

**Evaluation of the Years 1 to 10
Mathematics Key Learning Area
Curriculum Development Project**

Report 1

Prepared for the Queensland School Curriculum Council by



December 2000



Acknowledgments

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Executive Summary

This report is concerned with the trial phase of the Years 1 to 10 Mathematics Key Learning Area Curriculum Development Project. The purpose of the project is to design, develop and disseminate a Years 1 to 10 syllabus, sourcebooks and initial in-service materials in Mathematics for use in Queensland schools.

The project commenced in January 1999 and is expected to be completed by December 2002, when a complete set of curriculum materials will be available for implementation in schools. This report relates to the evaluation of the trial phase of the project, which took place during the second semester of 2000.

During the trial phase, 15 schools were involved in working with the project team in the development of draft curriculum materials for the pilot phase planned for 2001.

The draft materials for the trial were presented to the trial teachers in the form of a CD-ROM. They included the draft syllabus, a set of "source materials", a set of sample school programs and a "school program generator" designed to facilitate the planning task for teachers.

During the trial phase, project team activity consisted of:

- Two cluster meetings for trial teachers and school administrators
- Three visits to each trial school
- Establishment of an on-line mailing list with ongoing communication among trial teachers and project team members
- A series of revised drafts of the syllabus
- Further development of the CD-ROM in preparation for the pilot phase
- Ongoing consultation with people from a wide range of stakeholder groups

The purpose of the external evaluation is to provide advice on the appropriateness, effectiveness and efficiency of the draft syllabus and associated materials. This is the first of three evaluation reports and examines the progress of the trial phase and the trial teachers' preliminary views on the workability of the draft curriculum materials.

The conclusions of the first phase of the evaluation are:

1. The trial was effectively conducted, featuring good communication by the project team and sound progress in most of the schools. Visits to trial schools by the project team were effective and highly valued by the teachers.
2. Communication from the project team to the trial teachers was effective but in many cases, communication back from the teachers was hampered by either lack of direct access to email or not enough time.
3. Implications for the pilot phase are:
 - The support of the project team, especially through visits to the schools, should be maintained as a key strategy
 - Networking among pilot schools should be fostered by the project team
 - Guidance on assessment and reporting will be required, especially for secondary teachers working in the system of criteria-based assessment
4. By the end of the trial, with input from the trial teachers, the project team had developed a workable draft syllabus that showed sequential development in the levels and outcomes.
5. Some of the secondary trial teachers have expressed doubts about the workability of the draft syllabus for the purposes of assessment.

6. Any change to current planning processes that result from the draft syllabus will represent change for the better, because they will facilitate the planning process for teachers or improve teaching and assessment by placing more emphasis on the learning of individual students.
7. The current strategy of providing links from core learning outcomes to national numeracy benchmarks should be continued in future drafts of the syllabus, and the CD should provide teachers with easy access to the full set of benchmarks for reference purposes.

The Years 1 to 10 Mathematics KLA Curriculum Development Project has made a sound beginning. Extensive consultation with a range of stakeholder groups has occurred. Excellent relationships and mutual respect have been forged between the project team and the trial teachers. The trial teachers have had genuine opportunities to have input into the development process and have seen their contributions reflected in successive drafts.

An on-line mailing list has been set up allowing trial teachers and project team members to interact on emerging issues via email. The value of the on-line mailing list is probably limited however, because many of the trial teachers either do not have direct access to email or are not regular email users. This issue requires further investigation for the next evaluation report.

A workable draft syllabus has been prepared in time for the pilot phase in year 2001. The trial teachers have been enthused by the potential of the CD, especially the school program generator, which they see as greatly facilitating the planning process for them. As has been the case in other syllabus development projects, the secondary teachers have expressed concerns about their need for guidance in assessment and reporting using a syllabus based on an outcomes approach within the existing criteria-based processes in their schools. They need specific suggestions on how to cope with this problem.

At this stage we are confident of the continuing success of the project. Teachers have reacted positively to their first use of the developing materials, giving them support and encouragement for further development. Good relationships have been forged between the project team and the trial teachers. Strong and comprehensive consultation processes have been established. Future evaluation activity will focus strongly upon the pilot teachers' experiences as they implement the draft curriculum materials in school classrooms.

1. Introduction

1.1 Purpose of the Evaluation

The purpose of the external evaluation of the Years 1 to 10 Mathematics Key Learning Area Curriculum Development Project is to provide advice on:

- The appropriateness of the Years 1 to 10 Mathematics Syllabus (in development) and sample school programs, sourcebook guidelines and sample sourcebook modules, in meeting the needs of students, teachers, and school administrators
- The effectiveness of the Years 1 to 10 Mathematics Syllabus, sourcebook guidelines, sample modules and sample school programs in schools as resources for planning and implementing appropriate school and classroom mathematics programs
- The efficiency of use of the Years 1 to 10 Mathematics Syllabus and sample school programs, sourcebook guidelines and sample sourcebook modules

The primary audience for the evaluation consists of the Queensland School Curriculum Council and the mathematics project team.

1.2 The Years 1 to 10 Mathematics Key Learning Area Curriculum Development Project

The purpose of the Years 1 to 10 Mathematics Key Learning Area Curriculum Development Project is to design, develop and disseminate a Years 1 to 10 syllabus, sourcebooks and initial in-service materials in mathematics for use in Queensland schools.

The Project commenced in January 1999 and was expected to be completed by December 2002, when a complete set of curriculum materials would be available for implementation in schools.

The evaluation focuses mainly on the trial and pilot of the draft-in-development curriculum materials in schools nominated by Education Queensland, the Queensland Catholic Education Commission (QCEC) and the Association of Independent Schools of Queensland Inc. (AISQ). The trial schools are listed in Appendix 2.

The trial phase took place during second semester, 2000 and the pilot phase was scheduled for first and second semesters, 2001.

The present report covers activity during the trial phase when 15 schools were engaged in reviewing the draft-in-development curriculum materials and providing input to their ongoing refinement in preparation for the pilot phase.

We understand that budget considerations will lead to a reduction in the project team. This can be expected to impact on the project, possibly by affecting the target date for completion or by curtailing the extent of support that can be provided to the pilot teachers.

1.2.1 Draft Materials for the Trial

The draft materials for the trial were presented to the trial teachers in the form of a CD-ROM. The CD is planned to have the following main components:

- The draft syllabus
- A set of "source materials" containing background information on various topics and links to project information on the QSCC website

- A set of sample school programs
- A “school program generator” designed to simplify the planning task for teachers and school administrators
- An information page describing the CD and how to use it

The trial version of the CD was essentially a prototype. It contained some sections yet to be commenced and some that were developed only to the outline stage. For example, the CD included only outlines of school programs. The syllabus and the school program generator were provided in complete draft form.

