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“Technology is part of my life. I want to use it to learn at school and at home.”
What is digital learning?

Digital learning is learning supported by the use of digital technology. Digital technology includes classroom display technology, digital learning resources, networked technology such as online learning environments and devices such as data loggers and handheld, desktop and personal computers, supported by broadband connections to the internet. Web 2.0 tools and social networking tools are also included. These tools and resources support teaching and learning by enabling users to communicate, create, collaborate, disseminate, store and manage information in ways not previously possible.

Technological change in education means we are facing the largest transformation in how our students receive, interact with and respond to the learning experience that the teaching profession has ever seen.

We all know that globalisation and technological change are re-shaping the world as we see it today. But the impact of this is not just restricted to the jobs our students will eventually undertake, or the learning pathways to prepare them. Indeed, we see fundamental change to the learning experience inside and outside the four walls of the school.

The world of digital learning beckons, with opportunities for teachers and students alike to benefit from the opportunities and capabilities a digital world offers. Embracing digital learning is not a choice for students or teachers to consider and adopt – it is the modus operandi; the way we do business.

‘I think I learn better using technology than just sitting in the classroom and being told what to do because it gives me more flexibility and responsibility. I’m in control of my own learning which enables me to learn how I best learn and get the most out of my learning experience.’

Victorian government school student

This changing digital landscape needs to build on the increasing and wide-ranging experiences in the use of digital technology that children now have at home (Australian Communications and Media Authority, 2010). Schools need to support students to develop the skills needed for critical evaluation, online collaboration and communication and behaviours which support the safe, responsible and ethical use of digital technology – essential to participating in life and work in the 21st century.
International research shows that integrating digital technology into the learning environment can:

- improve students’ confidence levels, attitudes towards their own learning, behaviour and attendance
- promote improved opportunities for students to learn through collaboration and conversation
- improve connections with the real world and provide access to global communities with expertise and perspectives that can enrich learning.

(Becta, 2007)

Academic and practitioner-led research coordinated and supported by the Department of Education and Early Childhood Development (DEECD) has also provided evidence of how Victorian teachers use technology for teaching and learning and the significant benefits this has for the school, classroom and the individual student.

The Melbourne Declaration on Educational Goals for Young Australians supports the focus on digital learning and identifies the creative and productive use of technology as an indicator of a successful learner (Ministerial Council on Education, Employment, Training and Youth Affairs, 2008). Information and communication technology (ICT) skills and understandings have also been identified as one of the general capabilities to be included in the national curriculum (Australian Curriculum, Reporting and Assessment Authority, 2009), an initiative Victoria strongly endorses.

However, it is not just students that need support in this age of digital learning. Some teachers are comfortable in the digital learning space while others are still working to integrate the use of technology into their daily language and behaviours. In an environment where the digital space moves rapidly, teachers are also learners.

Student voice:

In October 2009, the Department of Education and Early Childhood Development convened the Leading Responsibly in a Digital World Student Summit which was hosted by 230 Year 10 students. The Summit was officially opened by the Minister for Education Minister Pike and provided an opportunity for two-way discussion between adults and young people about the issues associated with digital technology. The Summit was drawn to a close by the Premier of Victoria. A representative group of students presented the Premier with a message that summarised the day’s thoughts and declared each school’s personal commitment to take action and lead responsibly in a digital world. The Summit identified that students see the way to combat cyberbullying is through proactive cultural change and that they need support to take action.

“This is our domain and we believe that we need to make the internet a safe place. We have the skills and the ability to do so. But we cannot do this alone. And so we ask that our parents and teachers give us their trust, that we will be responsible online.”
This statement describes our vision and strategies for digital learning in Victorian government schools, current initiatives and next steps to help schools and teachers support this vision. It is an important step in addressing our Blueprint for Education and Early Childhood Development commitment to unlock the full potential of digital technology in our schools.

This document is intended to be a sound basis to inform future investment and focus. Now is the time to further transform the entire teaching experience for every Victorian teacher and every Victorian child through the opportunities and capabilities digital learning offers – allowing teachers and students alike to shine.

