

**An inquiry into improving educational outcomes for Western Australians of all ages:  
Current and future resourcing of new methods and activities to improve educational  
outcomes such as e-learning**

**A submission by the Community and Public Sector Union/Civil Service Association  
(CPSU/CSA)**



**Introduction**

The CPSU/CSA represents support staff (Business Managers, Registrars, School Officers, Library Officers, Laboratory Technicians, and ICT Officers) in WA's public schools. The issues raised in the first Term of Reference of the Inquiry directly relate to our members, as much of the work associated with establishing and maintaining the Information and Communication Technology (ICT) infrastructure required to deliver eLearning falls to these workers. The current level of resourcing to support eLearning in schools is inadequate; and with eLearning only set to become more prevalent in schools, this resourcing issue urgently needs to be addressed in order to deliver educational outcomes to the students of WA public schools.

**Current ICT resourcing**

In their submission to this Inquiry, the Department of Education has noted the importance of developing infrastructure in order to deliver eLearning to school communities, stating that:

Whilst many ICT services can be provided and maintained centrally, many school or location-specific technologies and services also require a level of onsite support.<sup>1</sup>

Although the Department acknowledges here the importance of ICT Officers in delivering eLearning to schools, this is not reflected in the resourcing. ICT Officers are not allocated to schools from the Department of Education as part of the staffing formula; instead, schools must fund their own ICT Officer positions from their budgets, or trade-in part of their teacher allocation to provide for ICT Officers. This means that the level of ICT support staff can vary across schools; typically primary schools have no ICT Officers, metropolitan high schools have varying levels of ICT Officers employed, and regional and remote schools can have no ICT Officers.

In 2011 the CPSU/CSA and the Department of Education jointly surveyed a sample of schools about the ICT support workload issues at their school. The 54 schools surveyed represented various sizes, geographical locations, and ICT systems<sup>2</sup>. Of the 54 schools surveyed, 21 schools have dedicated ICT Officers (2 of these Primary Schools); of these 21 schools, however, 11 still require additional ICT support from other staff.

At schools where there are no ICT Officers (or, too few ICT Officers) the Department of Education expects other school support staff, teachers, and deputies to phone the Customer Service Centre (CSC) helpdesk (run by private company Kinetic IT, located in Department of Education central office)

<sup>1</sup> Written submission by Ms Sharyn O'Neill, Director General, Department of Education, 11 January 2012, <http://www.parliament.wa.gov.au/Parliament/commit.nsf/a7b778ee55fef62a4825772700174a2c/5155f54dd7ecbbc9482579820028bd32?OpenDocument> p. 4.

<sup>2</sup> Of the 54 schools surveyed; 29 are on EdNet, and 25 are LWICT (Learning with Information Communication Technology).

with issues. Although our members report that the CSC is satisfactory at answering queries and assisting members, they are limited in the assistance they can provide remotely. They can assist with a number of software issues, but can only talk staff through issues relating to hardware. Our members report that it is often very time consuming having to be on the phone to the CSC to resolve issues, on top of their other work commitments. The CSC talk school support staff through how to resolve a particular hardware problem, however sometimes the problems are too complex to be successfully resolved over the phone. It is important to note here that schools which do not have the SOE4 (Standard Operating System) cannot be accessed remotely by the CSC. The Department of Education is currently implementing SOE4, which in theory will ensure that all schools are operating under a common system and can be provided with standard support. The roll-out has been extremely slow, however: while high schools have been prioritised to be converted to SOE4, there are also 395 primary schools yet to be moved on to SOE4. The schools that are not on SOE4 cannot be supported remotely by the CSC; this includes the curriculum server (see pages 4 & 5 for more information).

Private companies such as TFX, Solutions IT, and Magill's are contracted to provide 'on the ground' ICT support to schools when it is required, which the schools must pay for out of their own budgets. This arrangement is inferior to having an ICT Officer directly employed by the school, as it is often the case that if there are ICT issues then they have to wait days or weeks to be addressed by these support companies. The survey results showed that it was not uncommon for schools to wait 2 weeks for a problem to be resolved. The wait-times are exacerbated by distance; one remote school reported that it could take up to 25 days for a company to come out to the school and resolve an issue. These long delays are inconvenient, and lead to inefficiencies in the school and teachers not being able to utilise ICT in their classrooms. These companies have limited knowledge of Department of Education policies and processes, and know little about the processes and preferences of individual schools. Many schools also noted in the ICT survey that contracting private companies to carry out ICT support work was expensive. One school commented in the survey that it was even more expensive for regional schools to engage these companies, since the schools were also billed for the travel time of the contractors. Funds diverted to cover ICT support mean a reduction in funding for other educational/curriculum support services.

