy objective. We want our students to be able to listen attentively and to communicate orally with style and clarity. Assessment needs to provide a wider coverage of a good curriculum.

This research report is refreshing. It shows what can be achieved in terms of clarifying issues, obtaining relevant information and organising that information coherently to provide answers and, inevitably, construct further questions. It is not coincidence that the final section of this report suggests the need for further research. As the person responsible for the initial review (Queensland School Curriculum Council 2000a) that spawned this paper, I am pleased to have become part of the continuing search for improved assessment in Queensland's schools.

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## **Executive summary**

The purposes of this research were to investigate the feasibility and appropriateness of teacher-assessed tasks and using teacher judgment in the Queensland Years 3, 5 and 7 Testing Program in Aspects of Literacy and Numeracy<sup>1</sup>. The research also explored the manner in which teacher judgment might be used and the aspects of literacy and numeracy that could benefit from teacher-assessed tasks as one approach to broadening the curriculum coverage of the Testing Program. It also examined the possibility of assessing other valued literacy practices and new multiliteracies. The possibility of a trial of a testing procedure that would be based upon teacher-assessed tasks and teacher judgments was also considered as part of the research implications.

The need to consider teacher-assessed tasks and teacher judgments within the Testing Program was taken up from Professor Ball's review (Review of Queensland Literacy and Numeracy Testing Programs 1995–1999, Queensland School Curriculum Council 2000a). He stated that the current test formats were perceived as too narrow, broadening the test domain would please some curriculum groups, and allow for changes due to emergent English and Mathematics syllabus developments (p. 10). From Ball's review and further literature the major aim of the research emerged. This was to investigate if teacher-assessed tasks could contribute to improvement of the Queensland Testing Program by broadening the literacy and numeracy curriculum coverage.

Improving the Testing Program is part of the Council's cyclical evaluation and review processes. Broadening curriculum coverage of the test would assist the Council in offering the school authorities deeper and/or additional information about student performance in literacy and numeracy.

The following questions were used to focus the research and construct a framework for investigation:

- 1. What does the literature say about teacher-assessed tasks and teacher judgment in large-scale systemic testing programs?
- 2. Within the constraints of test development, what processes would be necessary, in terms of validity and reliability, to allow teacher-assessed tasks and teacher judgment in the Queensland Years 3, 5 and 7 Testing Program?
- 3. Which aspects of literacy and numeracy assessment, if any, would benefit, in terms of accounting for, and contributing to the improvement of, student performance, from the use of teacher-assessed tasks and teacher judgments of student performance within the framework of large-scale testing?
- 4. What other valued literacy practices, including multiliteracies, might be assessed formally through teacher-assessed tasks within the framework of large-scale testing?
- 5. What examples are available of teacher-assessed tasks and teacher judgment processes in other statewide or international testing programs? What samples of materials can be gathered for analysis?

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<sup>&</sup>lt;sup>1</sup> Information regarding the Queensland Years 3, 5 and 7 Testing Program in Aspects of Literacy and Numeracy can be found on the Queensland School Curriculum Council website – URL <a href="http://www.gscc.gld.edu.au">http://www.gscc.gld.edu.au</a>

Information was gathered from a literature review and through interviews with literacy and numeracy testing team members from other States, and internationally. Stakeholders' responses to the research were gathered from their nominees to the Teacher-Assessed Tasks Working Party. Queensland School Curriculum Council Literacy and Numeracy testing project officers and Mathematics and English curriculum development project officers, and a sample of teachers and administrators were also interviewed. Samples of teacher-assessed tasks and documents outlining consistency of teacher judgment strategies in large-scale census testing programs were collected and examined. Discussion with other curriculum development teams and Working Party discussions and activities also assisted in forming research conclusions.

Literature was analysed to form a critique, and were analysed to gather supporting evidence. Teacher-assessed test programs were collected and analysed for appropriateness in Queensland contexts and against the literature critique. Interview discourses became jointly constructed texts, which were analysed to reveal significant form and meanings in order to contribute to the general discussion.

A number of conclusions were reached:

#### 1. Literature Search and Review

What does the literature say about teacher-assessed tasks and teacher judgment in large-scale systemic testing programs?

The literature search outlined some national and international trends where shifts in large-scale testing practices to include teacher-assessed tasks and teacher judgments rather than multiple-choice, computer marked tests were made. The literature suggests that not only can the curriculum coverage be broader, tasks more flexible and authentic, but also teacher involvement in scoring has contributed to assisting teachers to value their judgments.

In Queensland, senior secondary and early primary contexts use teacher-assessed tasks and consistency of teacher judgment processes in widespread and large-scale assessment programs. It appears that when assessment results are used for more than reporting to parents, such as for funding allocation, reporting student performance nationally, or for certification, validity and reliability of teacher judgment become larger concerns.

The literature also demonstrated that teacher judgments become more consistent over time when teachers work with assessment criteria, and work with other teachers to refine understandings of those criteria. It explained that moderation procedures, either formal as in senior secondary contexts or informal as with processes associated with *The Year 2 Diagnostic Net*, are important alternative processes to assist in consistency of teacher judgment.

The critical positioning brought about by the literature review suggested four stances that can be used to appraise other testing programs, the samples of test material, and further literature. These stances were about:

- the types of teacher involvement in the testing program, either in marking or test construction
- the implications the testing program has for linking with effective pedagogy
- the gains that could be made in teacher professional development regarding syllabus implications and test construction
- the processes used to assist in consistency of teacher judgment, or validity and reliability of teacher marking.

## 2. Processes to Ensure Validity and Reliability of Assessments

Within the constraints of test development, what processes would be necessary, in terms of validity and reliability to allow teacher-assessed tasks and teacher judgment in the Queensland Years 3, 5 and 7 Testing program?

Both the literature and the interview discourses imply the need for processes and training to ensure that teacher judgments are consistent, valid and reliable. Administration of the test tasks would have to ensure that variables that affect student performance, such as teachers misunderstanding the nature of the tasks, inappropriate teacher intervention, and/or inappropriate student collaboration be minimised. Marking processes or assessment procedures of the test tasks would require either markers to be trained formally to understand criteria, have their marking checked, and a proportion of test papers re-marked, or processes of consistency in teacher judgment be undertaken.

Moderation processes would ensure consistency of teacher judgments in teacher-assessed test tasks. These processes could produce a positive benefit for teacher professional development, and teachers would profit from the effects in 'calibration' or 'benchmarking' their judgments, although the benefit should not be seen as the sole reason for providing moderation processes in the Year 3, 5 and 7 tests. Constraining moderation processes would be the increased workload to Years 3, 5 and 7 teachers to mark and/or undertake moderation activities. The budgetary requirements for teacher classroom release would also become more of an issue, as would commitment to the Testing Program by the school systems.

## 3. Broader Literacy and Numeracy Aspects

Which aspects of literacy and numeracy assessment, if any, would benefit, in terms of accounting for, and contributing to the improvement of, student performance, from the use of teacher-assessed tasks and teacher judgments of student performance within the framework of large-scale testing?

Professor Ball (2000a) in his review stated that the test formats were perceived as too narrow and broadening the test domain would allow for changes due to emergent English and Mathematics syllabuses. The Council project officers in testing and in curriculum development supported this statement, although the real impact of the new syllabuses on the Testing Program has yet to be fully investigated.

Broadening the curriculum coverage with the use of teacher-assessed tasks can be viewed as a matter of equity. A greater diversity of the student population could demonstrate their knowledge of literacy as broadening would allow multiple ways of showing performance as well as multiple opportunities for students to do it. In the current formats many students are inhibited from doing this, especially if they do not have test literacy as well.

To account for student learning both **additional** information (for example in aspects of literacy: speaking, being critical with texts, and school-based writing, or in aspects of numeracy: volume, mass, and pattern and algebra) and **deeper** information (for example in other curriculum literacies, use of multi-modal texts, and problem solving) would be gathered by broadening the coverage. To contribute to improvement of student performance, broadening the coverage to allow for consistency of teacher judgment processes would give teachers insights into students' results before the return of reports. This would assist teachers in preparing for the return of reports, and in planning for individual student learning during the school year rather than the following year which, in most schools, involves a different teacher.

Broadening curriculum coverage to include other aspects of literacy may allow for speaking, and critical interpretation of text assessments, through use of multimodal texts, open-ended responses, and school-based writing assessments. It could be difficult, however, to design ways to assess speaking and listening within the context of statewide testing, especially if the focus is on demonstrations of speaking in interactive rather than only oral presentation situations.

Broadening curriculum coverage to include other aspects of numeracy could encompass oral and written responses to numeracy problems, broader areas of measurement, and the use of concrete materials and hands-on activities. Broader tasks would incorporate more diagnostic features in the numeracy test. An analysis of responses would help to ascertain the 'level' at which the student was working, and assist teachers to further program learning activities for individual students.

There were questions still asked about who wants this information, and what will it be used for; which impacts on what is assessed. To contribute to improvement of student learning, broadening the coverage and allowing for teacher judgment may present gains for professional development, especially when student performance data is based upon new syllabuses. Through the testing procedure, teachers would develop understandings of the syllabus content, teaching and learning processes, and assessment techniques, as well as in testing processes.

## 4. Valued Literacy Practices and Multiliteracies

What other valued literacy practices, including multiliteracies, might be assessed formally through teacher-assessed tasks within the framework of large-scale testing?

Formal testing of multiliteracies or other valued literacy practices could prove difficult, even within the processes of teacher-assessed tasks and using consistency of teacher judgment strategies, or the context of key learning area-specific literacies. The newness of the concept of multiliteracies, the diverse social and cultural practices it involves, and its ever-evolving nature make it difficult to explain, or to name the tools which are used to make meanings. Certainly, use of only Standard Australian English would make it beyond the current Testing Program to assess other diverse Englishes.

## 5. Sample Material Appraisal

What examples are available of teacher-assessed tasks and teacher judgment processes in other statewide or international testing programs? What samples of materials can be gathered for analysis?

There are a variety of ways in which teachers assess test tasks beyond central marking. More extended test responses need more extensive marking processes and some of these include teachers marking their own students' tasks. While Indiana uses central marking processes, Maryland uses local marking of their multiple task and cross-curricular tests at different sites around the state. Both train markers rigidly in understanding marking rubrics and marking processes. Kentucky and Vermont include classroom teachers marking their own students for writing portfolio in Kentucky and writing and Mathematics portfolio in Vermont. Year level teachers concerned attend out of school sessions in training to use assessment rubrics and criteria. Portfolio results are reported separately from writing demand, or in the case of Vermont, Mathematics multiple choice and short answer, test results.

