

Auditor-General of Queensland

Report to Parliament No. 6 for 2010
Using student information to inform
teaching and learning

A Performance Management Systems audit



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QUEENSLAND

Prepared under Part 3 Division 3 of the
Auditor-General Act 2009

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ISSN 1834-1136

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Auditor-General of Queensland

May 2010

The Honourable R J Mickel MP
Speaker of the Legislative Assembly
Parliament House
BRISBANE QLD 4000

Dear Mr Speaker

This report is prepared under Part 3 Division 3 of the *Auditor-General Act 2009* (the Act), and is titled Using student information to inform teaching and learning. It is number six in the series of Auditor-General Reports to Parliament for 2010.

In accordance with s.67 of the Act, would you please arrange for the report to be tabled in the Legislative Assembly.

Yours sincerely



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Auditor-General



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1 | Executive summary

1.1 Audit overview

Queensland students in Years 3, 5 and 7 have sat for statewide literacy and numeracy tests since 1999. In 2008, these tests were replaced by the National Assessment Program – Literacy and Numeracy (NAPLAN). The test results, along with school-based assessments, have long been used for reporting to parents, principals and government. This data has also been analysed and used as the basis to inform teaching practices to improve student literacy and numeracy results.

In September 2009, the Department of Education and Training (DET) provided teachers with electronic access to the NAPLAN test data, previously provided to them only in hard copy. Principals have had electronic access to state literacy and numeracy test data since 2001 (see Section 2.3.5 for further information on the Corporate Data Warehouse and the OneSchool system).

With support from the regional office, schools work individually or in clusters to use the test results and their own school-based data to develop school specific strategies and targets in their annual operational plans. These plans show how schools will meet the needs of their local community and contribute to the achievement of departmental targets (see Section 2.1).

The objective of this audit was to determine whether DET had effective and efficient systems to use student data to inform literacy and numeracy teaching and learning. To assess the systems in place interviews were conducted with senior officers and central office managers. Field visits were made to 12 state primary schools and five regional offices in both metropolitan and country areas (see Section 6.3). A questionnaire was also sent to a sample of 150 state primary schools (see Appendix 7.1).

1.2 Audit conclusion

The audit identified that some schools had good practices and systems to support staff to analyse student data and use it to inform teaching and learning. However, there are opportunities for important improvements to ensure the systems enable the department to deliver services more effectively and efficiently at all schools. Areas for improvement include:

- more guidance and training for teachers to support the analysis of the full range of student data, both NAPLAN and school-based
- use of a greater range of data by regions to prioritise the support for schools
- improvements in the processes to monitor the implementation of school curriculum plans and assessment policies to ensure they meet department standards
- more complete feedback and supervision processes for all teachers on their skills, competencies and development needs to implement school curriculum plans
- clearer planning, monitoring and reporting requirements for delivery of services by regional offices

- more consistent monitoring of the implementation of school annual operational plans
- clearer requirements for storing and accessing student performance data
- more appropriate and relevant information reported to internal and external stakeholders.

1.3 Key findings

1.3.1 Systems for analysing literacy and numeracy data

Presenting data in ways that encourage teachers to take on a questioning, problem-solving role (scientist practitioner) with respect to their students' learning, causes changes in their teaching practice and results in improvements in student learning.¹

Analysing student performance

Audit observed that some schools took structured and formal approaches to analysing the NAPLAN and school-based data that included a comprehensive analysis of trends. Others used more informal discussions in staff meetings and focused mostly on the NAPLAN results. Audit noted that approaches to analysing the data were at different levels of maturity from school to school. A few of the schools visited had trained staff to interpret and analyse the data but most of the schools visited had no formal training in place. Teachers who had undertaken some training reported that they were confident to analyse the data while teachers who had not been trained reported that their capacity to analyse the data was limited.

Audit found that Release Two of the OneSchool system provides staff at central office, regional office and schools with the capacity to undertake a range of analysis on student background, behaviour and performance. The new module also allows analysis of the literacy and numeracy performance of Years 3, 5 and 7 students in comparison with national targets. While information on the contents of NAPLAN reports and help screens are available, at interview, teachers and principals said that they would like more training on how to analyse student data and how to use the functions of the new Release Two of OneSchool.

While all of the schools visited collected assessment data, only one school visited had a formal policy and comprehensive guidelines in place for teachers on how to assess students and interpret results to inform their literacy and numeracy programs.

Data analysis skills and training for teachers

Analysis of student performance is critical to improving teaching and learning. Data analysis skills allow teachers and principals to inform parents about student progress, identify curriculum changes, estimate whether students are making adequate progress and evaluate their classroom practice.

Audit was advised that there were opportunities for teachers and principals to discuss data analysis issues at region, cluster and school levels. There was coverage of the importance of using data for evidence-based teaching at the recent literacy training provided to all teachers. However, there were no targeted professional development opportunities for teachers and principals to develop a set of agreed competencies in data analysis. A review of the *DET Professional Development*

¹ Axworthy, D. *Turning data into information that improves learning: The WA experience. In using data to support learning: Conference proceedings, 2005*, pg. 127-130.

Catalogue 2009, which lists the department sponsored training available to teachers, identified that it did not include a training course about data analysis for principals or teachers. At interview teachers advised audit that they would like to be more confident in using spreadsheet applications such as *Microsoft Excel* to analyse student data and identify trends and issues.

Audit acknowledges that since the fieldwork for this audit was completed a training module for teachers has been developed to improve data analysis skills.

Training and support on the OneSchool system to analyse the national test results

As part of the training and support strategy, OneSchool provides a number of training avenues for teachers, including:

- an online training database where a user can practise in the OneSchool application without using the live database
- online web conferencing which targets specific application tasks. These web conferences, or webinars are advertised through the department's online web and video conferencing facility – OneChannel, and are available for all users. Audit noted that there were 582 registrations for the sessions offered in term four 2009. For term one 2010, as at end of February, there had been 333 registrations for further sessions. (There are approximately 37,000 full time equivalent teachers in Queensland government schools).

Despite these activities, at interview, many of the teachers expressed a lack of confidence in their skills to use the Release Two of OneSchool to interpret the NAPLAN reports. Teachers also expressed a lack of understanding of the system, its capabilities and data available to them. Additional encouragement or incentives may be needed to increase the take up of the existing online training in how to access the NAPLAN results through OneSchool. Although some schools had provided some informal training, none of the schools visited had a formal training plan for teachers in Release Two of OneSchool (see Section 2.3.5 for an explanation of OneSchool and the progressive releases).

Responses to the audit survey showed that only 35 per cent of principals agreed that *'The training and support I have received in OneSchool has prepared me well to analyse student data and report on performance.'* This suggests that additional training for teachers and principals is needed to provide the confidence and skill sets to enable comprehensive analysis of OneSchool data and realise its full potential to support literacy and numeracy programs.

Audit acknowledges that Release Two had only been made available in September 2009 and that teachers had limited opportunities to become familiar with the system. However, audit was informed by the OneSchool Strategic Information and Technologies Branch that they are not planning to provide the same level of training and support for Release Two as was provided for Release One. There are currently no plans to provide any funding to schools for specific training to new or returning teachers.

Storing and accessing school-based data

To ensure student data is securely maintained and accessible, relevant spreadsheets and databases procedures need to be documented. The documentation tells teachers how the database or spreadsheet works and ensures that data is not lost. When a new staff member takes responsibility for maintaining a spreadsheet or database certain information is required:

- what data is entered and how it is validated
- definitions of data fields
- how the formulas work
- how the access is managed and privacy maintained
- how the information is archived and backed up
- when the results have to be entered.

The department has a policy that outlines requirements for capture, creation, management, retention and disposal of departmental records (*Managing the Department's Records IFM PR008*). The policy does not provide specific guidance on requirements for documenting spreadsheets or databases, consequently how spreadsheets and databases are accessed, validated, archived and privacy issues handled was not well documented in most of the schools visited.

Responses to the audit survey confirmed that documentation of school databases is immature with 75 per cent of schools responding that they are either beginning or developing their documentation.

Release Two of OneSchool system facility to store and analyse school-based assessment data was not yet being used at any of the schools visited by audit. A number of principals advised that they were investigating how to best use this function.

Analysing school performance

At central and regional office level, analysis of the NAPLAN data is the main basis to assess school performance. At the school and individual student level, a variety of school-based assessment data is supplemented by NAPLAN to assess student performance. Regions had access to a range of data about schools including:

- demographic information
- enrolment data
- parent and community interviews
- student voice, e.g. forums to gather the students' own ideas about ways to improve achievement levels
- school-based, state and national data including:
 - data from ongoing classroom monitoring
 - reported student achievement on a five-point scale (A to E)
 - moderated samples of student work
 - state assessment data (Queensland Comparable Assessment Tasks, early intervention)
 - Years 3, 5, 7 and 9 national literacy and numeracy data.

Audit noted that not all regional offices made use of all of this data to determine where support or intervention for schools was required. Audit was informed that in some regions these decisions were based solely on the NAPLAN test results.

1.3.2 Systems for using literacy and numeracy data

There are opportunities for improvement in a number of the department's systems to use the literacy and numeracy data to improve teaching and learning. These opportunities are in the areas of curriculum planning, feedback to the Queensland Studies Authority and feedback to teachers and principals. With the rollout of the National Curriculum in 2011, it is critical that systems to implement and monitor curriculum are effective and efficient.

Curriculum planning

All schools visited had developed school curriculum plans. However, the approaches to using student data to inform these plans were inconsistent and at different levels of maturity. Only a few of the schools visited had formal processes to review their curriculum plans, year level plans and unit plans, as a result of the analysis of student data. The survey results from the 123 respondents showed that 56 per cent of principals assessed their processes to use student literacy and numeracy performance data in the development of school literacy and numeracy curriculum plans as 'still beginning' or 'developing'.

The department's *P-12 Curriculum Framework* has been in place since 2008. It provides guidance about the use of data for planning, reporting and reviewing curriculum plans. The department did not have a process in place to ensure the plans were current or met the department's quality requirements at the time of the audit. While many of the schools visited had revised their school English and Mathematics curriculum plans, in line with current departmental expectations, some plans in use dated back to 1995.

Audit acknowledges that the department has recently released further curriculum advice to schools via the *Roadmap for curriculum, teaching, assessment and reporting in Years 1-9*, and is currently carrying out teaching and learning audits on every state school, due to be completed by the end of 2010.

Feedback to the Queensland Studies Authority

The department provides feedback to the Queensland Studies Authority (QSA) through forums managed by QSA. The department is represented on the QSA Governing Board. All decisions relating to approval and review of syllabuses are ratified through this board.

The department is represented on all QSA subcommittees including the Aboriginal and Torres Strait Islander Education Committee, the Assessment, Moderation and Certification Committee, Equity Committee and P-12 Curriculum Committee. Minutes from these meetings are tabled at the QSA Governing Body meeting for noting and/or ratification.

Audit was informed by the department that all decisions relating to approval and review of syllabuses are ratified through these subcommittees. However, the department does not have a formal system to review QSA syllabuses to identify any systemic issues or areas for improvement. There is no process in place to aggregate information from principals and teachers about the strengths or weaknesses of the QSA syllabuses. As such, the department can not provide a formal consolidated opinion on the quality of the syllabus drawn from the experiences of teachers and principals.

Feedback to teachers and principals

Systems that provide feedback to teachers and principals about student learning tell them whether their approaches to teaching the curriculum are effective. They also provide information to principals and managers on the skills and training needs of teachers. The department has in place performance agreements with regional staff, principals and administrative staff at schools. However, the department does not have a strategy to ensure teachers are provided with effective feedback on their performance.

There are a number of applicable acts, regulations, standards, directives and policies that require schools and teachers to be supervised and provided with timely feedback. The department's performance management strategy, which currently has a strong development focus, could be improved to include greater emphasis on formal appraisal processes of teachers to allow it to meet all of the legislative requirements.

It is a requirement of *Public Service Commission Directive No. 18-1997* that public service employees actively participate in departmental performance management strategies which include a performance appraisal and development strategy.

1.3.3 Accountability systems for literacy and numeracy

Accountability for literacy and numeracy results rely on effective planning, monitoring and reporting. The department has a well established and clear planning, reporting and reviewing framework for schools, but there are opportunities for improvement in the planning processes, monitoring the progress of plans and reporting to stakeholders.

Planning processes

The department has developed and documented the mandatory requirements for school strategic and operational planning, reporting to parents on student achievements and financial reporting in accordance with the *Financial Accountability Act 2009*. This is through the department's *School Planning, Reporting and Reviewing Framework 2010*. All schools visited had a current annual operational plan and a school Annual Report.

Regions provided a range of support and services to schools. These services included student services programs, human resources support, facilities and maintenance, teacher and principal training and recruitment, and programs to support schools to improve teaching and learning. A review of the plans and reports for regions identified that only one region visited had a detailed plan of how all regional services (including NAPLAN strategies) were to be delivered, funded, monitored and reported. While the other regions visited had NAPLAN strategies in place, there is room for improvement in how their services are planned, monitored and reported. The department's planning and reporting cycle is not clear on the responsibilities for regions.