The draft syllabus was structured using the same headings as previous Years 1 to 10 syllabuses prepared by QSCC, but the elaborations took a different form. Rather than being examples of teaching and assessment approaches, they were more like further specification or fine detail of the core learning outcomes. Another difference from previous syllabuses was that the level statements were much longer, but as the trial progressed, the project team revised the long level statements and shortened them considerably.

1.2.2 Project Team Activity in the Trial

During the trial phase, project team trial activity consisted of:

- An introductory cluster meeting for teachers and school administrators in the trial schools presented in three sites (Brisbane, Bundaberg and Rockhampton) towards the end of Semester One
- Three visits to each trial school
- Establishment of an on-line mailing list with ongoing communication among trial teachers and project team members
- A series of revised drafts of the syllabus
- Further development of the CD-ROM in preparation for the pilot phase
- A cluster meeting for trial teachers presented in five sites during October (Brisbane, Biloela, Bundaberg, Emerald and Rockhampton)
- Ongoing consultation with people from stakeholder groups including
 - The trial teachers
 - Mathematics heads of department in secondary schools
 - Board of Senior Secondary School Studies mathematics syllabus advisory committee and subcommittee
 - Representatives of Education Queensland, AISQ and QCEC
 - Queensland Association of Mathematics Teachers
 - University lecturers in mathematics and mathematics education

During visits to trial schools, the project team discussed the teachers’ responses to a set of questions about the latest version of the syllabus. The questions were sent to the schools ahead of each visit.

1.2.3 Issues for the Trial

What the project team expected from the trial teachers was a practical view of the draft syllabus, including the levels, in terms of content, language and format. The stated intention was to have the trial teachers contribute to successive drafts of the syllabus. Trial teachers were expected to begin reviewing the draft outcomes and elaborations and, if possible, to begin to plan for next year.

A specific issue for the project team was how the syllabus should present links between core learning outcomes and the national numeracy benchmarks, which the States and Territories use as the basis for reports to the Commonwealth about students’ progress. The trial drafts of the syllabus provided hyperlinks from the

elaborations to the benchmarks. A possible alternative would be to include the full wording of the relevant benchmarks along with the relevant core learning outcomes, which would require a lot of repetition.

Another issue for the project team was whether they should supply only the syllabus in print form and everything else in CD or web format.

In consultation with the external evaluator, the project team raised the following questions for the evaluation of the trial phase:

- Are the trial teachers finding the consultation process worthwhile? Do they feel partners in the process? Do they see their contributions being reflected in successive drafts? Is the consultation process seen as more than tokenism?
- What are teachers' levels of confidence about being able to use the draft material to plan for teaching and to plan for assessment?
- Is there going to be a major shift in teachers' thinking about planning processes using the draft materials or do they believe that they will continue to plan as they have in the past?
- Is the developmental sequence in the levels and outcomes obvious? Can the teachers see the sequence in both the outcomes and the elaborations?
- Are the elaborations seen as core and critical information for the purpose of reflecting, explaining, clarifying and articulating the outcomes?

1.3 Evaluation Focus

The purpose of the external evaluation is to provide advice on:

- The appropriateness of the Years 1 to 10 Mathematics Syllabus (in development) and sample school programs, sourcebook guidelines and sample sourcebook modules, in meeting the needs of students, teachers, and school administrators
- The effectiveness of the Years 1 to 10 Mathematics Syllabus, sourcebook guidelines, sample modules and sample school programs in schools as resources for planning and implementing appropriate school and classroom mathematics programs
- The efficiency of use of the Years 1 to 10 Mathematics Syllabus and sample school programs, sourcebook guidelines and sample sourcebook modules

The primary audience for the evaluation consists of the Queensland School Curriculum Council and the mathematics project team.

This, the first of three evaluation reports, is mainly concerned with the progress of the trial phase and the trial teachers' preliminary views on the workability of the draft curriculum materials. The focus questions for the trial phase were:

- How effective have the trial processes been in the development of the draft curriculum materials?
- How workable are the trial versions of the draft curriculum materials likely to be for planning school programs, classroom programs and overall assessment programs?
- What changes could be made to the materials to make them easier to work with?

1.4 Evaluation Approach

The main approach used in this phase of the evaluation was a set of visits to the trial schools to interview trial teachers.

Interviews of trial teachers occurred during October and November 2000. By this time the trial process was well established. Interviews took place in the trial schools. At

least one trial teacher was interviewed in each school. In some cases, two or three teachers were interviewed. In all, 15 schools were visited, 23 interviews were held and 27 teachers were interviewed.

The interviews followed a set sequence of questions, shown in Appendix 1. Most of the questions asked the teachers to rate various aspects of the trial process or the draft materials. All items asked for teachers' comments. The issues identified in section 1.2.3 above were used as the basis for the interview design.

The teachers received a copy of the interview questions in advance of the interview, allowing time for them to discuss the issues with their school colleagues.

Interview responses were recorded and categorised. Trends in the interview responses are presented in subsequent sections of this report, illustrated in each case by selected responses.

Lists of all interview responses (without identification of the interviewees) were supplied to the curriculum development project team.

2. Progress of the Trial Phase

Focus Question 1: How effective have the trial processes been in the development of the draft curriculum materials?

Most of the interview questions were related to the effectiveness of the trial processes.

2.1 Messages

For the first interview question, trial teachers were asked, "What messages do you have for the Project Team, the Evaluator or the QSCC?" This question allowed the interviewees to focus on issues seen as important in their set of priorities.