Australian States also show a similar variety of teacher-assessed tasks. Australian Capital Territory employs classroom teacher assessment for their speaking test, as does Victoria in a writing and Mathematics tasks. Both present teachers with marking criteria and exemplars, in video and print format respectively. New South Wales uses local site

marking for their teacher-assessed tests in writing and extended Mathematics response tests, while the Northern Territory offers teachers an option to mark their demand writing task before it is centrally marked. Western Australia uses teacher-assessed tasks in their sample tests of English and Mathematics, but their literacy and numeracy census tests are machine scanned. Tasmania is not using teacher-assessed tasks at the present time and South Australia is trialling teacher-assessed tasks along with processes of consistency of teacher judgment as a way to collect statewide performance data. All use standardisation processes and training of teachers to enhance validity and reliability of test marking. There was little use of consistency processes in as far as marks being moderated through formal procedures or informally through discussion with other markers.

Sample teacher-assessed tasks in testing programs from the USA offer the Queensland Testing Program some avenues to explore for the broadening of the program. As Maryland's cohort is similar to Queensland's the processes used to administer and assess their open-ended tasks could be worthy of investigation. Portfolio assessments similar to Kentucky and Vermont could be adapted for trial in Queensland to include extended response literacy and numeracy tasks related to Queensland syllabuses. The Speaking Test from Australian Capital Territory could also be adapted for the Queensland testing context, as could the processes Victoria uses for teacher-assessed extended mathematics response and teacher-assessed writing tasks.

The processes New South Wales use to locally mark their tests could be further investigated for their use in local site marking. Teacher assessment of demand writing tasks resembling the Northern Territory processes could also be used in Queensland. While not broadening the coverage, both would allow for more teacher involvement in the Queensland Testing Program.

#### **Concluding Statements**

This research project was only able to touch the surface of the issues of teacher-assessed tasks and using teacher judgment in the Queensland Testing Program as one way to broaden the literacy and numeracy curriculum coverage. Investigation of computer adaptive testing, beyond the parameters of this research, would also broaden the curriculum coverage but teachers may not be involved in that assessment to a large degree.

Teacher-assessed tasks are a way in which the curriculum coverage of the existing Years 3, 5 and 7 tests could be broadened. Such tasks might involve either formal training of teachers in marking to set criteria, or teachers marking their own students' tasks. Using processes to develop consistency of teacher judgment strategies could be a path to follow if teachers are involved in assessing the test tasks of their own students.

Test items or assessment tasks that require more open-ended or extended responses would broaden and deepen the existing curriculum coverage of the Testing Program. A wider range of literacy and numeracy test tasks would allow for additional or deeper information of student performance in those areas.

Broadening the curriculum coverage may also challenge the purposes of the Testing Program. The impact this would have on the balance between accounting for, and contributing to, the improvement of student literacy and numeracy learning would have to be further investigated, especially as a change in the purpose of the program may raise issues related to sample or census testing. The decision regarding developing teacher-assessed tasks for sample tests would be more to do with the recipients of the results and what they do with them. The school authorities would need to be consulted

regarding this. If the teacher-assessed task were to add to or enhance existing data, then sample tests would be appropriate. In addition, this would need clear communication of the intent of the Testing Program to stakeholders, parent bodies and the wider education community.

Improved accountability, in terms of additional and deeper information being gathered, and improved student performances, in terms of teachers being more able to use the test results to plan for further student learning, would occur from teachers being more involved. The test would be seen more as an adjunct to classroom assessment than at present and used by teachers to plan for improved learning for their students by adding to existing classroom assessment data, instead of being seen as isolated from it.

The more the test items relate to newer syllabus documents, or their marking encourages effective assessment practices, the more teacher professional development occurs. Broadening the curriculum coverage begs a question of the relationship between the Testing Program in aspects of literacy and numeracy and the developing English and Mathematics syllabuses.

More teacher involvement with the test would not only increase workloads for Years 3, 5 and 7 teachers but also the Testing Program budget. This increase would not be valued highly if appropriate teacher release for training and marking was not available, or if the benefits for improving student learning were not obvious, especially with parent unease about teacher absence from the classroom.

## 1. Introduction

## 1.1 Purposes of research

Within the context of:

- the Queensland Years 3, 5 and 7 Testing Program, the purposes of which are to account for, and to contribute to the improvement of, student learning in aspects of literacy and numeracy (Queensland School Curriculum Council 2000b, p. 1)
- large-scale literacy and numeracy testing programs interstate and overseas
- views and needs of stakeholders: students, parents, and schools within the Queensland school authorities.

The purpose of this research was to:

- investigate the feasibility and appropriateness of teacher-assessed tasks and using teacher judgment as part of the Queensland Years 3, 5 and 7 Testing Program in Aspects of Literacy and Numeracy
- explore the manner in which teacher judgment might be used and the aspects of literacy and numeracy which would benefit from teacher-assessed tasks
- examine the possibility, if any, of assessing further valued literacy practices and new multiliteracies.

## 1.2 Background to the research

Background contexts influential upon this research project came from two separate, yet highly related fields. One was the review and evaluation process of the Queensland Years 3, 5 and 7 Testing Program, while the other was the development of Queensland School Curriculum Council (the Council) syllabuses and accompanying assessment principles. Areas that were to confine the research outcomes emerged as the research unfolded. These were the characteristics of testing program development, assessment of aspects of literacy and numeracy, and multiliteracies, debates regarding sample versus census testing, and the purposes of testing. Each context and constraint is discussed below.

In 1999 a review of the Queensland Literacy and Numeracy Testing programs from 1995 to 1999 was undertaken. Dr Glenn Finger of Griffith University prepared an *Issues Paper* (Queensland School Curriculum Council 1999a), which discussed a range of issues regarding the conduct of the Testing Program over the five-year period, and suggestions to facilitate planning for future testing. Subsequently, using the issues paper as a base, Dr Sam Ball from the University of Melbourne prepared an evaluation and review report, which drew conclusions about the conduct of the Testing Program and suggested future directions for its improvement. A number of conclusions were reached, one of which, in answer to a question regarding the extent of the tests to assess parts of the curriculum they are designed to assess. was that:

Conversations might be initiated with relevant groups on the matter of including somewhat greater use of teachers and teacher judgment in the Testing Program (Queensland School Curriculum Council 2000a, p. 11).

This aspect of Ball's review motivated this research project, and in the formulation of research questions considered that:

This could allow a broader scope for the tests but would require teacher cooperation (2000a, p. 11).

The above begs two questions. The first was: to improve the Testing Program how could teachers be more involved? The second was about what exactly could be broadened in terms of the purposes of the Testing Program. Ball's review implied that broadening the test domains in literacy and numeracy was possible (p. 10). They could be broadened to include, for example, media literacy, oracy and science literacy, and more complex assessment tasks, he stated (p. 10). As teacher assessed tasks is a term that could encapsulate the use that Ball suggests, it is necessary for the purposes of this research to describe these activities. Table 1 offers an illustration and examples of some teacher-assessed tasks, and shows that these can range from central or local marking, to teachers assessing their own students' work. The ways in which the current writing component is marked could be seen as a teacher-assessed task, but Ball implies a movement more towards individual classroom teachers marking more complex tasks that require students to give more detailed responses. Therefore, the table is more oriented towards those school-based teacher-assessed tasks and processes to develop consistency of teacher judgment.

In a large-scale testing situation validity of test items or assessment tasks, and reliability of subsequent marking becomes an issue whenever subjective decisions are made regarding student performance, especially when those decisions affect information reported nationally, as in benchmarking, certification, or allocation of funds. The constructs of validity, reliability and consistency are defined in the next section. Table 1 shows how the purpose of the tests affects decisions regarding test item construction and marking processes. Research question 2 allowed investigation into this relationship. The findings are displayed in the table by comparing purposes for tests with types of teacher assessment.

This research project was undertaken within the context of a shift in assessment practices, especially in those practices related to a learning outcomes approach. Queensland Year 1 to Year 10 syllabuses were being developed to reflect an outcomes approach, and a project on *Consistency of Teacher Judgment* (Queensland School Curriculum Council 2000f) was undertaken. Research on the appropriateness, efficiency and effectiveness of annotated work samples was also being investigated (Queensland School Curriculum Council 2001a). It was timely that the feasibility and appropriateness of teacher-assessed tasks and teacher judgment within the statewide Testing Program be examined.

Queensland Years 1 to 10 syllabus documents in each key learning area propose principles of school-based assessment. The syllabuses state that for school-based assessment to be effective it should:

- focus on students' demonstrations of learning outcomes
- be comprehensive
- develop students' capacity to monitor their own progress
- reflect current knowledge of child and adolescent development
- be an integral part of the learning process
- be valid and reliable
- reflect social justice principles (Queensland School Curriculum Council 1999b).