The surveyed schools were asked what additional ICT is required; most noted that they require an ICT Officer employed directly by the school, or additional ICT Officers employed directly by the school. Interestingly, many schools also noted that they require support for other technologies, such as interactive whiteboards, laptops for students, printers, projectors, faxes, iPads, etc; these technologies are not supported by the CSC or independent contractors. This indicates the need for more support from the Department of Education for ICT hardware, in particular.

This under-resourcing of ICT needs to be addressed immediately, as ICT is essential to delivering eLearning in WA schools. Having an appropriate number of ICT Officers allocated to each school would overcome all of these issues.

### **Impacts of under-resourcing**

#### **Workload**

In schools where there is limited or no ICT support staff, the workload associated with the establishment and maintenance of ICT in schools falls to other staff. The CPSU/CSA's survey showed that the roles of ICT support were most likely to fall to Business Managers/Registrars and teachers (see Table 1). Where Principals and Deputy Principals were involved in ICT, they were largely

involved in the purchasing, unpacking and installing of hardware; whereas support staff and teachers were more likely to provide the more ongoing 'on the ground' ICT support.

**Table 1: The schools that were surveyed identified the staff member/s responsible for ICT support at their school.<sup>3</sup>**

<b>Staff member</b>	<b>No. of schools who identified ICT support provided by this staff member</b>
Principal	3
Deputy Principal	9
Teacher	28
Business Manager/Registrar	27
School Officer	10
Library Officer	7
ICT Officer	21
Private contractor	17

The workload associated with the provision of ICT is absorbed by Principals, Deputies, teachers and school support staff (excluding ICT officers) in addition to the other tasks associated with their jobs. The workload associated with the provision of ICT in schools is part of a broader issue of excessive workload for school support staff, in particular. This excessive workload has been an issue for many years; a succession of reports and reviews (eg. Department of Education and Training School Support Staff Workload Review 1997; Mercer Report 2002; Workload Review School Support Staff Report 2007; Twomey Taskforce 2008) have highlighted that school support staff are increasingly unable to cope with the constant pressure from their day-to-day workloads.

With inadequate numbers of school support staff employed within schools, the burden of completing many essential duties required to keep the school running requires many unpaid hours of school support staff work. ICT support is one of the many functions that fall to school support staff in the absence of a dedicated ICT Officer, in addition to the already excessive workload of school support staff. The ICT support undertaken by school support staff also encompasses other technologies mentioned above, such as interactive whiteboards, as well as regularly administering and updating schools websites, which are used for marketing and providing news to the school community. The schools without a dedicated ICT Officer reported in the survey that they generally spend some time every day dealing with ICT issues. Where the duties associated with ICT support are absorbed by teaching staff, this negatively impacts on the time they have available to deliver education to students. As the use of ICT in schools increases, the burden of supporting this

<sup>3</sup> NB: The total adds up to more than the total number of schools surveyed, as some schools indicated that more than one staff member was responsible for the provision of ICT support at their school.

technology will increasingly fall to school support staff and teaching staff, unless dedicated ICT Officers are appointed to each school.

### **Libraries**

It should be noted that although some schools are able to get remote support from the CSC, the CSC does not support library servers. This is due to the fact that each school sources its own software product for use in the library. This situation means that each school must find their own solutions for supporting the library, generally utilising support from the provider company, and often this work can fall to the level 1 or level 2 Library Officer. Library Officers also often undertake troubleshooting for computers in the library used by students. This troubleshooting occurs in situations where a class of students may be utilising the library for research and learning, and so immediate support is required to resolve the issue quickly (and therefore the use of an IT service provider company in this scenario would not be efficient or effective). In these situations an ICT Officer located at the school would be able to provide immediate support, and the ICT Officer would most likely be able to resolve the issue more efficiently than a Library Officer who is not trained in ICT support. Having an ICT Officer based at the school would lead to issues being resolved more efficiently and free up the Library Officer to carry out their core duties.