Monitoring the outputs and outcomes

Audit was informed that schools develop their annual operational plans in consultation with their local communities. The plans are signed off by the principal, the executive director schools and the president of the parents and citizens association. The plans identify the agreed outputs and outcomes to be produced each year. Audit found that while most regions monitored the outcomes of school plans (mostly on the NAPLAN results), regions were not holding schools accountable for implementing the outputs (actions) endorsed in school annual operational plans.

Audit found that there was a large variation between regions in the extent and effectiveness of monitoring and analysing NAPLAN data.

The corporate, and most of the regional offices visited, are primarily focused on monitoring and reporting NAPLAN results and progress toward implementing strategies to improve literacy and numeracy results. The actions from school operational plans, educational outcomes in science, or other key learning areas were not often used to supplement the NAPLAN data to diagnose where additional help or resources were needed.

Reporting to stakeholders

School Annual Reports highlight the key outcomes achieved in the previous year. The Federal Government has prescribed reporting requirements for schools to include in their Annual Reports as part of the funding arrangements between the states and the federal government (see Section 7.3). While schools are required to meet these minimum reporting requirements, they are also able to report on other aspects of their performance to their community. Audit noted that while reporting to external stakeholders by schools meets the federal government's minimum requirements, the amount of additional detail provided varies from school to school.

While all the schools visited reported on their outcomes as required, there is scope for improvement in reporting outputs. For example, one of the schools visited committed in its annual operational plan to implement Year 2 Net Intervention and support programs. The plan includes a performance indicator about the percentage of students at or above the national minimum standard on the Year 3 NAPLAN tests. As this measure includes students who may have moved from other schools or did not receive extra help from the intervention program it does not allow judgements to be made on the effectiveness or efficiency of the intervention program. Information on the number of students in the programs and the percentage of them who were at or above the national minimum standard on the Year 3 NAPLAN test, would provide the school and stakeholders with information to judge the effectiveness and efficiency of the program.

This audit also considered the relevance and appropriateness of the Department of Education and Training performance measures for primary schooling in the strategic plan and service delivery statements and whether they fairly represent performance. The department has four objectives in its *Strategic Plan 2009-2013*, one of which is particularly relevant to this audit: *'Every young person will be well prepared for life success through learning and education.'*² While this objective has been linked back to the State Government's desired outcomes it does not define what being prepared for life success means. This lack of clarity makes it difficult to measure progress made towards achieving this objective. Audit is not able to provide an opinion on the relevance or appropriateness of the department's performance measures in the strategic plan or whether or not they fairly represent performance as the objective is not clearly defined.

² DET, *Strategic Plan 2009-2013*.

A review of the output objectives and performance measures in the department's *Service Delivery Statement 2009-2010* identified that the performance measures only report progress on some aspects of the quality and cost of the outputs. In my opinion, there is therefore room to improve the relevance of the department's measures as they do not comprehensively address the key material aspects of the department's outputs.

1.4 Recommendations

It is recommended that the Department of Education and Training:

- 1. provide teachers and principals with access to further training in the skills and competencies necessary for them to analyse the full range of student data - NAPLAN and school-based.**
- 2. strengthen guidelines for regions about how to use a broad range of data, including information on school systems to prioritise the support provided to schools to improve outcomes for students.**
- 3. ensure that school curriculum plans and assessment policies are regularly monitored for compliance with the department's standards.**
- 4. strengthen existing performance management processes to ensure feedback is provided to teachers on their skills, competencies and development needs to implement the school's curriculum plans.**
- 5. revise the department's model for planning, monitoring and reporting on the delivery of regional services to provide greater clarity of responsibility to this part of the organisation.**
- 6. review school planning processes to ensure that the principal's supervisor provides regular feedback and monitoring of the implementation of the priorities in school and annual operation plans.**
- 7. revise the requirements for school Annual Reports to ensure that information reported allows stakeholders to assess the effectiveness and efficiency of school performance.**
- 8. review the objectives and performance measures relating to schooling in its strategic plan and service delivery statement to ensure they are measurable and relevant.**

1.5 Department of Education and Training response

The Director-General, Department of Education and Training provided the following response on 30 April 2010.

We know from the results of the OECD's PISA assessment programs that Queensland, as part of Australia, has one of the highest performing education systems in the OECD – well above nations such as the United Kingdom and the United States on these tests. But we can always do more to improve student learning outcomes and the Department is currently implementing a wide range of strategies with school improvement as a central focus.

It is acknowledged that data plays an important role in the improvement of teaching and learning outcomes for Queensland students and this state has been at the forefront of data provision to schools and communities over the last decade. For example, Queensland was the first state in the nation to make school level NAPLAN data available to the public. It is disappointing that there is no acknowledgement of these achievements or activities in the report. The report also provides no national or international comparisons of where Queensland is placed within the scope of the audit that would have provided further benchmarking for the Department.

I am pleased that the Queensland Audit Office has acknowledged the significant role that the Department's investment in its OneSchool application will have on making student performance information available to classroom teachers, parents and school administrators, enhancing access from previously paper-based reports for teachers to fully automated views of results with links to curriculum statements and teaching and learning strategies based on data from the literacy and numeracy tests.

While the audit report acknowledges that this system was released only two weeks prior to the audit being conducted and that the level of maturity in its use is still developing across schools, this application provides the important platform for teachers to capture the full range of curriculum, assessment and reporting data to support teachers and principals in making an effective use of data, replacing more manual systems and processes. The conclusions drawn in relation to the implementation of the OneSchool application stretch well beyond the recognition that the system was only just implemented immediately prior to the audit being conducted and I consider some of the findings fail to adequately acknowledge the recency of the implementation.

The Department has implemented a range of contemporary training and support technologies and methodologies to ensure that teachers across the state can access online support and tutorials in the use of OneSchool. In addition, the Department has been progressively rolling out its training programs for the use of the curriculum, assessment and reporting modules that were released late last year. Investment in systems-use training must also be balanced against the range of other competing priorities that aim to boost our performance in literacy and numeracy.

A key consideration in the development of the OneSchool curriculum, assessment and reporting modules was to better support teachers in the management of records and the portability of these records as students move within and between schools. OneSchool makes the single student record a reality, allowing teachers to use OneSchool to replace local markbooks, spreadsheets and databases that have historically been used. While teachers work towards this transition, tools such as markbooks and spreadsheets will remain an important part of each teacher's process for tracking and monitoring student progress.

It is not realistic to expect that every spreadsheet and database should be supported by document and management procedures as implied in the audit report. Clearly, these are tools of trade for teachers, as with many other workers, in conducting their daily business in analysing data and exploring trends with a view to lifting student performance or targeting interventions and are subsets of the data stored in OneSchool or elsewhere. These tools do not purport to replace the official student records of results that are fully supported.

It is significant to note that Education Queensland operates over 1200 state schools and the audit included visits to just 12 primary schools with a short e-survey of 150 other primary schools. This light sample potentially brings into question some of the findings and the lack of clear alignment between some of the questions in the e-survey and site visits makes validating the findings difficult for the Department. However, regardless of the concerns regarding methodology, the report provides the Department with some pointers for where we can continue to improve our practice in order to lift our performance further.

Queensland state schools, like non-state schools, operate in a largely autonomous manner with the Principal accountable to the local school community. The school's Parents' and Citizens' Association is a key part of the connection with the community and are an essential element of the planning and accountability processes required of schools by the Department. Each school principal is supervised by an Executive Director School Improvement and are supported by a new Regional structure that took effect from 1 January 2010 with a renewed focus on school improvement and accountability. Again, some comparison of state school performance governance with government schools in other states or with non-government schools in Queensland would have been a useful benchmark on which to judge the adequacy of the Department's processes.

These are very important contextual differences for this Department, over smaller public sector agencies with few points of physical presence, and I am not sure that all judgements made throughout the report fully acknowledge or show a full understanding of the operating environment of schools.

Schools operate in a wide range of community settings across Queensland, each with unique attributes and needs. Schools and regions are provided with and have access to a significant amount of data on a range of school attributes and performance issues. These data are used to inform and assist improved learning outcomes for students at the individual, class, school, region and system level. The Department's investment in its OneSchool system places Queensland at the forefront of the nation in terms of providing the infrastructure for teachers that will build the foundation for even better teaching and learning data, curriculum planning, monitoring performance and student reporting.

The Department of Education and Training has a stated goal to lift the literacy and numeracy outcomes for all students across Queensland.

The 2009 National Assessment Program - Literacy and Numeracy (NAPLAN) results showed that overall Queensland had improvements in the proportion of students achieving the national standard in 17 of the 20 test result areas. This was an encouraging result and the 2010 NAPLAN tests to be conducted in May this year will provide more information as to what we can be doing better to further lift Queensland's performance in these areas.

The size and geographically dispersed nature of the Department and its workforce is a key consideration for this Department as opposed to smaller agencies. The cost of face-to-face training as promoted in the report is significant and the department has deliberately used a range of modern approaches to systems implementation and support to minimise the cost to the department.

Audit was advised of the range of data including enrolment data, attendance data, Year 2 data, school opinion survey data, Year 12 outcomes data, retention data, etc that is used in providing schools with feedback about their performance as well as being used to inform their communities. However, the audit report suggests that NAPLAN data is the only source of data used to judge school performance. NAPLAN data plays an important part in monitoring student performance but it is not the only data from which schools obtain feedback about how they are progressing. However, I make no apology for the importance that I place on lifting the literacy and numeracy outcomes of Queensland students.

The practicality and validity of using a range of un-moderated, non-standardised data as implied in the report displays a lack of understanding about the appropriate purpose to which some data can be put. The NAPLAN data while being a broad indicator of the achievements of the school in the areas of literacy (reading, writing, spelling, grammar and punctuation) and numeracy (measurement, chance and data, working with numbers, etc) provides a robust, independent and standardised suite of results that can be used for comparisons against state means, national means, achievement bands etc. Other locally collected data sets do not offer the same level of sophistication, independence and valid comparison.

I am unable to agree with your findings that Regions used only NAPLAN data to allocate support to schools. Regions use NAPLAN data to allocate specialist support in the areas of literacy and numeracy which is an entirely appropriate approach given the nature of the NAPLAN data at a range of levels - by gender, indigeneity, similar schools, etc. Other support resources such as Guidance Officers and Behaviour Management specialists are allocated using other appropriate data sources.

The audit acknowledged that the Department has in place the P-12 Curriculum Framework and the Roadmap for curriculum, teaching, assessment and reporting in Years 1-9 but asserts there is no process in place to oversee implementation. The Framework itself, released in 2008, however highlights the processes for annual review, planning and supervision of these activities by Executive Directors' School Improvement, principals' supervisors. The Framework is further supported by a number of guidelines providing additional advice for schools and Executive Directors. In September 2009, the Roadmap for curriculum, teaching, assessment and reporting in Years 1-9 was released for all schools. This resource provides expectations for the characteristics and requirements of quality curriculum planning and implementation.

As part of the Masters' Review, the Department also strengthened the processes surrounding the quality assurance of teaching and learning quality assurance by initiating a teaching and learning audit process of state schools. All schools will have the benefit of this external audit process of their teaching and learning practices by the end of this year which will highlight for them the areas for further development and investment. I am pleased that the Queensland Audit Office report acknowledges this activity in terms of strengthening the department's oversight of schools in relation to curriculum.

The audit also appears to suggest that the Department should duplicate the processes employed by the QSA in Syllabus review and feedback. The QSA is the statutory authority responsible for curriculum development and review and along with the non-state sectors, Education Queensland has representation on the QSA Governing Board and provides active representation on curriculum committees and sub-committees. The data gathered by the QSA through these processes ensures that all stakeholder views are collected and evidence-based.

In relation to teacher performance monitoring, the Department has been progressively rolling out its Developing Performance process for teachers. The audit found a range of practices across the schools visited when it comes to teacher supervision. The e-survey used by Audit did not attempt to collect the same information from the other 150 schools which makes assessing this finding difficult when based on such a small sample of 12 schools visited.

The department has well established procedures to support its Standards for Teachers. It also has a Valuing Performance Framework which includes the Developing Performance Process for teachers. These important processes are there to support staff in performance management processes.

The Joint Statement made by the Department and the Queensland Teachers' Union, published as part of the package of information for the process, states that the Developing Performance Framework includes a cyclical process of negotiating and implementing and agreement that covers three aspects:

- *Key work tasks for the period of the agreement and expectations of employees*
- *Activities directed towards furthering employees' career goals*
- *Support for professional development necessary to support the achievement of work and career goals.*

Schools are dynamic places where teaching professionals interact daily with a focus on student learning through staff meetings, parent meetings, and student contact. Principals have formal and informal contact with teachers on a daily basis. The Department also has a comprehensive Managing Unsatisfactory Performance process for teachers which is not acknowledged in the report.

Audit acknowledged that the school planning and accountability documents and processes are well articulated, well administered by schools and are well aligned to the strategic plan and operational plan of the department. These school planning, reporting and review processes reinforce the accountability at the local level between the Principal and the community and acknowledges the Department's continued work to improve this process. Community involvement in the cyclical review of school performance is a key to maximising local accountability and engagement.