Most of the teachers commented favourably on the efforts of the project team, as evidenced by the quotations from teachers' responses shown below. Many said that they were pleased with the level of collaboration with the project team that resulted in teachers' feedback on materials being reflected in drafts of the documents:

- *Keep up the consultation process because that is a big plus at the moment. The project as a result is a very successful one.*
- *For the project team: they are doing a really good job. I like the way they are working very closely with us.*
- *I am very pleased with the way the team is using the data we are providing back and we can see evidence in the changes that have been made.*
- *The project is proceeding well now. There were some glitches to start with, but these are ironed out and everything is going well, particularly after the last visit from the project officer.*

A few others commented on the helpfulness of the project team members:

- *I have been impressed with the amount of work they have put into it and with the way the whole thing has gone.*
- *The team is doing a very good job.*
- *The project team is always very approachable. They are very good at giving guidance, advice and help.*

Some of the teachers wanted to inform the QSCC that the drafts of materials produced by the team gave clear and specific advice to teachers on planning and teaching. Comments on the CD were highly complimentary:

- *It makes it easy for me the way it is set out with the elaborations etc. I can see clearly what I have to teach.*
- *As a young teacher I think there is value in the way they organise and provide information in the CD.*
- *It is far superior, much more user friendly than the other KLAs. The CD is much more useful and user friendly than the Science for example.*

One teacher commented that the change from 6 to 5 strands should have been done earlier:

- *The terminology in the elaborations is often difficult. The team's thinking does not always come out in the elaborations. As well, the changing from 6 to 5 strands should have been done earlier.*

Teachers at one of the secondary schools expressed concern over what they believed was an over-representation of primary people on the team:

- *There are too many primary people on the project team who do not appreciate the complexity of mathematics thwarting the efforts of secondary people.*

Two secondary teachers cited issues in relation to assessment and reporting:

- *The actual trial syllabus is realistic but it is still going to be a major problem in the assessment and reporting and that has to be addressed.*
- *Assessment and reporting is a problem as parents expect to get information like 6/10 or in the top third of class, so the new reporting is going to take work with parents and school.*

One interviewee raised the issue of including foundation level outcomes suitable for special school students:

- *To the QSCC: children with special needs really need to be a valued part in the curriculum. The special schools people have come up with foundation level outcomes but the Council has not taken these up.*

One teacher voiced concerns about a perception that influence was moving from teachers and project team officers to academics at cluster meetings:

- *During terms 2 and 3 I felt the driving force behind the project started to move away from the project team and the teachers involved towards the academics who were there on an 'observation' basis.*

Apart from a few isolated concerns, the messages indicate strong support among the trial teachers for the work of the project team and the clarity of the draft materials.

2.2 Progress of the Trial

For the second interview question trial teachers were asked, "How is the trial phase progressing in your school?" This question was intended to elicit the trial teachers' main issues in relation to their roles in the trial.

In most cases, the teachers said the trial was going well. Many reported that the trial was progressing at a level where teachers were using the materials for planning and teaching:

- *I believe the trial phase is progressing well enough to begin planning for 2001.*

- *It is going steadily. We don't have a lot of work to do at the moment with the trial. We have just been going through the outcomes and elaborations. At the start of next year we will be very busy.*
- *We have re-written our Year 4 - 8 Maths program using the outcomes listed in the draft syllabus. We're now waiting on a workshop with the project officer to in-service us about the CD.*
- *Steadily because we are all doing little bits and pieces. We are consulting with each other in the secondary section and discussing what we are doing and how that relates to the levels. We have begun planning for next year and have a draft plan for next year. The biggest problem is how to assess and report. We have a few ideas to start with.*

A few teachers reported that the trial was going well but was involving only the designated trial teachers in the school:

- *Only two teachers are doing it here but it is going really well.*
- *I think it is going really well with the core group but outside that it is not travelling well at all. The interest isn't there because it is not something they have to do.*

Some of the teachers believed the trial was progressing slowly in their schools with the focus mainly on giving feedback to the team on written materials as they were sent to schools:

- *Little has been done in the school other than offer feedback on the drafts. Nothing has been done insofar as implementation.*
- *Slowly. We have been doing everything that they said but we feel that we haven't yet been asked to do much.*
- *So far we have completed the tasks that have been required, that is to comment on various aspects of the draft syllabus. When it comes to the preparation of school based documents for next year, we haven't started, but this will wait until we have the latest update of the syllabus in a few weeks time. It is progressing to where we expect it to be.*

A few teachers appeared to have doubts about the future of the project in their schools:

- *I'm not confident in Years 9 and 10. The levels in the draft syllabus seem to be disjointed.*
- *Fragmented. It has been slow due to the changes in the syllabus because we have had no final document. Just coming to terms with the idea of outcomes based has taken us 8 months. We have a vague notion of just what we are going to do at the end of this term.*
- *We are concerned that there is so much change going on, and with the New Basics also going on in other schools, that some staff are resisting the amount of change, and we have doubts whether outcomes-based education is going to be successful.*

Two teachers saw resources or time as impediments:

- *At the school level, much money and resources are being ploughed into IT and its related areas, but maths is being left out.*
- *We are trying to do too much in the secondary school. We are spending hours trying to work out what to do. We can't implement it in just one classroom in secondary. We need more release time for teachers.*

These results indicate that in some of the trial schools, progress had been limited but in most cases, good progress had been made with a start made on planning for pilot implementation in 2001.

2.3 Suggestions for Conduct of the Pilot

The third interview question asked, “What suggestions do you have for the conduct of the pilot phase?” As well as providing guidance for the conduct of the pilot, this question indirectly allows insight into the teachers’ opinions of the trial phase.

Many teachers recommended school visits by the project team, saying these were essential for a successful pilot of the draft materials:

- *I would like to see the project team come into the school as a backup when we are finding problems or to show us ways of things to be done. We would like to have a lot of contact with the project team.*
- *I would like them to peruse our school program when it is ready. We would like to use them as a kind of moderator. There needs to be a moderation or overview of what is going on in schools to monitor what people are doing to keep us all on the same trend.*
- *It will be necessary for the team to make themselves available for visits to the schools.*
- *That close consultation should be maintained if possible, particularly when we are trying to get it started. Once we get started we will be right, then they should be available when we need help.*

Two teachers hoped that the support from the team could include whole school in-service:

- *Once the school has decided how it will be done, if as a whole school project I would like to see the team come and help with in-service of all the teachers.*
- *As we get further into the pilot there will have to be in-service of other staff to make it a full school project and the team will have to play a part in that with their support of our efforts in this.*

Some teachers encouraged networking of pilot schools as a support for teachers:

- *If there are other schools in the area that will be in the pilot, we need to be put in touch with those schools so we can arrange meetings and regular contact. This probably has to be arranged by the team because if it is left to us it will probably not happen.*
- *We’re looking for how other schools are going.*
- *Networking is the key word. You need to have constant contact with the team and other pilot schools in piloting the Year 8, sharing of learning activities and assessment items.*

Several teachers, primary and secondary, spoke strongly about the need for guidance with assessment and reporting:

- *We need some guidance and material on how to translate assessment into reporting for students and parents. We also need some way of educating parents on what the levels and outcomes are.*
- *By the end of the pilot year we need to have a fairly good idea of the assessment. We will have to come up with definite answers for assessment in the second half of the year that is meaningful for the students and parents. It is important for us to be consistent with each other.*
- *Avoid buck-passing on the issue of assessment.*

