CASES21

V I C T O R I A

Victorian
Auditor-General

CASES21

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The Hon. Robert Smith MLC
President
Legislative Council
Parliament House
Melbourne

The Hon. Jenny Lindell MP
Speaker
Legislative Assembly
Parliament House
Melbourne

Dear Presiding Officers

Under the provisions of section 16AB of the *Audit Act 1994*, I transmit my performance report on *CASES21.*

Yours faithfully

D D R PEARSON
Auditor-General

29 October 2008

Foreword

Government schools have been provided with information technology support (hardware and software) since the 1980s. Implementation of the current system, CASES21, an integrated school administration and finance software system, was completed in October 2006. More than $100 million has been committed to this system by the Department of Education and Early Childhood Development (DEECD), of which half has already been spent.

This audit examined whether CASES21 has achieved its broad objective of enabling schools to manage student and finance data better; and improve schools' capacity to report their financial performance.

For the majority of schools the broad objective of CASES21 has been achieved. DEECD should now build on this achievement by examining the feasibility of modifying CASES21 to make it more efficient for larger schools. In particular, it would be beneficial for all schools if there was a greater level of integration between CASES21 and the other software also used by schools.

DEECD has accountability responsibilities too. As objectives have been established for CASES21—supporting efficient and effective school administration, and providing a return on investment—DEECD should report to the school community on its performance in meeting these objectives.

D D R PEARSON
Auditor-General

29 October 2008

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1 Executive summary

1.1 Introduction

Since the 1980s the government has provided state primary and secondary schools with standard computer administration and finance systems, hardware and operating environments.

CASES21 is the current integrated school administration and finance software system. It is designed to provide Victorian government schools with a standardised system to manage their core administrative and finance functions. The software is also intended to help schools provide data reports to the Department of Education and Early Childhood Development (DEECD).

CASES21 was rolled out progressively to all government schools between 2000 and 2006. As a result of project management issues identified by DEECD during this roll out, implementation of the finance system was delayed. These issues were subsequently addressed by DEECD and roll out of the finance module was completed in October 2006.

Since 1998 DEECD has invested approximately $50 million in the development and implementation of CASES21 (including provision of training, computers and equipment, and office automation to 1600 schools). DEECD has committed to ongoing maintenance and targeted enhancement of CASES21 until 2011, at an estimated additional cost of $51 million. This includes operating, capital and equipment costs, but excludes CASES21-related projects that are funded as part of DEECD's Information Communication and Technology budget.

The audit objective was to determine the extent to which the objectives for CASES21, with respect to improved school administration, were being achieved. A questionnaire was sent to 180 schools to identify the level of utilisation and satisfaction with CASES21. Responses received from 157 schools were weighted to extrapolate the results across all government schools. Follow-up visits to eight schools corroborated the questionnaire responses.

1.2 Findings and conclusion

CASES21 has improved school administration

For the majority of schools, CASES21 has achieved its broad aim of improving school administration. The overall level of utilisation and satisfaction among school staff is high. CASES21 has also enabled DEECD to streamline reporting of school administrative data to its central office and improve its ability to monitor and track school financial data.

CASES21 does not meet the needs of some large schools

While CASES21 provides a good foundation for improving school administration, further analysis of the audit results has identified scope to increase the benefits of CASES21 for a broader cross-section of schools.

As school enrolments increase beyond 400 and then beyond 1 000, the extent to which CASES21 meets the needs of schools decreases. For example:

- The administration module meets the student data management needs and student administration needs of 84 per cent and 93 per cent of schools respectively. For the largest schools (1 000+ students), these satisfaction levels decrease markedly to 57 and 70 per cent respectively.
- The administration module has improved the capacity of 87 per cent of schools to produce student administration reports. For large schools (1 000+ students), this satisfaction level decreases to 55 per cent.
- The finance module meets or exceeds the finance data management needs of 86 per cent of schools and for 77 per cent of schools it has improved their finance reporting capacity. For schools with 400 to 999 students, these satisfaction levels decrease to 76 and 53 per cent respectively. For larger schools (1 000+ students), these satisfaction levels decrease to 28 and 15 per cent respectively.

Further, CASES21 is not meeting the administrative software needs of a high number of larger state schools. Fifty-seven per cent of schools, mostly those with more than 400 students, use a range of additional administrative software. The purchase and ongoing costs of this software are borne by individual schools. The additional software is not standardised across schools and is not integrated with CASES21.

These results are significant because schools with up to 400 students, while accounting for 69 per cent of government schools in Victoria, account for only 34 per cent of the government student population. Schools with 400 to 999 students account for 25 per cent of schools and 41 per cent of the student population; and schools with 1 000 or more students account for 6 per cent of schools and 25 per cent of the student population.

CASES21 training and support services are valued by schools

DEECD provides a range of training and support services for the CASES21 administration and finance modules. These services are well received by the majority of schools. Utilisation of the services is high.

DEECD does not identify the benefits to schools of training it has provided or determine schools' future training needs. Evaluating the benefits of training provided to schools, and undertaking an analysis of future training needs, would improve DEECD's development of a training, development and resource plan, and would enable DEECD to identify and target its resources more effectively.

DEECD also provides tools to help schools manage and report their data. Some schools visited are able to manage and report their finance data using the DEECD tools and with limited use of additional tools such as Excel spreadsheets. Other schools are not, and would benefit from further training and support to help them reduce their reliance on extensive Excel spreadsheet use. The capacity of schools to manage and report their finance data did not correlate to school size or type.

The CASES21 governance arrangements are now working well

The importance of robust, clearly defined and communicated governance arrangements cannot be overstated. Significant effort and resources were required by DEECD to rectify problems it encountered in implementing the CASES21 finance module and the impact of these problems on schools. In part, these problems were due to DEECD's inadequate governance arrangements.

In addition to addressing software issues, DEECD has put considerable energy into restoring stakeholder confidence in the benefits of CASES21 and DEECD's capacity to manage its implementation. This was because the severity of the issues that arose during roll out of the finance module resulted in it being halted in May 2005. Roll out resumed in August 2005 when schools and key stakeholders were satisfied that all issues had been sufficiently addressed.

With CASES21 now fully implemented across schools, DEECD's focus has shifted to software upgrades. A range of governance mechanisms have been implemented by DEECD aimed at improving the management, coordination and impact of software changes on system users. We commend these actions, particularly as it indicates DEECD has learnt from its past experiences with implementing CASES21.

The lessons learnt by DEECD from its past experiences should continue to be used to improve and inform implementation of future information technology projects.

DEECD's measurement of the performance and benefits delivered through CASES21 is inadequate

Given that CASES21 is used by all government schools and, in broad terms, is expected to support improved school administration, DEECD should have had in place a formal performance monitoring and reporting framework. In the absence of such a framework, this audit has reverted to primary sources to establish the extent to which government schools were utilising CASES21 and the extent to which it was meeting school needs. This information was not held by DEECD.

1.3   Recommendations

- DEECD should:
    - modify the administrative module to reduce the need for schools to use additional software
    - determine the extent of the data importation limitations across the school system **(Recommendation 3.1)**.
- DEECD should:
    - evaluate the benefits of the CASES21 training provided to schools
    - undertake a future training needs analysis for CASES21 **(Recommendation 3.2).**
- DEECD should determine the feasibility of modifying the CASES21 finance module to achieve more efficient use **(Recommendation 4.1)**.
- DEECD should, as part of its training analysis, identify and reinforce opportunities for schools with more streamlined financial management practices to share lessons learned with schools that are less well advanced **(Recommendation 4.2)**.
- DEECD should implement a formal performance monitoring and reporting framework for the CASES21 Program to strengthen accountability and oversight. The framework should include the measurement of benefits achieved from CASES21 software enhancements **(Recommendation 5.1)**.

> **RESPONSE provided by the Secretary, Department of Education and Early Childhood Development**
>
> *The Department of Education and Early Childhood Development (DEECD) notes the continuous improvement emphasis of the Auditor-General's report. DEECD sees one of its main responsibilities is to manage and drive continuous improvement in the delivery of primary and secondary education in Victorian Government schools.*
>
> *The results of the audit are welcomed in this context.*

RESPONSE provided by the Secretary, Department of Education and Early Childhood Development – continued

DEECD accepts that CASES21 does not meet the needs of some large schools. DEECD notes that timetabling and attendance functions, in particular, have been identified as "missing from CASES21". However, CASES21 does provide Timetable and Attendance recording functionality. DEECD acknowledges that these are often supplemented by the use of additional software in large secondary schools as these functions have been historically provided for by entrenched commercial packages for which CASES21 provides support through data interfaces.

Notwithstanding this, DEECD considers the results of the audit will contribute to its drive of a performance and development culture that continues the work of large scale school improvement, realises the benefits of a statewide system, and focuses on those schools without the capacity to improve on their own.

As part of its three year Corporate Plan DEECD is committed to a continuously improving, high performing corporate organisation that is capable of supporting schools through highly developed management systems to deliver the best possible outcomes for children and young people.

In response to specific recommendations:

Recommendation 3.1

DEECD accepts in principle this recommendation. CASES21 is the subject of an ongoing process of refinements and formal updating twice a year and priority is given to system updates and examining areas for improvement. Where viable commercial products are already being used and meeting school needs, the rationale for modifying the administrative module is unclear. DEECD accepts the part of the recommendation relating to determining the extent of the data importation across the school system and will examine this issue.

Recommendation 3.2

DEECD accepts this recommendation and, while already seeing improvements through established mechanisms and networks (such as the school council financial audit program and professional development programs for school personnel), will continue to investigate the benefits to schools of user participation in CASES21 training and undertake analysis of future training needs.