**Technology for assisted learning**

Echuca Special Development School has implemented the use of individualised podcasts on MP4 players to help improve students’ concentration and focus and help them to cope with unexpected events. Teachers worked with students to create specific music selections on their MP4s to lower anxiety and improve engagement. For some students teachers combined music selections with voice recordings to reinforce behavioural rules, such as how to act in the playground, as well as including comments to improve self esteem. Each podcast created was designed to meet the individual needs of the student to help them to interact well with others and engage in classroom activities.

Teachers also created audio and visual ‘social stories’ to be played on students’ MP4s to prepare them for changes in routine. The ability for the students to carry these stories with them, watch and listen to them prior to an event and whenever they felt they needed it greatly reduced their anxiety and helped them cope with change.

The resultant changes in behaviour were clearly identifiable by both teaching staff and the students themselves. In all cases the use of the podcasts improved student focus and concentration helping them to meet their goals more quickly and improve their learning.
2. Our vision and strategies

Our vision

All teachers and students have access to contemporary technology and world-class digital content with which to create, communicate and collaborate locally and globally. Learning is engaging, personalised and authentic to enable students to become confident, creative, active and informed citizens of the 21st century.

Our strategies

We have outlined three key interrelated strategies to achieve the vision we have set for ourselves:

- Anywhere, anytime access: all students and teachers have appropriate and equitable opportunities to use digital devices and systems, including access to a range of contemporary digital devices and sophisticated online systems that support learning, teaching and knowledge sharing.

- Advancing teaching practice: all teachers and school leaders build capabilities to use digital technology to improve student learning.

- Access to high quality resources, tools and data: all teachers and students have access to quality assured digital resources, tools, and rich data sources.

These three key strategies are interdependent – they must all work together in order to achieve the vision.

We are fortunate to have access to world class devices, a system such as the UltraNet and high quality digital resources such as FUSE (Find, Use, Share quality Education) – but to maximise this we need teachers who have the capability and skills to use such devices to improve learning outcomes. Victoria has leading edge tools and access to a wealth of data – but such resources must be accompanied by clear and consistent teaching practice. And finally, we need to enable and empower our dedicated and committed teachers to grasp the next step in world class teaching practice, to equip them with the devices and systems to optimise both teachers’ and students’ learning outcomes.

We are proud of how much we have achieved already. But we also know we have more to do to ensure that we can truly meet and exceed the expectations our parents, students, teachers and the broader Victorian community have of 21st century learning.
All teachers and students have access to contemporary technology and world-class digital content with which to create, communicate and collaborate locally and globally. Learning is engaging, personalised and authentic to enable students to become confident, creative, active and informed citizens of the 21st century.
The Victorian Government continues to invest in digital learning in our schools. This includes investment in technical infrastructure, online resources and strengthening capability within the teaching workforce.

DEECD’s aspiration is to continue Victoria’s proud history of innovation and commitment to best practice. We support the integration of digital technology in schools through research, the development of high quality digital learning resources, investment in new learning spaces, delivery of cost efficiencies and unique, leading edge partnerships.

We have harnessed the expertise and resources of private industry through a series of mutually beneficial partnerships. These partnerships are enabling us to consider new ways of working with digital technology and providing us with examples of best and next practice that can be used to influence Victorian government schools.

DEECD is supportive of emerging technology trials and innovation projects, such as those that incorporate digital technology and new learning spaces, and those that provide increased engagement between teachers, students and parents. And most importantly, we are committed to professional development for our teachers so they are equipped with the skills and capabilities they need.

It is an exciting time to be a teacher in Victoria. We have built a strong base of technology that is secure and capable so that teachers are free to innovate – to increase their proficiency and expertise, to develop pedagogies which leverage off the opportunities digital technology offer, and to enable students to take a more active role in how, where and when they learn.
4. Strategy 1: Anywhere, anytime access

The Ultranet

A key foundation plank in our ‘anywhere, anytime access’ strategy is the introduction of the Ultranet, a digital learning platform introduced into every Victorian government school during 2010. Research by DEECD highlights the benefits of digital learning platforms to include students, teachers, parents and the system, inter-connecting communities to facilitate the sharing of skills, knowledge and resources (Department of Education and Early Childhood Development, 2010).