A few teachers made suggestions for improving the draft materials before the pilot:

- *Need simpler wording on outcomes. Some activities would also be useful to help teachers with the outcomes.*
- *When working with the CD, when we come up to an outcome, maybe we could see other outcomes that relate to it.*

A few teachers raised questions about the requirements of the pilot phase, seeking clear definition of what is being piloted or what the requirements for the pilot teachers will be:

- *I think there should be a finished product ready for people to use and have a proper pilot. If you are going to pilot it you must have all the materials ready on time and enough for everybody to be involved.*
- *Are we piloting curriculum changes, i.e. content related to a child's development and sequence? Or layout and accessibility of information? Or difficulty or otherwise of understanding what is required of teachers? Or content of documents for accuracy?*

Teachers from a couple of schools stressed the need for support materials to assist with planning:

- *No suggestions - other than there is a real need for more support in terms of resources for those schools currently involved in the development. The teachers feel as if they have to reinvent new activities. Once the data bank of resources (or text books) is available, this will be better for all teachers but it is a lot of work at the moment.*
- *Support documents will be needed to help teachers in the pilot.*

The implications of these results for the pilot phase are that:

- The support of the project team, especially through visits to the schools, should be maintained as a key strategy
- Networking among pilot schools should be fostered by the project team
- Guidance and a clearer statement on direction on assessment and reporting will be required
- Support documents will be needed to provide pilot teachers with a guide for planning and teaching

2.4 Teachers' Understanding of Expectations in their Role

Interview question 4 asked, "To what extent do you understand what is expected of you in the trial process?" This question helps to indicate the strength of the trial component of the development process and how likely that will be to produce workable curriculum materials.

The ratings were evenly distributed among very high, high and moderate:

Very High: 7	High: 11	Moderate: 8	Low: 1	Very Low: 0
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Most teachers were confident that they clearly understood their role in the trial phase:

- *The people who have visited us have made it very clear what we have to do and kept us informed of what will happen in the next visit.*
- *I have been able to understand what my role is within the process of being a trial school.*
- *I am up to par with where they are at. The Project Officer is very good with communication.*
- *We are expected to trial the thing and see how it is working and give feedback to the team on how it works.*

Several teachers remarked on the flexibility of involvement that was available to schools:

- *I like the fact that we are allowed to use the CD and go our own way with it. There is room for experimentation and going the way I want to go.*
- *There is flexibility. At the last cluster meeting we worked through planning and that helped my understanding.*

A few teachers felt uncertain of their role and believed it had not been clearly specified by the project team:

- *So far I haven't actually trialled anything. I am not sure what is required of me. I have checked the CD and not much more.*
- *The team needs to be more explicit about what they want us to do.*
- *I didn't have a clear understanding of what was expected of us.*
- *They haven't specified the level of involvement. It's too open.*

For the most part, the trial teachers understood their roles in the trial process, but a moderate degree of uncertainty was evident in about one-third of the teachers.

2.5 Initial Cluster Meetings

Interview question 5 asked teachers to "Rate the effectiveness of the first cluster meeting in clarifying what is expected of you as a trial teacher". This item, along with items 6, 7 and 8, provides evaluation of specific aspects of the trial process.

The ratings were mostly moderate or high:

Very High: 7	High: 8	Moderate: 10	Low: 1	Very Low: 0
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One teacher did not rate this item.

Most of the teachers commented on the effectiveness of the first cluster meeting in clearly explaining the content of the draft materials and the expectations of teachers:

- *It was really quite effective. The team went through what the syllabus was about and what was expected of us.*
- *They explained things in user-friendly terms and it wasn't intimidating. They were really well prepared and had done a lot of work before getting there. They linked successfully with what we already knew.*
- *It was very good in educating us about what was to happen. I liked the content. It gave us a good overview.*
- *They introduced it really well and the people presenting were really approachable and it was not daunting if I wanted to ask questions.*
- *They were really well organised and we were very excited by it at the end of the day.*
- *This was excellent. The presentation included a range of people and it was so informative. It is good that there is an independent body to monitor the curriculum.*

Some of the teachers reported that they were unsure of exactly what they were expected to do with the materials at the end of the first meeting:

- *I really didn't know how far down the road on what path we would have to go. As I got into it further I realised this was really good - great. The first meeting got me in without really knowing where we were heading.*
- *Moderate, mainly because it was the first meeting and at that point I wasn't sure of what the new maths syllabus would involve. It started to become clearer at the second meeting.*
- *The conference didn't help much but the visit by the project team member helped somewhat.*

A few teachers had criticisms of the program content:

- *The first session was good. The second session was not fruitful in the light of comments made by us, which were ignored, therefore we left dissatisfied. The third session was too low level.*

- *Moderate, because the first day was good but the next day was being stretched out a little. One day might have been enough.*

Most of the teachers saw the first cluster meeting as successful in explaining what was expected of them in the trial. For many, successive visits by project team members and the second cluster meeting clarified these expectations.

2.6 Value of Project Team Visits to Trial Schools

Interview question 6 asked, “To what extent have visits by the project team helped you with your trial tasks?”

The ratings were mostly very high or high:

Very High: 12	High: 5	Moderate: 7	Low: 1	Very Low: 0
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Two teachers did not rate this item.

The school visits by project team members were highly valued by most of the trial teachers and their role was clearly seen as guiding teachers through the trial process:

- *They have been very good at directing us into resources we can use. They challenge the way you teach and this has helped me. It is good to get the confirmation that what you are doing is on the right track.*
- *I get a really good understanding of what I am doing and that it is exactly what they are expecting. They give really good positive feedback. They support our innovative ideas and I can see they are learning by it.*
- *They have been great in guiding us through what they wanted us to know. They haven't just left it to us to decide what we need to know.*
- *They have been very important by giving us a framework to work through. We know exactly what information we need to give them and what is expected of us. They go through step by step and clarify things. It is a very efficient way of doing it.*
- *I've had one visit and found it extremely helpful. It made me question where we're at in this school and question our progress. I've looked at my personal maths teaching.*

One teacher focused on a perceived lack of guidance in evaluating the draft materials:

- *The team weren't on hand to guide us in the evaluation process of what they had put together. We did this here in our own way. Once we had the meetings there was a lot of discussion to which we contributed to a high degree.*

A few of the teachers said they became unsure of what they were to do after the team had left the school:

- *We only looked at the syllabus and not what we were going to do in the school.*
- *When we have the contact with them it is easy to talk but when they leave we are not sure of what they want.*

A couple were lukewarm in enthusiasm for the project itself and were reserved in their responses to the question:

- *We have helped them. That was our task.*
- *I have done what they asked but I missed one visit.*

In general, the results indicate that most of the trial teachers valued highly the visits by the project team.