Table 1
Types of Teacher-Assessed Tasks and Examples

Type of Teacher Assessment	Features	Examples of large-scale census assessment (Examples in Section 6)	Purpose
Centrally developed tasks with central marking.	Tasks developed centrally through panelling and trialling processes. Item response theory applied. Markers are trained to understand and use centrally developed criteria. Markers gather in a central location to mark all tasks.	Queensland Years 3, 5 and 7 Testing Program — Writing, spelling and dictation tasks.	Accountability and Improvement. Inform against benchmark standards
		Queensland Core Skills tests.	OP ranking Certification
Centrally developed tasks with local marking.	Tasks developed centrally through panelling and trialling processes. Item response theory applied. Markers are trained to understand and use centrally developed criteria. Markers gather in local sites to mark the tasks of other schools in the locality.	New South Wales Primary Writing Assessment, Writing task for English Language and Learning Assessment, and extended response task for Statewide Numeracy Assessment Program (See figures 11 and 12)	Accountability. Inform against benchmark standards
Centrally developed tasks with teachers marking own students. May be on-line marking.	Tasks developed centrally through panelling and trialling processes. Item response theory applied. Teachers are sensitised to understand and use centrally developed criteria (sometimes through centrally driven professional development or just by publishing	Victoria Achievement Improvement Monitor — writing and mathematics tasks — consistency processes encouraged. Marks are added to centrally marked writing and mathematics tasks. (See Figure 14)	Accountability. Inform against benchmark standards
	criteria), and may undertake consistency processes to understand criteria and/or to mark the tasks.	Northern Territory Multi-level Assessment Program — teachers opt to mark the writing tasks which are then centrally marked. Consistency processes not used. Central markers do not see teachers' mark. (See figure 13)	Accountability. Inform against benchmark standards
		Australian Capital Territory Testing program — Speaking task — consistency processes encouraged. (See figures 9 and 10)	Accountability
		Queensland Year 2 Diagnostic Net validation tasks — consistency processes seen as highly necessary. Teacher release provided.	Accountability Funding
School-based teacher developed tasks with central marking.	Individual teachers develop assessment tasks. Products are sent to a central location for marking. Markers are trained to understand and use centrally developed criteria. Markers gather in a central location to mark all tasks	No examples	
School-based teacher developed tasks with teachers marking (rating) own students. Local verification of marking (rating).	Individual teachers develop and mark assessment tasks undertaken by their own students. Products sent to local sites. Markers (panellists) trained to understand and use centrally developed exit criteria and standards. Markers (panellists) gather in local sites to verify the ratings of other schools in the locality.	Senior Secondary Criteria Based Assessment tasks. Expert panellists moderate a sample of marked folios from each school. Central authority monitors student performance in schools.	OP ranking Certification
School-based teacher developed and validated tasks with teachers marking own students. May be on-line marking.	Individual teachers develop assessment tasks. Teachers are sensitised to understand and use centrally developed criteria, and may undertake internal or system-wide moderation processes to understand criteria and/or to mark the tasks, and place students on a learning continua.	Queensland Year 2 Diagnostic Net — teachers make judgments on student performance against indicators of learning on a continua. Consistency processes are seen as highly necessary. Teacher release is provided.	Accountability Funding Diagnosis

The same, or similar principles of school-based assessment could be the case in a statewide testing program, although comprehensiveness, validity and reliability of assessment become larger issues when assessment is used in reporting student performance to State, and federal governments, or when the stakes<sup>2</sup> rise to include rewarding or punishing schools and teachers for not reaching required performance goals. Moreover, if there is more alignment between classroom-based assessment processes and the processes involved in test development, administration and marking, then one process will not be perceived as having more worth than the other. Both become mutually supporting enterprises (Sanders & Horn 1995).

The Council's syllabus sourcebook guidelines detail suggestions of techniques for gathering information about student's demonstrations of learning outcomes. Techniques of observation, consultation, self-assessment and peer-assessment provide types of information from different assessment or learning situations (Queensland School Curriculum Council 1999c, p. 57). Focussed analysis is also suggested as an information gathering technique, and tests are considered as part of this as they allow for teachers to identify students' strengths and weaknesses through a variety of oral or written tasks. A variety of techniques would ensure that information regarding student performance was more authentic, compared to only using a narrow range. As a focussed analysis technique, tests may form part of the variety of assessment techniques necessary to gather student performance information, as the Queensland Years 1 to 10 syllabus and support materials maintain. Just how stakeholders see an externally developed and marked Testing Program, as another assessment technique along side other school-based assessment techniques is another matter, however.

Knowing that only some aspects of literacy and numeracy can be assessed through pencil and paper, multiple-choice items has been understood for some time. Ball's review (Queensland School Curriculum Council 2000a) concluded that current test domains are basic and vital for future student success. He stated that the perceived narrowness of the Testing Program should not deny the importance of the domain that is being tested (p. 10). Nevertheless, more extended responses to open-ended questions would more broadly assess student performance, and allow for gathering of additional or deeper performance information. This information would both provide better information to systems and could better contribute to student improvement. Research question 3 assisted in gathering information about deeper and additional student performance data.

This research acknowledged the issues involved with the aspects of large-scale testing programs, such as the issues involved in test item (task) development, trialling, administration of test materials, marking of tests, analysis of test scores and reporting of test results. These aspects can constrain the expansion of the test coverage, and the involvement of teachers in assessment of the tasks, as well as the issues of increased workloads for teachers.

The Literacy: Position Paper (2000c) and Numeracy: Position Paper (2000d), published by the Council, presented a range of assessable areas in literacy and numeracy. For literacy these come from the four resources of coding, semantic, pragmatic and critical practices (Queensland School Curriculum Council 2000c, p. 10) in strands from the trial syllabus documents of reading and viewing, writing and shaping, and speaking and listening (Queensland School Curriculum Council 2002a). Student ability in negotiating multiliteracies and literacies across the key learning areas also offers indicators of

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<sup>&</sup>lt;sup>2</sup> The term 'High-stakes', used in American testing contexts, describes the influence the test results have in decisions regarding student, school or teacher performance. Test results can also be linked to funding controls, certification of students, entrance or exit requirements, or accountability.

performance. For numeracy assessment areas come from four resources of foundational, linking, pragmatic, and critical practices (Queensland School Curriculum Council 2000d, p. 10) in strands of number, space, measurement, chance and data, and patterns and algebra (Queensland School Curriculum Council 2002b). At present, the literacy test items mostly come from the coding and semantic resources in reading and viewing, and writing and shaping. The numeracy test items mostly come from foundational and linking resources in number, measurement and data, and space. Teasing out these issues also became a focus of this research and formed the third and fourth research questions. The curriculum broadening is discussed more fully later as well as issues involving multiliteracies and its definition.

The debate regarding sample versus census testing has more to do with the purpose of the tests, and client needs, than further broadening the curriculum coverage. As the purpose of the Queensland Testing Program is to account for, and contribute to, the improvement of student performance, this drives the decision regarding selecting a sample group for testing, or testing the total population. As this research unfolded sample versus census issues emerged, especially when questions were asked regarding whom the test results would be for, and what was being tested in the broader literacy and numeracy curriculum. If the broader tests are contributing to national benchmark data, then census or sample testing may not be an issue. If, however, the tests are contributing to reports to parents and students, census testing may be more suitable. Wyatt-Smith and Ludwig (1998) add another dimension. Although their work is about testing in literacy, it has implications for testing itself. They suggest three points that serve to address which testing program would be more appropriate. The first is about educational relevance; how 'methods are relevant to educational objectives and ... assessment constructs', the second regarding the respectability that is attributed to certain assessment practices, while the third is to do with the costs of the program. Wyatt-Smith and Ludwig conclude that, although theirs is not an exhaustive list of criteria, the 'relevance-respectability-cost' criteria highlights the complexity in the decision making when choosing the appropriateness of the type of testing program (p. 12). These issues are discussed later especially in terms of the relevance of sample or census testing, if teacher-assessed tasks are 'respectable' processes when marking large-scale test items, and the budgetary requirements needed for teachers to be more involved.

## 1.3 Research questions

The major aim of this research was to investigate the extent that teacher-assessed tasks could contribute to the improvement of the Queensland Testing Program. The following questions were used to focus the research and construct a framework for investigation:

- 1. What does the literature say about teacher-assessed tasks and teacher judgment in large-scale systemic testing programs?
- 2. Within the constraints of test development, what processes would be necessary, in terms of validity and reliability, to allow teacher-assessed tasks and teacher judgment in the Queensland Years 3, 5 and 7 Testing program?
- 3. Which aspects of literacy and numeracy assessment, if any, would benefit, in terms of accounting for, and contributing to the improvement of, student performance, from the use of teacher-assessed tasks and teacher judgments of student performance within the framework of large-scale testing?
- 4. What further valued literacy practices, including multiliteracies, might be assessed formally through teacher-assessed tasks within the framework of large-scale testing?
- 5. What examples are available of teacher-assessed tasks and teacher judgment processes in other statewide or international testing programs? What samples of materials can be gathered for analysis?

## 1.4 Research approach

Data was gathered from:

- · a literature search
- interviews from literacy and numeracy testing team members from other States, and internationally
- collection of samples of teacher-assessed tasks, and documents outlining consistency of teacher judgment processes in large-scale census testing programs
- interviews with the Council's Literacy and Numeracy testing project officers, and Mathematics and English curriculum development project officers
- interviews with a sample of teachers and educational administrators
- discussion with other curriculum development teams, and members of the Teacher-Assessed Tasks Working Party.

The analysis of collected data included the following:

- research literature was analysed to form a critical stance
- articles were analysed to gather supporting evidence
- program and test samples collected were analysed against the critical stance informed by the literature critique.

Interview discourses became jointly constructed texts, which were analysed to reveal significant form and meanings related to issues regarding teacher-assessed tasks and broader curriculum coverage.

Other questions and analyses were raised during the conduct of this research, but the original questions remained the major guide to data collection and analysis. Reporting was achieved through members of the Testing Program Advisory Committee, who were invited to nominate for a Teacher-Assessed Tasks working party. The working party represented the views of stakeholders and served as a discussion group to advise on the research, and to investigate significant questions and issues as they arose.

## 2. Literature Search and Review

Research Question 1

What does the literature say about teacher-assessed tasks and teacher judgment in large-scale systemic testing programs?

## 2.1 Contexts for shifting emphases on large-scale tests

Assessment and reporting literature since the 1990s reveals much about teacher judgments of student performance how these judgments can be valid<sup>3</sup> and reliable<sup>4</sup>, and how valuable they are in recording student learning. Mostly, the literature argues for a shift away from assessment practices that are narrow, rigid, and decontextualised to more ongoing gathering of work samples that provide demonstrations of learning outcomes. Assessment, or marking, of the work samples involves processes to ensure consistency<sup>5</sup> of the teacher judgment, rather than computer scanning of responses. Certainly, large-scale testing programs also reveal the same shift (Barton 1999, p. 4), and there are organisations that assess these programs to ensure they are broad, flexible and encompass authentic learning contexts (Fairtest 2001).

There are international and national contexts surrounding assessment techniques, mostly to do with accounting for student performance. In a climate where governments and the general public wish to have education systems that are more accountable, assessment and testing assume different perspectives, and different purposes. Assessment is generally regarded as school-based and non-standardised and serves to report individual student progress to parents, while testing is regarded as standardised, externally produced, administered and marked, and serves to report student performance to systems for accountability, funding or other systemic purposes. Although teacher judgments and school-based assessments have and do occur in large-scale assessment programs, governments often favour external assessments such as examination and standardised tests to account for student learning.