The Ultranet creates a landscape in which teachers and students take on the role of co-learners and facilitators. Students are able to make choices about how they learn, and enabled by digital technology, learning is interactive and continues beyond the school day. The Ultranet also gives opportunities for students to create, communicate and collaborate in secure learning spaces.

“Our teachers love the idea that they can develop all of their work, either individually or collaboratively, in one place. Not only that, but in a way that students and parents can access. Having samples of student work and results available for parents, will engage more families with their child’s school.”

Michael Phillips, Principal Ringwood Secondary College

The Ultranet focuses on good practice and innovative use of technology to:

- allow teachers to access and capture rich data about individual students to inform their teaching
- enable personalised learning
- enable knowledge sharing, creation and collaboration across the government school system
- allow students to develop knowledge and skills for the digital age
- deliver efficiencies for teachers in their work
- provide infrastructure to support all students and teachers to exploit potential of ICT
- support parents as partners in learning.
Online safety

While the Ultranet provides secure online learning spaces for students, anytime, anywhere access increases the need for all students to develop responsible behaviours that will help keep them safe when using other online tools and devices. DEECD’s Learning On Line website (www.education.vic.gov.au/cybersafety) provides policy guidelines and advice for school leaders to create and sustain a culture which promotes the safe and responsible use of digital technology. Learning and teaching resources are also available.

Learning spaces

Innovative Learning Environments (ILE), their external and internal design, ICT infrastructure, resourcing, organisation, curriculum and pedagogy are high on the education agenda in many parts of the world. Victoria is taking a lead role in raising awareness and developing an evidence-base of the relationship between educational and architectural design features and principles when planning new learning environments. The design of spaces and facilities enables contemporary teaching and learning practices including strong and practical teamwork and the creative use and application of ICT.

The Victorian Government’s Schools Plan and the Commonwealth Government’s Building the Education Revolution (BER) are providing infrastructure funding for all Victorian schools to create the physical learning spaces to meet future needs of students and teachers. New learning spaces will be supported by infrastructure, hardware and resources supplied through the Commonwealth Government’s Digital Education Revolution.

A Learning Street

The Lakes South Morang P-9 School is only three years old and it’s already making its mark in the online learning environment with a ‘learning street’ being a central feature. The learning street allows students to use computers, cameras, mobile phones and other handheld devices throughout the school day to undertake a range of activities and tasks.

Furniture is strategically placed around spaces on the learning street so students can work individually in quiet rooms or collaboratively in groups of different sizes. Students move freely around, accessing these resources as they need them and finding appropriate learning spaces for the task they are engaged in.

Outdoor learning spaces are designed to build curiosity and to enable learning to take place anywhere in the school. The creek bed shown in the image (bottom left) provides opportunities for a variety of authentic learning experiences. Students are finding that the learning street is a powerful complement to their classroom.
Access to digital devices

Students and teachers have unprecedented access to digital devices through:

- an ongoing grants program for the Student Resource Package and an additional $28 million over four years as part of the 2006 Victorian Schools Plan

- 10,000 netbook devices as part of the $6.2 million Netbook Trial to provide improved access to computers to primary school students in regional and low socio-economic areas. This has made a significant contribution to the state wide average computer to student ratio in Victorian government schools to one computer for every 2.68 students in 2010.

- the National Secondary Schools Computer Fund (NSSCF), enabling students in Years 9–12 to have personal access to a computer by the end of 2011. A range of resources to support planning and implementation, ideas for classroom activities, advice for parents and sample case studies, have been developed by the DEECD to support NSSCF schools and other schools who are implementing a 1-to-1 program.

- the Notebooks for Teachers and Principals Program, in place for over ten years. Over $18 million each year goes to providing 41,000 notebooks to Victorian government schools to support and enhance the teaching practice of participating teachers and principals.

Administrative systems and equipment

Reliable and secure school administration systems are essential to the provision of an effective online learning environment and the Victorian Government regularly purchases and deploys equipment for all schools on the school CASES network.

- In 2008, the $15 million Technology Refresh Project provisioned 6,000 workstations, 1,700 servers and printers, and enhanced software to maintain a contemporary CASES environment in schools.