Recommendation 4.1

DEECD accepts this recommendation. While CASES21 finance implementation has been mandated for all government schools, DEECD will continue to improve the module through regular enhancements to system processing that will add value for school personnel. These enhancements will be driven by feedback from school personnel at key stakeholder forums, as is the process currently in place.

RESPONSE provided by the Secretary, Department of Education and Early Childhood Development – continued

Recommendation 4.2

DEECD accepts this recommendation and has already begun to identify and reinforce opportunities for sharing learnings across government schools as demonstrated by the establishment of the Schools Advisory Group, the appointment of School Finance Liaison Officers, the development of self-contained online learning modules and through the coordination of 'like school' (secondary, primary, special) workshops where experienced school personnel with excellent processes and practices can discuss and guide others with less experience, or less streamlined processes and practices.

Recommendation 5.1

DEECD accepts in principle this recommendation. DEECD has a range of reporting and monitoring elements in place supported by CASES21 implementation, such as student census collections; end of year financial consolidation of school financial information within DEECD financial accounts; and administrative and financial reporting within school annual reports. Within this context, DEECD acknowledges system development and reform is ongoing and improvements can always be made in its performance monitoring and reporting. DEECD accepts a formally documented framework, including measurement of benefits, should be developed to improve accountability and oversight.

2 Background

2.1 CASES21

2.1.1 Background

Since the 1980s the Government has provided state primary and secondary schools with standard computer administration and finance systems, hardware and operating environments. Up until the late 1990s, schools used an integrated, DOS based system known as CASES (Computerised Administrative System Environment in Schools). In May 1998, the then Department of Education tendered for a new system to replace CASES to comply with Y2K requirements and to operate in a Windows environment.

The new (current) system, CASES21, is an integrated school administration and finance software system. It is designed to provide government schools with a standardised, integrated system to manage the main school administrative and finance functions. The software is also intended to help schools provide key data reports to the Department of Education and Early Childhood Development (DEECD). To this end, it is considered to be 'business critical'.

CASES21 was rolled out progressively to all government schools. Implementation of the administration module commenced in July 2000 through to August 2004. Roll out of the finance module commenced in late 2004 and was completed in October 2006. Between 2001 and 2004, ongoing and high risk project management issues were identified by DEECD that delayed roll out of the finance system. The project management issues were subsequently addressed by DEECD.

Since 1998 DEECD has invested approximately $50 million in the development and implementation of CASES21 (including provision of training, computers and equipment, and office automation to 1600 schools). DEECD has committed to ongoing maintenance and enhancement of CASES21 until 2011. The estimated cost of this commitment until 2011 is $51 million. This includes operating, capital and equipment costs. It excludes CASES21 related projects that are funded as part of DEECD's Information Communication and Technology budget.

2.1.2 Program objectives

DEECD's CASES Roadmap (2006–2011) outlines the vision and objectives for the CASES program, including the recommended direction and anticipated resources required for CASES21 until 2011. This strategy requires:

- continued commitment by DEECD for the maintenance, support and enhancement of CASES21
- DEECD to support a range of departmental initiatives planned for the next five years
- establishment of a governance structure involving a joint approach across DEECD.

The 1998 objectives for CASES21 were revised in the 2007 CASES Roadmap to take into account the progress and evolution of CASES21. Both sets of objectives are shown in Figure 2A.

Figure 2A
Summary of CASES21 objectives

Request for Tender CASES21 Objectives (1998)	CASES Roadmap—Program Objectives (2006–2011)
Determine opportunities to improve schools' business processes	Support informed and devolved decision-making, policy development and resource management, both locally (schools) and corporately
Specify, acquire and deliver to schools a computer system which supports schools' business processes	Provide critical support for the accountability framework to achieve the objectives set by government within the distributed model of leadership
Provide a system that integrates with the various databases within a school	Provide a common and supported platform for school administration
Provide flexible management information and decision support capabilities, especially ad hoc reporting, planning and business modelling	Support efficient and effective school operations
Increase schools' capacity to use their data flexibly to meet their specific needs	Provide a return on investment
Provide the system on a mainstream hardware and software platform which will support current and future requirements for useability, consistent user interface, performance and on-going development	Align CASES approach to Departmental Architecture
Provide effective and efficient system support for essential functions related to teachers' core work	

Source: Department of Education (now DEECD), Request for Tender, CASES21, May 1998 and CASES Roadmap (2006–2011), February 2007.

2.2   Audit objective

The audit objective was to determine the extent to which the objectives for CASES21, with respect to improved school administration, are being achieved by DEECD.

2.3   Audit scope

The audit examined whether the CASES21 student administration and finance system has enabled government schools to:

* better manage student and finance data
* improve school administration and finance practices
* improve their capacity to report on the school's financial performance.

The audit also examined:

* the extent to which the components of CASES21 administration and finance modules are used by schools
* the governance arrangements in place to support CASES21, including the action taken by DEECD in response to its two internal reviews (2001 and 2004) and mechanisms for monitoring the performance of the CASES Program.

2.4   Audit approach

The audit involved interviews with key personnel and reviews of relevant documents and associated information at DEECD.

A questionnaire was sent to 180 Victorian government primary, secondary and primary-secondary schools. Responses were received from 157 schools. The questionnaire was designed to gather information on the:

* extent to which CASES21 helps schools to meet their business needs
* adequacy of training and support
* adequacy of information communicated about CASES21
* processes to manage and resolve CASES21 related issues.

School responses were grouped according to student enrolment numbers, 1 to 400, 400 to 999 and 1 000+ students. Percentages in the report demonstrating the levels of utilisation and satisfaction are the responses from 157 schools which have been weighted and extrapolated across the school population.

Figure 2B shows there are more schools with 400 or fewer students (69 per cent) as a proportion of the total number of primary, secondary and primary-secondary schools. Schools of 400 students or more account for the greater proportion (66 per cent) of student enrolments (Figure 2C).

Figure 2B
Number of schools by enrolment size category and school type

School type	<400 students	401–999 students	1 000+ students	Total
Primary	954	245	2	**1 201**
Secondary	53	117	83	**253**
Primary-Secondary	33	10	11	**54**
Total	1 040	372	96	**1 508**
Percentage of schools across school population	**69**	**25**	**6**	

Note: Excludes Special, Camp and Language schools.
Source: Victorian Auditor-General's Office.

Figure 2C
Number of students by enrolment size category and school type

School type	<400 students	401–999 students	1 000+ students	Total
Primary	158 693	131 915	2 825	293 433
Secondary	12 795	81 543	111 954	206 292
Primary-Secondary	6 927	6 073	16 045	29 045
Total	178 415	219 531	130 824	528 770
Percentage of students across total student population	**34**	**41**	**25**	

Note: Excludes Special, Camp and Language schools.
Source: Victorian Auditor-General's Office.

Follow-up visits were made to eight schools, of varying student enrolment numbers and type, across different education regions, reflecting the schools covered in the questionnaire. The questionnaire responses from these schools were validated and explored in more detail to assess whether their needs were being met by CASES21.

The audit was performed in accordance with the Australian Auditing Standards applicable to performance audits and included tests and procedures sufficient to enable audit conclusions to be reached. The total cost of the audit was $218 000. This cost includes staff time, overheads, specialist assistance and printing.

2.5   Acknowledgements

The audit team consulted with a range of people and stakeholder organisations to obtain insight into CASES21 and we thank them for their support and assistance. We would also like to thank staff from DEECD's central office, the schools we visited, the schools that participated in piloting the questionnaire and the schools that responded to the questionnaire.

3 Administration module

At a glance

Background

This part of the report examines the extent to which the CASES21 administration module helps schools manage and report student data and supports student administration. It also examines whether schools are aware of, use, and are satisfied with, the training and support services provided by the Department of Education and Early Childhood Development (DEECD).

Key findings

- The CASES21 administration module meets the student data management needs and student administration needs of the majority of government schools (84 and 93 per cent respectively). For the largest schools (over 1 000 students), these satisfaction levels decrease markedly (57 and 70 per cent respectively).
- Fifty-seven per cent of schools, most of which are schools with over 400 students, use additional software for school administration.
- CASES21 has enabled DEECD to better meet its student data and administrative reporting requirements.
- For the majority of schools, CASES21 meets their student administration reporting needs although satisfaction levels decrease for schools with over 400 students.
- Utilisation of training and support services provided by DEECD was high and generally met the needs of schools.

Key recommendations

DEECD should:
- modify the administrative module to reduce the need for schools to use additional software
- determine the extent of the data importation limitations across the school system **(Recommendation 3.1)**.

DEECD should:
- evaluate the benefits of the CASES21 training provided to schools
- undertake a future training needs analysis for CASES21 **(Recommendation 3.2)**.

3.1   Introduction

Managing student data and undertaking associated administration tasks are core functions of daily life in schools. It is important that administrative software supports these and other business critical functions, is user friendly, and provides opportunities for schools to streamline their administrative processes and maximise resource utilisation.

The CASES21 administration module is designed to assist schools to manage and report on a range of student data and in performing associated administration tasks. Key functions are:

- student and family data
- student medical information
- accident and sick bay data
- student attendance
- school management information including school profile data
- managing group activities such as student camps and excursions
- student achievement
- student discipline, welfare and merit
- student timetabling
- daily organisation such as scheduling of relief teachers
- student transport
- school council associations such as parent clubs, uniform shop.

Schools are required to record data relating to student enrolment, key student details, census, accident and injury, and staff and student contact details in CASES21. The Department of Education and Early Childhood Development (DEECD) requires schools to report student attendance annually. Schools may use other software to record student attendance on a daily basis and report the total attendance for each student at the end of the annual cycle.

3.2   Improving the management of student data and school administration

In our questionnaire, schools were asked to indicate which of the twelve CASES21 administration functions they use. If a school did not use a function they were asked whether this was because it was not needed, or whether they need the function but use software other than CASES21.