### **Attraction and retention of existing ICT Officers**

As ICT Officer positions are not funded centrally by the Department of Education, and are instead employed on an ad hoc basis by schools from within their budgets, they are generally fixed-term contract positions. Pay levels are low compared with the private sector, as well as inconsistent between schools, ranging from level 1 to level 5 positions for similar duties. Additionally, the work is insecure as ICT Officers are generally not employed on a permanent basis. Exceptions to this are a few instances of ICT Officers being appointed permanently in Independent Public Schools; these schools have more autonomy and control over their budgets, and so have the capacity to appoint more support staff on an ongoing basis. Another exception is staff that have permanency in a previous role, but have been transferred across to IT support as they have the highest level of IT skills of available staff within the school. If an allocation of ICT Officers was provided to each school within their budgets, then they would have the capacity to permanently appoint ICT Officers, which would resolve some of these issues.

### **Barriers to teachers utilising eLearning in their classrooms**

The Department of Education's submission to this inquiry posits that in situations where teachers do not incorporate eLearning into their classrooms it is because the teacher lacks the confidence or the knowledge to do so. There is anecdotal evidence, however, that where teachers do not use eLearning it is not due to a lack of motivation, confidence or knowledge – it is because if the technology fails, there is no ICT Officer at the school who can provide that immediate support. For teachers to use eLearning in their classrooms (and structure their lessons around this technology), they need to have confidence that they can deliver their teaching program without incident, or be able to rely on receiving immediate support if it is required. As noted above, the curriculum server is not supported by the CSC for non-SOE4 schools. If the curriculum server crashes then teachers cannot access Integris (student data management system) – which means that teachers will not be able to record lesson attendance or access behaviour management information. If there were adequate numbers of ICT Officers at each school, they could provide support for the curriculum server to ensure teachers are not without these vital tools. If the Department of Education wishes to

emphasise eLearning as “the way forward”<sup>4</sup> for WA schools, then it needs to provide each school with an appropriate allocation of ICT Officers to provide immediate hands-on support for teachers using this technology in their classrooms.

### **Remote Schools and Distance Education**

The School of Isolated and Distance Education (SIDE) also encounters issues with lack of ICT support in schools. SIDE delivers curriculum units to students in rural and remote areas, and to schools all around the state where there are insufficient student numbers enrolled in a particular unit for the school to justify running it. SIDE relies on ICT to deliver these units, and in schools where there are no ICT Officers employed, or there is poor infrastructure, there are difficulties in delivering the curriculum to students. Where schools do not have any staff with enough ICT expertise to assist - e.g. to download the latest version of a web browser required to run a particular program for the distance education students - this lack of ICT support on-the-ground has a serious impact on delivery of learning outcomes.

### **Lack of planning around ICT and outdated technology**

The Department of Education’s planning around ICT is narrowly scoped around central office and the system as a whole, rather than on individual schools. For instance, the Department of Education appears to have no structured plan around the roll-out and maintenance of ICT in individual schools. The Department has not taken into account planning around maintenance of the computers being rolled-out under Federal Government funding. This large scale roll-out of computers has workload implications for existing ICT Officers in schools, and in schools without ICT Officers, presumably the maintenance of new computers is added to the existing workload of school support staff, teachers and school administrators. Some schools have noted that a lack of planning and leadership on ICT best-practice can lead to schools wasting money, and can lead to new school builds not being future-proof against growing technology needs.

As noted above, the roll-out of SOE4 to schools is an attempt to streamline the technical support in the school system, however it fails because not all schools have moved on to SOE4, and therefore not all schools are provided with remote technical support by the CSC. Although many high schools are running on SOE4, a large number of primary schools are yet to be moved onto the system. The process for conversion to SOE4 requires systems to be taken offline for up to two weeks, which has serious ramifications for school operations during this time. With additional funding it would take up to three years to roll-out SOE4 to these schools, and with no additional funding it is questionable that the full roll-out will ever be achieved. SOE5 is in the process of being developed, so even if SOE4 is rolled-out over the next three years to all schools, it is likely that by this time schools will need to upgrade to SOE5 to be up-to-date with the latest technology.