2.7 Communication between Project Team and Trial Teachers

Interview question 7 asked, “ To what extent are the channels of communication between you and the development team working effectively?”

The ratings were mostly very high or high:

Very High: 10	High: 9	Moderate: 6	Low: 1	Very Low: 0
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One teacher did not rate this item.

The trial teachers fell into three roughly equal groups.

One group indicated that the communication between themselves and the project team officers was an effective, two-way process:

- *We can email and this is effective. The project team members are really easy to talk to and highly knowledgeable about maths and the teaching of maths. They are not hesitant and give clear answers.*
- *It is great that they send things ahead of time and give us the chance to think about things before they come.*
- *They have always been available when I need them. It may not be immediate but it is very quick for them to get back to us.*
- *The people have been very, very helpful.*

The second group reported difficulties with email as a medium of communication:

- *Because I am not connected to email yet it is low at the moment.*
- *Any emails or notices come through admin. I haven't used email yet.*
- *From their side, they have endeavoured to provide what information they can. From the school side, sometimes email doesn't work for various reasons such as computer problems.*

The third group commented that communication from the team was good but teacher or school factors inhibited communication from the school to the project team:

- *The communication from team to me was very high but my communication back the other way was only moderate but only because of time constraints.*
- *Most of the communication is from them to us via the principal. We get all of the messages. We don't use the opportunity to contact them much but it is there if we want it.*
- *I have been a bit lax about getting into the maths discussion group but it is a matter of time. I can't fault their communication.*
- *Schools are so busy leaving little time for thinking and planning and communicating with the team. It's not the fault of the team, but circumstantial.*

The results indicate that the project team has been effective in their communication, but that most of the trial teachers lacked the opportunity (direct access to email) or the time to contribute to the communication process. The lack of direct access to email by teachers clearly limits the effectiveness of the on-line mailing list.

2.8 Contributions made by Trial Teachers

Interview question 8 asked, “To what extent are your contributions reflected in successive drafts of the syllabus?”

The ratings were mostly very high or high:

Very High: 13	High: 10	Moderate: 3	Low: 1	Very Low: 0
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Most of the teachers could see that their contributions had been reflected in the developing materials:

- *I can see that our suggestions have been taken into the next draft.*
- *It has been really positive and rewarding to see the effects of what we have been discussing reflected in the next drafts.*
- *It is exciting to be part of the process of drafting and redrafting and to be able to see how the drafts change and become easier and easier to work with.*
- *They do take note of what you say and you see the results of that.*
- *When we have our meetings with the project officer we find that most schools are saying the same kinds of things and the team is making the changes.*

A couple were less enthusiastic, but still positive about their contributions:

- *What we have said we can see in successive drafts but we also see certain aspects that they are not keen to change, eg the issue of negative numbers in level 3.*
- *Usually these appear or something unworkable disappears.*

One seemed quite disappointed:

- *They have heard me but disregarded my input as, according to the team, not many others have made similar comments.*

The results clearly indicate that the processes adopted by the project team were successful in receiving and adopting contributions from the trial teachers to the developing syllabus. Teachers saw the results of their contributions in successive drafts.

2.9 Summary and Conclusions

Apart from a few isolated concerns, the messages indicate strong support among the trial teachers for the work of the project team and the clarity of the draft curriculum materials.

On the progress of the trial, the results indicate that in some of the trial schools, progress had been limited but in most cases, good progress had been made with a start made on planning for pilot implementation in 2001.

The trial teachers' suggestions for the pilot phase indicate that:

- The support of the project team, especially through visits to the schools, should be maintained as a key strategy
- Networking among pilot schools should be fostered by the project team
- Guidance on assessment and reporting will be required
- Support documents will be needed to give a guide for planning and teaching

For the most part, the trial teachers understood their roles in the trial process, but a moderate degree of uncertainty was evident in about one-third of the teachers.

Most of the teachers saw the first cluster meeting as successful in explaining what was expected of them in the trial. For many, successive visits by project team members and the second cluster meeting clarified these expectations to high levels.

The interview results indicate that most of the trial teachers valued highly the visits by the project team.

The teachers' responses show that the project team has been effective in their communication, but that many of the trial teachers lacked the opportunity (direct access to email) or the time to contribute to the communication process. The lack of direct access to email by teachers must represent a limitation on the effectiveness of the on-line mailing list.

Most of the teachers indicated that the processes adopted by the project team were successful in receiving suggestions from trial teachers and incorporating their contributions into the developing syllabus.

We conclude that:

1. The trial was effectively conducted, featuring good communication by the project team and sound progress in most of the schools. Visits to trial schools by the project team were effective and highly valued by the teachers.
2. Communication from the project team to the trial teachers was effective but in many cases, communication back from the teachers was hampered by either lack of direct access to email or not enough time.
3. Implications for the pilot phase are:
 - The support of the project team, especially through visits to the schools, should be maintained as a key strategy
 - Networking among pilot schools should be fostered by the project team
 - Guidance on assessment and reporting will be required, especially for secondary teachers working in the system of criteria-based assessment
 - Support documents to assist with planning will be valued by teachers

3. Workability of the Trial Versions of the Draft Materials

Focus Question 2: How workable are the trial versions of the draft curriculum materials likely to be for planning school programs, classroom programs and overall assessment programs?

Four interview questions were more specifically targeted to this issue.

3.1 Sequence of Development in Levels and Outcomes

Interview question 9 asked, “To what extent do the draft levels and outcomes show a sequence of development?”

The ratings were mostly high:

Very High: 7	High: 15	Moderate: 3	Low: 1	Very Low: 0
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One teacher did not rate this item.

Most teachers could see a definite sequence of development:

- *From level to level there is a definite sequence of development. There are changes that are needed and are being made but on the whole it is definitely a workable document.*
- *They are sorting out the levels. They are on the ball with the sequence going from one level to another.*
- *It is a logical sequence that any teacher should be able to follow.*

Several teachers had noticed improvements in the sequence following their input:

- *Now that they have had a chance to get into schools and get the teachers’ feedback the sequence is much improved.*
- *The last cluster meeting showed they weren’t that clear but at this stage they are quite good.*

Two commented that the trial teachers had responsibility in sequencing the levels:

- *The sequencing of that is our work so if it is not sequenced then we have done something wrong.*
- *If they don’t show a sequence by now then we haven’t done our job.*

One secondary teacher saw the need for further changes in upper levels:

- *Levels 5 onwards are not appropriate, but disjointed. There are lots of holes. Some prerequisites are missing. Level 6 and beyond is not stretching the students.*

Teachers at a primary school found inconsistencies across strands:

- *The levels within a strand are fine developmentally, but links across strands are not good (yet). For example it is possible that in number say, children can count to 20 in level 2, but level 2 in space may demand that they count to 200.*

The results indicate that towards the end of the trial phase, with the input from the trial teachers, the levels and outcomes in the draft syllabus showed a sequence of development, although refinement was still necessary.