Technical support for schools

- Approximately $40 million a year assists schools to meet the costs of technical support

- Approximately $60 million to support Commonwealth Government national secondary school devices over four years.

Netbooks at Quarry Hill

DEECD’s Netbook Project Trial is providing students in 340 schools across Victoria with unprecedented anywhere, anytime access to learning. One of the aims of the Trial is to address social disadvantage through expanding the ICT infrastructure available to rural, regional and remote locations.

At Quarry Hill Primary School staff and students have identified many benefits since the netbooks were introduced to the Year 5 and 6 classrooms in early 2009. Ready access to the Netbooks has had a positive influence on the curriculum planning processes of the teachers, strengthened the team teaching approach, and enhanced the literacy and numeracy programs.

A typical day in class sees the 61 Year 5 and 6 students accessing numeracy or grammatical concept games from the web; using Wordle to learn about conjunction; exploring fractions using Mathletics or Funbrain; and linking literacy with inquiry learning by using the web to research topics and respond to tasks.

‘The netbooks have increased student engagement through a greater emphasis on self directed learning... The netbooks have forged stronger links with respect to integrating the curriculum and the level of student engagement and enthusiasm is extremely high.’

Acting Principal
Andrew Schaeche
**Device connectivity**

- The VicSmart initiative has continued to deliver high capacity broadband with 10 megabits per second fibre optical links to all Victorian government schools.
- In 2010, the VicSmart 3.0 initiative further enhanced provision to larger schools by delivering 20 Mbps to campuses with more than 500 students and 50 Mbps for sites with more than 1,000 students.

**Free internet**

- The eduSTAR.ISP initiative provides free internet services to Victorian government schools in 2010, saving schools an estimated $9.5 million.

**Wireless upgrade**

- The embedding of wireless technology across the state continues. The program has deployed 3,000 Wireless Access Points across all secondary schools, including special schools with a secondary component. A further 10,900 Wireless Access Points will be installed in secondary schools from September, 2010.

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**Internationalisation of education**

The BRIDGE (Building Relationships Through Intercultural Dialogue and Growing Engagement) Project increases knowledge and understanding between Australia and Asia through school-to-school partnerships linking students through online digital collaboration. It is currently available in English and Indonesian and:

- supports intercultural understanding through the combined use of Web 2.0 technology and people-to-people interactions
- increases knowledge and understanding between school communities
- builds teacher capacity in ICT skills and pedagogical practice
- offers teachers and students access to real-time interaction with peers
- challenges stereotypes, builds knowledge about history, geography, arts, sciences and environments across Asia and supports the exchange of worldviews
- provides a safe, supported and proven model for establishing meaningful partnerships with schools in the Asian region.

Twenty online collaborative and technology training activities are available to support classroom-to-classroom engagement

Digital Learning Statement

The education workforce is a key driver of school and system transformation.

While infrastructure and resources are clearly necessary to providing the digital learning space of the future for all Victorian government school students, DEECD recognises the critical role that principals and teachers play in delivering an online learning environment and using digital technology in their classrooms that stimulate, support and encourage students to learn. There is a strong body of evidence to suggest that schools that take a systematic and a planned approach to using digital technology to support learning will achieve better outcomes with technology than other schools (Becta, 2009).

It starts with a vision

The first step is to establish a well developed vision for learning through rigorous school-based strategic planning for how digital technology can enable and support improved student learning. This planning should reflect the digital learning landscape - open learning spaces, ubiquitous technology as evidenced by the Ultranet, and unprecedented access to experts beyond the classroom. It should continue to evolve as the collective capability of the school’s learning community develops. And in turn, it will focus on developing the competency of our school teachers to ensure the quality of our workforce reflects the quality of our digital systems and competency. What follows are some of the key initiatives in place to further develop our new generation school leaders.

Advancing leadership practice

From 2010, the new world class Bastow Institute of Educational Leadership will provide high quality professional learning programs that build the capacity of school leaders. One of the first sixteen leadership modules, Leading Technology for Learning, will focus on digital technology.