In relation to strategic measures used by the Department, the audit appears to have taken a very narrow view of Departmental reporting against its strategic objectives and measures. The Department invests significant effort in making a wide range of information available to the community not only through the Service Delivery Statement but also through its school and departmental websites. In fact, the Department of Education and Training Annual Report recently received a silver medal at the Queensland Annual Report Awards.

In a large department that publishes a wide variety of information about its activities and services, including statements such as 'more appropriate and relevant information reported to internal and external stakeholders' without providing specific detail is unhelpful to the Department in understanding Audit's intent.

The Department's planned activities arising from its strategic improvement agenda to lift literacy and numeracy outcomes already addresses a range of issues identified by the audit. But we can always do more.

The Department is committed to long term reform to ensure that the quality of Queensland's education system continues to deliver improved results for the people of this State. The recommendations made by Audit encourage us in the main to refine what we already have in place to assist us in meeting our objectives.

The Department will consider these recommendations as it continues to implement its improvement agenda.

1.6 Auditor-General's additional comment

As the department has collected and published data on student results for many years, I expected to find well established processes for using the data to inform teaching and learning. Although OneSchool is now an important element of the technology available to schools to access and analyse the NAPLAN data, the audit assessed the systems in place at all levels of the department to use the broad range of available student performance data (not just NAPLAN).

The audit visits found that data use across regions was inconsistent. While some regions used a range of data to inform decisions about support or intervention for schools, other regions advised audit that these decisions were based solely on the NAPLAN test results. If the audit finding about actual practices on data use at some regions indicates that these practices are not consistent with departmental policies, it is an issue for the department to address as highlighted in the report's recommendations.

The audit was undertaken using a methodology which complies with the Australian auditing standard on assurance engagements – *ASAE 3500 Performance Engagements*. The audit examined the frameworks and policies developed and disseminated by DET central office to schools. A survey and school visits were used to determine if these policies and frameworks were in use and if they were effective in promoting the use of student data to inform teaching and learning practices in classrooms. An unbiased mix of schools and regions was selected in consultation with the department for school visits. The electronic survey to principals was sent to a randomly selected sample of 150 schools.

This methodology is consistent with other audits and reviews of entities of a similar size and complexity including reviews used by DET for its own purposes. The audit methodology provides a sound basis for the audit conclusions and opinion outlined in the report.

2 | Teaching and learning data

Summary

Background

This section briefly describes the context of the audit and highlights the importance of effective and efficient systems to use student data to inform literacy and numeracy teaching and learning.

Key points

- State schools are expected to develop their own school curriculum in accordance with the department's curriculum framework and the Queensland Studies Authority (QSA) syllabuses.
- QSA develops, approves and revises syllabuses for the Preparatory Year to Year 12, and provides guidance and resources to help teachers.
- Developing and modifying curriculum in response to student data helps ensure students are receiving the teaching and learning opportunities required to meet their identified learning needs.
- Releases One and Two of the department's OneSchool data management system have been implemented and OneSchool continues to evolve with the goal of improving operational efficiencies.
- Effective systems which clearly identify school performance and the underlying factors that contribute to performance help principals and management ensure continuous improvement.
- Relevant, timely and appropriate data assists all decision makers within the education system to effectively improve teaching and learning.
- Should data reveal unsatisfactory performance, educators need to examine possible causes and reassess teaching strategies, curriculum design, and possibly expectations of students.³

³ G. Matters, *Using data to support learning in schools students, teachers, systems*, 2006.

2.1 Context

2.1.1 National agreements and state commitments

The Council of Australian Governments (COAG) has agreed to ensure that Australian school students acquire the knowledge and skills necessary to participate effectively in society and gain employment in a global economy. COAG has determined the following outcomes for schooling in Australia:

- all children are engaged in and benefiting from schooling
- young people are meeting basic literacy and numeracy standards, and overall levels of literacy and numeracy achievement are improving
- Australian students excel by international standards
- schooling promotes the social inclusion and reduces the educational disadvantage of children, especially indigenous children
- young people make successful transition from school to work and further study.

COAG has also agreed to the National Education Agreement (NEA). The key national education policy directions influencing schools are driven by NEA key priorities of:

- improving teacher and school leader quality
- high standards and expectations
- greater accountability and better directed resources
- modern, world-class teaching and learning environments, including Information Communication and Technologies
- integrated strategies for low socio-economic status school communities
- boosting parental engagement.

From 2009, these key priorities are delivered through a number of reforms under the National Partnership Agreements for eligible schools. These include:

- literacy and numeracy – focusing on the key areas of teaching, leadership and the effective use of student performance information, especially for those students who are identified as not meeting the national minimum standards
- low socio-economic status communities – supporting a suite of reforms designed to transform the way schooling is delivered in disadvantaged communities
- teacher quality – improving teacher and school leadership quality
- youth attainment and transitions – increasing young people's participation and attainment in education and training, and enabling young people to successfully move from school to further education, training or full-time employment.

One hundred and seventy five state schools, 36 Catholic schools and 28 Independent schools across Queensland have been selected to participate in the Literacy and Numeracy National Partnership.

In support of the national goals, the Queensland Government has developed *Toward Q2: Tomorrow's Queensland* framework and other state government plans and policies including the *Department of Education and Training Strategic Plan 2009-2013*. Department of Education and Training has seven key priorities which complement the department's strategic plan and reinforce the department's major goals.

The department's *Roadmap for Curriculum, Teaching, Assessment and Reporting in Years 1-9* affirms the importance of every child, in every classroom, every day. It provides teachers and school leaders direction on how to raise student achievement in the priority areas of English/literacy, Mathematics/numeracy and Science.

The *School Planning, Reporting and Reviewing Framework 2010* details the school improvement processes of planning, reporting and reviewing to be enacted in Queensland state schools to implement state and national reforms, and to ensure improved learning outcomes for all students.

2.1.2 School and region autonomy

Schools have the primary role of developing appropriate learning programs and managing the relationship between schools and the community. All schools are required to develop their own school specific operational plans and targets which align to the department's priorities and contribute to achieving the department's targets.

Regions provide a range of support services to drive school improvement and hold schools accountable. Services include:

- implementing targeted school improvement strategies
- allocating support resources such as speech-language therapy
- coordinating and facilitating training
- supporting schools to implement key initiatives such as OneSchool.

2.1.3 New organisational structure

Audit was advised that with the recent inclusion of early childhood education and care into the Department of Education and Training, it was necessary for the department to review the way in which it operated. On 1 September 2009, a new organisational structure for central office operations commenced. The structure and function of education regions and districts was last reviewed in 2005. In view of the department's new organisational structure that became operational on 1 September, it was important that services were integrated to ensure a cohesive service to Queensland communities.

Delivering the most effective education, training and early childhood education and care services to Queensland communities is the Department of Education and Training's primary objective. The department's regions have been closely aligned with those of the social cluster and, in particular, the Department of Communities, to assist with referral pathways and cross agency coordination and governance for driving reform across early years services. Integrated service delivery will ensure a seamless approach to meeting the needs of communities throughout the state. It will also enable decision making to occur closer to clients, be more responsive to local needs and ensure clients receive the highest standard of service at the local level.

2.2 Teaching and learning terminology

2.2.1 School curriculum planning

Curriculum is the planned, guided and implemented learning that occurs in a school. State schools are expected to develop their own school curriculum tailored to the needs of their students in accordance with the department's Preparatory Year to Year 12 curriculum framework and Queensland Studies Authority syllabuses (outlined in Section 2.2.3).

*The Professional Standards for Teachers – Guidelines for Professional Practice*⁴ describes what teachers need to know and be able to do in terms of the curriculum, in order to provide relevant and worthwhile learning experiences for individuals and groups of students. (Audit findings on curriculum planning systems are included in Section 4.1).

2.2.2 Intervention programs

Curriculum should be developed and modified with consideration for the specific needs of children within the school and classroom. If students are not achieving the expected standards in numeracy and literacy, intervention or additional support needs to be considered. The type and level of intervention required depends on the specific needs of the child and may range from special reading groups to disability support programs.

The department also needs to be able to clearly identify school performance and understand the underlying causes, in order to facilitate continuous improvement. Intervention at the central and regional office level may include additional staff training, partnering with other schools and/or closer monitoring. (Audit findings on the development of intervention programs are included in Section 3.1).

2.2.3 Syllabus

A syllabus is an official 'map' of a school subject, which provide teachers with:

- a rationale and outline of the school subject
- an overview and specification of what should be taught and learned
- guidance on applying centralised standards to assess students to ensure that classroom and school-level assessment align with systemic practices.⁵

The Queensland Studies Authority (QSA), a statutory body of the Queensland Government develops, approves and revises syllabuses for the Preparatory Year to Year 12 and provides guidance and resources to help teachers implement the QSA syllabuses.

QSA systems were not included in the scope of this audit.

⁴ DET, *Professional Standards for Teachers - Guidelines for Professional Practice*, 2005.

⁵ Queensland Studies Authority, *P-12 Syllabus design principals*, April, 2008.

2.3 School data

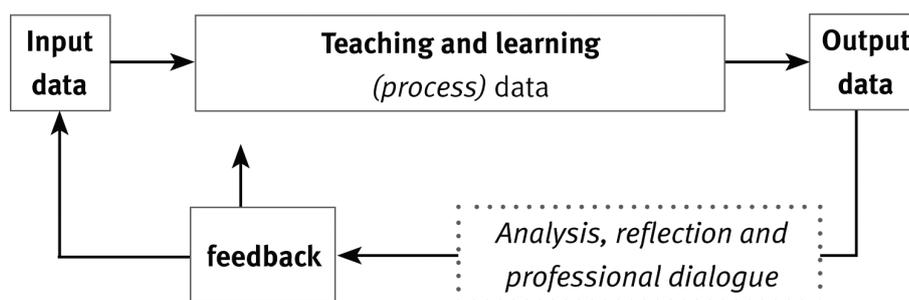
Analysis of relevant, timely and appropriate data assists all decision makers within the education system to effectively improve teaching and learning.

2.3.1 Types of data

As per the *Guidelines for using student achievement data to inform teaching and learning*, the department classifies data as input, output or process data, according to where they are used in the teaching and learning cycle. The cycle is illustrated in Figure 2A and consists of the following components:

- input data guides decision making about the design of the learning environment
- process data guides decisions about strategy
- output data is used to evaluate teaching and learning and provide feedback to continuously sustain and improve overall processes.

Figure 2A – A data-informed teaching and learning cycle⁶



The department and teachers collect a significant amount of data on teaching and learning from a range of sources. The types of data which may be collected is outlined in Figure 2B.

⁶ DETA, *Guidelines for using student achievement data to inform teaching and learning*, 2008.

Figure 2B – Data which may be collected and used to inform teaching and learning

Source	Type	Information that may be useful in teaching
Student enrolment files including data held in the School Management System and OneSchool	Input	Basic demographic information: gender, age, grade level. Family: location, situation, make-up of the family, sibling order, parent's occupation, language usually spoken at home, ethnic and cultural traditions. Record of previous attendance. Health records and management plans for medical conditions. School psychologist reports.
Achievement records	Output	Test scores, quizzes, portfolios and work samples. Records and notes from previous teachers. Teacher observations and results from questioning. Results from Year 3, 5, 7 and 9 testing, Year 2 Net results and other standardised tests.
Opinion surveys	Input / process	Parent and student perceptions, parent support for learning and teaching, parent involvement in the school.
Staff and community profiles	Input	Special skills, interests, qualifications, ethnic backgrounds, workplaces that teachers can draw on to enrich the classroom experience for students.
Programs	Process	Course outlines, online resources, special programs, web links.
Catalogues and inventories	Input	Resources – books, software, workbooks, web pages and ICTs – that enhance learning experiences for students.
School/professional culture	Input / process	Beliefs about teaching and learning. School vision, purpose, traditions and policies. Relationship within the schools and between the school and its community. Levels of professional dialogue, development and collaboration.

Source: DET, *Guidelines for using student achievement data to inform teaching and learning*.

2.3.2 National assessment program – literacy and numeracy

In May 2009, Australian schools undertook the second year of testing under the National Assessment Program – Literacy and Numeracy (NAPLAN). The national tests assess the skills of all students (State, Catholic and Independent schools) in Years 3, 5, 7 and 9, in reading, writing, language conventions (spelling, grammar and punctuation) and numeracy.

These tests provide a consistent measure on how students are performing against national standards. Results are reported publicly through school Annual Reports, individual reports to parents, the DET Annual Report and the MySchool website.

QSA coordinates the administration, marking and reporting of the NAPLAN tests in Queensland. Individual student results are reported to parents. Schools have access to the results for each of their students, which can be broken down by individual question.