In Queensland *The Year 2 Diagnostic Net*, more widespread than large-scale, is an assessment program developed within the context of educational accountability such as the above and early literacy and numeracy improvement. Using teacher judgment, data on student achievement, in aspects of literacy and numeracy, in the early years of primary school, is collected and analysed against developmental learning behaviour criteria (continua). Luke et al. in their appraisal report, discussed these broad contexts within which *The Year 2 Diagnostic Net* came about. They maintained:

...an international context involving corporate managerialist moves towards outcome-based education, the development of student achievement standards and greater centralised control of schools and increased accountability of teachers for

<sup>&</sup>lt;sup>3</sup> Kerlinger (1986, p. 417) defines validity as epitomised in the question: Are we measuring what we think we are measuring? For the purposes for this research a valid teacher judgment is one that most accurately describes student performance against learning outcomes, standards or marking criteria.

<sup>&</sup>lt;sup>4</sup> Kerlinger (1986, p. 405) defines reliability as epitomised in the question: If we measure the same set of objects again and again with the same or comparable measuring instrument, will we get the same or similar results? For the purposes of this research a reliable teacher judgment is one that can be replicated across similar performances of different students on similar tasks, or in different schools and situations.
<sup>5</sup> Consistency can be defined as: A consistent teacher judgment about student performance is one

<sup>&</sup>lt;sup>5</sup> Consistency can be defined as: A consistent teacher judgment about student performance is one that is comparable with other teachers in a school, and teachers in other schools, on the same student performance. (Queensland School Curriculum Council 2000f, p. 1)

the quality of student outcomes....a *national* context, showing evidence that these ideas travelled to this country and resulted in attempts to develop common frameworks for curriculum, assessment and reporting of school achievement and moves to enhance regular systemic monitoring of student outcome standards (Luke, Land, van Kraayenoord & Elkins 1997, p. 19).

These same international and national contexts shaped the intent of the Council's project on *Outcomes-based Approaches to Assessment and Reporting* (2000e). This report revealed that:

Queensland has developed a unique culture of assessment and reporting over the last twenty years, particularly in the secondary sector. This culture that demands and relies on school-based assessment and teacher judgment is well grounded in research and is highly effective in practice. (p. 19)

Senior secondary schools have established formalised processes that lead to teacher iudaments about student achievement that are deemed to be fair and reliable. On the same hand, since 1995, teachers in early primary settings have undertaken less formal, but similar, processes to ensure fair and reliable judgments when using The Year 2 Diagnostic Net. An external review of The Year 2 Diagnostic Net revealed that teacher judgment consistency was problematic, especially as teachers appeared to confuse concepts of certainty of judgment and consistency of judgment (Stewart-Dore & Bartlett 1999). Perceived consistency was apparent, but teachers wished for their judgments to be more 'certain'. Stewart-Dore and Bartlett found teacher judgments were consistent and this was achieved through formal and informal peer review and networking, within and across, year levels within schools. Teachers saw this moderation process as an effective means of negotiating agreement about interpretations (p. 40). There was less consistency across schools, and this was where teachers questioned the judgments' certainty. Stewart-Dore and Bartlett felt that once teachers had worked more with the continua, their concerns about *certainty* would diminish. At present, moderation processes have moved to only include key teachers in literacy and numeracy from schools meeting to discuss and moderate on samples of work from their schools. It is supposed that the key teachers become sensitised to the criteria and in turn be able to offer 'expertise' on judgments at their base schools. Teachers' interviews revealed that some hold The Year 2 Diagnostic Net processes in high regard, although it was mentioned that the performance data is problematic. Because it is sometimes linked to intervention funding, data validity has been questioned by some systems.

## 2.2 Consistency (Reliability and Validity) Implications

In large-scale testing programs, consistency of teacher judgment is mostly achieved through training of teachers as markers to ensure reliability and validity of work marked. Where there are complex assessment criteria, or test tasks that are more open-ended, 'markers' would negotiate the meanings of the criteria, and 'group mark' the test responses. In some testing programs reviewed during this research markers were often trained formally, and if unreliable were retrained or rejected (Maryland Department of Education 2001). Often there would be 'out of school' meetings to discuss the protocols for assessment of these more in-depth responses (Vermont Department of Education 2001). Administration of the tests was 'standardised', so that variables that would affect individual student performance would be minimised. School-based assessments employ different kinds of techniques to guarantee reliability and validity. See table 1 for examples.

A project undertaken by the Council to identify strategies that support consistency of teacher judgment offers a description. Titled *Consistency in Teacher Judgment* (2000f), the report acknowledged that teachers' professional judgment was fundamental to

assessment and reporting processes which are advocated in the developing syllabus documents. But, the key issue, they stated, was consistency:

A key issue linked to the role of teacher judgment is consistency. Teachers and the broader educational community need to be confident that a teacher's judgments about students' demonstration of learning outcomes are consistent with the judgments of other teachers in a school, and teachers in other schools (p. 1).

Griffin (1997) mentions the tension that exists concerning the need for an accountable system and the best methods for gathering information on student achievement: He maintains:

In the past, governments have valued external assessment practices such as testing, and devalued the information that teachers gather daily about their students' learning. In this context even teachers have themselves learned to devalue their professional judgment and knowledge of their students' learning and development (p. 24).

Yet teacher judgment as Rowe (1997) discovered, after an initial period of working with and understanding the assessment criteria, becomes increasingly reliable. Data gathered from scoring of tasks by original assessors (often the teachers of the students) against expert assessors, to determine correlation, has been undertaken in California as part of an assessment procedure termed *The Learning Record* (Center for Language and Learning 1999). It was found that correlation between assessments was extremely high once the original assessors had been working with *The Learning Record* criteria for over a period of three years. This being so, teachers working with assessment criteria over time, and working with others to refine their understandings of the criteria, assists in making judgments on student performance more consistent.

#### Griffin (1997) asserts:

Teachers' observations certainly have been open to criticism about bias and lack of objectivity ... but teachers' assessments have the advantage of possessing many more consequences for individual student learning than does external testing.

Maxwell, in a discussion paper on teacher observation in student performance (Maxwell 2001), says that systematic gathering and recording of information from observations on student learning allows assessment to be more comprehensive, connected, contextualised, authentic and holistic. He writes:

It can be argued that unless there is a strong connection between pedagogy and assessment, the assessment will be disembodied and discriminatory, that is, not connected to any means for improving student learning and privileging students with existing cultural capital (p. 4).

Sadler (2001) answers questions regarding the subjectiveness of teacher judgment. Many others are concerned about the lack of objectivity in assessment practices that rely on teacher judgment. Sadler answers:

To question judgments simply because they are subjective would lead to a rejection of most of the decisions made in everyday life. So the real issue is not whether judgments are subjective or objective, but how consistent those judgments are ...the debate is not between subjectivity and objectivity as such, but how credible, how consistent, and how meaningful the assessments are.

This 'quality' of teacher observation in assessment remains a concern for Maxwell (2001). To acknowledge this concern he argues that accountability and verification of observation assures credibility and consistency. He explains further by stating that quality is assured through teachers being able to explain and defend assessment

judgments to students, their parent(s) and other teachers, and being able to revisit the foundations for assessment judgments (p. 6).

Sanders and Horn (1995), in an article that discusses the usefulness of standardised and alternative measures, write that alternative forms of assessment (other than standardised, centrally marked, pen and paper tests) are also viable as long as care is taken to assure validity and reliability, as others, above, would agree. Sanders and Horn question the usefulness of alternative forms of assessment in large-scale testing because they are expensive and difficult to develop, administer and score. The dilemma for stakeholders in large-scale testing programs is the trading off of costs against what kinds and types of information is required for accountability purposes.

Wiggins (1990) makes a point regarding the gains made, when teachers are involved in the procedures of test development and test assessment, in teacher professional development processes. He states:

... while the scoring of judgment-based tasks seems expensive when compared to multiple-choice tests the gains to teacher professional development, local assessing, and student learning are many. ... significant improvements occur locally in the teaching and assessing ... when teachers become involved and invested ...

As discussed previously, reliability and validity of marking of test responses is always considered problematical, especially from test items that require more extended responses. Research from the Council's *Consistency in Teacher Judgment* (2000f, p. 20) identified ways to develop consistency or reliability in teachers' judgments about student performance. These approaches were:

- planning collaboratively
- using a common assessment task
- developing a common criteria sheet
- comparing samples of student work (moderation)
- sharing understandings about the core learning outcomes and their developmental sequence
- sharing understandings about assessment.

Moderation, the report describes, is the process by which teachers meet to compare samples of student work and to discuss and compare the judgments they had made about student demonstration of core learning outcomes (Queensland School Curriculum Council 2000f, p. 11). Griffin and Smith (1996, p. 22) suggest that moderation helps to overcome localisation of standards (expectations of 'normal' student ability levels which teachers draw from practice) and can be an important adjunct of assessment that is based on direct observation. But, moderation is more than that. It is a social practice with accompanying discourses and social behaviours. Typical of any social practice, to allow others access to moderation practices, the discourse constructs need to be examined to discover existing meta-language, behaviours and attitudes. Moderation as social practice is discussed later in this report, as it is an important adjunct to the use of teacher judgment in large-scale testing programs.

In Queensland moderation is used formally in the final years of secondary schooling for the purposes of accrediting work programs and study plans, monitoring standards, verifying and approving levels of achievement (Queensland Board of Senior Secondary School Studies 1999, pp. 7–8), and ensuring that results recorded on Senior Certificates match the requirements of syllabuses (p. 53). Moderation processes are also used, but somewhat differently in early primary schooling with *The Year 2 Diagnostic Net*. These processes ensure that teachers can confirm their judgments about the particular literacy

and numeracy phases in which students operate so that phase allocations are comparable across classes and schools (Department of Education 1998, p. 12). Moderation processes are also used for assessment in Religious Education, the Council syllabuses, English and Mathematics as part of the Consistency of Teacher Judgment Program (Brisbane Catholic Education 2001) in Brisbane Catholic Education schools. Brisbane Catholic Education teachers meet in inter-school groups to moderate on levelled learning outcomes in Religious Education Profiles (Archdiocese of Brisbane 1997), and student performance standards in English (Department of Education and Community Services, South Australia 1996) and Mathematics (Department of Education, Queensland 1994). Brisbane Catholic Education did consider at one time collecting student performance data for accountability purposes, but they had neither the resources nor personnel to do so.