Bastow Institute of Educational Leadership

The Bastow Institute of Educational Leadership will offer a Leading Technology for Learning module in 2011. The importance of digital learning technology lies in its ability to engage students in ways not previously possible, create new learning and teaching possibilities, enhance achievement and extend interactions with local and global communities. The module develops the knowledge, skills and dispositions a leader needs to use technology to support achievement of educational goals.
Professional development in the Wimmera

The Wimmera Rural and Remote Project was implemented across 10 Wimmera schools to support teachers to develop skills and practices in three priority areas of professional learning needs:
- the ways in which students learn
- the use of data to inform practice
- assessment of student literacy needs.

Participation in the 12 month program involved a mix of Elluminate virtual conference sessions, interaction in the Moodle online learning environment, trialing new approaches with students and collaborating with colleagues.

The project made significant gains in building capacity in teaching staff to effectively use and contribute to online learning to address the needs of their students. Teachers completed a before and after assessment of their skills and there is an improved trend towards acquiring new skills in student-centred learning and greater teacher collaboration both within and across schools in the Wimmera.

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eLearning planning support

Resources and programs are available to support school leadership teams to achieve their vision in a dynamic, changing digital environment. They support effective planning for the integration of ICT in all aspects of school activity.

The eLearning Plan supports school leaders to make eLearning an integral part of the School Accountability and Improvement Framework. The eLearning Planning Guide is one resource which provides support for reflection and planning for the integration of ICT for teaching, learning, assessment and reporting as well as learning places and spaces, and learning communities.

e5 Instructional Model

Recent Australian research findings indicate the need for pedagogy frameworks that integrate ICT for curriculum and assessment as well as classroom organisation and professional learning (Baker, 2009).

A whole school vision and plan must be supported in the classroom through the development of pedagogies that refashion the teacher and learner relationship (Becta, 2008). School leaders and teachers have an obligation to harness the potential of digital technology and use appropriate pedagogies to support the development of the skills and understanding students will need to be successful citizens in a globalised world.

The Victorian e5 Instructional Model’s five domains outline pedagogical approaches that support effective learning, including facilitating and scaffolding learning; developing active learner engagement; using new, more open, questioning techniques; and undertaking assessment for learning (Department of Education and Early Childhood Development, 2009).

Teachers’ knowledge of the ICT curriculum should support their instructional practices and pedagogy in line with the e5 Instructional Model.
ICT can support all phases of the Instructional Model, for example:

- through engaging students by introducing a new topic of inquiry to students, using electronic presentations, excerpts from DVDs etc
- in the explore phase, teachers scaffold student inquiry into a new topic using tools and strategies to support student interaction with ICT and digital technology
- in the explain phase, teachers provide opportunities for students to use blogs or other discussion forums to have conversations about new thinking of the topic of inquiry
- in the elaborate phase, teachers guide students to apply learning in new ways such as in the electronic environment
- in the evaluate phase, teachers guide students to review their learning and to design presentations of learning in an electronic or digital format.

Advancing teacher practice

The Victorian Government has a comprehensive range of professional learning opportunities that support and enable teachers to build their digital literacy, to inspire and empower them to feel confident and capable of leading students into the online learning environment of the future.

The Ultranet gives all Victorian government schools an intelligent and responsive knowledge management framework that is web-based and accessible at all times. It provides teachers with the ability to readily plan, deliver and assess curriculum online and to collaborate with colleagues in their own school and other schools in Victoria. By facilitating knowledge transfer and collaboration across schools and the system, teachers can develop and share their expertise, strengthening Victoria’s teaching capacity.

Ultranet coaches are supporting the implementation of the Ultranet by training Lead Users from every Victorian government school in 2010. This investment to support the professional development of Ultranet coaches and Lead Users will enable teachers, students and parents to maximise the potential of the Ultranet as an interactive tool for learning.

ePotential ICT Capabilities Resource

The ePotential ICT Capabilities Resource incorporates an online survey for teachers to assess their level of ICT capability. The tool is used to collect benchmark data, track personal and school-wide progress against the continuum and identify areas where professional learning may be needed.

The Ultranet makes daily news

At Laburnum Primary School, Joanne Blannin and her colleagues started using social networking sites about a year ago to prepare both students and staff for the Ultranet. This was about starting the change process and allowing teachers and students to become familiar with communicating and collaborating in online spaces.