In partnership with the states and territories, the Federal Government has entered into *Smarter Schools National Partnerships for Literacy and Numeracy* in the key areas of addressing disadvantage, supporting teachers, and improving literacy and numeracy. States and territories have developed summary implementation plans, outlining the reforms being introduced under the partnerships. Performance indicators are based on NAPLAN results. The Federal Government has committed funding of \$540m through the *Smarter Schools National Partnerships on Numeracy and Literacy*.⁷

The Honourable J Gillard MP, Minister for Education, Minister for Employment and Workplace Relations, Minister for Social Inclusion, Deputy Prime Minister, announced on 7 February 2010, an additional \$11m will be provided to 110 schools, to help ensure students improve their literacy and numeracy.⁸ These schools were selected based on NAPLAN results that were below or substantially below the national average.

Prior to NAPLAN, which started in 2008, all eligible Queensland school students in Years 3, 5 and 7 participated in standardised state based testing dating back to 1999.

2.3.3 School-based assessments

Teachers and schools develop and administer formal and informal classroom assessments (such as those identified in Figure 2B), on a regular basis to identify student progress and choose ways to further enhance the learning. Schools also collect a variety of school-based assessments. Principals and teachers determine what classroom assessments will be undertaken. These assessment results are collected by the teacher and may not be moderated.

There are some standard assessment processes that all primary schools undertake. These include the Queensland Common Assessment Tasks (QCATs) and NAPLAN. QCATs assess a selection of the Essential Learnings in the key learning areas of English, Mathematics and Science in Years 4, 6 and 9.

Together, these results inform reporting to parents and identify students who may need additional support with their learning.

2.3.4 Analysing and using data

In order to draw accurate meaning from the data, concepts of validity and reliability, correlation and causation need to be understood. If the analysis of the data reveals that students do not know what they are expected to know, educators need to examine teaching strategies, curriculum design, and possibly expectations of students.⁹

Student data may be used by teachers and the school to:

- identify trends in student learning
- identify students requiring additional support or intervention
- inform teaching practice
- guide curriculum planning
- report student progress to parents and students
- guide the design of a learning environment to match the class profile
- group students.

⁷ www.deewr.gov.au/Schooling/Programs/SmarterSchools/Pages/default.aspx

⁸ www.deewr.gov.au/Schooling/Programs/SmarterSchools/Pages/11M.aspx

⁹ G. Matters, *Using data to support learning in school students, teachers, systems*, 2006.

Student data and information gained from monitoring and reporting may be used by the central office and regions to:

- identify statewide and regional trends in student achievement
- identify school performance and underlying causes
- gauge the effectiveness of special programs
- measure progress against past performances
- provide accountability to government and the broader community about school effectiveness
- provide the required support and guidance to schools and teachers
- prioritise needs and allocate resources
- inform planning and improvement strategies
- inform policy development.

The quality of the data, its management and the staffs' analytical skills will impact on how well data supports improvements to student performance. (Audit findings on analysing and using data are included in Sections 3 and 4).

2.3.5 Data management systems

School developed data systems

Schools have always had data management systems to store and analyse student assessments. As technology has advanced, schools have developed spreadsheets and databases to replace and/or supplement paper based filing systems. (Audit findings on data management systems are included in Section 3.4).

Corporate Data Warehouse

The Corporate Data Warehouse (CDW) collection system is used to gather data from a number of separate systems within the department and QSA. This data is then collated into consolidated views and stored in the CDW. This system has been in place to support analysis of student performance data since 2001.

Data that is extracted from the CDW includes: student demographic details, student addresses, student absences, class sizes, student roll class, roll class teachers, secondary subject enrolments, workforce health and safety data and finance data.

Prior to Release Two of OneSchool, the NAPLAN data and Year 2 Diagnostic Net achievement information for each Year 2 student was available to schools through the CDW. This system allowed some analysis, but access was limited to principals. Since Release Two, access to the national literacy and numeracy test results is accessible by all teaching staff.

OneSchool

The department is currently implementing OneSchool, a major initiative aimed at improving operational efficiencies, particularly in relation to administrative processes. Release One delivered the initial building blocks for a single student record including student behaviour, assessment, attendance, extracurricular activities, and career planning. Release One was deployed to all Queensland state schools during 2008.

Release Two was made available to all state schools in September 2009. It builds on the functionality provided in Release One and supports the processes for curriculum planning and implementation by providing modules to develop work programs, unit plans and learning plans. It also stores NAPLAN results and has the potential to store school-based data.

Access to core departmental and QSA curriculum documents is possible directly from OneSchool. Teachers are able to access the Queensland Curriculum, Assessment and Reporting Framework, standards, syllabus documents and various teaching and learning frameworks to identify the curriculum intent and build relevant and customised curriculum plans for their students.

Release Three is currently being finalised and will include resource management, financial applications and Workplace Health and Safety functions.

3

Systems for analysing literacy and numeracy results

Summary

Background

This section reports on the department's systems to analyse literacy and numeracy data efficiently and effectively. In its raw form, data can be used to report on student outcomes. Once analysed it allows interpretations about teaching successes and improvements. This interpretation of the data can then support evidence-based teaching and learning.¹⁰

To undertake analysis and make interpretations, teachers need to have an adequate level of analytical skills, and the data also needs to be readily accessible and easy to interpret.

Key findings

- Teachers and principals reported they need more support to develop their skills to use OneSchool to analyse data.
- At central and regional offices, NAPLAN (National Assessment Program – Literacy and Numeracy) data is the main source of student performance data used to inform decisions on the support provided to schools.
- At school and classroom level, a variety of school-based assessment data is supplemented by NAPLAN data to inform decisions regarding teaching and learning and to identify students with special learning needs.
- There was no evidence of analysis to determine the effectiveness of specific literacy and numeracy intervention programs at the school level.
- Only one school visited by audit had a formal policy and comprehensive guidelines to inform the assessment of students and interpret results to inform their literacy and numeracy programs.
- The schools visited are still developing their processes to analyse school-based and NAPLAN data.
- The schools visited were not clear on the expected standards or minimum requirements for processes to collect, analyse and secure school-based student performance data.

¹⁰ Hattie J. ACER Melbourne, *What is the nature of evidence that makes a difference to learning?*, 2005, pg. 19.

3.1 Analysing student performance

The department has provided advice to schools about how to analyse data and take a whole school approach to improving student achievement. Schools are advised to:

- set targets
- establish a team to improve performance
- develop a hypothesis
- gather further data to clarify needs
- analyse the data
- develop a plan of action
- monitor improvement and celebrate success.¹¹

Identifying trends and patterns

Audit observed that the different schools visited took different approaches to analysing student performance data. Some schools visited had formal approaches that included analysis of trends from the school-based data and NAPLAN results. They also used the NAPLAN test results to confirm or challenge students' achievement results drawn from school-based data. Others used more informal discussions in staff meetings and focused mostly on the NAPLAN results. Audit observed that the type and complexity of analysis performed by teachers varied widely as some teachers reported they had limited skill levels and confidence to analyse school-based and NAPLAN data. Schools receive the NAPLAN results five months after the students sit for the tests.

Audit found that the new Release Two of the OneSchool system provides staff at central office, regional office and schools with a powerful tool to analyse a range of student background, behaviour and performance data. It also allows the literacy and numeracy performance of the school's Year 3, 5 and 7 students to be compared with national benchmarks. A documentation review showed that there is information on the contents of NAPLAN reports and help screens in the system. However, the inconsistent skills and confidence of teachers to analyse student data and immature school analysis processes shows that there is room for improvement in the training provided in how to use the new analysis functions of the system. Although some training has been provided, there is room for improvement in the scope and coverage of training. This will allow the department to fully realise the benefit of its investment in the OneSchool system.

At interview teachers informed audit that they knew how to use the system to write report cards but did not now how to use the system to analyse the NAPLAN results (refer to Section 3.3 for further information about teacher skills). While audit acknowledges that Release Two had been rolled out shortly before the audit fieldwork and there is documentation and a *'help'* function within the system, there is room for improvement in the level of guidance provided to teachers. This would help them to confidently use the data analysis functions of the system.

¹¹ DET, *A whole-school approach to improving student achievement*.

The department's *Guidelines for assessing student achievement and moderating teacher judgments* state that:¹²

'Schools should have an Assessment Policy/Program, which outlines the place of assessment in curriculum. This should highlight that assessment is used in an ongoing way to inform teaching and learning programs, and not merely in a summative way as a means of gathering information about learning at the end of the program.'

While most of the 12 schools visited by audit had some documentation regarding student assessment (such as a data collection schedule), only one had a formal policy. The policy provided guidance to teachers about:

- the data to be collected
- collection processes
- timing of assessments
- moderation processes.

Identifying students who need learning support

Another major focus of data analysis for the schools visited was the identification of students who need specific intervention, such as learning support. Schools used special needs committees to identify students, collect and analyse diagnostic data and moderate results to determine the appropriate level of support and to monitor improvements. However, at many schools visited, the committee decisions were not documented.

All schools visited by audit determined individual student performance levels by collecting both school-based assessment data, and for Year 3, 5 and 7 students, the NAPLAN results. The schools visited considered both sets of data to determine where additional support and intervention was needed to improve a student's performance.

Some schools also considered other data such as student behaviour and attendance. At interview teachers advised that the advantages of school-based data was that it was timely and also included continuous testing. They also advised that while school-based assessment data was a key indicator of student performance, the point in time NAPLAN tests usually confirmed these assessments.

Research undertaken by Griffith University on behalf of the department and others recommended in 2007 that a statewide database be developed for identifying intervention practices and evidence of their impact on student outcomes. Audit was advised at all schools visited that the intervention and support programs implemented by the school for these students had not been reviewed formally to evaluate their effectiveness.

¹² DET, *Guidelines for assessing student achievement and moderating teacher judgments*.

Case study one

Analysing data to improve performance – Durack State School

Durack State School identified student needs through data analysis, made changes based on the analysis and monitored and reviewed their changes and programs.

An example of this is the adjustment made to the numeracy program. Teachers identified that the mathematics text they were using was not appropriate to the students due to the variations in students' levels of development, and diversity in cultural and social backgrounds.

The school analysed the student performance data, identified the key areas of knowledge requiring improvement, established goals and developed action plans and new practices to meet the goals. The school also measured students' progress against a baseline.

They changed their program to one which was more suited to the students' needs and trained the teachers in delivering the new program. The reflection, analysis and evaluation encompassed student performance data and achievements, curriculum, student needs, professional development and term plans. The action plan linked to the new maths program which was then evaluated at the end of the year.

3.2 Data analysis skills and training for teachers

Skills to analyse the results of teaching and learning

Principals and teachers need a range of skills to analyse trends and patterns in the data or identify students in need of learning support. In 2009, a report commissioned by the Office of Planning, Evaluation and Policy Development, United States Department of Education, *Implementing Data-Informed Decision Making in Schools – Teacher Access, Supports and Use*, identified that:

*'Having accumulated assessment data, educators then need to analyse [sic] the data in ways that relate the outcomes to processes and turn the data into actionable information. Often this analysis includes segmenting the findings by student subgroups or by groupings used within the school or classroom (because students in different groups received different services). It may also include the analysis of data trends over time and the search for patterns in multiple measures related to a given change or issue.'*¹³

This report identified five critical data competencies that teachers and principals need:

- question posing
- data location
- data comprehension
- data interpretation and data use.

(See Appendix 7.3 for further breakdown of the data analysis competencies for teachers and principals).

¹³ U.S. Department of Education Office of Planning, Evaluation and Policy Development, *Implementing Data-Informed Decision Making in Schools –Teacher Access, Supports and Use*, 2009.

Audit was advised that there were opportunities provided at the region, cluster and school levels to share information and ideas on a range of teaching and learning issues, including assessment and analysis practices. These opportunities included principals' meetings, cluster meetings and training on pupil free days. However, there were no targeted professional development opportunities for teachers and principals to develop an agreed set of competencies in data analysis. Audit was advised that the importance of using data for evidence-based teaching is covered during program specific training but is not covered as a separate topic. Audit also noted the *DET Professional Development Catalogue 2009*, that lists the department sponsored training available to teachers, did not include any training courses about data analysis for principals or teachers.

Skills to use the OneSchool system

Audit was informed that the OneSchool Strategic Information and Technologies Branch has provided extensive formal training to all teachers during the deployment of Release One (see Section 2.3.5 for further explanation of Release One). All teachers are required to use Release One functions to write student report cards twice a year. All schools were provided funding to enable teachers to be released for 1.5 hours to attend formal face to face training (for Release One). This initial training focussed on moving the school workforce to a new technology platform for the entry of data as well as providing initial training in the use of the new application. Each school had a Smart Classrooms Coordinator who in conjunction with the principal managed the deployment of Release One and any subsequent training that was required. Funding was provided directly to schools to support these activities.

Audit was advised of a variety of training and resources provided to teachers and principals in relation to Release Two. Training examples included a NAPLAN results interpretation seminar for selected principals, a five day literacy training course undertaken by all teachers and school-based training of staff and teachers. Other resources included the self explanatory design of OneSchool, including built-in help and guidance screens. Audit was advised that short interactive online training sessions have also been provided to 582 participants on OneSchool. For term one 2010, as at the end of February, there had been 333 registrants for further sessions. There are approximately 37,000 full-time teachers in Queensland state schools.