3.2 Workability for Teaching

Interview question 10 asked, "What is the level of your confidence in being able to translate the syllabus into workable plans for teaching?"

The ratings were mostly very high or high:

Very High: 10	High: 13	Moderate: 2	Low: 0	Very Low: 0
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Two teachers did not rate this item.

Some teachers specifically commented on the value of the CD's format in making the materials workable for teaching:

- *Because of the CD with the school planning generator on it, it is going to make the planning of maths so much easier especially for new teachers. This has to translate across into better teaching in the classroom.*
- *I like the way they have the CD set up. You can pick on a term and get meaning on it from another source. In terms of planning and understanding it is all there and it is just great.*

One teacher pointed out the need to have hard copies of documents from the CD to work with:

- *It would be useful to have both hard copies as well as CD as some teachers prefer to work with hard copies in planning while others prefer to work from CDs using cut and paste for planning. There are problems with computers and being able to access the data so this is a potential problem of access for some schools or teachers particularly when systems do not match.*

A couple of the teachers found the syllabus matched their current practice:

- *I find it's what I'm doing anyway.*

Some made specific reference to the clarity of the draft syllabus or the elaborations:

- *The elaborations help me because they are so explicit. You can use them to decide exactly what to do with your class.*
- *It is very easy to understand. I think they are trying to make it as easy as possible for teachers to use.*

A couple of the teachers saw problems at the basic level of coming to terms with the outcomes approach:

- *My concern is that after the syllabus is finalised and schools get the CD, they may find it difficult to come to the new way of thinking without a lot of in-service like we have had.*
- *It is a huge task moving people from textbooks to an outcome-based syllabus.*

Most of the teachers did not see any great difficulty in translating the draft syllabus into workable plans for teaching:

- *I have no doubt that I can do this in my plans.*
- *I would see this process of change being part of the ongoing review of a school-based program. It should hold no fears, only minor alterations.*
- *Syllabus is written in such a way as to make it easy for planning.*
- *When the changes stop and examples are included it will be great.*

Clearly, the trial teachers were confident that the draft syllabus could readily be translated into workable plans for teaching.

3.3 Workability for Assessment

Interview question 11 asked, "What is the level of your confidence in being able to translate the syllabus into workable plans for assessment?"

The ratings were mostly high or moderate:

Very High: 3	High: 11	Moderate: 9	Low: 2	Very Low: 1
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One teacher did not rate this item.

Further analysis of the ratings showed that secondary teachers were responsible for all three of the low and very low ratings, while primary teachers were responsible for all three of the very high ratings.

A few found it too early to comment:

- *We are in the planning stage still. There are some possibilities we have looked at ourselves and it remains to be seen whether these will work.*
- *I haven't had a big chance to look at the assessment side of it yet.*

Many (all primary teachers) thought the syllabus would translate fairly easily into assessment plans:

- *It will be easy to make assessment from it. But levels 3 and 4 have an enormous amount of content, more so than other levels and the workload for assessment will be high.*
- *The way it is set out makes it pretty easy to plan assessment.*
- *The outcomes are very easy to translate into assessment.*

Some of the secondary teachers anticipated difficulties with assessment and reporting:

- *I can see it's a real minefield. You will have to give students a way to give evidence that they have achieved an outcome. I see a problem in getting enough time to do that in secondary.*
- *We think we are getting it. It is pretty radical compared to what we have been doing.*
- *Need guidance on how thorough we need to be, and how to know when students have mastered outcomes.*

The primary teachers were generally confident that the draft syllabus could be translated into effective plans for assessment, but some of the secondary teachers anticipated problems with deciding on whether students had achieved core learning outcomes or collecting evidence to justify such decisions.

The indications that assessment and reporting continue to be concerns for secondary teachers are supported by some of the "messages" reported in Section 2.1.

3.4 Implications for Teachers' Planning

Interview question 12 asked, "To what extent will the draft syllabus demand a change in the way teachers plan for teaching mathematics?"

The ratings varied across the full range, with a slight tendency towards the high end.:

Very High: 8	High: 4	Moderate: 7	Low: 3	Very Low: 3
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Two teachers did not rate this item. They felt it was too early to say.

Some saw continuity with current good practice:

- *I don't think teachers will have to change much.*
- *It won't call for huge dramatic changes in what is already being done in good teaching practices.*
- *I believe the new syllabus will reinforce the way teachers are presently teaching mathematics. The only variations could be that of assessment and record keeping.*
- *It will flow quite nicely from what we do now.*

Some saw the CD format, including the school program generator, as making changes for the better:

- *From what we have seen I think the planning requirements will improve greatly. The CD is really accessible and easy to follow for planning. Planning will be less arduous.*
- *I don't think it will change the content but it will change the planning, especially the way the CD is done and the use of the technology generally.*
- *It will be a big change. I worry that some teachers are still not confident with computers. The CD is very time saving.*
- *It will be easy because you don't have to take 5 or 6 sourcebooks and other books with you.*
- *There will be far less planning than we have had to do before. The emphasis can go to planning how to teach better. It is a winner.*

Some saw positive changes in the way mathematics will be taught and assessed:

- *Maths programs are going to have to be more hands-on. It can't be a test-based program – there has to be ongoing monitoring.*
- *Now you will have to cater to individuals rather than to class groups.*
- *We are looking at implementing this from teaching point of view rather than assessment driven. We will teach properly and let the assessment come after in a natural way.*
- *We will have to do a lot of work convincing others and modelling the change and convincing the community it is the right way to go.*

The trial teachers were divided on how much change would be required in the way teachers plan for teaching mathematics. About half saw high or very high levels of change, and about half saw moderate, low or very low levels. Most of those who anticipated change thought it would be change for the better in terms of facilitating the planning process or improving teaching and assessment by placing emphasis on the learning of individual students.

3.5 Summary and Conclusions

Towards the end of the trial phase, with the input from the trial teachers, the levels and outcomes in the draft syllabus followed a sequence of development, although continued refinement was necessary.