Where schools indicated that they used a CASES21 function, they were asked how often they use it and the extent to which it met their needs. Where the function partially met or did not meet their needs, schools were asked to provide reasons.

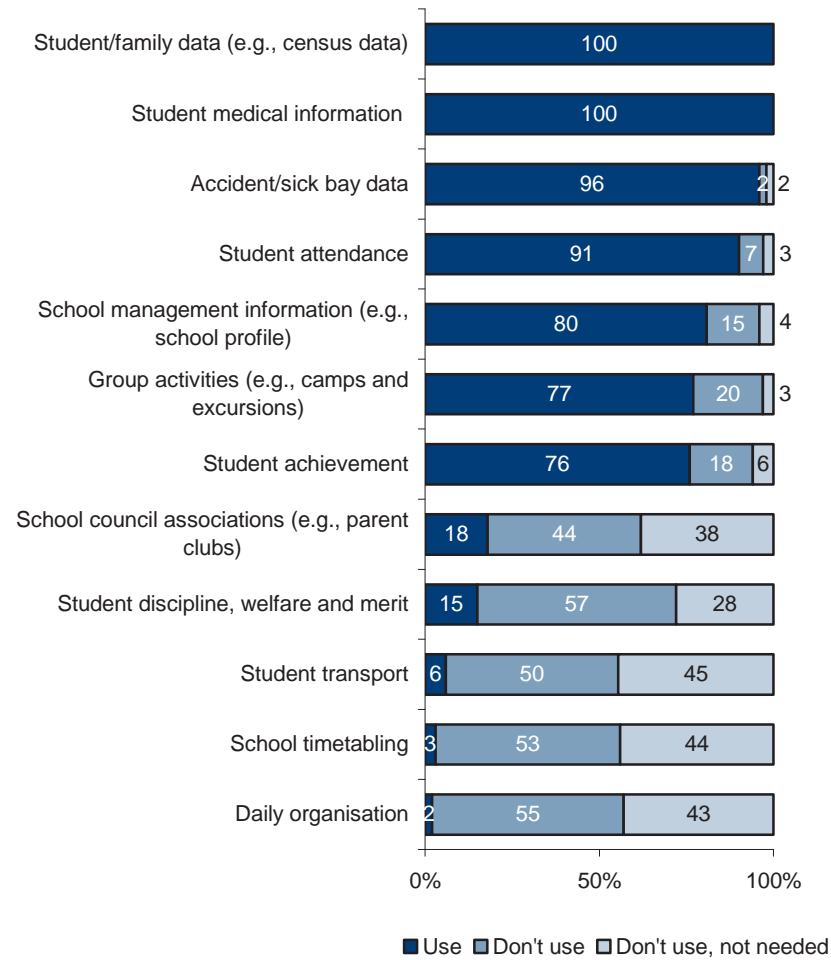### 3.2.1 Utilisation of CASES21 administration functions

Figure 3A shows that CASES21 administration functions used by schools fall into two distinct groups. Those that are heavily used by more than three-quarters of schools, namely:

- student and family data
- student medical information
- accident and sick bay data
- student attendance
- school management information
- managing group activities
- student achievement;

and those used by less than one in five schools:

- daily organisation
- student timetabling
- student transport
- student discipline, welfare and merit
- school council associations.

Figure 3A
Utilisation of CASES21 administration functions

Function	Use	Don't use	Don't use, not needed
Student/family data (e.g., census data)	100		
Student medical information	100		
Accident/sick bay data	96	2	2
Student attendance	91	7	3
School management information (e.g., school profile)	80	15	4
Group activities (e.g., camps and excursions)	77	20	3
Student achievement	76	18	6
School council associations (e.g., parent clubs)	18	44	38
Student discipline, welfare and merit	15	57	28
Student transport	6	50	45
School timetabling	3	53	44
Daily organisation	2	55	43

■ Use ■ Don't use □ Don't use, not needed

Note: Utilisation levels for some functions may not add to 100 per cent due to rounding.
Source: Victorian Auditor-General's Office.

High utilisation (76 per cent and upwards shown in Figure 3A) tended to correlate positively with the extent to which the function is required. Between 28 and 45 per cent of schools indicated that they did not use the functions of school council associations, student discipline, welfare and merit, student transport, timetabling and daily organisation. Low utilisation of these functions is due to schools having no need for it or because they use other software.

The frequency with which schools use CASES21 functions, or have elected to use alternative software, reflects the way schools operate. For example, student attendance is required to be recorded daily, whereas school management is used less often. Low utilisation of core functions such as timetabling and daily organisation, particularly by secondary schools, indicates that alternative software is used. The most widely and frequently used functions were:

- student and family data
- student attendance
- student medical information
- accident and sick bay data
- group activities.

3.2.2 Meeting school needs

Overall, the administration module meets or exceeds the student data management and student administration needs of the majority of schools (84 and 93 per cent respectively). Figure 3B shows that the extent to which these needs are met decreases marginally for schools with 400 to 999 students but the decrease is marked for schools with 1 000+ students.

Figure 3B
Extent to which the administration module meets school needs

|	All schools overall	1–400 students	400–999 students	1 000+ students
The extent to which the administration module meets student data management needs *(exceeds/meets need)*	84 per cent	88 per cent	80 per cent	57 per cent
The extent to which the administration module meets the student administration needs overall *(exceeds/meets need)*	93 per cent	96 per cent	89 per cent	70 per cent

Source: Victorian Auditor-General's Office.

Fifty-nine per cent of schools (93 of 157 respondents) provided additional information to support their rating of satisfaction with the administration module and the extent to which the module meets their student data needs. Higher school enrolments correlated with a decrease in satisfaction levels. The most frequent reasons given by schools whose needs were met were that CASES21 works well and works better than the previous version.

Schools whose needs for both student data management and student administration were not met indicated that CASES21 was difficult and time consuming to use and functions needed to be upgraded to meet school needs. These issues were more pronounced for schools with more than 1 000 students.

Administrative functions not meeting school needs

Figure 3C shows that the administrative functions schools considered least met their needs (partially or does not) were timetabling (36 per cent), discipline, welfare and merit (22 per cent), student transport (24 per cent) and student achievement (18 per cent). Apart from student achievement, the same functions were identified by schools as less likely to be needed and used as shown in Figure 3A.

Figure 3C
Extent to which administrative functions meet the needs of schools
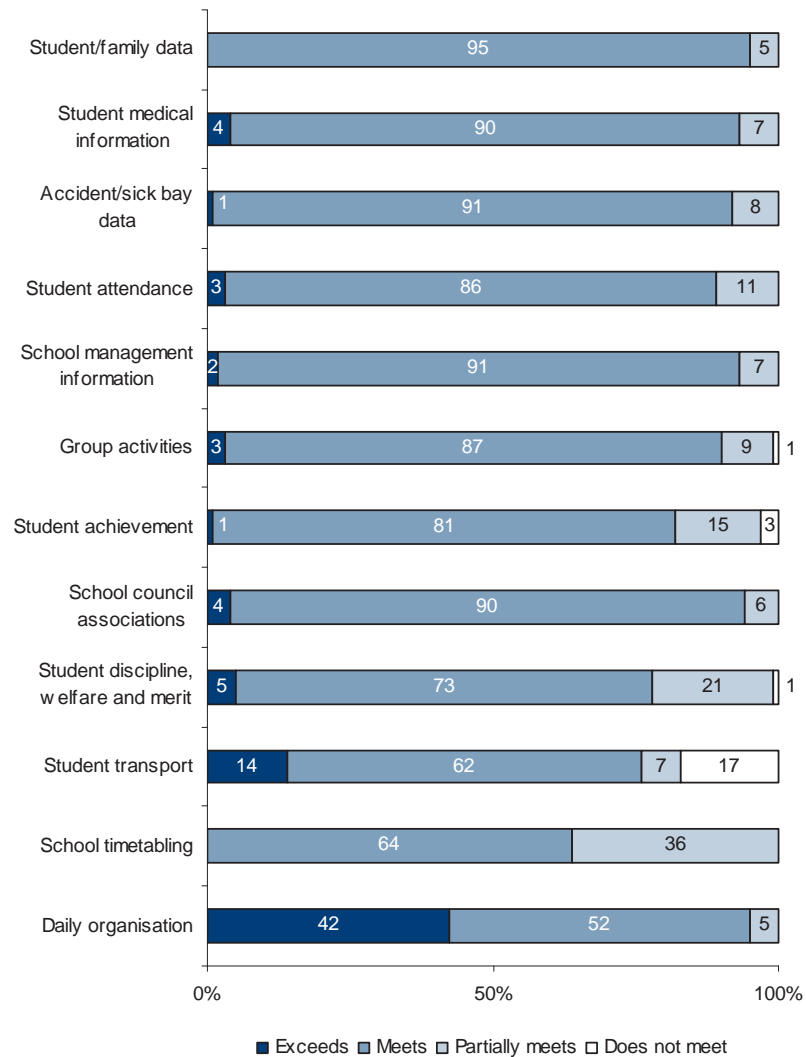
Note: Satisfaction levels for some functions may not add to 100 per cent due to rounding.
Source: Victorian Auditor-General's Office.

Student attendance and timetabling function

Primary school student attendance is usually recorded on a half or full day basis whereas secondary school student attendance is recorded on a period by period basis to align with the student timetable. CASES21 functionality enables schools to record attendance on a half day or full day basis. Student attendance can only be recorded period by period in CASES21 if a corresponding timetable has been loaded into CASES21. For the majority of schools (97 per cent), their complex timetabling requirements prevent them using the more basic CASES21 timetable functionality and corresponding period by period attendance function.