Schools that are running on LWICT (Learning With Information Communication Technology) are restricted to out-dated Department of Education software such as Windows XP and Adobe Flashplayer 10.3. Most of the newer technology rolled out in schools will only run on newer systems – for instance, interactive whiteboards are programmed to run on Windows 7, and some educational software requires Adobe Flashplayer 11 to run. These schools report experiencing many difficulties with attempting to run newer technologies alongside the outdated Department of Education systems.

---

<sup>4</sup> P. 2 dept submission

## **Training and Professional Development**

A certification program, provided via a Registered Training Organisation, should be implemented to ensure staff employed as IT Officers within schools are fully trained to deal with software packages in use by WA schools.

Relevant Professional Development courses will need to be developed and provided as systems are upgraded.

## **Conclusion**

### **Under-resourcing and Workload**

In order for the Department of Education to succeed in delivering eLearning in WA schools, the issue of ICT support urgently needs to be addressed. The 2011 survey of a sample of WA schools overwhelmingly shows that schools do not have appropriate ICT support to maintain ICT in schools. This has a range of impacts; in schools where there are no ICT Officers or too few ICT Officers, workload has a serious impact on staff. The workload associated with ICT provision and maintenance is pushed on to teachers, school administrators, and, in particular, school support staff. There are significant delays experienced as a result of this, which undermines teachers' confidence in using the technology.

### **Insecure Employment**

In schools that do have ICT Officers, the lack of investment by the Department of Education in ICT means that, with a few exceptions, the large majority of ICT Officers are employed on insecure fixed-term contracts as schools are not able to guarantee them ongoing positions. This often leads to ICT staff securing work elsewhere, with a resulting loss of institutional knowledge as new staff familiarise themselves with the school systems.

### **eLearning**

The lack of ICT support in schools also has an impact on students; teachers are less likely to be willing to use ICT in their classrooms if they cannot be guaranteed an immediate response from an ICT Officer based at the school if an issue arises. Distance education students rely heavily on ICT to deliver the curriculum, and there are many examples of where the technology has failed and there has not been on-the-ground ICT support at the school to assist them.

## **Recommendations**

- 1. The Department of Education must provide for an allocation of ICT Officers per school in the staffing formula, taking into account the number of computers at each school.**

The survey results show that schools require on-the-ground ICT Officers. The requirement for each school will be different, based on factors such as both student and staff numbers. It is necessary that any formula factors in the number of computers at each school to establish the appropriate FTE to support ICT, as well as factors such as other technology in use, eg. interactive whiteboards. This formula should also include the level of ICT Officers required at each school (eg. larger schools with a high computer : student ratios are likely to require a Network Administrator or similar ICT management

position, as well as level 2 Technician positions; whereas a smaller primary school may only require a Technician).

**2. Any planned future roll-outs of new ICT must include provision for additional ICT support.**

With technology evolving at a rapid pace, there will continue to be roll-outs of new technologies across WA schools. Unless there is appropriate planning around these roll-outs which acknowledges the need for on-the-ground support for these technologies – not only to setup the ICT but to maintain it - then the existing problem of lack of ICT support will be further exacerbated.

**3. The establishment of a Department of Education-specific training course through a Registered Training Organisation to train ICT Officers in Department of Education procedures.**

This course would provide Officers with a qualification, and ensure that they are trained in Department of Education systems, processes and procedures. This would form part of a broader structured plan of ICT and supporting eLearning in WA schools.

**4. The Department of Education provide additional resources to fast-track the roll-out of SOE4 to all schools.**

There are 395 schools in WA that are not on SOE4; these schools are not provided with support from the CSC. This situation needs to be rectified immediately in order to ensure that these schools can be provided with central ICT support from the CSC. As this submission has argued, however, the CSC is limited in the support it can provide – to ensure that ICT is fully and properly supported, it is essential schools are provided with ICT Officers located onsite.

It is vital that WA schools focus on eLearning to delivering the curriculum in new ways and equip students with the knowledge and skills to excel in our technology-driven society. The Department of Education needs to ensure that there is adequate on-the-ground support to deliver eLearning. The implementation of the above recommendations would go some way towards rectifying the urgent issue of the lack of ICT support in WA schools.