When Ultranet was introduced to the school earlier this year, Joanne created a community space called ‘Our Daily News’ in the Ultranet to encourage staff to log in every day. All school staff have co-ownership of the space so that they can post information and help lay out the site. At Laburnum Primary School ‘Our Daily News’ community space has replaced paper memos and the schools’ Ning, with 60 staff a day accessing the site.
Data from the ePotential ICT Capabilities Survey has shown a steady increase in the ICT capability of Victorian government teachers over the past three years. Continued support will be provided to further strengthen teacher capacity and capability and focus on supporting professional learning opportunities for teachers and leaders to optimise available digital tools and resources including the Ultranet.

Professional learning programs supported by technology partners

- The Microsoft Partners in Learning Innovative Schools Program and other professional learning programs such as Intel Teach are available at a system, regional and school level and are providing invaluable skills and training on how to maximise the online learning environment. ICT Peer Coaching is also assisting teachers and has been a successful strategy adopted by schools.

- IdeasLAB was developed through a unique partnership between DEECD, Microsoft, Intel, Cisco Systems, the University of Melbourne’s Graduate School of Education and Hume City Council. Based at the Hume Global Learning Centre, it aims to challenge the way we think about learning and teaching. It is a testing and proving ground for the application of emerging technology that enhances and personalises student learning.

Catalyst: Changing teacher practice

Nine Catalyst schools continue to share their findings across the Victorian school system after participating in the Microsoft Partners in Learning (PIL) Project 2007-2009. The focus of the project was on transforming classroom practice for improved student learning outcomes. Using digital technology as a catalyst, the program was designed to develop and document successful leadership strategies, professional learning practice and pedagogical curriculum innovation.

X-Box 360 in the classroom

In 2009 IdeasLAB ran a pilot trial on Kodu, a design platform for primary school students to design and build their own games for the X-Box 360. Twenty-nine teachers were trained in games-based learning and how students learn online and from each other. IdeasLAB supported the course with www.planetkodu.com, an online learning community where teachers and students were able to ask questions, learn from each other and share games. The group produced over 200 games where students demonstrated technical programming and problem solving skills and high quality game play in 3D environments.
Next Practice Program

The Department provides a program of activities involving leading local and international educators and innovators under the banner of the Next Practice Program. The program exposes Victorian educators, school leaders and policy makers to the latest thinking in education across the globe.

It creates opportunities for interaction and exchange of ideas through visits from national and international thinkers and broadens participant perspectives of the education landscape, provoking thinking about new possibilities for transformation in education here in Victoria.

The Next Practice Program aims to stimulate innovation and ultimately to inform next practice. Leading thinkers recently engaged through the program have achieved that in many ways. For example, Charles Leadbeater articulated a powerful framework for thinking about innovation in education and consideration of system transformation. Professor Stephen Heppell inspired a body of work around student voice and students as influencers of change. Mrs Ameeta Wattall delved deeply into the themes related to providing a holistic educational experience to develop tomorrow’s global citizens. Professor Yong Zhao stimulated deep thinking about digital learning, internationalisation and the increasingly globalised world for which we are preparing students.
Strategy 3: Quality resources, tools and data

Resources and tools for students and teachers

DEECD is making available quality assured digital resources for student and teacher use which are interactive, engaging and able to be used to support individual learning styles. Initiatives include:

- materials developed in partnership with Victoria’s major cultural agencies such as Museum Victoria, The National Gallery of Victoria, the State Library, Melbourne Zoo and the Australian Centre for the Moving Image

- more than 9000 curriculum linked student resources developed in partnership with other state and territory governments and the Commonwealth through the National Digital Learning Resources Network (formerly The Learning Federation)

- software tools to support creative learning activities

- fifteen thousand mathematics and science interactives

- the eduSTAR software list which provides over 80 educational software applications that cover such areas as animation, thinking skills, presentation and multimedia tools

- materials recommended by teachers including digital stories, case studies and reports to support professional learning by teachers and school leaders.

Japanese animation in the Victorian classroom

The Pictures of the Floating World project was a partnership project between the National Gallery of Victoria, and DEECD’s Innovation and Next Practice Division. The project created a package of online resources for schools based on 19th century Japanese woodblock prints drawn from the NGV Asian art collection. These resources were designed to be used on a wide variety of digital tools such as interactive white boards and mobile phones.