The trial teachers were mostly confident that the draft syllabus could readily be translated into workable plans for teaching.

Most of the primary teachers were confident that the draft syllabus could be translated into effective plans for assessment, but some of the secondary teachers anticipated problems in this area.

The trial teachers were divided on how much change would be required in the way teachers plan for teaching mathematics. Some saw much change, and some saw little. Most of those who anticipated change saw improvement in terms of facilitating the planning process for teachers or improving teaching and assessment by placing more emphasis on the learning of individual students.

We conclude that:

4. By the end of the trial, with input from the trial teachers, the project team had developed a workable draft syllabus that showed sequential development in the levels and outcomes.
5. Some of the secondary trial teachers have expressed doubts about the workability of the draft syllabus for the purposes of assessment.
6. Any change to current planning processes that result from the draft syllabus will represent change for the better, because they will facilitate the planning process for teachers or improve teaching and assessment by placing more emphasis on the learning of individual students.

4. Suggestions for Change

The interview included three questions related to suggestions for change in the draft materials.

Question 13 sought to explore what teachers understood to be the purpose of the elaborations.

The nature of the elaborations had been a topic of discussion among the project team, the trial teachers, the syllabus advisory committee and the consultative group. One particular issue was that the elaborations in the draft mathematics syllabus differed in nature from those in other QSCC syllabuses.

Teachers' needs as expressed in answer to this item were expected to give insights into whether the entities currently called elaborations should be called something else and new elaborations written to retain alignment of terminology with other syllabuses.

Question 14 dealt with the issue of how best to show alignment of the core learning outcomes with the national numeracy benchmarks. The current version of the syllabus provided links to the relevant benchmarks from certain elaborations.

Question 15 asked directly for suggestions to improve the draft syllabus.

4.1 Purpose of Elaborations

Question 13 asked, "What are the elaborations for?" The teachers' answers were recorded and categorised.

The responses to this question indicate that most of the teachers interpreted the elaborations in one of three ways:

- Explanations of the outcomes or levels for teachers
- Guides to teaching
- Guides to assessment

Some saw the elaborations as an explanation of the outcomes for teachers:

- *The elaborations are necessary for understanding the outcomes.*
- *They are meant to make clear the outcomes and what is required at that level.*
- *I see elaboration as being a further explanation to support the outcome i.e. a greater clarification of what children are attempting to achieve at a particular level.*

Some saw them as guides to planning or teaching:

- *An in-depth look at the outcomes and what needs to be taught to meet that outcome requirement.*
- *They are guides for teaching sequences and without them the syllabus wouldn't be clarified.*
- *They explain the process of what is involved in reaching the outcomes.*
- *Giving an indication of what is to be taught at that Year level.*

Others saw the elaborations as guides to assessment:

- *They explain what the children can demonstrate to achieve the outcomes.*
- *They are a set of points or indicators that will assist me to determine where a child is with regard to the outcome.*
- *They are to understand the outcomes. They also give an assessment base – what to look for from kids.*

A couple saw the elaborations as fostering uniformity of interpretation of levels or outcomes:

- *Enable teachers to be consistent across classes.*
- *For making the outcomes clear and ensuring that everyone has the same understanding of the levels.*

One of the teachers saw the elaborations as merely an additional set of outcomes, and wanted elaborations that would assist with planning, teaching and assessment.

- *I don't like the term "Elaborations". Elaborations are written as student outcomes, therefore should be called outcomes. "Elaboration" should be teachers' notes to explain an outcome.*

The responses to this item suggest strongly that teachers generally would expect the elaborations to explain the core learning outcomes and provide guidance for planning, teaching and assessment.

4.2 Links with National Numeracy Benchmarks

Interview item 14 asked, "What is the best way for the syllabus to show how the outcomes and elaborations connect with the national benchmarks?"

A majority of the trial teachers advocated the current strategy of providing links from outcomes to the relevant benchmark:

- *I like the way it is done with the CD now. That is excellent.*
- *I think the way the CD is set up the links are fine but in the hard copy form they need to have the benchmarks somewhere so you can go to them in the same book.*
- *It is as good a way as any. If we have done our work properly in setting up the outcomes then the benchmarks will be inherent. Hotlinks or hyperlinks are fine. I see this as more a political issue rather than a practical.*
- *The way it is set out at the moment I am quite happy with.*
- *We thought the way they do it now is fine. Keep doing it this way.*

A couple of the teachers suggested including the benchmarks side by side with the outcomes:

- *I'd like to see them in the same place side by side. The wording should be the same and that will make it easy for teachers.*

A few of the secondary teachers were not familiar with the benchmarks or were not concerned about them:

- *We don't know what benchmarks are. They are probably not that relevant to secondary school's work.*

A couple of the teachers suggested including all of the benchmarks together in an appendix to the syllabus:

- *Show the links as now but also include an appendix that contains all the benchmarks together so you can see them all at once and get a good overview.*
- *Perhaps include the benchmarks in an Appendix so people can get to them easily.*

These results indicate that the approach taken by the draft syllabus of linking core learning outcomes with the national numeracy benchmarks is appropriate. Inclusion of all benchmarks in the CD for easy reference by teachers is recommended.

4.3 Suggestions for Improvement

Interview item 15 asked, "What suggestions do you have for improving the draft syllabus?"

Many had praise for the current draft:

- *I am very impressed with it. It will be something that is workable and that is great.*
- *I have no real concerns or suggestions. The format of presenting the information (CD) is exceptional.*
- *I think they are doing a wonderful job.*
- *Not at this stage – I reckon it is good. I think they have done a magnificent job in a short period of time.*

Most of the others had no suggestions at that point:

- *At this point no. It is now time to get into it and see what we can do with it.*
- *Wait until implementation next year.*

Specific suggestions by individual teachers were:

- *Transition Year 10 - 11 needs to be carefully considered.*
- *The standards of the levels need "realistic re-jigging" (make them higher).*
- *The draft syllabus needs to encompass the transfer of skills to the problem-solving process.*
- *Communication and problem solving need to be more explicit.*
- *The outcomes and elaborations have to be shown to be assessable. If a student can't show problem solving but can do processes and skills, have they achieved the outcomes?*
- *I would find it easier to plan if I could see all the strands across one level: a grid of strands by levels with strands across the top and levels down the side.*
- *The syllabus is not really a contemporary document as it fails to take into account the broader social changes as society becomes more technologically based.*
- *Basically that the outcomes stay as outcomes and the elaborations are in the syllabus with the outcomes.*

- *Change the way the CD is set up so you can print off the outcomes for a single level without having to go through all of the strands.*
- *There should be something in here about developing children's computing skills.*
- *Part of the CD could include how leaders within schools can assist teachers to change the way they teach maths.*

The results of the interviews indicated that most of the teachers had been given adequate opportunity to make suggestions directly to the project team during the trial process, and that these suggestions had been appropriately reflected in successive drafts. As a result, few wanted to make new suggestions in the evaluation context.