Internationally, States in USA such as Kentucky and Vermont use portfolio assessment<sup>6</sup> procedures in their statewide testing programs. These are examined more fully later. While Kentucky uses portfolios for writing, Vermont has also developed mathematics portfolios. Freedman (1993), in an article titled *Linking Large-Scale Testing and Classroom Portfolio Assessments of Student Writing*, states that portfolios fit with good writing instruction and are a procedure for thoughtful classroom-based assessment. As well, they can be used for large-scale testing. The problem, however, she states is to make the links: teachers are concerned with instruction, testers with policy and accountability. Links lie in a reciprocal relationship between teachers and test developers. Teachers would need to work together to provide judgments of student ability, have those judgments checked by panels, and to aggregate the results — what Sadler (1995) would call 'Professional Calibration', and what Wiggins (1993) would term a process of 'benchmarking' their grading. On the same hand, test developers would:

... have to relax their fears that classroom teachers may in some way contaminate test data collected as a natural part of instruction... (Freedman 1993, p. 48).

Both the areas of test development and reliability of assessment, and teacher's professional conduct as assessors, versus their positions as instructors are discussed later in this report.

## 2.3 Critical positioning

The literature revealed certain stances that can be used to form a critique. These stances were drawn on to evaluate further literature regarding large-scale testing programs, and sample teacher-assessed task material from interstate and overseas. The critique regarding samples of testing program components follow in section 6 of this report. The following stances emerged from the literature search:

- teacher-assessed tasks are not only about teachers 'marking' test papers, either centrally or locally, but also teachers being involved in developing assessment tasks and assessment criteria, and making informed judgments on student performance (see table 1)
- any large-scale testing program has implications for pedagogy. A strong connection between effective pedagogy, effective assessment practices and testing procedures is essential if the testing program is not to sabotage curriculum development and delivery

<sup>&</sup>lt;sup>6</sup> Portfolio Assessment is a procedure in which assessors examine a student folio. Queensland School Curriculum Council (1999c, p. 59) defines a student folio as a collection of a student's work over a period of time. It may include day-to-day tasks, work produced for assessment items or selections of a student's best work showing effort, progress and achievement. A folio containing a complete collection of a student's work is often used to demonstrate progress. A folio containing selected items only is more commonly used for summative assessment and reporting.

- if teachers are involved with testing programs, especially those programs which
  reflect syllabus documents, gains are made in teacher professional development,
  not only in test development, and in assessment task development, but also in
  syllabus understandings
- consistency in teacher judgments not only comes from spot checks on markers, double or triple marking, training of markers, but by teachers moderating during the assessment process, and valuing processes for developing 'Professional Calibration'.

#### 2.4 Conclusion

What does the literature say about teacher-assessed tasks and teacher judgment in large-scale systemic testing programs?

The literature search outlined some national and international trends where shifts in large-scale testing practices to include teacher-assessed tasks and teacher judgments rather than multiple-choice, computer marked tests were made. The literature suggests that not only can the curriculum coverage be broader, tasks more flexible and authentic, but also teacher involvement in scoring has contributed to assisting teachers to value their judgments.

In Queensland, senior secondary and early primary contexts use teacher-assessed tasks and consistency of teacher judgment processes in widespread and large-scale assessment programs. It appears that when assessment results are used for more than reporting to parents, such as for funding allocation, reporting student performance nationally, or for certification, validity and reliability of teacher judgment become larger concerns.

The literature also demonstrated that teacher judgments become more consistent over time when teachers work with assessment criteria, and work with other teachers to refine understandings of those criteria. It explained that moderation procedures, either formal as in senior secondary contexts or informal as with processes associated with *The Year 2 Diagnostic Net*, are important alternative processes to assist in consistency of teacher judgment.

The critical positioning brought about by the literature review suggested four stances that can be used to appraise other testing programs, the samples of test material, and further literature. These stances were about:

- the types of teacher involvement in the testing program, either in marking or test construction
- the implications the testing program has for linking with effective pedagogy
- the gains that could be made in teacher professional development regarding syllabus implications and test construction
- the processes used to assist in consistency of teacher judgment, or validity and reliability of teacher marking.

## 3. Processes to Ensure Validity and Reliability of Assessments

#### Research Question 2

Within the constraints of test development, what processes would be necessary, in terms of validity and reliability to allow teacher-assessed tasks and teacher judgment in the Queensland Years 3, 5 and 7 Testing program?

#### 3.1 Teacher-Assessed Tasks

In everyday learning and teaching situations, teachers constantly make judgments about student performance. On occasion these judgments are documented, which contribute to reporting of performance to students themselves, parents, schools, and systems. As stated previously, when accountability across the system, State and national level is required, the consistency of these judgments becomes more an issue than when judgments are used to report to parents. In large-scale testing programs validity and reliability are major concerns.

To alleviate concerns, a number of testing programs in Australia and overseas develop procedures by which teachers (or other professionals) are trained to mark test papers. In some cases, as in numeracy test items, and multiple-choice responses, the marker's task is easier, as it requires a simple right/wrong mark or judgment. With more openended responses, especially in the case of marking 'writing' tasks, markers need to be sensitised to the differing quality of responses, and what the mark, or score, could represent. If descriptions of a standard are used to indicate a 'level' (as in levels of development, difficulty or sophistication), rather than competency then the task of marking becomes even more complex. Discussed later, formal procedures are used to enhance reliability and validity in the marking of test papers, including formal training and retraining of markers, double or triple marking of tests papers, re-marking of a proportion of test papers, or the use of control papers.

As seen in table 1, marking by teachers can be undertaken centrally (large groups of trained markers work in a central location), locally (trained markers work in clusters nearer to the test paper collection sites), or in the schools where the students sit the test. In each case training is seen as essential, and procedures to ensure reliable scores are considered crucial. The Queensland Years 3, 5 and 7 Testing Program uses central marking processes for the spelling, dictation and writing tasks with 10 per cent of papers re-marked to minimise reliability concerns.

The Council Literacy and Numeracy Testing Program project officers indicated similar concerns for valid and reliable test results. They maintained that tasks assessed by teachers in schools would need to be centrally constructed and accompanied with clear notes of procedures and protocols. They also stated that standards or criteria for marking should be clear, unambiguous, and specific, and the assessment process should include a full range of annotated response exemplars. They thought that teachers would need to try to be as objective as possible in this process. The English project team agreed that if teacher-assessed tasks were to be used in a large-scale testing program the tasks' effectiveness would depend on the training of teachers in task administration and use of marking criteria. They said marking guides would need to be unambiguous and marking and moderating processes would need to be rigorous.

These above comments reflect not only the subjectivity of teacher assessment commented upon by Maxwell (2001) and Wyatt-Smith (1995), but the dilemma teachers have when administering and marking a large-scale testing program. Teachers

interviewed said that they find it inappropriate not to intervene when students are in perceived difficulty. Certainly, literature (Freedman 1993; Wiggins 1993) regarding the differences between the concerns of test developers and teachers would suggest that teachers find it difficult not to intervene in a test situation. Concerns with *The Year 2 Diagnostic Net* also indicate similar difficulties when systems require reliable student performance data from teacher assessors.

#### 3.2 Moderation

Strategies to develop consistency of teacher judgment were investigated as part of a research project for the Council: *Consistency of Teacher Judgment* (Queensland School Curriculum Council 2000f). While the focus of judgments was upon core learning outcomes of the Council's developing curriculum materials, the strategies are still pertinent to the discussion of how to make teacher judgments more reliable. The report established that strategies such as planning collaboratively, using a common assessment task, developing a criteria sheet, comparing samples of student work (moderation), sharing understandings about the core learning outcomes and their developmental sequence, and sharing understandings about assessment, assisted in positive ways to make teacher judgments more consistent.

Presently, within the Queensland Years 3, 5 and 7 Testing Program, common assessment tasks and criteria for marking are developed as part of test item, or task, construction. Practising teachers are not involved in this joint construction, however. Strategies that suggest teachers share understandings of the developmental sequence of outcomes, and of assessment, that they plan collaboratively, and compare samples of student work (moderation), is beyond the Testing Program as it exists. If moderation were to be a process to ensure reliability in teacher-assessed tasks, different processes that at present would have to be developed to ensure teacher judgments were consistent across schools and systems. Some of the processes to ensure reliability are described later, especially those used in other States' and overseas' large-scale testing programs, but moderation, as a unique and discrete process, is further described here.

As discussed previously, moderation processes in assessment are well grounded and appear to be highly effective in senior secondary schooling. Moderation in this context is the formal procedures used to accredit work programs and study plans, monitor standards, verify and approve levels of achievement (Queensland Board of Senior Secondary School Studies 1999). Although more informal, a moderation process of jointly discussing student performance and judgment criteria is understood in early primary settings and in Brisbane Catholic Education schools.

As the developing Council curriculum materials are suggesting informal moderation processes (Queensland School Curriculum Council 1999b, p. 31) to ensure valid and reliable assessments of student performance against learning outcomes, then over time moderation processes, similar to those in early primary settings, would be undertaken in year 3 to year 10 areas of schooling. Similarly, moderation processes necessary for assessment in Rich Tasks of the *New Basics Project* (Education Queensland 2001) will eventually become part of Year 3, 6 and 9 contexts in Education Queensland schools. If the Testing Program in Years 3, 5 and 7 requires teacher-assessed tasks in order to broaden the curriculum coverage, then moderation processes to assess test item or task marks may be developed. There is potential for this development to go hand in hand with curriculum planning and school-based assessment consistency practices.

Moderation serves many purposes, most of which are to do with consistency of teacher judgment of student performance, and in senior secondary schooling, consistency in work programs and verifying levels of student achievement assigned by teachers.

Moderation challenges teachers' views on their own positioning, and can cause reflection on the assessment processes of designing assessment tasks, collecting appropriate samples and making judgments. It often asks teachers to look with unbiased eyes, or different eyes at an assessment task, or work sample. Moderation contributes to teachers' own professional development as it not only values teachers' ability at making judgments on student performance, it can assist in further curriculum planning and contribute to positive conversations about assessment (Queensland School Curriculum Council 2000f).