Despite these activities, at interview, many teachers expressed a lack of confidence in their analytical skills to use Release Two of OneSchool NAPLAN reports. Teachers also expressed a lack of understanding of the system, its capabilities and data available. None of the schools visited had a formal training plan for teachers in Release Two of OneSchool. Responses to the audit survey show that only 35 per cent of principals agreed that, *'The training and support I have received in OneSchool has prepared me well to analyse student data and report on performance.'* Audit found that the OneSchool Strategic Information and Technologies Branch has no plan to deliver centrally coordinated training for all teachers in the analysis functions now available in Release Two. Audit was informed that there are no plans to train new or returning teachers in OneSchool.

At a few schools visited audit sighted checklists to guide teachers' analysis, and were informed at other schools that an individual teacher or principal performed the analysis of overall school trends and patterns, then distributed the information to the other teachers. At most schools it was up to individual teachers to analyse any trends or patterns in their own class. At interview, most teachers stated that they had looked at the NAPLAN test results for their class. Some teachers had also looked at the test questions where their students had answered incorrectly.

Audit was also advised of the system of Smart Classrooms Coordinators to provide assistance to schools on Release One of OneSchool for 2008 only. Audit was informed that regional offices and schools are not funded to deliver OneSchool training to teachers for Release Two.

Audit noted that current monitoring of Release Two implementation is limited to take up or usage information and therefore no confirmations were available as to whether or not the system self explanations enable efficient analysis.

Most of the schools visited did not have processes in place to provide training in the use of the OneSchool NAPLAN reports. Given that untrained users take up to six times longer¹⁴ to perform the same tasks there are opportunities for improvement in the OneSchool training strategy available for principals and teachers.

3.3 Storing school-based data

Audit sighted a variety of documentation at the schools and regions visited including spreadsheets and in-house databases. The access, validation, archiving and privacy of the spreadsheets and databases were not well documented in most of the schools visited. There was also limited guidance on how to analyse the school-based data. Responses to the survey confirmed that documentation of school databases is immature with 75 per cent of principals responding that they are either beginning or developing their documentation. The survey also confirmed that eight per cent of schools did not have any school specific databases to document students' literacy and numeracy assessment results. The OneSchool system facility to store and analyse school-based assessment data was not being used at any of the schools visited by audit.

3.4 Analysing school performance

The department provides a range of school performance information to schools and regions to determine the level of support required. Data available includes: like school comparison, regional performance comparison and year on year comparisons. Regions will target their available resources at the areas where they assess they can be most effective.

Audit found that some regions visited were rating schools using only the NAPLAN results to determine the level of support and supervision to provide. Other regions were using a variety of information to supplement the NAPLAN data including school-based assessments. There is room for improvement in the approaches regions are using to allocate support and intervention to schools. Information on a range of school practices would provide regions with a broader set of information on some of the underlying causes of poor performance. *A Shared Challenge: Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools*¹⁵ identified a number of practices that high performing schools have in common:

- setting high expectations
- teachers have a deep knowledge of the subjects they teach
- systems, resources and processes are in place to assist teachers to diagnose specific learning needs
- strong accountability and performance monitoring systems exist.

¹⁴ Conner, Marcia L. Learnativity.com, *How do I measure return on investment (ROI) for my learning program?*, Training & Learning FAQs, April 5, 2002.

¹⁵ G. Masters, ACER, *A Shared Challenge: Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools*, 2009.

Audit acknowledges that the department has initiated a number of initiatives to improve its capacity to analyse school performance, including:

- A teaching and learning audit which will provide information about many of these practices. Audit was advised that 131 schools will be audited by the end of term one 2010 and all schools will be audited by the end of 2010.
- Increasing the range of school performance data available to regions. Audit was advised that new reports will include performance information on:
 - student engagement (enrolment and attendance rates)
 - student disciplinary absences (suspensions and exclusions)
 - apparent retention rates
 - student performance data from report cards (A to E ratings)
 - Year 12 data
 - parent, student and staff satisfaction data
 - financial and audit data
 - investment data
 - teaching and learning audit findings.
- New NAPLAN reports for teachers, principals and managers that will provide an indication of progress made by individual students between test occasions, together with comparative information for how other students at the same starting point also progressed.

Audit is unable to provide an assurance of the impact of these initiatives at this time.

3.5 Recommendations

It is recommended that the Department of Education and Training:

- 1. provide teachers and principals with access to further training in the skills and competencies necessary for them to analyse the full range of student data – NAPLAN and school-based.**
- 2. strengthen guidelines for regions about how to use a broad range of data, including information on school systems to prioritise the support provided to schools to improve outcomes for students.**

4

Systems for using the analysis of literacy and numeracy results

Summary

Background

Systems providing access to relevant and reliable data, and training in how to fully analyse data will provide teachers, principals and managers with the tools they need to measure the effectiveness of their current approaches.

Relevant and reliable data also provides a source of evidence to inform decisions about teaching and learning.

Using the analysis of data can inform decisions in a range of areas, including:

- school curriculum programs
- teacher training needs
- learning resources.

Key findings

- The department provides guidance about the content, structure and review cycle of curriculum plans, but regions do not monitor the quality of school curriculum plans.
- The department does not have a formal system to review Queensland Studies Authority syllabuses and does not provide a consolidated opinion on their quality or issues identified in implementation.
- The department has in place performance agreements with regions, principals and administrative staff at schools. However, the department does not have a clear strategy to ensure that teachers are provided with effective feedback on their performance.

4.1 Informing curriculum planning

Curriculum refers to everything a school does to support student learning, including what is taught, and the knowledge and skills acquired by students. Across Queensland, each school develops its own curriculum plan which provides details of the what, when and how of the teaching-learning process of a particular school across the different years and phases of schooling.¹⁶

The department has a comprehensive policy document: *P-12 Curriculum Framework* which is supported by numerous principle and guideline documents. The policy requires schools to have documented curriculum provision and planning processes (see Appendix 7.2 for further information on the mandated literacy and numeracy curriculum documents).

Curriculum planning is required at three levels:

- school (including year level plans)
- term overviews
- unit plans.

Based on information provided to audit during fieldwork, some of the schools visited were unclear about curriculum planning standards and expectations. The department has recognised the need to strengthen its curriculum requirements and has implemented programs to address this area such as:

- *The Roadmap for Curriculum, Teaching, Assessment and Reporting in Years 1-9* released in September 2009, has outlined many of the curriculum requirements for schools and identifies five priorities for schools, regions and central office in improving student achievement. The document provides links to 68 strategy and guideline documents which in turn provide links to more guidelines.
- Teaching and learning audits across every state school during 2010, following a trial during 2009.

During fieldwork, audit found that not all schools visited reviewed their curriculum plans to ensure they meet the department's quality standards. Documents reviewed by audit showed that approval processes and a review of year level and classroom (term and unit) plans were undertaken thoroughly using available data at some schools visited while others used ad hoc methods.

A review of school documents by audit indicated that the processes in place in schools to use data to develop and review curriculum are at various levels of maturity. Several of the schools visited had current school curriculum plans based on an analysis of school data, however, at others audit was advised that the curriculum plans were no longer in use as they were out of date (see Table 4A for further information). Despite two major curriculum reforms in 1998 and 2005, some of the Mathematics and English plans at the schools visited had not been revised in line with departmental requirements since 1995. The survey showed that 82 per cent (refer to Section 7 for survey results) of principals identified that their processes to evaluate school curriculum plans were still either beginning or developing.

¹⁶ Former Department of Education and the Arts, *Queensland Curriculum Assessment and Reporting Framework*, 2005, pg. 5.

Table 4A – School curriculum plans in place at the time of audit

	English Plan	Mathematics Plan
Plans in place	7	7
Plans not in place	5	5
Schools visited	12	12

While the department has a curriculum framework for principals and teachers, it does not have processes in place to ensure all curriculum plans are based on current data and meet departmental quality standards. Audit was informed at interview with regional staff that there was no process at the regional level to monitor the status and quality of school curriculum plans or ensure that they are developed, implemented and reviewed based on identified student needs.

Case study two

School-based policy and comprehensive guidelines for analysis – Alliance Charters Towers State Schools

Over the last two years the Alliance Charters Towers State Schools (including the three primary schools in Charters Towers), have used an analysis of the trends and patterns in the data to develop a comprehensive curriculum planning tool, which includes:

- alliance curriculum plan
- assessment and reporting framework
- Year 1-7 and multi-age essential learnings documents
- Year 1-7 unit descriptions
- planning proformas
- year level literacy and numeracy scope and sequence documents
- curriculum documents (including the teaching of reading and spelling, a handbook of teaching ideas, classroom pedagogies, a numeracy action plan, middle school work programs and prep literacy and numeracy overview).

These documents were developed collaboratively to reduce duplication and ensure continuity of curriculum and assessment across year levels to enable effective moderation to occur.

The documentation provides both overview and detailed information. For example the curriculum planning document includes sections addressing curriculum rationale, organisation, moderation processes, assessment and reporting as well as sections referring specifically to literacy and numeracy. The assessment and reporting framework includes sections relating to assessment principles, assessment processes, state (e.g. QCATs) and national testing (NAPLAN) and performance target setting. Appendices to the framework include details of all the school-based assessment packages including examples of the assessment methods.

4.2 Feedback to the Queensland Studies Authority

The Queensland Studies Authority (QSA), a statutory body of the Queensland Government, develops, approves and revises syllabuses for the Preparatory Year to Year 12 for all Queensland Schools. It provides guidance and resources to help teachers implement the QSA syllabuses.

Development of school curriculum plans is the responsibility of the individual school. Schools develop the school curriculum based on the department's *P-12 Curriculum Framework*. Audit was advised that the department is represented on all QSA sub-committees including the Aboriginal and Torres Strait Islander Education Committee, the Assessment, Moderation and Certification Committee, Equity Committee and P-12 Curriculum Committee. Minutes from these meetings are tabled at the QSA Governing Body meeting for noting and/or ratification.

Based on information provided, audit found no evidence of a coordinated departmental system to review the QSA syllabuses. The department does not provide a consolidated opinion based on the experience of teachers and principals to QSA on the quality of the syllabus or usefulness of support materials provided. Audit was informed that the department has representatives on the QSA board and committees however, there was no structure within the department to coordinate reviews of syllabus or provide feedback to QSA. Documents reviewed by audit showed that one region had identified concerns about the sequence of number concepts in the QSA syllabus. The region had developed its own mathematics curriculum and training package in isolation, not as part of a coordinated departmental response.

4.3 Review of commercial packages

Schools decide on the curriculum resources they will use based on a review of their data, community expectations and the school curriculum developed from syllabuses provided by QSA. The resources include such things as activity books for mathematics and spelling that parents purchase and reading books or science equipment purchased by the school.

Audit was advised that the department does not gather information or provide advice on the effectiveness or use of the wide range of commercially available curriculum packages or activity books. At interview, audit was informed that some schools had trialled and assessed certain packages to be ineffective or to have gaps, while other schools were contemplating or just beginning to implement those same packages. Audit noted that principals and teachers were relying on formal and informal networks to share information and experiences about the value and appropriateness of commercial packages.

4.4 Performance feedback to teachers and principals

There are a number of acts, regulations, standards, directives and policies to ensure that schools and teachers and principals are supervised and provided with timely feedback applicable to the department. These are:

- *Public Service Act 2008*
- *Education (General Provisions) Regulation 2006, s6(a)*
- *Financial and Performance Management Standard, 2009, s7(3)*
- *Performance Management, Public Service Commission Directive no. 18-1997, s(e)*
- *Department of Education and Training, Managing performance – teaching staff and school leaders, s.1.2, 2.3.2, 2.3.3.*

Interviews conducted by audit with school and regional staff found that there were a range of approaches to the supervision of principals and teachers. Documents reviewed by audit identified that while four of the principals had well established systems in place at the schools visited to provide formal feedback to teachers, the rest did not. Of the 12 schools visited, four of the principals had negotiated one on one teacher interviews and documented classroom observations each term. These principals used comprehensive student data to provide constructive feedback to teachers about teaching and learning in the classroom and professional development needs. Audit was informed by some principals that they were unsure as to what processes they were able to use to fulfil their obligations to supervise teaching and learning.

A review of the department's *Developing Performance Framework* showed that the department has trialled and is now phasing in a process for teachers to identify their professional development needs. Audit was advised that this enables teachers to regularly reflect and review their progress and identify appropriate professional development to support them in achieving their goals. However, the process does not currently include an appraisal process where the principal provides formal feedback to teachers on their teaching skills and competencies. Audit was advised that the department did not have a strategy to ensure performance agreements or performance appraisals were in place for all teachers. This is not in accordance with *Public Service Commission Directive no. 18-1997, s(e)*.

Since fieldwork was finalised audit has been advised that the proposed new senior teacher classification will see approximately 14000 teachers participating in development processes with a focus on this new role. Audit can not provide an assurance of the effectiveness of this process at this time.