Eighty-nine per cent of schools indicated that their needs were met by the student attendance function in CASES21. The reasons provided by the 11 per cent of schools for why the student attendance function only partly met or did not meet their needs differed according to school size. Of this 11 per cent, most schools with 400 or less enrolments (98 per cent) were more likely to say that their need exceeded CASES21 functionality and schools with more than 400 enrolments were more likely to use different software (40 per cent). This is most likely to meet their daily period by period attendance recording requirement.

Student achievement function

The student achievement function reports on the learning and development progress of students and is used by 76 per cent of schools (Figure 3A) with one in five (18 per cent) indicating that their needs are partially or not met. While schools with fewer than 400 students are more likely than schools with more than 400 enrolments to use this feature (84 per cent versus 59 per cent respectively), levels of unmet need are the same.

Figure 3D provides examples identified by audit where CASES21 is impacting on the efficient management of student data and conduct of administration tasks.

Figure 3D
Examples of CASES21 limitations

- CASES21 does not cater sufficiently for different and complex family combinations such as where parents, students and siblings from the same family have different surnames. As the administration module is student ID centric and the finance module is family ID centric, parents, students and siblings cannot be linked to the family code. There are three main consequences:
  - It hinders the schools ability to distribute student related information to both parents automatically. Schools use manual systems to make sure student information is sent to both parents.
  - It reduces the ability of schools to manage family data, including finance data.
  - It hinders recording and management of the Education Maintenance Allowance (EMA). CASES21 only allows the allocation of EMA receipts to individual students, yet the EMA allowance is linked to the family code.

  This situation is more of an issue in larger schools. As the majority of families are less likely to be known by the administrative staff, more effort is likely to be required to match students, siblings and parents.
- The enrolment process is more time consuming as there is limited alignment between the data sequence on the enrolment form and screen sequence in CASES21. This is an issue, despite most schools modifying the enrolment form to improve alignment.
- Recording late arrival and early departure in one day incorrectly shows that the student was absent for the day.
- When using sick bay data, medical data is not easily accessible.

Source: Victorian Auditor-General's Office.

Use of additional software packages

The audit found that 57 per cent of schools use additional software for student administration. Of these schools, 31 per cent use at least one other administrative software package, 15 per cent use two and 11 per cent use three. Twenty-one per cent of the schools that use additional software use tailored software and the other 36 per cent use commercial software. The initial purchase cost of commercially available software ranges between $3 500 and $6 000, with annual maintenance and upgrade costs ranging between $2 000 and $3 000.

Examples of commercial software used by some schools include:
- A Plus and Rollcall for recording student attendance
- First Class and Timechart for student timetabling
- SMART for recording student behaviour, incidents and welfare issues.

Schools also have the option of using QuickVic for student reporting as CASES21 does not provide this functionality. This software, which was made available by DEECD in 2006, enables schools to upload data into CASES21. Reporter-Pro and Markbook software are also used for student reporting.

Secondary schools using First Class timetabling software cannot upload the data into CASES21. DEECD is aware of this and has been working with the software vendor for some time to address this issue. According to DEECD, all other timetable software data can be uploaded into CASES21. However, our visits to schools (eight) indicated some of them were either unaware or unable to do this. For example, some schools believe that data cannot be reliably imported from some software such as A Plus (student attendance), and that there is no import facility between Timechart (timetabling), and Rollcall (student attendance) and CASES21. As a result of this lack of knowledge, some schools constantly maintain student data across more than one database, which is time consuming and inefficient.

Schools with more than 400 students are more likely to use additional software to meet their needs (79 per cent) whereas 47 per cent of schools with 400 or fewer students use additional software.

Although schools have been using other software to meet timetabling needs over a long period, DEECD considered that further development of the timetabling function in CASES21 was not justified. This was because the CASES21 timetabling function was never intended to compete with alternative complex timetabling software already used by schools.

3.2.3   Meeting the reporting requirements of DEECD

DEECD's Victorian Government School Reference Guide mandates the reporting of specified student and administration data. DEECD expects schools to use the CASES21 administration module to meet policy reporting requirements. Figure 3E shows the key student and administration data schools must report.

Figure 3E
Mandated reporting—student and administration data

Administration activity	Data to be recorded by schools and reported to DEECD
Maintenance of students records database	• Enrolment date and key student details. • Recording of student attendance on at least a half-day basis. Data is reported annually to DEECD. • Class attendance for VCE students is required by the Victorian Curriculum and Assessment Authority. • Demographic data for non-Australian born students. This information is required for funding and census purposes.
School and personnel administration	• School and staff contact details including emergency contact details. • Locally paid staff.
Maintenance of data required for school census returns	• Census data (student/family data) completed in February and August each year. This data informs the funding allocation for schools.
Maintenance of data to assist with the preparation of annual reports and self evaluation	• Schools' annual report to the community includes student enrolment, achievement and attendance data.
Student safety and risk management	• All accidents and injuries at school or on excursions are to be recorded on the CASES21 injury management system. • Staff nominated with responsibilities in an emergency should have contact details updated each term on CASES21.

Source: Victorian Schools Reference Guide, September 2007, DEECD.

For the most part, administrative data reported by schools is automated and receipted by DEECD's central office automated message handling system. Census data is transferred electronically (not automatically) and is validated at central office. The implementation of CASES21 in schools has enabled some streamlining of data reporting and improvements in data consistency for DEECD. CASES21 has also enabled DEECD to better meet its own reporting requirements.

3.2.4 Meeting administrative reporting needs

Figure 3F shows that, for the majority of schools (86 per cent), CASES21 completely or mostly enables them to produce reports to assist student administration. CASES21 has also improved the capacity of the majority of schools (87 per cent) to produce student administration reports that meet their needs. The audit also found that size remains a determinant of the extent to which school needs are met, particularly for schools with 1 000+ students, as shown in Figure 3F.

Figure 3F
Student administration reporting capability

	All schools overall	1–400 students	400–999 students	1 000+ students
The extent to which the administration module enables schools to produce reports to assist student administration *(completely/mostly)*	86 per cent	91 per cent	80 per cent	55 per cent
The extent to which the administration module has improved your school's capacity to produce reports on student administration to meet school needs *(completely/mostly)*	87 per cent	93 per cent	80 per cent	55 per cent

Source: Victorian Auditor-General's Office.

3.2.5 Adequacy of training and support services

DEECD provides training and support for schools across 13 training centres including four remote, country training and resource centres that are staffed on an 'as needs' basis by mobile trainers. Schools book their training through an on-line booking system. More recently, DEECD's trainers have been equipped with notebook computers which has increased their flexibility to run training sessions at locations other than the dedicated training centres.

DEECD's trainers monitor regional demand through the on-line booking system. Where there is a need to run a training session closer to schools, trainers liaise with schools to run sessions at a more convenient location.

Schools were asked to consider the training and support services provided by DEECD and indicate whether they were aware of the service, had utilised it and, if they had used the service, the extent to which it met their needs.

Awareness and utilisation of training and support services

Figure 3G shows that school awareness of DEECD's training and support services was high, as were utilisation levels.

Figure 3G
Awareness and utilisation of training and support services

Training and support services	Aware %	Not Aware %	Used %
Administration documents (web based)	93	7	90
Timetabling guide	57	43	8
Guidelines e.g., census data collection and submission	97	3	96
System training for CASES21 Administration module	94	6	95
Response time of helpdesk	100	-	100
Capacity to resolve issues	100	-	99
Process of requesting changes/enhancements	87	13	58

Source: Victorian Auditor-General's Office.

Our eight school visits indicated that while enhancements to CASES21 were generally well received, the process for submitting change requests is not known by some schools. The data in Figure 3G show that 13 per cent of schools indicated they were not aware of processes for change requests. Our visits to eight schools also indicated that DEECD's process for assessing and prioritising which enhancements are actioned is not clear or well communicated.

Some schools we visited expressed frustration that the process of logging a call with the service desk, and then having to wait for a service officer to call back, is a deterrent to using the service. Schools were more likely to contact other schools in their area, training centres or manually work around the problem. DEECD encourages schools to support each other and resolve issues locally, however, it is important that the helpdesk is accessible and responsive to school requests. Our eight school visits indicated that communication by the service desk on the progress of problems was variable.

DEECD use service desk statistics and calls logged through training centres to monitor patterns and trends in day-to-day issues; demand on services and to identify schools that may require further training or support. Although this provides some insight into school training needs, it has not been complemented with a needs analysis across schools.

Extent to which training and support services meet school needs

The majority of schools said DEECD training and support services met their needs (Figure 3H).

Figure 3H
Extent to which training and support services meet school needs
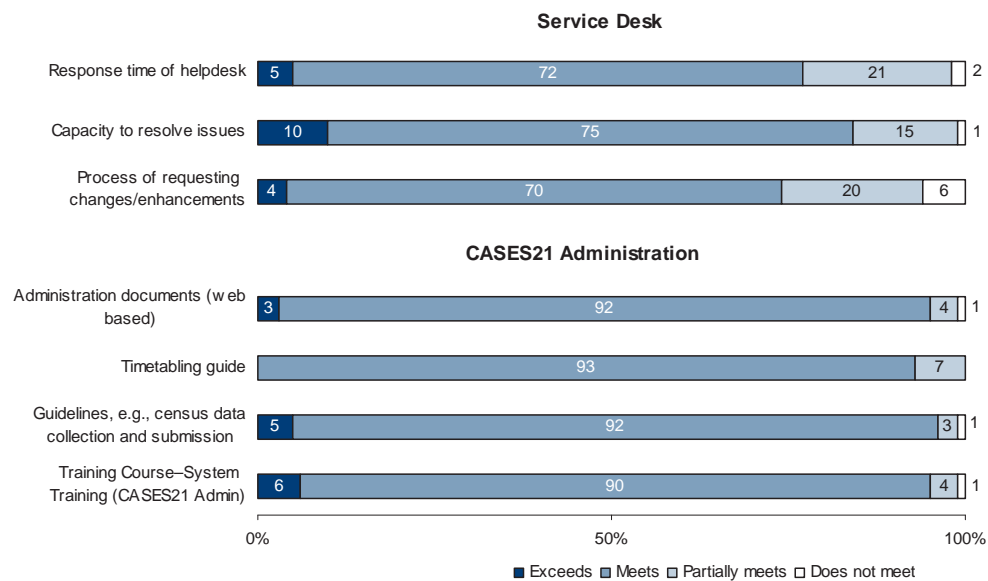
Source: Victorian Auditor-General's Office.