Maxwell's (2001) discussion paper on *Teacher Observation in Student Assessment* looks at causes for inconsistency in teachers' observations. These causes he grouped as factors that affect the accuracy of teacher judgment. These factors are teachers' prejudgments and prejudices, selective perception, provision of inadvertent clues, and making an inappropriate inference. Maxwell suggests that moderation processes as suggested in the *Consistency of Teacher Judgment* report can be used to reduce the effect of these factors.

If moderation were tied to a large-scale testing program, the process would also challenge teachers to re-frame their judgments in light of the purposes of the program. Therefore, moderation practices for the purposes of large-scale testing may well have to be more formalised, especially as moderation is not yet part of assessment culture in many Years 3, 5 and 7 Queensland classrooms. Moderation discourse constructs would need to be developed and discussed with these teachers. Most vital are those constructs that have to do with knowing and understanding the assessment criteria, putting forward a case for judgment, arguing a particular judgment, negotiating and being able to modify the judgment. In particular, moderation encourages construction of teachers becoming aware that their judgments are appropriate and valued. The professional calibration construct, discussed later, and held in high regard in senior secondary areas of schooling in Queensland, is an important part of moderation processes.

Primary teachers interviewed raised issues about the possible use of moderation in the Testing Program often showed positive acknowledgment of the moderation processes used in *The Year 2 Diagnostic Net*. Teachers commented that they saw value in the time they had away from classroom duties to undertake moderation processes, and speculated that they would require similar time concessions if moderation was to be used in Years 3, 5 and 7 tests. Teachers in the Catholic sector also recognised the worth of having teacher release time to moderate assessments with others. Moderation, which is part of the *Consistency of Teacher Judgment Program* for Brisbane Catholic Education (2001), is considered a professional development strategy.

Teachers also indicated that they would feel their assessments of students' performance more worthwhile if they were asked to assist in the test marking process, as sometimes the current test results conflicted with their own judgments. In response to this type of concern, the Northern Territory Testing Program allows teachers to assess student responses prior to them being centrally marked. This procedure is discussed more fully later in this report.

## 3.3 Calibrated Teacher Judgments

Although borrowed from measurement of machinery, Sadler (2001, p. 4) uses the term 'calibration' to describe the social practices professionals engage in to fine-tune their individual competency levels in assessment. For teachers this involves collaboratively agreeing to keep themselves abreast of all that is involved in assessment practices, moderation processes, and student performance levels. It also means that teachers keep themselves knowledgeable about the standards and criteria used for judgment, to

ensure judgments are consistent with judgments other teachers would make given the same evidence. Sadler says that as professionals, teachers welcome this collaboration with other teachers, and want their judgments to be consistent with others. He says that they see this as their professional responsibility as a teacher, and the public expects professionals to make sound and consistent judgments. Sadler sees this process as vital to the profession of teachers, and through formal processes with being involved with *The Learning Record* (Sadler 2001) teachers develop and check their notions of being 'calibrated' (p. 4). Different from the processes for *The Learning Record*, calibration ideals are reflected in Queensland senior secondary and in lower primary areas, through teachers' work in moderation processes.

Wiggins (1993) argues that the calibration process is of extreme importance, especially if large-scale assessment programs use teacher judgment when marking test tasks. He insists that for test results to be useful and credible teacher groups must 'benchmark' their grading and work to develop more criterion-referenced procedures and better interrater reliability in their grading. He maintains that the experience of the state of Vermont, when unreliable scores from naïve and untrained assessors were revealed, illuminates the importance of the 'calibration/benchmark' process (p. 22).

Teachers interviewed from the Brisbane Catholic sector and those who had experience in early primary years in state schools shared the view that they possessed skills to reasonably assess their students' work, and those who had been involved in moderation processes were confident in their skills as assessors, and how the moderation process modified and affirmed those skills. Others and some from Education Queensland schools, who had only limited involvement, saw the process as questioning their professional thinking, not only in assessment but also in the activities they use for assessment. It was stated that they felt judgments were being made upon themselves as teachers, both in terms of task development and judgment of student performance, rather than on the work sample being assessed. Moderation meetings were seen as helpful in implementing Religious Education Guidelines by almost 50 per cent of early childhood/lower primary teachers compared with almost 40 per cent of other primary and less than 20 per cent of secondary (Archdiocese of Brisbane 2002). Nevertheless, implications from research have indicated that with continual involvement in moderation teachers begin to view the process more positively. Indication of this improvement is evident in the moderation activities evaluation reports from Brisbane Catholic Education (Archdiocese of Brisbane, Catholic Education 1996-1999).

Calibration adds another facet to the work of teachers, especially for those who may be involved with a testing program that uses consistency of teacher judgment processes. In some ways, the existing Testing Program releases teachers from the professional responsibility of which Sadler (2001) and Wiggins (1993) write, and allows lack of commitment to, or ownership of, it. The Testing Program through use of consistency of teacher judgment processes could assist in the development of teacher professionalism, especially in calibration of, or benchmarking, their judgments. Not only would accounting for student performance be no less consistent than it is at present, and assessment tasks would give deeper performance data, but teachers would have internalised the marking criteria, and know how to respond to student work, at times other than the testing, or data collection periods. Therefore, professional calibration would add another path to improving student performance.

#### 3.4 Conclusion

Within the constraints of test development, what processes would be necessary, in terms of validity and reliability to allow teacher-assessed tasks and teacher judgment in the Queensland Years 3, 5 and 7 Testing program?

Both the literature and the interview discourses imply the need for processes and training to ensure that teacher judgments are consistent, valid and reliable. Administration of the test tasks would have to ensure that variables that affect student performance, such as teachers misunderstanding the nature of the tasks, inappropriate teacher intervention, and/or inappropriate student collaboration be minimised. Marking processes or assessment procedures of the test tasks would require either markers to be trained formally to understand criteria, have their marking checked, and a proportion of test papers re-marked, or processes of consistency in teacher judgment be undertaken.

Moderation processes would ensure consistency of teacher judgments in teacher-assessed test tasks. These processes could produce a positive benefit for teacher professional development, and teachers would profit from the effects in 'calibration' or 'benchmarking' their judgments, although the benefit should not be seen as the sole reason for providing moderation processes in the Year 3, 5 and 7 tests. Constraining moderation processes would be the increased workload to Years 3, 5 and 7 teachers to mark and/or undertake moderation activities. The budgetary requirements for teacher classroom release would also become more of an issue, as would commitment to the Testing Program by the school systems.

## 4. Broader Literacy and Numeracy Aspects

#### Research Question 3

Which aspects of literacy and numeracy assessment, if any, would benefit, in terms of accounting for, and contributing to the improvement of, student performance, from the use of teacher-assessed tasks and teacher judgments of student performance within the framework of large-scale testing?

## 4.1 Broader Curriculum Coverage

Teachers interviewed for this research were critical of the narrow range of competencies being tested, and the perceived importance that was being placed upon the test results by parents. Teachers felt that, if there were to be any inconsistencies between the test result and teacher judgments that occur on classroom-assessed tasks, especially on the end of year report card sent to parents, their own judgment would be seen as inappropriate rather than the test result. Use of teacher judgment, these teachers believed, would alleviate some of the problems of inconsistencies, and also allow teachers insight into student performance on the test tasks over the testing period. This could occur, teachers said, because further individual teaching and learning would result before students leave the year level.

The Council's Testing Program project officers, and members of the teacher-assessed tasks working party had concerns regarding the rationale for broadening the curriculum coverage of the Testing Program. It was felt that teacher-assessed tasks should only be used if the purpose of the test warranted it. Working party members, while appraising some interstate testing program teacher-assessed tasks suggested that some information could have been as easily gathered through a multiple-choice, pencil and paper test, and drew implications from this about the purposes for involving teachers more in the program.

The above responses indicated questions that were being asked, not of this research project so much, but of a change to the Testing Program itself. Some were about what was going to be tested, and whom the information is for, while others were about the tasks themselves. It was asked, 'What else do stakeholders want to know about students' literacy learning? Will the information be additional to what is gathered now, or will it be the same but deeper? How can school authorities, schools and teachers use the data collected from teacher-assessed tasks?' and, 'How will this contribute to improvement of student learning in aspects of literacy and numeracy?' These latter questions, addressed through interviews with project officers, are discussed below and later will form questions for further investigation in recommended follow-up research.

As Ball's (2000a) review of the Testing Program influenced this research project it holds some of the rationale for the need for broadening the curriculum coverage. The review focused upon nine questions, one of which asked about the extent to which the current tests assess those parts of the intended curriculum that they are designed to assess and whether the curriculum areas within and outside literacy and numeracy could be considered by the Council for testing. While it was claimed by Ball that the literacy and numeracy tests were assessing those important areas that they set out to assess, it was also concluded that a greater use of teachers and teacher judgment might be used in the testing process (p. 11). Professor Ball presented caveats to contextualise the conclusions reached. He stated that the current aspects of literacy and numeracy were seen as relatively narrow in terms of the total Queensland curriculum. Ball advocated that broadening the test domain was possible, but believed that even classroom

teachers contributing to the marking of writing tasks, while providing a useful professional development process, would increase budgetary requirements and year 3, 5 and 7 teachers' workloads.

The need to broaden the Testing Program was also referred to in another of Ball's caveats. This caveat had to do with the revision of the mathematics and English syllabuses, and the fact that the revised syllabuses are being developed in terms of learning outcomes. Ball saw that because of this, test development would become a clearer procedure, as the relationship between the assessment task and curriculum outcome would be more direct. He felt that to leave the testing in its current format risks the criticism by teachers that the tests call for a too narrow range of student responses. Ball suggested that the current test items and results students achieve would be especially important when English and mathematics outcome-approach syllabuses for Years 1 to 10 are implemented. The full impact of these syllabuses on the Testing Program, or when the literacy and numeracy test items should be based upon the new syllabus, is yet to be investigated.

Broadening curriculum coverage using teacher-assessed tasks is also a matter of equity. This can allow students opportunities to demonstrate knowledge of literacies that the current Testing Program does not, and give access to testing practices, and a greater likelihood of success, to a greater diversity of student populations. Making the processes of assessment broader (i.e. using teacher-assessed tasks with a variety of assessment techniques) will allow a greater diversity of the student population to demonstrate their literacies as broadening can allow multiple ways of demonstrating performance as well as multiple opportunities for students to do it. In the current formats many students are inhibited from doing this, especially if they do not have test literacy as well. Further discussion on valued literacy practices and multiliteracies and test literacy follows in the next section of this report.