Interviews conducted by audit with department staff indicated that regions prioritised supervision and monitoring of principals and schools based on their NAPLAN results and school satisfaction surveys. Audit was informed during interview that if the school was performing well on NAPLAN the principal may receive only one visit per year from their supervisor, the executive director schools to discuss their performance and development needs. The number of schools executive directors supervised varied from approximately 30 to 62. Audit acknowledges that a recent restructure of regional offices has resulted in changes to resource levels.

Audit acknowledges that since the fieldwork was conducted the department has developed new data sets and school performance reports for regions. Review of the reports showed that they incorporate a broader range of student and school performance data to complement the NAPLAN data. Audit is unable to provide an assurance of the use of these reports at this time.

Case study three

Teacher feedback model - Happy Valley State School

The feedback process in place at Happy Valley State School allows the principal to work cooperatively with staff to improve student results. The purpose of the process was to appraise teachers' skills and to identify professional development needs.

The principal visits each classroom in the school up to four times per year to observe teaching and learning. This is documented and recorded. Teachers are given documented feedback about their teaching practices in the classroom and decisions are made to assist the teacher to improve their student outcomes. For example, it may be decided that the teacher undertake further professional development or observe other teachers at work.

Each teacher also participates in a data chat process each term either individually or in groups. As part of this process student results are prepared in graph form to measure progress. Individual students that are not progressing as expected are identified and teachers complete a form on their student performance data in three areas:

- What is so? - Where are things right now?
- What is possible? - Where would you like to be?
- What is missing? - What do you need to get there?

By completing the form teachers demonstrate that they have analysed and interpreted the student performance information from the internal monitoring process to identify actions and improvements in their own teaching and curriculum.

Teachers interviewed at the school were positive about the data chats and classroom observations and felt that they contributed to improved performance and professional development.

4.5 Recommendations

It is recommended that the Department of Education and Training:

- 3. ensure that school curriculum plans and assessment policies are regularly monitored for compliance with the department's standards.**
- 4. strengthen existing performance management processes to ensure feedback is provided to teachers on their skills, competencies and development needs to implement the school's curriculum plans.**

5

Accountability systems for literacy and numeracy results

Summary

Background

This section details department systems in place to ensure accountability for literacy and numeracy results. Accountability systems are supported by effective planning, monitoring and reporting.

Planning processes that clearly identify and prioritise needs make it easier to determine the most effective strategies to address those priorities. This allows for the appropriate allocation of resources.

A system to support regular and timely monitoring of strategies will ensure action is taken in a timely manner to address concerns.

Plans that incorporate relevant performance indicators allow stakeholders to determine whether objectives are being achieved.

Key findings

- All schools visited had a current annual operational plan.
- Audit found that while most regions required schools to report on their National Assessment Program – Literacy and Numeracy (NAPLAN) results, regions were not holding schools accountable for implementing the actions endorsed in school annual operational plans.
- Regional operational plans are at various levels of maturity and planning and reporting requirements for regions were therefore often unclear.
- Audit found formal monitoring systems in the regions to ensure identified business strategies and programs are being implemented effectively and efficiently were inconsistent.
- Corporate, and most regional offices visited, are primarily focused on monitoring and reporting NAPLAN results and progress toward implementing strategies to improve NAPLAN results.

5.1 School and regional planning

School planning

A review of the department's *School Planning, Reporting and Reviewing Framework 2010* (SPRRF), showed that the department has developed and documented mandatory requirements for school strategic and operational planning, reporting to parents on student achievements and financial reporting in accordance with the *Financial Accountability Act 2009*. This framework replaced the *School Improvement and Accountability Framework 2009*. Guidance material and tools have been developed to support schools comply with the planning requirements.

The 2010 framework encourages schools to identify and consider student needs as part of the annual operational planning process and develop realistic school specific strategies to implement the department's priorities.

Audit noted that all schools visited had a current annual operational plan which included priorities and strategies to improve teaching and learning and some performance indicators. The school annual operational plans are developed collaboratively with the local community. The plans are signed by the principal, executive director schools and the president of the parents and citizens association.

Case study four

Action planning – Ironside State School

The school has a well established and documented planning process. The annual operating plan was developed in conjunction with the school community. The annual operational plan aligns with the department's objectives and covers state and school specific strategies, teacher professional development, school performance indicators, budgets, and clear responsibilities for planned actions.

The annual operational plan is supported by comprehensive annual action plans that identify detailed school specific strategies to achieve the annual operational plan objectives. The action plans have been prepared by various staff members including the Head of Curriculum, Deputy Principal, Learning Support Teacher and English as Second Language Teacher.

The action plans cover curriculum, reporting and data management, learning support, numeracy, literacy, resources and allocation and teacher professional development. The documents clearly identify objectives, evidence sources, the responsible officer, strategies, timelines, monitoring record and date, and budget.

Each of the specific actions are clearly linked to the school's annual operational plan and the state's objectives. There are specific actions for improving literacy and numeracy results. Review by audit showed that the document had been assessed by the administration team and adjusted.

Regional planning

Planning and reporting requirements for regions were not clearly documented. A review of regional operational and business plans obtained during fieldwork identified that the plans were at various levels of maturity. None of the planning documents covered all aspects of good planning as outlined in the *Queensland Government Agency Planning Requirements May 2009*.

Audit noted that regions are required to develop plans to improve National Assessment Program – Literacy and Numeracy (NAPLAN) results. These plans cover a range of strategies to support schools in their region improve NAPLAN results. However, audit found that as the NAPLAN plans reviewed did not cover the full range of services delivered by the region they do not fulfil the role of a comprehensive regional plan. The NAPLAN plans do not allow the region to manage the full range of services.

Audit found that only one of the five regions visited had a comprehensive plan in place which covered the full range of services provided and was supported by performance indicators, targets and clear accountabilities. Other regions visited used a collection of individual project plans, broad governance frameworks and the personal performance agreements of senior officers, as their operational plan. At some regions the regional executive directors and executive directors schools' performance agreements were the only documented plans in place to guide the delivery of regional services.

From the review, audit also identified that many regional plans were not linked to budgets. As the planned activities were not costed, the region was not able to report on how efficiently they were delivering services.

Audit was informed that since the fieldwork was conducted the department has developed a set of draft planning guides and templates for central office and regional office planning. Audit can not provide any assurance about the effectiveness of these materials at this time.

Linkages between plans

While there were some high level documents addressing planning and reporting, they did not include all elements of an effective planning and reporting cycle, or apply to regional offices. Audit found the current planning and reporting cycle did not ensure alignment of planning and reporting at central office, regional offices and schools. A review of the regional plans showed that they did not meet the requirements of either the *Department of Education and Training Strategic Planning and Reporting Cycle* or the *Department of the Premier and Cabinet's Agency Planning Requirements*. It is recognised that performance agreements are in place for regional executive directors and executive directors schools, however this falls short of an operational planning process.

Links between school annual operation plans and the department's strategic plan were clear, but linkages between the strategic plan, the department's operational plan and regional plans were not clear to audit. The School Improvement and Accountability Framework (SIAF) ensured that school planning and reporting was consistent and school performance indicators align to the department's strategic priorities.

5.2 Monitoring school progress

School planning documents

The department's SIAF set the planning and reporting requirements at the time of audit. The framework requires the principal's supervisor (regional office) to endorse school annual operational plans, however audit found no documented requirements for either schools or the principal's supervisor to regularly monitor the implementation of strategies and actions within the plans.

From discussions with schools and regions, audit found that while most regions required schools to report on their NAPLAN results, regions were not holding schools accountable for implementing the endorsed annual operational plans. There was no evidence of regular monitoring of annual operational plans or school curriculum plans by regions to assess whether schools were achieving their stated objectives effectively and efficiently. Audit was informed by some principals that the executive director schools only visited once a year to discuss progress on the annual operation plan and the principal's performance.

A number of principals at the schools visited told audit that they did not know what their region did with the plans and they were not receiving sufficient regional support to implement the plans. Most principals reported that they did not receive detailed feedback on the school's annual operational plan from their region. Some principals also reported that they treat the process as a compliance exercise rather than a key mechanism to identify improvement goals and strategies.

Reviewing schools

Under the previous school planning and accountability framework (SIAF), schools undertook triennial reviews of their annual operational plans. However, audit considers this insufficient to ensure any issues are identified and action is taken to address concerns in a timely manner and facilitate continuous improvement.

Audit was advised that under the new School Planning Reporting and Reviewing Framework, all schools will undertake either a one year review or a four year review as determined by the principal's supervisor. Part of this process will be the verification and sign-off of student performance outcomes and targets by the principal's supervisor. This is to ensure the outcomes of the self-assessment and strategic directions set for the next planning cycle are relevant and meaningful for the school. Audit can not provide an assurance of this process at this time.

The department has a formal review by exception process, in which it may respond to significant and changing circumstances at a school, where there is uncertainty about the school's strategic direction, or where the school requires assistance to undertake improvement strategies.

The review by exception policy states that a review:

- focuses on school improvement and should be viewed as an enabling process
- identifies those factors that have inhibited learning in schools
- provides an avenue for productive dialogue for improving performance
- supports the development of operational plans for school improvement.

Audit was informed that a review by exception is conducted only in exceptional circumstances and that three were conducted in 2009. Audit notes that there are approximately 1300 state schools in Queensland.

5.3 Reporting to stakeholders

External reporting to Parliament and the community

Audit found that reports to Parliament and stakeholders on student performance were limited to the Year 2 Diagnostic Net and NAPLAN results collected annually for Years 3, 5 and 7 students and do not cover science or other key learning areas. School-based assessment data is not used for department-wide external reporting as it is unmoderated at a state level (i.e. based on teacher judgement) and therefore considered less reliable. Moderated data is considered more consistent and useful for analysis and reporting as the teachers have validated their judgements with other teachers in the school or across the district. However, parents receive individual report cards twice a year on data that is mostly unmoderated.

The department has four objectives in its strategic plan, one of which is particularly relevant to numeracy and literacy teaching and learning; *'Every young person will be well prepared for life success through learning and education.'*¹⁷ While this objective has been linked back to the State Government's desired outcomes, the department has not defined what 'being prepared for life success' means. This lack of clarity makes it difficult to measure progress made towards achieving this objective. Audit is not able to provide an opinion on the relevance or appropriateness of the department's performance measures or whether or not they fairly represent performance as the objective is not clearly defined.

The department has eight objectives for the achievement of its outputs, two are particularly relevant to numeracy and literacy teaching and learning in primary schools. They are:

- Early Phase of Learning - Preparatory to Year 3 - providing the best possible start for young Queenslanders by establishing the foundations for lifelong learning and **personal well being**.
- Middle Phase of Learning - Years 4 to 9 - developing the knowledge, skills, **values and creative thinking** of students to prepare them for their senior years.

A review of the output objectives and performance measures in the department's *Service Delivery Statement 2009-2010* for primary schools identified that there are a range of performance measures that report progress on some aspects of the quality and cost of the outputs. The measures report on establishing the foundations for life long learning and developing knowledge and skills by reporting student performance in literacy and numeracy on the Year 2 Diagnostic Net and the NAPLAN test. The measures do not address progress made on personal well-being or the development of values and the creative thinking of students. In the opinion of the Auditor-General there is room to improve the relevance of the department's measures for primary schools as they do not do not comprehensively address the key material aspects of the department's primary school outputs.

The department uses a more comprehensive range of information to manage the delivery of services, including client satisfaction, class sizes, Year 12 results, enrolment counts, school disciplinary absences, student attendance and number of indigenous students. However, the department does not make full use of this information to report to stakeholders on the achievement of its objectives.

Audit acknowledges that the department is expanding its measures to include the percentage of students in the top two bands of the NAPLAN test.

¹⁷ DET, *Strategic Plan 2009-2013*.

School performance measures

Audit found that the department requires all schools to include a number of department-wide performance measures from its strategic plan in their annual operational plans to provide the department with comparable data for reporting. The framework also allows schools to develop their own measures which directly link to school specific strategies. However, audit found that only a few schools visited had supplemented the generic measures with school specific indicators.

A review of school annual operational plans and Annual Reports showed that the schools visited consistently reported on the outcomes as per the department's strategic plan and their individual goals. Reporting on these outcomes is a requirement of the Commonwealth regulations (see Section 7.3) as part of the funding arrangements between the states and the Federal Government. However, schools did not consistently provide information about the completion of planned actions (outputs). This makes it difficult for stakeholders to make judgements about the effectiveness or efficiency of funded outputs.

Table 5.1 contains an analysis of school annual operational plans to assess the linkage between annual operational plans and departmental strategic documents and key performance indicator's.

Table 5.1 School annual operational plan analysis results

Criteria	Yes	No
School specific strategies are listed	12	0
Budget information is included	6	6
Key performance indicators are linked to school specific strategies	5	7
Accountabilities for implementation school strategies are listed	6	6
All the relevant Destination 2010 key performance indicators are included	11	1

Information on school strategies (outputs), budget amounts, accountabilities and appropriate performance indicators allows principals and stakeholders to judge effectiveness and efficiency. It allows some important questions to be answered: Is what we are doing working?, Is someone else doing it better?