Figure 3H also shows that the three service desk support services have the lowest scores for meeting school needs. Further analysis of this data showed that schools with more than 400 students were less likely to have their needs met by the service desk than schools with fewer than 400 students. Specifically:

- for the response time of the help desk, 41 per cent of schools with more than 400 enrolments said their needs were partially or not met. Fifteen per cent of schools with less than 400 enrolments said their needs were partially met
- for the capacity to resolve issues, 22 per cent of schools with more than 400 students said their needs were partially or not met
- for the process of requesting changes and enhancements, 42 per cent of schools with more than 400 students said their needs were partially or not met.

3.3   Conclusion

CASES21 has increased the capacity of schools to improve the management of student data and school administration. While this is a positive result, there are opportunities for DEECD to increase the benefits to schools of using CASES21. It is evident that as school enrolment numbers increase beyond 400, and then beyond 1 000 students, the extent to which student data management and school administration needs are met decreases.

System limitations are more pointed when we consider that schools with 400 to 999 students account for 25 per cent of government schools and 41 per cent of the student population. Schools with 1 000 or more students account for 6 per cent of schools and 25 per cent of the student population. Further, school sizes are unlikely to reduce, given that DEECD's planning guidelines recommend student enrolment sizes for new schools are 451+ students for primary schools and 1 100 students for secondary schools. For existing schools, these benchmarks are used as target enrolments.

In addition, 57 per cent of schools (mostly those with 400+ students) use a range of additional software to meet their administrative needs. While we acknowledge that the administration module was not intended to meet all the administrative needs of schools, the high volume of schools using additional software, and the associated costs, warrant DEECD exploring opportunities to address this issue.

Where schools are using additional administrative software, it is desirable that data can be easily and reliably imported into CASES21. Our visits to the eight schools suggest that the extent to which schools are able to do this varies. Where it cannot be done, schools are required to undertake ongoing ad hoc data maintenance across databases resulting in duplication of effort and opening the way for data errors. DEECD should explore how widespread the issue is and the feasibility of modifying CASES21 to enable more data to be imported into the system from commercial software.

For the majority of schools, CASES21 has improved their capacity to record and store student data, together with their capacity to retrieve and report data locally and in response to DEECD's central office requests. This level of satisfaction is marginally lower for schools with more than 400 students, but then falls away significantly for schools with 1 000+ students.

DEECD's range of CASES21 training and support services are well received by the majority of schools. Evaluating the impact of training provided to schools, and undertaking a future training needs analysis, would inform DEECD in developing a medium to longer term training, development and resource plan. This would enable DEECD to identify and target its resources more effectively.

Recommendations

3.1 DEECD should:

- modify the administrative module to reduce the need for schools to use additional software
- determine the extent of the data importation limitations across the school system.

3.2 DEECD should:

- evaluate the benefits of the CASES21 training provided to schools
- undertake a future training needs analysis for CASES21.

4 Finance module

At a glance

Background

This part of the report examines the extent to which the CASES21 finance module helps schools manage and report on their finances. Whether schools are aware of, use, and are satisfied with, the training and support services provided by the Department of Education and Early Childhood Development (DEECD) is also examined.

Key findings

- Responses to our questionnaire indicated that the CASES21 finance module meets or exceeds the finance data management needs of schools (86 per cent) and has improved their finance reporting capacity (77 per cent).
- As student numbers increase, the extent to which school needs are met for both finance data management and finance reporting decreases. For the largest schools (1 000 + students), this decrease is more significant (28 per cent and 15 per cent respectively).
- The CASES21 finance module has enabled DEECD to improve school finance data collection and reporting processes. It has also assisted DEECD in meeting its central reporting requirements.
- Awareness of training and support services is high, with 86 per cent or more of schools reporting that their needs are met.
- At least 70 per cent of schools were aware of the seven sources of CASES21 information, although they may not use all of them.

Key recommendations

- DEECD should determine the feasibility of modifying the CASES21 finance module to achieve more efficient use **(Recommendation 4.1).**
- DEECD should, as part of its training analysis, identify and reinforce opportunities for schools with more streamlined financial management practices to share lessons learned with schools that are less well advanced **(Recommendation 4.2).**

4.1   Introduction

The CASES21 finance module was implemented in schools from 2005 onwards to align with schools moving from a cash-based to a partial accrual based accounting system. This was a significant change for schools as it required them to adapt to a new software system, and understand and apply new accounting concepts and practices.

Schools use CASES21 finance to manage and report on their financial position, as well as to meet the Department of Education and Early Childhood Development (DEECD) reporting and legislative requirements. Its key functions are:

- create and manage creditor financial transactions
- create and manage general ledger financial transactions
- manage the school asset register excluding buildings and facilities
- process and manage the school level payroll
- generate finance reports
- manage school budgets
- create and manage family financial transactions
- create and manage sundry debtor financial transactions.

Use of the finance module by schools is mandatory.

4.2   Improving the management and reporting of financial data

We asked schools which of the eight main finance functions they use, the frequency of usage and to what extent the function met their needs. Schools that did not use a function were asked whether they needed to use it.

4.2.1 Utilisation of CASES21 finance functions

Schools reported a 97 to 100 per cent utilisation rate for seven of the eight main finance functions:

- create and manage creditor financial transactions **(100 per cent)**
- create and manage general ledger financial transactions **(100 per cent)**
- manage the school asset register excluding buildings and facilities **(100 per cent)**
- process and manage the school level payroll **(100 per cent)**
- generate finance reports **(100 per cent)**
- manage school budgets **(99 per cent)**
- create and manage family financial transactions **(97 per cent)**.

Overall utilisation of the other main function, Create and manage sundry debtor financial transactions, was marginally lower (81 per cent), reflecting that not all schools need to use this function. Utilisation of the sundry debtor function for schools with fewer than 400 students and with 400–999 students was 77 and 88 per cent respectively. Schools with more than 1 000 students recorded a 100 per cent utilisation rate for this function.

4.2.2 Meeting school needs

Figure 4A shows that, overall, the finance module meets or exceeds the finance data management needs of the majority of schools (86 per cent). Figure 4A also shows that, as school enrolments increase, the extent to which these needs are met decreases.

Figure 4A
Extent to which CASES21 finance module meets school finance data needs

	All schools overall	1–400 students	400–999 students	1 000+ students
The extent to which the finance module meets the finance data needs of your school overall	86 per cent	93 per cent	76 per cent	28 per cent

Source: Victorian Auditor-General's Office.

Seventy-four per cent of schools (115 of 157 respondents) provided comments to support their rating on the extent to which the finance module meets their finance data needs. The comments correlated with the decrease in satisfaction levels as school enrolments increase. Favourable comments included:

- it works well and does what we want
- quality reports are produced and it provides the information needed
- it is user friendly.

Less favourable comments included:

- it is difficult to use, not user friendly and is time consuming
- reports are confusing and there are too many of them.

Figure 4B shows the extent to which the eight main finance functions exceed or meet the needs of the majority of schools. The functions that least meet (i.e., partially or do not meet) school needs are:

- manage school budgets
- manage the school asset register
- generate finance reports.

Figure 4B
Extent to which CASES21 finance functions meet school needs
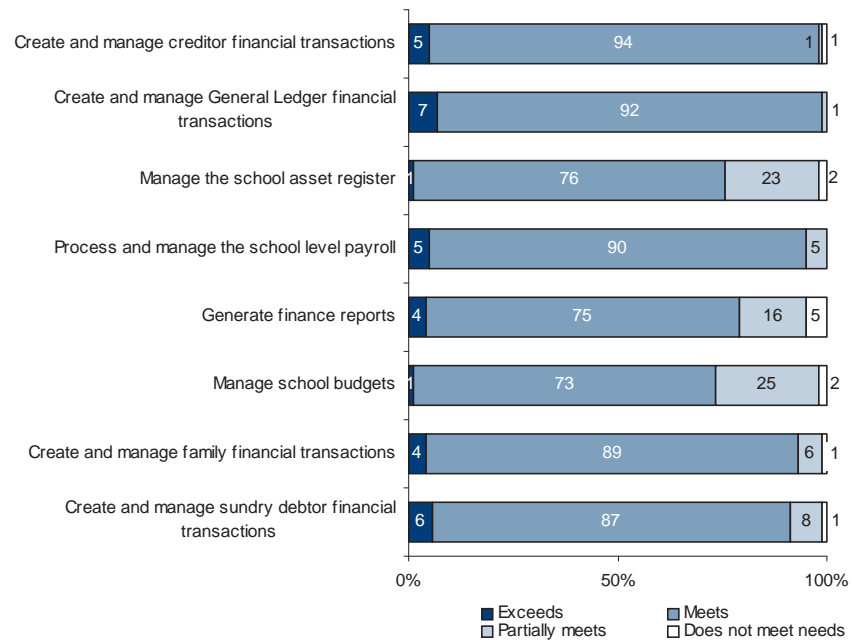
Note: Satisfaction levels for some functions may not add to 100 per cent due to rounding.
Source: Victorian Auditor-General's Office.