The Council Principal Project Officer (Mathematics) stated that the new Mathematics syllabus (Queensland School Curriculum Council 2002b) would have a major influence on the Testing Program because of its emphasis on 'thinking and working mathematically' approaches to learning. This may lead to the numeracy test needing to incorporate more open-ended, extended response items. He predicted students would be taught mental strategies that encourage confidence and initiative when dealing with mathematical situations. He suggested that the emphasis on understanding and conceptual awareness might be less suited to the dominant use of multiple-choice items.

## 4.2 Broader Coverage of Literacy

Interviews with the Council's project officers said that broader literacy coverage and use of teacher judgment could include multimodal texts and questions that would require open-ended responses. It was believed this would mean that reading test items could be less reliant upon responses being within literal understanding of texts; and accordingly, movement away from multiple-choice items could allow for collection of data on student performance in critical interpretation of texts. The project officer could see that there could be use of more school-based writing assessments to complement the centrally marked task. It was stated that if teachers assessed the writing component, there would be opportunities for professional development, and teachers would better understand the assessment/marking process. The project officer thought this could be one way to alleviate the 'surprises', which sometimes exist at the moment between teacher judgment of students' writing and the writing component's test scores.

At present, students' abilities in speaking are not tested, and the project officer could see that changes to the Testing Program could encompass this. She could also see that

videotapes, or on-line visuals, could be used as stimulus (prompt) material, and used to collect information on student performance in reading and viewing. Students were exposed to this type of material out of school, she stated. It was also felt that teacher-assessed tasks would allow assessments to be tailored to students' needs in a broader context than at present. In the situations where the testing dates for some students, for emotional or physical reasons, are inappropriate, there could be alternative arrangements made.

The Council English curriculum development project team indicated that finding ways to effectively assess students' critical use of and work with texts (i.e. text-analysing resources) is still the focus of ongoing investigation. They felt that the assessment of critical understandings would not necessarily be achieved by introducing teacher-assessed tasks to the Testing Program. Similarly, they suggested that even with the introduction of teacher-assessed tasks it would be difficult to design relevant and purposeful ways to assess speaking and listening within the context of a statewide testing program. This would be particularly challenging when focusing on demonstrations of speaking and listening in interactive, rather than only oral presentation, situations.

The project team acknowledged that the addition of teacher-assessed tasks may allow for the collection of more diagnostic information and therefore enable the Testing Program to more directly contribute to the improvement of student performance. It was also argued that ongoing school-based assessment, with a focus on the alignment of pedagogy, curriculum and assessment and the development of relevant and purposeful assessment tasks would remain better placed in classrooms to achieve the improvement purpose of the Testing Program. Working party members agreed, and saw the connections between testing results, school-based assessment practices, and improvement of performance were the diagnostic aspects, and direct feedback that teacher-assessed tasks would create.

#### 4.3 Broader Coverage of Numeracy

The Council's project officer in numeracy testing thought that teacher-assessed tasks and teacher judgments would allow for activities involving more open-ended responses and the use of oral and written explanations in test items. She felt that collection of data on student performance in problem-solving activities, with an emphasis on the process of how students go about solving them, and other mathematical concepts could be undertaken. Numeracy tasks that use an oral language explanation, as in explaining the meaning of symmetry, could also be offered, and individual mental computations could be administered orally with responses recorded by teachers. The project officer could see that 3D material could be used for measuring spatial concepts, and students could demonstrate concepts of measurement, recognising amounts of money, or counting out change, and the like. She could see teachers using concrete materials to assess younger students' understanding. She also thought that a range of test items, to assess an outcome, could be provided, and therefore allow teachers to select appropriate tasks to suit individual needs of students.

Mathematics curriculum development project officers stated that while length and area can be reasonably assessed with multiple choice and pencil and paper, they thought that other aspects such as volume, and mass could be better tested than at present. It was suggested that student ability in pattern and algebra could also be assessed with more open-ended tasks and use of concrete materials. They gave an example of an 'interview task' that could be undertaken with students explaining their strategies, with the student being further challenged by teacher questioning. This, they thought, would give more authentic information of ability. It was mentioned that validation tasks, similar to those

from *The Year 2 Diagnostic Net* tasks, could better cater for individual differences and students' diverse needs.

The mathematics curriculum project officers suggested that teacher professional development would occur when students are asked to solve more open-ended mathematical problems, or when testing conceptual issues. They stated that while teachers observed students at work one-on-one, interpreted their responses, and made suggestions about other strategies or ideas that students could investigate, they would be engaging in mathematical content and thinking. They thought that the test at present doesn't allow teachers to engage much in mathematical content. The project officers suggested that test marking criteria would help teachers to focus their observations, and see students do things that might otherwise go unnoticed. The development of multimodal test items through the use of computer technology was discussed. It was stated that as this would assist in broadening the numeracy test, especially in the areas of item response and feedback. Students would also be able to be involved in rotating and manipulating shapes, loan calculators and processes for borrowing money.

It was also stated that broader tasks could incorporate more diagnostic features in the numeracy test - where a range of responses could be accepted from the same stimulus question or problem. They stated that analysis of these response ranges would help in providing evidence of demonstrations of learning outcomes and contribute to decisions regarding the 'level' at which the student was working in particular strands, and assist teachers to further program learning activities for individual students.

These project officers mentioned that if numeracy test reports were going to assist in reporting in outcomes, teachers, through test involvement, would gain further knowledge of mathematics processes and the outcomes approach syllabus. It was stated that the aspect of shape is better addressed in the new syllabus, and through teacher-assessed tasks, solid shapes could be used for students to hold and manipulate. Students would be able to design, analyse and interpret their own graphs (especially when computers were available to support their construction), which would allow for more individualised tasks which could be more culturally appropriate.

It was stated that teacher-assessed tasks would help reassure teachers that their judgments were valuable, and assist in teacher knowledge about test development. It was mentioned that, at present, teachers are not aware of how the tests are developed, or how to best interpret and use the results either at the classroom or whole school levels for further improvement in student learning. Certainly, interviews with teachers for this research bore this conclusion out. Teachers were not able to comment on how the test results could be used to improve students' performance because they felt this was constrained by the timing of receipt of test reports.

Teachers interviewed were sometimes confused with the term 'broader'. They stated that they often felt the numeracy test was broad enough as there were items in the test that they considered too difficult and beyond the year levels that were being tested. Once clearer they commented on the need to have broader 'hands on' numeracy tasks or items, especially in the year 3 tests, and more process-oriented writing tasks. Further questioning revealed that these areas were necessary as these were the ones that the test results and their own assessments of students did match as closely. There is an indication here again of teachers being more concerned about instruction than accountability, and that their own assessment practices are often devalued through the test results.

#### 4.4 Conclusion

Which aspects of literacy and numeracy assessment, if any, would benefit, in terms of accounting for, and contributing to the improvement of, student performance, from the use of teacher-assessed tasks and teacher judgments of student performance within the framework of large-scale testing?

Professor Ball (2000a) in his review stated that the test formats were perceived as too narrow and broadening the test domain would allow for changes due to emergent English and Mathematics syllabuses. The Council project officers in testing and in curriculum development supported this statement, although the real impact of the new syllabuses on the Testing Program has yet to be fully investigated.

Broadening the curriculum coverage with the use of teacher-assessed tasks can be viewed as a matter of equity. A greater diversity of the student population could demonstrate their knowledge of literacy as broadening would allow multiple ways of showing performance as well as multiple opportunities for students to do it. In the current formats many students are inhibited from doing this, especially if they do not have test literacy as well.

To account for student learning both **additional** information (for example in aspects of literacy: speaking, being critical with texts, and school-based writing, or in aspects of numeracy: volume, mass, and pattern and algebra) and **deeper** information (for example in other curriculum literacies, use of multi-modal texts, and problem solving) would be gathered by broadening the coverage. To contribute to improvement of student performance, broadening the coverage to allow for consistency of teacher judgment processes would give teachers insights into students' results before the return of reports. This would assist teachers in preparing for the return of reports, and in planning for individual student learning during the school year rather than the following year which, in most schools, involves a different teacher.

Broadening curriculum coverage to include other aspects of literacy may allow for speaking, and critical interpretation of text assessments, through use of multimodal texts, open-ended responses, and school-based writing assessments. It could be difficult, however, to design ways to assess speaking and listening within the context of statewide testing, especially if the focus is on demonstrations of speaking in interactive rather than only oral presentation situations.

Broadening curriculum coverage to include other aspects of numeracy could encompass oral and written responses to numeracy problems, broader areas of measurement, and the use of concrete materials and hands-on activities. Broader tasks would incorporate more diagnostic features in the numeracy test. An analysis of responses would help to ascertain the 'level' at which the student was working, and assist teachers to further program learning activities for individual students.

There were questions still asked about who wants this information, and what will it be used for, which impacts on what is assessed. To contribute to *improvement* of student learning, broadening the coverage and allowing for teacher judgment may present gains for professional development, especially when student performance data is based upon new syllabuses. Through the testing procedure, teachers would develop understandings of the syllabus content, teaching and learning processes, and assessment techniques, as well as in testing processes.

## 5. Valued Literacy Practices and Multiliteracies

Research Question 4

What further valued literacy practices, including multiliteracies, might be assessed formally through teacher-assessed tasks within the framework of large-scale testing?

## 5.1 Multiliteracies and Valued Literacy Practices

Multiliteracies are about the growing significance of cultural and linguistic diversity and the influence of new communication technologies upon the social practices of using language (Kalantzis & Cope 1997). Today, English language users negotiate meanings every day in not only local communities, but in increasingly globally interconnected lives. English is a world language, a common language of global commerce, media and politics, and a language broken into multiple and differentiated versions. Migration, multiculturalism, global economics help deepen these differences, and will continue to make English even more diverse in time. Unsworth defines multiliteracies as the multidimensional, multiple literacies used to interact with computer technology, electronic and conventional images, distinctive literacy demands of different curriculum areas, and reproductive and critically reflective literacy practices (Unsworth 2001).