For example, one of the schools visited decided to develop a community engagement strategy to encourage greater parent participation in their child's education. A strategic plan measure on the percentage of students at the national minimum standard for reading does not allow the school or stakeholders to judge if the community engagement strategy has been either effective or efficient.

Audit was advised that the Parents and Citizens Associations have a major role in ensuring accountability of schools. The president of the school's local association signs both the annual operational plan and the annual school report.

Audit acknowledges that since the fieldwork was completed the template for school Annual Reports has been changed to include a requirement for all state schools to concisely describe school progress towards its goals for the year as outlined in the school operational plan. Audit was advised that this will apply to 2009 school Annual Reports which will be available in June 2010. Audit can not provide an assurance of the effectiveness of this revised process at this time.

Internal reporting

Audit noted that at the corporate level and most of the regional offices visited, monitoring and reporting processes focused solely on NAPLAN results and progress of strategies to improve NAPLAN results. School-based data was collected and analysed at only one of the regions visited. There was no system either centrally or at the region to collect and analyse a broad range of data that could identify the underlying possible causes of under-performance.

The audit survey of 123 state primary schools identified that only 50 per cent of principals agreed that the comparisons in NAPLAN reports with state and national standards help motivate teachers (refer to Section 7.1).

Audit found no formal reporting requirements to hold regional offices accountable for all of the services they deliver. The department's School Planning, Reporting and Review Framework outlines the reporting requirements for schools, including school Annual Reports, financial reporting, reporting to parents and Australian Government compliance obligations. It does not include reporting requirements to regions or central office.

Information reported in school annual operational plans did not appear to align with what was reported in their Annual Reports. The requirements for school Annual Reports are dictated by Commonwealth regulations as part of the funding arrangements between the states and the Federal Government (see Section 7.3). The department also provides advice on additional information that schools should include in the reports.

A review of school annual operational plans and Annual Reports identified that the schools visited did not always report to their communities on all the planned actions. In school annual operation plans a range of outputs (actions) and outcomes (student results) are listed but in the school Annual Reports the progress on the actions are not always included.

5.4 Recommendations

It is recommended that the Department of Education and Training:

- 5. revise the department's model for planning, monitoring and reporting on the delivery of regional services to provide greater clarity of responsibility to this part of the organisation.**
- 6. review school planning processes to ensure that the principal's supervisor provides regular feedback and monitoring of the implementation of the priorities in school and annual operation plans.**
- 7. revise the requirements for school Annual Reports to ensure that information reported allows stakeholders to assess the effectiveness and efficiency of school performance.**
- 8. review the objectives and performance measures relating to schooling in its strategic plan and service delivery statement to ensure they are measurable and relevant.**

6 | Audit outline

6.1 Background

Using student data has become increasingly important. Current public debate has centred around education funding and resourcing, responsibility for establishing curriculum and syllabus and national testing. The introduction of the Australian governments' National Assessment Program – Literacy and Numeracy (NAPLAN) and MySchool website has drawn public attention to school results. The MySchool site provides parents and stakeholders access to the NAPLAN results for all schools, state, Catholic and Independent, and provides comparative information about like schools. The department states in its 2008-09 Annual Report that it is:¹⁸

'...committed to ensuring that all students develop a strong foundation in literacy and numeracy in the early years as a basis for progress in all future learning.'

In response to the lower than expected 2008 NAPLAN results the department commissioned Professor Geoff Masters to conduct a performance review in 2008. He presented his report *A Shared Challenge: Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools* in May 2009 and the department has commenced implementing the five recommendations from this report. The departments Annual Report 2008-09 states that specific programs targeting literacy (\$28m)¹⁹ and numeracy (\$2m) have commenced at school level to improve NAPLAN results.²⁰

While the public focus is on the results of national testing, schools undertake other in-class testing and collect data about students. The data collected is then stored in school-based systems by the individual teacher or school. The OneSchool system is an integrated information system that has been released in stages and enables the department to collect and store data about students for the duration of their school years. The system also provides access to NAPLAN results when they become available each September.

6.2 Audit objective

The audit objective was to determine whether the Department of Education and Training had effective and efficient systems to use student data to inform literacy and numeracy teaching and learning.

¹⁸ DET, Annual Report 2008-09, pg. 48 – 51.

¹⁹ DET, Annual Report 2008-09, Figure represents \$10m for an intense literacy support program and \$18m to continued implementation of Literacy – The key to learning: Framework for Action, pg. 42.

²⁰ DET, Annual Report 2008-09, pg. 49.

6.3 Audit scope

The Department of Education and Training was the only department subject to the audit. Audit visited the department's central office, regional offices and state primary schools and conducted an web-based survey.

There are 1038 state primary schools across Queensland. The sample for field visits was chosen in consultation with the department, that included an unbiased mix of schools with different characteristics (location, size, socioeconomic status and academic outcomes). Field visits were made to 12 primary schools to assess the systems more comprehensively along with five regional offices. An electronic questionnaire was sent to a sample of 150 schools to broadly assess the systems in place.

Exclusion from audit scope

The audit did not cover:

- the validity, integrity and reliability of the input data the department and schools use to assess and monitor student performance. The audit took the input data as a given and focused on the reliability of the systems for the management and use of the data
- the systems of non-state schools
- the systems of high schools and TAFE colleges
- the systems of the Queensland Studies Authority
- the systems individual teachers use to monitor student progress.

Criteria

The audit assessed whether the department has:

- information management systems that allow the department and schools to efficiently analyse student data
- processes in place at the school, region and state level to ensure actions to enhance teaching and learning are informed by the analysis of student data
- a reporting process to allow stakeholders to determine whether literacy and numeracy objectives are being achieved at a state, regional, school and program level.

Fieldwork

Audit fieldwork was conducted between October and December 2009 at 12 primary schools, five regional offices and the department's central office. A questionnaire of 150 schools was undertaken concurrently with the fieldwork. Responses were received from 123 principals.

The following schools were visited:

- Canungra State School
- Charters Towers State School
- Darra State School
- Durack State School
- Gilston State School
- Happy Valley State School
- Ironside State School
- Julia Creek State School

- Peak Crossing State School
- Redbank Plains State School
- Robina State School
- Weir State School.

Regions visited were:

- South Coast Region
- Former Mt. Isa District – North Queensland Region
- Townsville District – North Queensland Region
- Moreton East District – Moreton Region
- Brisbane Central and West District – Greater Brisbane Region.

6.4 Audit procedures

To gain an understanding of the educational context and topic, audit reviewed relevant literature and audit reports, including publications from Australian and international jurisdictions.

During fieldwork, audit assessed:

- departmental systems and processes for managing and analysing data
- the role of regions, and central offices in supporting schools
- monitoring and reporting procedures at the school, regional and central office level.

Audit made assessments based on a number of interviews with senior staff and a review of relevant documentation including policies and procedures, forward plans, guidelines, training material and key initiatives.

School visits involved interviews with principals, heads of curriculum (where applicable), literacy and numeracy coaches, a number of teachers and a review of school documents including annual operational plans, Annual Reports, curriculum plans, assessment schedules and data collection and analysis tools.

A questionnaire of 150 schools was undertaken concurrently with fieldwork to confirm findings at the 12 schools visited and gain greater insight into departmental practices (123 principals responded to the questionnaire). The results of the survey were checked for congruence with the results of the fieldwork in the 12 schools visited.

6.5 PMS audit approach

A Performance Management Systems (PMS) audit is an independent examination which includes determining whether an entity or part of an entity's activities have performance management systems in place to enable management to assess whether its objectives are being achieved economically, efficiently and effectively.

The legislative basis for this audit is the *Auditor-General Act 2009* (the Act). The Act prescribes that the Auditor-General may conduct an audit in the way the Auditor-General considers appropriate. While the Auditor-General takes note of the entity's perspective, the scope of a public sector audit is at the sole discretion of the Auditor-General.

The Auditor-General applies the standards of the Auditing and Assurance Standards Board to audits in the Queensland public sector to the extent that they are not inconsistent with the requirements of the Act and other legislation that prescribes the Auditor-General's work.

While a PMS audit will not review or comment on government policy, it will have regard to any relevant prescribed requirements. It may also extend to include a focus on the entity's performance measures and whether, in the Auditor-General's opinion, the performance measures are relevant, appropriate and fairly represent the entity's performance.

The intent of a PMS audit is to provide independent assurance to Parliament, and to act as a catalyst for adding value to the quality of public administration by assisting entities in the discharge of their governance obligations.

A PMS audit has a focus on ascertaining whether systems and controls used by management to monitor and measure performance, assist the entity in meeting its stewardship responsibilities.

6.6 Other related audits and reviews

April 2009 Geoff Masters, *A Shared Challenge, Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools*, ACER.

February 2009 Victorian Auditor-General; *Literacy and numeracy achievement*.

2008 Audit Office of NSW; *Improving literacy and numeracy in NSW public schools: Department of Education and Training*.

March 2007 Department of Education and Training Western Australia; *Literacy and Numeracy Review taskforce* - Chair Professor Bill Louder.

March 2000 Tasmanian Audit Office; *Literacy and Numeracy in Tasmanian Government Schools*.

May 2009 Queensland Audit Office, *Report to Parliament No 4 for 2009, Results of audits at 31 May 2009*.

7 | Appendices

Summary

Background

This section contains the results of the survey sent to 150 randomly selected primary schools. Responses were received from 123 principals.

The section also includes the department's requirements about literacy, numeracy, English and Mathematics planning, and defines the terms. The Commonwealth requirements for school Annual Reports and the list of data analysis competencies, acronyms, a glossary and references are also included.

7.1 Survey

7.1.1 Overview

As part of the audit a survey was sent to 150 state primary schools to request additional information on school processes to use data to inform literacy and numeracy teaching and learning. The survey included schools from each region across the state and from each of the seven band levels (5-11) in which schools are grouped. Responses were received from 123 principals (82 per cent response rate).

The purpose of the survey was to provide assurance that audit findings from schools visited by audit were consistent with a wider range of schools across the state. The survey of 150 school principals was undertaken to mitigate the risk of forming incorrect conclusions based on the size of the sample of schools for fieldwork. The results of the survey were checked for congruence with the results of the fieldwork in the 12 schools visited.

A comparison of final audit findings was made with survey results. A strong correlation was found between areas observed by audit and principals' self assessments of their schools.

7.1.2 Survey results

Section 1 – Release Two of OneSchool: Data Module

Figure 7A – Principals' assessment regarding their schools maturity level

Survey question	Beginning (%)	Developing (%)	Embedded (%)	Leading (%)
How mature are plans to provide training to teachers in using the NAPLAN reporting functions in OneSchool?	19	55	23	3
How mature are the processes used to analyse the NAPLAN results with the OneSchool functions?	24	67	10	0
How mature are the processes used to enter literacy and numeracy school based student assessment data in OneSchool?	34	56	10	0

Figure 7B – School principals' levels of agreement

Survey statement	Agree (%)	Neutral (%)	Disagree (%)	Don't know (%)
The training and support I have received in OneSchool has prepared me well to analyse student data and report on performance.	35	22	38	5
I have had sufficient opportunities to provide feedback about the OneSchool.	32	37	26	5
I think OneSchool allows me to effectively analyse the performance of students at this school.	79	14	2	6
I think OneSchool allows me to effectively report on the literacy and numeracy results of students at this school.	74	20	3	4

Section 2 – School specific databases or systems

Figure 7C – Principals' assessment regarding their schools maturity level

Survey question	Beginning (%)	Developing (%)	Embedded (%)	Leading (%)	N/A (%)
How mature is the documentation for your school based databases or processes to collect and analyse any school based student literacy and numeracy results?	21	54	17	0	8
How mature are plans to provide training to teachers to use the school specific databases and processes to analyse student literacy and numeracy results?	21	47	22	0	10

Figure 7D – School principals' level of agreement

Survey statement	Agree (%)	Neutral (%)	Disagree (%)	Don't know (%)
The school specific databases and systems at this school provide important information that supplements the data in OneSchool.	67	24	2	7
The school specific databases and systems will be phased out as the OneSchool modules are implemented over the next 18 months.	46	28	11	15

Section 3 – Informing planning and reporting

Figure 7E – Principals' assessment regarding their schools maturity level

Survey question	Beginning (%)	Developing (%)	Embedded (%)	Leading (%)
How mature are your processes to identify your school's literacy and numeracy data needs?	5	75	20	0
How mature are your processes to use student literacy and numeracy performance data to inform the development of the annual operational plan?	2	40	57	1
How mature are your processes to use student literacy and numeracy performance data in the development of school literacy and numeracy curriculum plans?	2	54	43	0
How mature are your processes to assess the effectiveness of literacy and numeracy curriculum plans at this school?	9	73	18	0
How mature are your processes to review literacy and numeracy intervention programs?	9	40	50	1

Figure 7F – School principals’ level of agreement

Survey statement	Agree (%)	Neutral (%)	Disagree (%)	Don't know (%)
The literacy and numeracy reports used by my district or regional supervisor are presented in a way that promotes improvement.	67	21	7	5
The performance measures used to judge school performance are well aligned with the department's objectives.	59	24	11	7
The comparisons in the NAPLAN reports with state and national standards help me set meaningful targets at this school.	73	15	11	1
The comparisons in the NAPLAN reports with state and national standards help me to motivate teachers.	50	24	25	2
The systems at this school allow me to easily report to my district or regional supervisor on the effectiveness of the literacy and numeracy teaching and learning.	76	17	7	1
The systems at this school allow me to easily report to parents/carers on the effectiveness of the literacy and numeracy teaching and learning.	82	12	5	1

7.2 Literacy and numeracy planning requirements

Student achievement in numeracy and literacy is important for their future. It impacts on their employment prospects, further education opportunities and their capacity for social interaction.