The 'Manage school budgets' function meets or exceeds the needs of 73 per cent of schools. The extent to which the need is met or exceeded rises to 82 per cent for schools with less than 400 students and decreases to 53 per cent for schools with 400+ students. Furthermore, the larger the school, the more frequently they use this function. Forty per cent of schools with 400+ students use it on a weekly basis, compared with only 26 per cent of schools with fewer than 400 students. These smaller schools tend to use it more on a monthly basis (forty-five per cent). Limitations of the function will be heightened for schools that use the function more frequently.

A lower user satisfaction level for this function compared to most of the other finance functions may be explained by the examples in Figure 4C. During the eight school visits, we observed that some schools rely more heavily on additional Excel spreadsheets and manual processes to support their use of the budget management function. This increases the school's administrative workload and reduces the potential to improve process efficiency.

Figure 4C
Examples of differences in approach by schools—CASES21
and budget management

Sub-program management

- Five of the eight schools visited found the Excel tools developed by DEECD were sufficient to support their budgeting and tracking of finance data and sub-program management. However, for the three other schools, monitoring and tracking of sub-program budgets is a manual process, requiring extensive Excel spreadsheet use and corresponding increase in data entry and workload. Sub-program management can be onerous and time consuming, particularly when schools have upwards of 150 sub-programs.

Financial management

- The capability of schools to set up, monitor and report on the financial position of their sub-programs within CASES21 is variable. Some schools are better able to provide (within CASES21) for the estimated non-payment of subject contributions and other student related payments to give a more accurate financial position.

Source: Victorian Auditor-General's Office.

The 'Manage school asset register' function meets the needs of approximately three-quarters of all schools, regardless of size. During our visits to eight schools, the extent to which the function was considered either user friendly or difficult to use varied considerably. Schools also raised the following points during our visits:

- Most of the eight schools visited engaged external assistance to manage their assets at a cost of approximately $5 000 per annum.
- The calculation of asset depreciation is undertaken centrally by DEECD but not reflected in the school's financial records. This overstates the value of the school's assets on the balance sheet. While schools and the school councils are aware of this, it has the potential to be misleading.

The questionnaire results indicated that, overall, schools were satisfied with the family finance management, creditor and debtor management functions. However, our visits to schools found some limitations with these functions as shown in Figure 4D. These findings are also supported by the additional comments made by schools on the extent to which finance data functionality meets their needs.

Figure 4D
Examples of CASES21 limitations related to creditor
and debtor management

- Matching family payments to student invoices is time consuming as there is no search facility to search by student name and find family details if the last names are different.

- Matching receipts and credit notes to orders and invoices is time consuming and inefficient as there is no search facility for order and invoice numbers.

- The process for applying credits to invoices is logical, but lengthy and time consuming. Users have to go through several screens to perform one transaction. The time this takes is increased by the lack of search facility.

- Report descriptors on credit notes, refunds and sundry debtor invoices relating to family payments are not sufficient to identify the student, program or excursion. This requires significant back tracking and review of other reports to match and identify items.

Source: Victorian Auditor-General's Office.

Use of additional software packages

Excel is the software most widely used by schools to support their financial management. Excel is mainly used for budgeting and tracking purposes and, to a lesser extent, financial reporting, general ledger and debtor/creditor financial tracking. This is to be expected as DEECD has developed Excel based tools to help schools manage their finances. Schools with 400+ students were the highest users of Excel (68 per cent). It is likely this is due to the increased complexity of financial management for larger schools.

In our visits to schools, we found that those schools that are less confident in using CASES21 to manage and report on their financial position use Excel spreadsheets more extensively (in addition to the DEECD developed tools). This leads to increased data entry, opportunity for error, duplicated effort and contributes to a higher workload.

4.2.3   Meeting the reporting requirements of DEECD

The CASES21 finance module has enabled DEECD to streamline and improve school finance data collection and reporting processes. It has also assisted DEECD in meeting its central reporting requirements, in particular:

- the consistency, timeliness and completeness of financial data reported by schools
- the ability to monitor and track the submission of school financial data
- aggregation of monthly finance data to monitor individual school expenditure and revenue against other schools
- assisting with exception reporting and review of balance sheet against DEECD forward estimates
- monitoring of expenditure trends against the number of enrolments and benchmark against School Resource Indicators
- the provision of benchmark data to schools to assist them with their workforce planning and cash management tasks
- the tracking of income receivable and expenditure
- tracking assets (not buildings and facilities)
- improving timeliness and completeness of period end finance processes
- completing a year end (calendar) process which includes entering data relating to bank account interest rates and financial commitment planning.

DEECD has set up an automated message handling system to monitor and track the receipt of data sent automatically by schools. Data collected in these messages is used for central reporting and analysis. It also helps DEECD to identify schools that have not completed a period end process and provide support for those schools. Matching of automated messages against central office reporting requirements has also helped to improve DEECD's compliance processes.

4.2.4 Assistance with financial reporting

We asked schools to rate the performance of CASES21 in helping them to meet various financial reporting requirements.

Overall, the majority of schools (77 per cent) indicated that CASES21 completely or mostly met their needs regarding improving their capacity to produce finance reports and meet finance reporting requirements (Figure 4E).

School size is a determinant of satisfaction in that larger schools were less likely to have their reporting needs met as shown in Figure 4E.

Figure 4E
Finance reporting capability

	All schools overall	1–400 students	400–999 students	1 000+ students
Extent to which suggested reports for school council and finance committees meet school needs *(exceeds/meets)*	78 per cent	87 per cent	62 per cent	45 per cent
Extent to which other CASES21 finance reports meet school needs *(exceeds/meets)*	79 per cent	87 per cent	68 per cent	45 per cent
Overall, the extent to which CASES21 finance has improved your schools' capacity to produce finance reports and meet finance reporting requirements *(completely/mostly)*	77 per cent	89 per cent	53 per cent	15 per cent

Source: Victorian Auditor-General's Office.

Reports for school councils and finance committees

CASES21 generates two reports for school councils and finance committees namely, the operating statement (detailed) and the balance sheet. Additional reports generated by CASES21 for finance committees include:

- cash flow statement
- bank accounts movement (detailed)
- cash receipts
- cash payments
- invoices awaiting payment (detailed)
- annual sub-program budget.

Seventy-eight per cent of schools indicated that the finance reports available from CASES21 met their needs. Figure 4E shows the extent to which this need was met varied with school size: with 87 per cent of schools with fewer than 400 students indicating their needs were met. Larger schools with 400–999 students indicated their needs were met to a lesser extent (62 per cent) and this need decreased further for schools with more than 1 000 students (45 per cent).

Some schools we visited indicated that their school council and finance committee request additional information and reports to better understand the school's financial position. Some reports are generated from CASES21, while others may require compiling data not held in CASES21 using Excel spreadsheets.

Most business managers at the schools we visited provide training and education each year for school council members to help them understand and interpret the finance reports. Some business managers supplement training with examples from DEECD's publication 'Financial Reporting for Schools'.[1]

Other finance reports

Seventy-nine per cent of schools said other finance reports available from CASES21 exceeded or met their needs. Figure 4E shows a consistent pattern for all aspects of financial reporting. As school enrolments increase the extent to which school finance reporting needs are met decreases.

Smaller schools (fewer than 400 students) were more likely to say that reports were complicated and difficult to read. The eight schools we visited indicated that once they identify which reports best suit their needs, they use those reports. Other schools suggested if CASES21 allowed users to define reporting parameters, this would help schools to generate reports to meet their needs. While DEECD has indicated that CASES21 does in fact allow users to define reporting parameters, the lack of school awareness suggests there is a need for further training.

4.2.5 Adequacy of training and support services

DEECD has developed a range of training and support services and resources to help schools use CASES21 finance. These services are regularly reviewed and updated. Electronic and hard copy resources are also available to guide schools in applying accounting practices to manage their accounts and to meet legislative and DEECD's reporting requirements.

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[1] Financial Reporting for Schools, CASES21 Finance, Department of Education, January 2005.

Awareness and utilisation of training and support services

Figure 4F shows that overall at least 80 per cent of schools are aware of and use DEECD's finance training and support services. The level of awareness and utilisation of School Finance Liaison Officer (SFLO) services was not as high compared to other finance support services provided. Awareness and utilisation was slightly higher for schools with 400+ enrolments (81 per cent) compared to schools with fewer than 400 enrolments (77 per cent).