4.4 Summary and Conclusions

Teachers would generally expect the elaborations to explain the core learning outcomes and provide with guidance for planning, teaching and assessment.

The approach to linking core learning outcomes with the national numeracy benchmarks taken by the draft syllabus is appropriate. Inclusion of all benchmarks in the CD for easy reference by teachers is recommended.

The teachers had been given adequate opportunity to make suggestions directly to the project team during the trial process, and these suggestions have been appropriately reflected in successive drafts.

We conclude that:

7. The current strategy of providing links from core learning outcomes to national numeracy benchmarks should be continued in future drafts of the syllabus, and the CD should provide teachers with easy access to the full set of benchmarks for reference purposes.

5. Concluding Comments

This phase of the evaluation was necessarily preliminary in nature and limited in scope because development of the draft curriculum was in an early stage during the period when data were collected.

The evaluation results show that the Years 1 to 10 Mathematics KLA Curriculum Development Project has made a sound beginning. Extensive consultation with a range of stakeholder groups has occurred. Excellent relationships and mutual respect have been forged between the trial teachers and the project team. The trial teachers have had genuine opportunities to have input into the development process and have seen their contributions reflected in successive drafts.

An on-line mailing list has been set up allowing trial teachers and project team members to interact on emerging issues via email. The value of the on-line mailing list is probably limited however, because many of the trial teachers either do not have direct access to email or are not regular email users. This issue requires further investigation for the next evaluation report.

A workable draft syllabus has been prepared in time for the pilot phase in 2001, although much refinement is still needed to ensure a consistent, well-worded set of outcomes.

The trial teachers have been enthused by the potential of the CD, especially the school program generator, which they see as greatly facilitating the planning process for them.

As has been the case in other syllabus development projects, the secondary teachers have expressed concerns about their need for guidance in assessment and

reporting using a syllabus based on an outcomes approach within the existing criteria-based processes in their schools. They need specific suggestions on how to cope with this problem.

At this stage we are confident of the continuing success of the project. Teachers have reacted positively to their first use of the developing materials, giving them support and encouragement for further development. Good relationships have been forged between the project team and the trial teachers. Strong and comprehensive consultation processes have been established, although balancing competing opinions may be a difficult task.

Future evaluation activity will focus strongly upon the pilot teachers' experiences as they implement the draft curriculum materials in school classrooms.

Appendix 1: Trial Teacher Interview Questions

This interview is for teachers taking part in the trial phase of the Years 1 to 10 Mathematics KLA curriculum development project during Term Four 2000.

Questions 4 to 12 (indicated by [R]) require a rating as well as a brief comment. Other items require a comment only. The scale for ratings is:

Very Low	Low	Moderate	High	Very High
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Our reports will not show the source of any ratings or comments. We will report your ratings and comments but we won't identify which school or person they came from.

Our main aims are to evaluate the progress of the trial process and to gain your current impressions of the developing syllabus and associated materials.

Section 1: General
1. What messages do you have for the Project Team, the Evaluator or the QSCC?
2. How is the trial phase progressing in your school?
3. What suggestions do you have for the conduct of the pilot phase?
Section 2: The Trial Process
4. To what extent do you understand what is expected of you in the trial process? [R]
5. Rate the effectiveness of the first cluster meeting in clarifying what is expected of you as a trial teacher. [R]
6. To what extent have visits by the project team helped you with your trial tasks? [R]
7. To what extent are the channels of communication between you and the development team working effectively? [R]
8. To what extent are your contributions reflected in successive drafts of the syllabus? [R]
9. To what extent do the draft levels and outcomes show a sequence of development? [R]
10. What is the level of your confidence in being able to translate the syllabus into workable plans for teaching? [R]
11. What is the level of your confidence in being able to translate the syllabus into workable plans for assessment? [R]
12. To what extent will the draft syllabus demand a change in the way teachers plan for teaching mathematics? [R]
Section 3: The Developing Syllabus
13. What are the elaborations for?
14. What is the best way for the syllabus to show how the outcomes and elaborations connect with the national benchmarks?
15. What suggestions do you have for improving the draft syllabus?

Appendix 2: The Trial Schools

School	Location	PostCode
Bundaberg State High School	Bundaberg	4670
Tieri State School	Tieri	4709
Glenmore State School	Rockhampton	4702
Bouldercombe State School	Bouldercombe	4702
Coombah State School	Gold Coast	4216
Bribie Island State School	Bongaree	4507
The Gap State High School	The Gap	4061
Sheldon College	Capalaba	4157
St John's Lutheran Primary School	Bundaberg	4670
St Luke's Anglican School	Bundaberg	4670
Redeemer Lutheran Primary School	Biloela	4715
Our Lady of the Sacred Heart School	Springsure	4722
Emmaus College	North Rockhampton	4701
Southern Cross Catholic College	Scarborough	4020
South Burnett Catholic College	Kingaroy	4610

Evaluation and Review Report Series

1997 Year 6 Test: Report on School Survey

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Evaluation of the Queensland 1998 Year 3 Test Resource Kit: Final Report

Evaluation of the Years 1 to 10 English Key Learning Area Curriculum Development Project: Report 1

Evaluation of the Years 1 to 10 Mathematics Key Learning Area Curriculum Development Project: Report 1

Evaluation of the Years 1 to 10 Technology Curriculum Development Project: Report 1

Evaluation of the Years 1 to 10 Technology Curriculum Development Project: Report 2

Evaluation of the Years 1 to 10 Technology Curriculum Development Project: Report 3

Evaluation of the Years 1 to 10 The Arts Curriculum Development Project: Report 1

Evaluation of the Years 1 to 10 The Arts Curriculum Development Project: Report 2

Evaluation of the Years 1 to 10 The Arts Curriculum Development Project: Report 3

Review of Queensland Literacy and Numeracy Testing Programs, 1995 to 1999 (Issues Paper)

Review of Queensland Literacy and Numeracy Testing Programs, 1995 to 1999

Review of the Form and Nature of the Queensland Year 3 Test

Copies of these reports are available from the Queensland School Curriculum Council website:
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