Within a multimodal meaning system (multiple ways of knowing and doing), five major areas constitute the concept of multiliteracies (The New London Group 1996). Termed modes of meaning, these are the linguistic, visual, audio, gestural, and spatial practices used to negotiate meanings with the world. These modes are always interrelated (multimodal) as in the meanings needed to create and understand drama performances, email, or desktop publishing. To assist the language learner, multiliteracies need an open-ended and flexible functional grammar; a metalanguage that describes and explains the patterns of meanings, and illustrates the differences embedded in cultural and linguistic situations and in the multimodal channels used to create and understand meaning.

Student performance in multiliteracy is an ability to understand and create patterns of meaning as products of different contexts - particularly in the changing contexts of communication technologies, and diverse social and intercultural contexts. Students use cognitive tools to make particular language choices within particular cultural and situational contexts. As each mode of meaning has elements that are negotiated with the use of these tools, student ability in utilising and critical understanding of the tools may be assessed. It would be difficult to assess the use of cognitive tools of multiliteracies if they are devoid of the authentic cultural and social situations in which they occur, or if they are embedded in the cultural and social contexts of a standardised test. The standardised test as a social practice is too narrow an instrument to assess full multiliterate performance, although it does test important aspects of literacy (Queensland School Curriculum Council 2000a).

Literacy practices of the test may, or may not, be valued in classrooms, in homes, or in workplaces. The test literacies become valued because of the emphasis placed upon them by the test clients or by governments. Teachers interviewed commented upon the need to know what writing genre was to be undertaken in the writing task, well before the test, and how to pre-teach aspects of viewing. They often felt that a broader coverage would mean more work in sensitising the students to the tests tasks. The literacy practices that are part of the test become the perceived valued practices in at least Year 3, 5 and 7 classrooms.

At present test literacies appear to be practices that are to do with comprehending print-based written and visual texts, writing on demand (one-off genre specific), error-free spelling, and use of Standard Australian English and its construction. Multiliteracies, by definition, could not encompass rigid literacy practices, or a demand for only one version of English. Aspects of speaking and listening are not tested at present, and even when student ability in understanding new technologies is tested, the test items are generally 'web site home page' reading stimulus materials. The test looks at linguistic modes of meaning, but attempts at testing visual literacies remain within a wholly linguistic dimension.

## 5.2 Cross-curricular numeracy and literacy

Aspects of multiliterate behaviour occur when literacy events are situated within other curriculum areas. These are the subject-specific literacies, or as Unsworth (2001) terms them, curriculum literacies (p. 10). Unsworth sees a need to look at curriculum literacies as the interface between a particular curriculum and its literacies, rather than imagining that there is a single literacy that could be spread across the curriculum (p. 11). Curriculum literacies are about comprehending and composing the modes of meaning unique to particular curriculum areas, and critiquing the perspectives on the way knowledges are constructed in that area. At present, collecting data on student multiliterate performance would be to look further at cross-curriculum literacy and numeracy practices.

The Council's position papers in literacy (Queensland School Curriculum Council 2000c, p. 5) and numeracy (Queensland School Curriculum Council 2000d, p. 8) provide examples of the practices that contemporary societies require of their members for effective literacy and numeracy. These practices are to do mostly with the way the literacy and numeracy codes work, with meanings, with social and cultural function and purpose, and with how users are influenced and positioned by texts, or mathematical problems or investigations. The position papers also describe the sorts of literacy and numeracy practices that occur within curriculum areas other than English.

The issue of what aspects of literacy the Testing Program could assess (eg basic skills, critical understandings) and in which key learning areas was of particular interest to the English curriculum development project team. It was thought that some valued aspects of literacy could not be assessed by point in time large-scale testing. The project team argued that if literacy is valued as a social practice within a multiliteracies agenda then it would be more appropriate to investigate the creation of a framework to support assessment of literacy for breadth, depth and complexity within an assessment program generally, before considering what role a large-scale testing program can play in this.

To assist in developing a framework, curriculum project officers of the Council from all key learning areas met to discuss the concept of multiliteracies. From their own perspectives of curriculum development, it was thought that multiliteracies needed to be centred on the climate where it was born, and as it was born out of globalisation of English, caused by commerce and technology, it has to be future oriented. It was agreed that multiliteracies is about diversity, access, power, and the multiplicity of discourses. It was understood that multiliteracies is dependent upon culture and has metalanguages and grammars to describe it.

The commonalities the curriculum teams saw in the literacy practices of each of their areas were the diverse metalanguages; the language to describe how people create meanings that are specific to a particular curriculum area may be similar. Project officers thought that they should 'name' the literacy behaviours, and the semiotic systems that are unique to their area. It was said that students could not be critical of the practices

unless they knew what the tools were by naming them. It was also thought that issues regarding multiliteracies were moving so fast and in hybrid and multimodal ways that it was difficult to name the practices and the tools, as they are ever-changing.

Once the multiliteracy concept is further understood items may be developed which could assess student performance in diverse literacy contexts, especially in the changing contexts of communication technologies. Administration of the test tasks would have to account for the more diverse social and cultural practices, and the technologies that constitute multiliteracies. Developing protocols, or criteria for marking and analysing tasks would have to recognise the different social and cultural contexts, the demands those contexts have on language choices, and the ways students use tools to negotiate meanings. Reporting back to students, teachers, parents and systems would also have to describe the social and cultural contexts of the test tasks as well as the diverse Englishes required for those contexts, and the social contexts of the test itself.

#### 5.3 Conclusion

What other valued literacy practices, including multiliteracies, might be assessed formally through teacher-assessed tasks within the framework of large-scale testing?

Formal testing of multiliteracies or other valued literacy practices could prove difficult, even within the processes of teacher-assessed tasks and using consistency of teacher judgment strategies, or the context of key learning area-specific literacies. The newness of the concept of multiliteracies, the diverse social and cultural practices it involves, and its ever-evolving nature make it difficult to explain, or to name the tools which are used to make meanings. Certainly, use of only Standard Australian English would make it beyond the current Testing Program to assess other diverse Englishes.

## 7. Concluding Statements

This research project was only able to touch the surface of the issues of teacher-assessed tasks and using teacher judgment in the Queensland Testing Program as one way to broaden the literacy and numeracy curriculum coverage. Investigation of computer adaptive testing, beyond the parameters of this research, could also broaden the curriculum coverage but teachers may not be involved in that assessment to a large degree.

Teacher-assessed tasks are a way in which the curriculum coverage of the existing Years 3, 5 and 7 tests could be broadened. Such tasks might involve either formal training of teachers in marking to set criteria, or teachers marking their own students' tasks. Using processes to develop consistency of teacher judgment strategies could be a path to follow if teachers are involved in assessing the test tasks of their own students.

Test items or assessment tasks that require more open-ended or extended responses would broaden and deepen the existing curriculum coverage of the Testing Program. A wider range of literacy and numeracy test tasks would allow for additional or deeper information of student performance in those areas.

Broadening the curriculum coverage may also challenge the purposes of the Testing Program. The impact this would have on the balance between accounting for, and contributing to, the improvement of student literacy and numeracy learning would have to be further investigated, especially as a change in the purpose of the program may raise issues related to sample or census testing. The decision regarding developing teacher-assessed tasks for sample tests would be more to do with the recipients of the results and what they do with them. The school authorities would need to be consulted regarding this. If the teacher-assessed task were to add to or enhance existing data, then sample tests would be appropriate. In addition, this would need clear communication of the intent of the Testing Program to stakeholders, parent bodies and the wider education community.

Improved accountability, in terms of additional and deeper information being gathered, and improved student performances, in terms of teachers being more able to use the test results to plan for further student learning, would occur from teachers being more involved. The test would be seen more as an adjunct to classroom assessment than at present and used by teachers to plan for improved learning for their students by adding to existing classroom assessment data, instead of being seen as isolated from it.

The more the test items relate to newer syllabus documents, or their marking encourages effective assessment practices, the more teacher professional development occurs. Broadening the curriculum coverage begs a question of the relationship between the Testing Program in aspects of literacy and numeracy and the developing Years 1 to 10 English and Mathematics syllabuses.

More teacher involvement with the tests would not only increase workloads for Years 3, 5 and 7 teachers but also the Testing Program budget. This increase would not be valued highly if appropriate teacher release for training and marking was not available, or if the benefits for improving student learning were not obvious, especially with parent unease about teacher absence from the classroom.

## Appendix A – Interview Schedule A

The following schedule was used for interviews with the Council project officers in testing and curriculum development. This schedule was used as a base to develop a shared interview text — other questions arose as these issues were discussed.

#### Issues to think about

Broadening the Curriculum of the Testing Program is about gathering more authentic, and contextual information about student learning for the purposes for accountability and improvement of student performance.

Question: How could the Testing Program enable more authentic and contextual gathering of information?

The literature suggests that if Testing Programs are more aligned to curriculum development and assessment practices, there are spin-offs for professional development.

Question: Can the Testing Program be more aligned?

Once assessment becomes high-stakes (certification, early years intervention, accountability, distribution of funding, and benchmarking) reliability (consistency) and validity (authenticity) of results become major concerns, especially in teacher-assessed tasks.

Question: Can we gather more authentic information, and remain valid and reliable?

Some valued literacy practices, and multiliteracies are unable to be assessed with the Testing Program in its present format.

Question: Can we assess valued literacy practices and multiliteracies?

## Appendix B - Interview Schedule B

The following schedule was used to interview teachers and school administrators. This schedule was used as a base to develop a shared interview text — other questions arose as these issues were discussed.

## Issues to think about

Broadening the Curriculum of the Testing Program is about gathering more authentic, and contextual information about student learning for the purposes for accountability and improvement of student performance.

Question: What sorts of information do you think the Testing Program could gather if it was broadened?

The literature suggests that if Testing Programs are more aligned to curriculum development and assessment practices, there are spin-offs for professional development.

Question: Can the Testing Program be more aligned to the assessment practices in this school?

Once assessment becomes high-stakes (certification, early years intervention, accountability, distribution of funding, and benchmarking) reliability (consistency) and validity (authenticity) of results become major concerns, especially in teacher-assessed tasks.

Question: How could we ensure teacher-assessed tasks would be reliably assessed?

Some valued literacy practices, and multiliteracies are unable to be assessed with the Testing Program in its present format.

Question: How can we assess more valued literacy practices and multiliteracies?

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