Figure 4F
Awareness and utilisation of DEECD training and support services
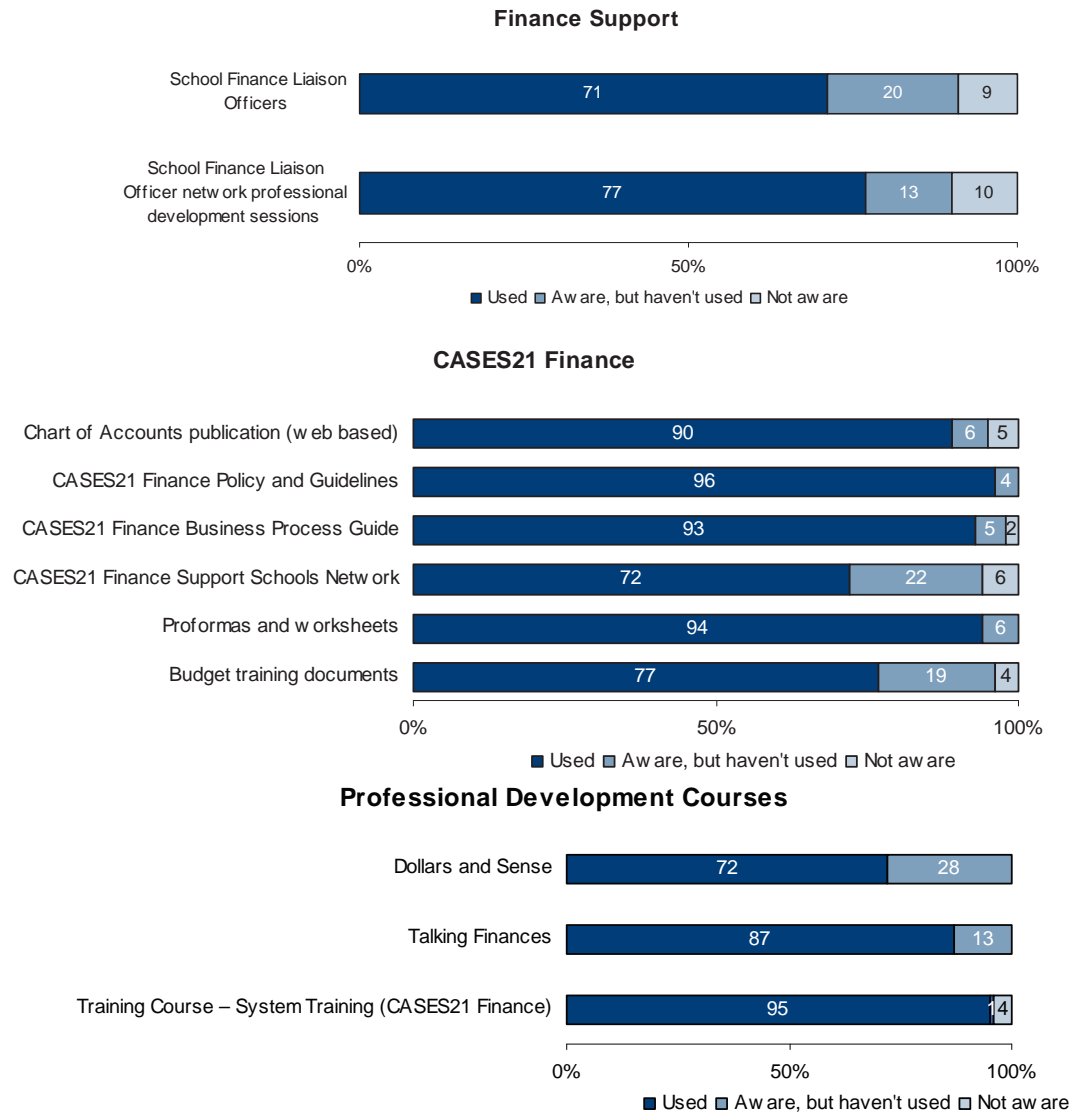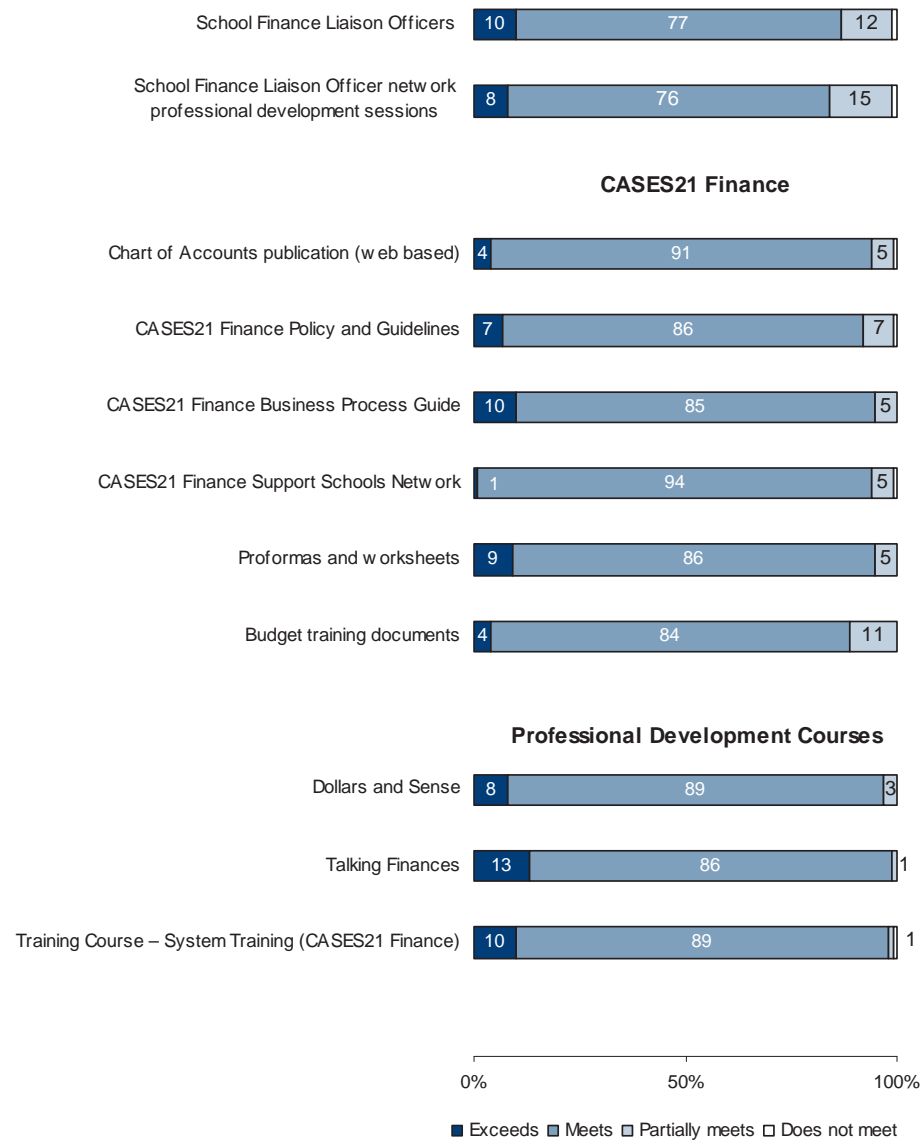
Finance Support

CASES21 Finance

Professional Development Courses

Note: Utilisation levels for some functions may not add to 100 per cent due to rounding.
Source: Victorian Auditor-General's Office

Extent to which training and support services meet school needs

Schools that used DEECD's finance training and support services said that they met their needs (Figure 4G).

Figure 4G
Extent to which training and support services meet school needs

Note: Satisfaction levels for some functions may not add to 100 per cent due to rounding.
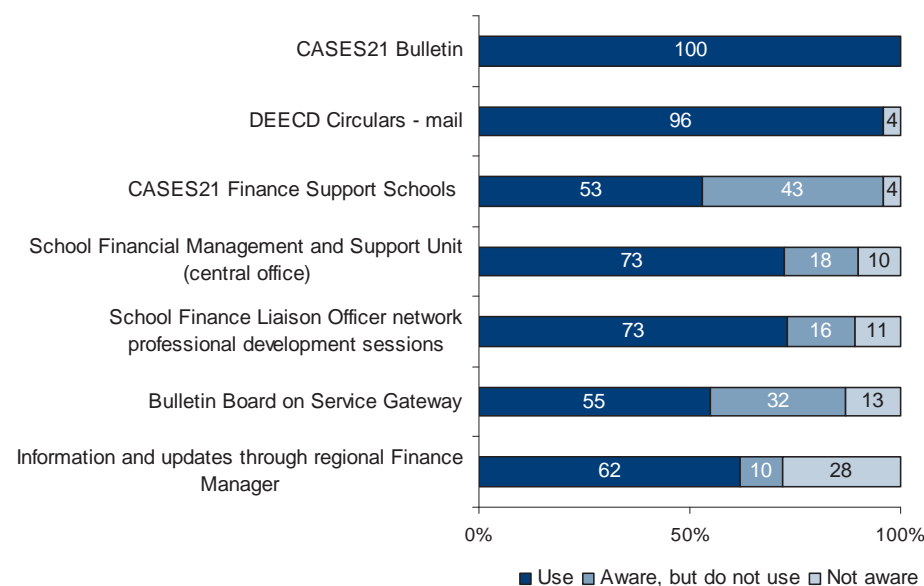*Source:* Victorian Auditor-General's Office.

4.2.6 Communicating information about CASES21 finance

DEECD makes a range of information available to schools to assist them in using CASES21 and to inform schools of system changes. Schools were asked to indicate whether they were aware of, and used, seven sources of information.

Figure 4H shows that at least 70 per cent of schools were aware of all seven sources of CASES21 information, although they may not use all of them. The CASES21 Bulletin and DEECD circular were the most effective ways of communicating changes and information about CASES21. Staff at the eight schools we visited indicated that the CASES21 bulletin was the most useful information source.

Figure 4H
Awareness and utilisation CASES21 finance information

Note: Utilisation levels for some functions may not add to 100 per cent due to rounding.
Source: Victorian Auditor-General's Office.

4.3 Conclusion

As with the administration module, the finance module met the needs of most schools. However, scope exists to improve the module to better meet the needs of schools with more than 400 students and schools with more than 1 000 students. The extent to which the needs of larger schools were met decreased markedly.

While utilisation of the finance module is high, questionnaire responses and our eight school visits identified limitations with several finance functions that are not meeting schools' needs as well as they could. There is merit in DEECD exploring these limitations with schools to determine where system changes are required or where further training may help to improve the efficiency of school finance practices. Potential software enhancements would need to be considered and prioritised in the context of other identified CASES21 enhancements and school need.

DEECD's range of finance training and support services are well received by the majority of schools. Some schools were better able to manage and report their finance data using the DEECD developed tools and with limited use of additional Excel spreadsheets. Other schools may benefit from further training and support to help them refine their practices and reduce their reliance on extensive Excel spreadsheet use.

Recommendations

4.1 DEECD should determine the feasibility of modifying the CASES21 finance module to achieve more efficient use.

4.2 DEECD should, as part of its training analysis, identify and reinforce opportunities for schools with more streamlined financial management practices to share lessons learned with schools that are less well advanced.