The department has implemented the P-12 Curriculum Framework and provides system level requirements, expectations and principles. The four policy statements within the Framework are mandated for schools.²¹

Policy Statement 1 of the Framework clearly states that schools are required to:

- Carry out curriculum planning processes and document curriculum provision, in consultation with the school community, and guided by the Principles for P-12 Teaching and Learning (Section 3.1) and the Principles for P-12 Assessment (Section 3.2). This provides a basis for ongoing discussions with the Executive Director (Schools) about the monitoring, reviewing and reporting of student progress.
- Engage in an annual process of whole-school literacy planning, implementation and evaluation with a focus on the literacy requirements of each subject area.
- Engage in an annual process of whole-school numeracy planning, implementation and evaluation with a focus on numeracy in mathematics teaching and learning, and numeracy across the curriculum.

²¹ DET, P-12 Curriculum Framework, V1, 2008, pg. 3.

Literacy

*'Literacy is integral to effective learning, teaching and assessing in all curriculum areas and across all phases of learning.'*²²

*'To be literate in the 21st century one must have a flexible and sustainable mastery of a repertoire of practices with texts of traditional and new communications technologies via spoken language, print and multimedia, and the ability to use these practices in various social contexts.'*²³

Literacy is not just about having a knowledge of English. Literacy is about being literate in reading, writing and using technology to understand other topics such as science, history, mathematics and social structures.

To be literate in science is to understand and use the science terminology. To be literate in mathematics is to be able to understand the terminology and apply it in context. To be literate is to be able to use all available resources to understand and communicate in order to contribute to society.

Numeracy

*'Numeracy is integral to effective learning in all years of schooling and in all areas of learning.'*²⁴

Numeracy is about students having the confidence to choose and use mathematics skills they learn at school in everyday life, as well as the classroom. Numeracy is used in science class when students interpret a graph, in woodwork when they confidently measure a piece of wood, or in cooking when a student halves a recipe without being given specific instructions on what to do. Every classroom teacher has a role to play in helping students develop numeracy skills.²⁵

English plan

*'The English key learning area develops understandings about literary, mass media and everyday texts, language use and associated literacy practices.'*²⁶ It enables the student to make sense of the world around them.

A school English plan provides guidelines to teachers and is linked to the Queensland Curriculum, Assessment and Reporting (QCAR) Framework. It ensures that students are taught the intended curriculum in the right sequence.

The school takes the following into account when developing their plans:

- their values and beliefs about the teaching and learning of English
- the school profile including the needs of the students at the school
- how the students understand and learn English
- how the teacher will teach English based on the analysis of available student assessment data at the school
- how the students will be assessed for their understanding.²⁷

²² DET, *Literacy and Numeracy*, <http://education.qld.gov.au/curriculum/area/literacy/index.html>

²³ DET, *Literacy-the Key to Learning, 5 day Literacy Professional Development Overview*.

²⁴ DET, *Literacy and Numeracy*, <http://education.qld.gov.au/curriculum/area/literacy/index.html>

²⁵ DET, *Numeracy – Lifelong confidence with mathematics, Framework for Action, 2007-2010*.

²⁶ <http://education.qld.gov.au/curriculum/area/english/index.html>

²⁷ DET, *P-12 Curriculum Framework, V1, 2008*, pg 12.

Maths plan

'Students in Queensland Schools study the mathematical concepts under the strands of Number, Algebra, Measurement, Chance and Data and Space.'²⁸

The school mathematics plan provides guidance to teachers and is linked to the QCAR Framework. Each school plan should respond to the needs of the students and ensure that the students are taught the intended curriculum in the right sequence.

When developing the mathematics plan the school needs to consider the following:

- their values and beliefs about teaching and learning of mathematics
- the school profile including the needs of the students at the school
- how the students understand and learn mathematics
- how the teacher will teach mathematics based on the analysis of available student assessment data at the school
- how the students will be assessed for their understanding of mathematics.

7.3 Commonwealth reporting requirements

Part 6 of the *Schools Assistance Regulations 2009* lists the requirements for school reporting.²⁹ The regulations specify the information that schools must include in the Annual Report.

Part 6 Funding agreements – publication by schools of information relating to schools

6.1 Information relating to schools

- (1) For subsection 21 (1) of the Act, and subject to sub regulation (2), the following information for a school is specified:
 - (a) contextual information about the school, including the characteristics of the student body;
 - (b) teacher standards and qualifications (as mandated in the relevant jurisdiction);
 - (c) workforce composition, including Indigenous composition;
 - (d) student attendance at school, including:
 - (i) the rates of attendance for the whole school and for each year level; and
 - (ii) a description of how non-attendance is managed by the school;
 - (e) senior secondary outcomes, including the percentage of Year 12 students:
 - (i) undertaking vocational training or training in a trade; and
 - (ii) attaining a Year 12 certificate or equivalent vocational education and training qualification;
 - (f) student outcomes in standardised national literacy and numeracy testing;
 - (g) parent, student and teacher satisfaction with the school;
 - (h) post-school destinations;
 - (i) school income broken down by funding source.

²⁸ DET, <http://education.qld.gov.au/curriculum/area/maths/index.html> viewed 5 March, 2010.

²⁹ Australian Government, *Schools Assistance Regulations 2009*.

7.4 Data analysis competencies for teachers and principals

Figure 7.1 – Competencies for analysing student data

Data-Informed Decision-Making Components, Concepts and Skills	
Component	Target Concept/Skill
Question Posing	<ul style="list-style-type: none"> Aligns question with purpose and data. Forms queries that lead to actionable data. Understands iterative nature of data exploration. Understands value of multiple measures.
Data Location	<ul style="list-style-type: none"> Finds relevant cells in a complex table. Finds relevant cells in a complex figure.
Data Comprehension	<ul style="list-style-type: none"> Manipulates data from a complex table or graph to support reasoning. Maps between data in a table and a prose representation of the data. Maps between data in a figure and a prose representation of the data. Understands a histogram as distinct from a bar graph. Interprets a contingency table. Distinguishes between longitudinal and cross-sectional data. Evidences data comprehension monitoring (metacognition).
Data Interpretation	<ul style="list-style-type: none"> Understands the advantages and disadvantages of using disaggregated subgroup data vs. individual student data. Attends to distribution and extreme quartiles, not just mean or proportion above cut score. Appreciates effect of a few extreme scores on the mean. Realises that more items on a scale or members in a sample produce more precise reliable estimates. Understands measurement error and variability; results not identical on every testing. Understands that student cohorts differ from year to year.
Data Use	<ul style="list-style-type: none"> Understands how to differentiate instruction based on data. Seeks subscale and item data that can be mapped to curriculum. Understands value of formative assessments.

Source: Office of Planning, Evaluation and Policy Development, United States Department of Education *Implementing Data-Informed Decision Making in Schools—Teacher Access, Supports and Use, 2009.*

7.5 Acronyms

CDW	Corporate Data Warehouse
DET	Department of Education and Training
EQ	Education Queensland
KLA	Key Learning Areas
MAP	Maximising Achievement Program
NAPLAN	National Assessment Program – Literacy and Numeracy
NMS	National Minimum Standards
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
QCAR	Queensland Curriculum Assessment and Reporting
QSA	Queensland Studies Authority
SDS	Service Delivery Statement
SES	Socio Economic Status
SIAF	School Improvement and Accountability Framework

7.6 Glossary

Curriculum

*'The curriculum is the sum total of the teaching and learning resources used in classrooms and other learning environments.'*³⁰

Effectiveness

The achievement of the objectives or other intended effects of a strategy or activities at a program or entity level. The impact of planned outputs (actions) on intended outcomes (results).

Efficiency

The use of resources, such that output is optimised for any given set of resource inputs, or input is minimised for any given quantity and quality of output.

³⁰ Queensland Studies Authority, *P-12 Syllabus design principals*, April, 2008.

Essential learnings

Essential learnings identify what should be taught and what is important for students to have opportunities to know, understand and be able to do. The essential learnings describe the ways of working, and knowledge and understanding that students need for ongoing learning, social and personal competence, and participation in a democratic society.³¹

Literacy

*'To be literate in the 21st century one must have a flexible and sustainable mastery of a repertoire of practices with texts of traditional and new communications technologies via spoken language, print and multimedia, and the ability to use these practices in various social contexts.'*³²

The comprehensive definition of literacy included in the policy paper, *Literacy for All: the Challenge for Australian Schools* is that:³³

'.....literacy requires the ability to read and use written information, to write appropriately, in a range of contexts, for many different purposes and to communicate with a variety of audiences. Literacy is integrally related to learning in all areas of the curriculum, and enables all individuals to develop knowledge and understanding. Reading and writing, when integrated with speaking, listening and viewing and critical thinking constitute valued aspects of literacy in modern life.'

Numeracy

'To be numerate is to use mathematics effectively to meet the general demands of life at home, in paid work, and for participation in community and civic life.'

In school education, numeracy is a fundamental component of learning, performance, discourse and critique across all areas of the curriculum. It involves the disposition to use, in context, a combination of:

- *underpinning mathematical concepts and skills from across the discipline (numerical, spatial, graphical, statistical and algebraic)*
- *mathematical thinking and strategies*
- *general thinking skills and*
- *grounded appreciation of context.'*³⁴

OneSchool

An integrated information management system for schools.³⁵

³¹ Queensland Studies Authority, *Learning P-12, Informed prescription > Informed professionalism*.

³² DET, *Literacy-The Key to Learning, 5 day Literacy Professional Development Overview*.

³³ Department of Employment, Education, Training and Youth Affairs, 1998.

³⁴ *Report of the Numeracy Education Strategy Development Conference, Numeracy = Everyone's business (October 1997)* adopted by Australian Association of Mathematics Teachers 1.

³⁵ DET, *OneSchool Release 3, Requirements Definition Stage, Solution Architecture Requirements and Strategies, V1(Final)*, May 2009.

Key Learning Areas

Key Learning Areas (KLAs) are the eight nationally agreed learning areas that form the common curriculum for the compulsory years of schooling (Preparatory Year to Year 10). These are: The Arts, English, Health and Physical Education, Languages other than English, Mathematics, Science, Studies of Society and Environment, and Technology.³⁶

Performance management

Considered to be the system, which integrates organisational strategic management, performance information, evaluation, performance measurement, monitoring, assessment and reporting.³⁷

School-based

School-based indicates that the system or database is not standardised across the State. School-based systems or databases may however be in place at a number of schools e.g. commercial assessment packages may have been used in numerous schools but are not mandated by the department.

Syllabus

A syllabus is an official 'map' of a school subject. It provides teachers with:

- a rationale and outline of the school subject
- an overview and specification of what should be taught and learned
- guidance on applying centralised standards to assess students to ensure that classroom and school-level assessment aligns with systemic practices.³⁸

7.7 References

Department of Education and Training, Annual Report, 2008-09.

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Masters. Geoff, *A Shared Challenge, Improving Literacy, Numeracy and Science Learning in Queensland Primary Schools*, ACER. April 2009.

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³⁶ Queensland Studies Authority, *Learning P-12, Informed Prescription > Informed Professionalism*.

³⁷ Queensland Public Service Commission, *Government Performance Management Framework*, May, 2009, pg. 45.

³⁸ Queensland Studies Authority, *P-12 Syllabus Design Principals*, April, 2008.

8

Auditor-General

Reports to Parliament

8.1 Tabled in 2010

Report No.	Subject	Date tabled in Legislative Assembly
1	<i>Auditor-General Report to Parliament No. 1 for 2010</i> <i>Audit of A1 Grand Prix Agreements</i> A Financial and Compliance audit	4 February 2010
2	<i>Auditor-General Report to Parliament No. 2 for 2010</i> <i>Follow-up of selected audits tabled in 2007</i> A Performance Management Systems audit	23 March 2010
3	<i>Auditor-General Report to Parliament No. 3 for 2010</i> <i>Administration of Magistrate Court Services in Queensland</i> A Performance Management Systems audit	13 April 2010
4	<i>Auditor-General Report to Parliament No. 4 for 2010</i> <i>Results of local government audits</i> Financial and Compliance audits	21 April 2010
5	<i>Auditor-General Report to Parliament No. 5 for 2010</i> <i>Performance Reviews – Using performance information to improve service delivery</i> A Performance Management Systems audit	18 May 2010
6	<i>Auditor-General Report to Parliament No. 6 for 2010</i> <i>Using student information to inform teaching and learning</i> A Performance Management Systems audit	May 2010

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