5 Governance

At a glance

Background

This part of the report examines the governance arrangements in place to support CASES21. This includes an examination of actions taken by the Department of Education and Early Childhood Development (DEECD) to address governance problems encountered during the initial development and implementation of CASES21.

Problems associated with the initial roll out of the CASES21 finance module required a halt to any further roll out to schools until they were resolved. The Portfolio Board established by DEECD in early 2007 replaced the Steering Group. The Board is responsible for overall governance of CASES21 and the CASES Program.

Key findings
- DEECD has put in place processes to monitor and manage CASES21 software enhancements.
- To date, little progress has been made by DEECD in establishing a formal performance framework for monitoring and reporting on progress against the CASES21 program objectives and the achievement of benefits from software enhancements.
- DEECD does not collect information on school utilisation and satisfaction with CASES21.

Key recommendation
- DEECD should implement a formal performance monitoring and reporting framework for the CASES21 Program to strengthen accountability and oversight. The framework should include the measurement of benefits achieved from CASES21 software enhancements **(Recommendation 5.1)**.

5.1   Introduction

Robust governance arrangements underpin the ability of organisations and individuals to achieve agreed outcomes. An appropriate governance model includes clearly defined and communicated:

- roles, responsibilities and accountabilities, including leadership
- goals and objectives
- decision-making mechanisms
- processes to identify and manage risks
- stakeholder consultation processes
- performance monitoring and reporting arrangements.

Budgeting, and financial planning and control systems, such as quality assurance and fiscal compliance, are also important components of a governance model.

Following implementation of the CASES21 administration and finance modules in government schools, the next phase of the CASES Program provides for a series of targeted system enhancements and several related projects. The governance arrangements established by the Department of Education and Early Childhood Development (DEECD) reflect the next phase of CASES21 and this program's relationship with DEECD's Information Communication and Technology policy platform.

5.2   Oversight of CASES21

5.2.1 Project governance arrangements pre-2007

Reviews initiated by DEECD between 2001 and 2004 to assess the development and implementation of CASES21, identified significant and ongoing areas of high risk. The 2004 review also identified a lack of overall project governance as a risk and the need for the CASES21 Steering Group to take a more pro-active oversight and monitoring role.

Despite DEECD commencing action to improve overall project governance and other aspects of project management, the work was incomplete when the initial roll out of the CASES21 finance module started in late 2004.

In May 2005, roll out of CASES21 to schools was halted until problems with the finance module were resolved. The main problems identified by DEECD were:

- insufficiently established governance and project management mechanisms
- inadequate software testing resulting in inaccurate finance reports or reports not available
- inadequate testing of the system in a multi campus environment to make sure the needs of these schools were addressed

- insufficient training and support including helping schools adjust to changes in DEECD's accounting practices, system training for business managers, principals and office staff, on-site school support and inadequate system and accounting practice documentation
- support and helpdesk unable to cope with heavy demand from schools caused by the implementation problems.

In May 2005, a project manager was engaged by DEECD with responsibility for addressing the problems and completing the roll out of the finance module. Further roll out was delayed until August 2005 after all issues had been addressed. A range of processes were put in place to improve project management, and to address report testing, communication, stakeholder management, and training and support. Implementation of CASES21 finance was completed in October 2006.

5.2.2 Project governance arrangements after 2007

DEECD established the Portfolio Board in early 2007 to replace the Steering Group. The Portfolio Board is responsible for overall governance of CASES21 and the CASES Program.

The role of the Portfolio Board is to manage CASES21 and related operations and projects across DEECD, and to provide a coordinated approach at a school level. It considers and approves project budgets and makes project decisions in the context of DEECD's broader Information and Communication Technology environment and IT strategies such as the Ultranet.[1] Examples of projects include the Central Hosting Environment for Schools System (CHESS) which will provide central delivery of CASES21 for up to 400 small schools to shift the burden of maintaining CASES21 away from schools. Another project is the development of a CASES Data Mirror repository which will provide student data to the Ultranet and other corporate systems.

The Portfolio Board's terms of reference detail the board, executive, senior user and senior supplier responsibilities. Key responsibilities include:
- ensuring wise investment in CASES21, including the provision of appropriate budget and project resources
- setting major program deliverables
- reviewing major issues and agreeing action plans for their resolution
- monitoring the risk profile and risk management strategies
- reviewing and approving major requests for change to the program including scope, software enhancements and budget.

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[1] The Ultranet is a proposed student centred electronic learning environment that will support high quality learning and teaching, connect students, teachers and parents and enable efficient knowledge transfer. The system is currently under development.

In February 2007 the Portfolio Board endorsed the governance structure which extends beyond DEECD's central and regional offices to key users at a school level represented by the School Advisory Group (SAG). The aim of the SAG is to give a 'voice' to schools on the future development of CASES21. The group provides DEECD with advice on school practices and requirements; recommends priorities for system enhancements and provides advice related to support and training.

Our eight school visits identified that there was scope for DEECD to explore opportunities to improve the usefulness of CASES21 for schools with 400 or more students. The audit also identified scope for improving DEECD's training and support services. These issues could be addressed through the SAG.

5.2.3 Monitoring and managing software enhancements

DEECD has established a range of processes for monitoring and managing CASES21 software enhancements.

DEECD has mechanisms in place that govern changes to all software within its ICT environment. These mechanisms aim to improve the management, coordination and impact of software changes on IT services it provides to DEECD staff and schools.

Progress, achievement and completion of tasks against budget and project plans are reported monthly to the Portfolio Board for each CASES related project and software enhancements. Identification of risks and their treatment are described in the reports made to the Portfolio Board. Issues papers are also presented to the Portfolio Board for discussion. The board reports any major risks to DEECD's Knowledge Management and Departmental Management Committee.

Changes to CASES21 are made in accordance with DEECD's ICT Change Management Policy and ICT Release Management Policy. These policies are supported by processes and procedures aimed at making sure that all technical and non-technical aspects of each CASES21 release are addressed.

Proposed changes to CASES21 and other DEECD software are subject to a four phase internal control process; initiation, analysis, development and testing. This process tests the validity and need for the change. Proposed changes are then submitted to the Change Advisory Board for final endorsement prior to release.

To improve the management and release of changes to CASES21, since 2007 DEECD has established a systematic approach to the release of version upgrades. Releases occur twice yearly and all aspects of the version implementation are documented in a release plan. Release notes and information are provided to users. DEECD continues to refine the coordination of its training and support resources with version releases to make sure schools have the information they need that explain system changes.

DEECD has recently initiated processes to review the lessons learned from the CASES21 version releases. The software project team identify 'what worked well' and 'what could be done better' under each of the release stages; planning, business analysis, software analysis, quality assurance, production support, technical support, documentation and, service delivery and support. Audit considers this is a valuable process and demonstrates a pro-active approach to continuous improvement by DEECD.

5.2.4 Monitoring and reporting performance

Version enhancements

For each new version release (enhancement) of CASES21, DEECD identifies the benefits expected to be achieved for its central office and for schools. For example, benefits expected to be realised in the CASES21 upgrade at the end of 2007 included:

- improved administration and financial reporting for schools
- improved functionality for school users (reduce workload and remove the need for some 'workarounds')
- improved performance of CASES21.

The CASES Roadmap 2006–2011 identifies a range of performance measures (e.g., user satisfaction) being considered by DEECD to monitor implementation progress and results of each software enhancement.

DEECD has not yet determined a timeframe for adopting a suite of performance measures.

Program objectives

The CASES Roadmap 2006--2011 details the program objectives for CASES21. These include supporting efficient and effective school administration and providing a return on investment. To date, little progress has been made by DEECD in establishing a formalised performance framework for monitoring and reporting on progress against the program objectives.

Similarly, information is not collected on the extent to which the individual CASES21 administration and finance functions (mandatory and non-mandatory) are used by schools. Nor is information collected on the extent to which CASES21 meets school needs.

5.3   Conclusion

The importance of robust, clearly defined and communicated governance arrangements cannot be overstated. Significant effort and resources were required by DEECD to rectify the problems it encountered in implementing CASES21. In part, these problems were due to inadequate governance arrangements.

In addition to addressing software issues, DEECD has put considerable energy into restoring stakeholder confidence in terms of both the benefits of CASES21 and in DEECD's capacity to manage the implementation. It is important that the lessons learnt are used to continuously improve and inform implementation of future IT projects.

With CASES21 now fully implemented across schools, the focus has shifted to software upgrades. We support DEECD's actions to continuously improve its management, control and implementation of version upgrades, particularly as it indicates DEECD has learnt from its past experiences in implementing CASES21. DEECD should continue to use lessons learnt to improve and inform implementation of future information technology projects.

Given that CASES21 is used by all government schools and, in broad terms, is expected to support improved school administration, it should now be a high priority to put in place a formal performance monitoring and reporting framework. In the absence of a systematic framework, this audit has reverted to primary sources to establish the extent to which government schools were utilising CASES21 and the extent to which it was meeting school needs.

Recommendation

5.1   DEECD should implement a formal performance monitoring and reporting framework for the CASES21 Program to strengthen accountability and oversight. The framework should include the measurement of benefits achieved from CASES21 software enhancements.

Auditor-General's reports

Reports tabled during 2008-09

Report title	Date tabled
Managing Complaints Against Ticket Inspectors (2008-09:1)	July 2008
Records Management Checklist: A Tool to Improve Records Management (2008-09:2)	July 2008
Investing Smarter in Public Sector ICT: Turning Principles into Practice (2008-09:3)	July 2008
Private Practice Arrangements in Health Services (2008-09:4)	October 2008
Working with Children Check (2008-09:5)	October 2008

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