A central feature of the Floating World resources was the script-writing game, where students could use backgrounds, characters and music from the digitalised woodblock prints to create and share their own animated stories of ‘old Japan’.

Key to the project’s success was the use of a social networking site to establish a professional learning community between teachers, content and curriculum specialists and software developers which provided teachers with the technological and pedagogical support they needed.

To ensure our students and teachers have information and resources at their finger tips, the Victorian Government has invested heavily to make an extensive range of online learning resources and tools available for learners and teachers. These resources will benefit all Victorian schools and provide an extensive digital library within the Ultranet. Access to such resources is essential to providing a world leading educational experience for young Victorians.
FUSE

To access this content, DEECD has developed FUSE, a library of digital content for the Ultranet. FUSE enables educators to Find, Use and Share quality Education resources. FUSE is a portal, a repository, a search engine, a workspace and a way of sharing quality education resources.

FUSE provides educators with access to a comprehensive collection of high quality content including:

- quality assured teaching and learning resources from a wide variety of sources
- case studies, digital stories and reports showcasing new and emerging technology in education
- policies and guidelines to assist schools implementing digital learning.

FUSE also allows users to create, combine and share online resources including video, documents, PDF, webpages, images and sound files.

As well as providing access to resources sourced locally, FUSE provides a connection to a national network of content providers including education, cultural and scientific agencies from other states and territories.

Through the FUSE initiative the Department is working with cultural agencies, professional associations and other members of the Strategic Partnerships Program (SPP) to develop innovative and engaging digital learning resources, typically employing Web 2.0 technology. Examples include serious games; collaborative web conferencing; global online projects; ‘mashups’ and virtual worlds.
Technology in assessment

ICT is making it easier to analyse, combine and share assessment data to provide a more comprehensive picture of individual progress, development and learning needs. Victorian educators across all year levels are regularly accessing a range of online assessment tools in Maths and English. These tools enable them to obtain instant feedback about individual student progress.

The Ultranet is a one-stop shop of information and tools to support teachers to plan, deliver – and assess. It provides teachers with a rich, readily accessible source of information about each learner to inform personalised curriculum planning and delivery. It gives parents better access to information about their child at school so they can monitor and support their child’s learning.

Virtual Conference Centre

Web conferencing software allows groups of people to communicate and collaborate online from any device with an internet connection. Presenters and participants can interact using a variety of features such as audio, video, instant messaging, polling, desktop sharing, interactive whiteboard, file sharing, multimedia library and virtual breakout rooms.

Web conferencing overcomes the barriers of distance by allowing people to connect with each other no matter where they are, and has many applications in education. The Virtual Conference Centre is currently being used by teachers and principals to facilitate professional learning and online meetings.

Teachers are also using the Virtual Conference Centre to teach distance education lessons, enable student collaboration and bring experts into the classroom.

Inside the giant squid with Dr Mark Norman

Through the DEECD’s Virtual Conference Centre students had a unique opportunity to meet Dr Mark Norman, the Melbourne Museum scientist who performed the first ever public dissection on a giant 245kg squid, the largest ever caught. They watched video-footage of the dissection and had the opportunity to ask Dr Norman questions, gaining a unique insight into what was learned in the public dissection and how it might contribute to greater awareness and understanding of these little-known and rarely-seen deep-sea creatures.
Research

The Department will continue to support research into innovative use of technology through school-based research and collaboration with external partners. The Innovating with Technologies Grants and iPad Trial are two examples currently in place. The Department also develops technology-focused research projects in partnership with ideasLAB.

7. Conclusion

The Digital Learning Statement presents a vision and strategies with which to drive learning and teaching in the technology-rich landscape available in Victorian government schools. The introduction of the Ultranet in particular opens up new opportunities for anytime, anywhere learning, supporting the whole school community to engage in student learning. The Ultranet is a key enabler of the three key strategies we are implementing in order to achieve the full potential of our vision.

However, we are equipping not just our infrastructure, but also our teachers, students and parent community to prepare for the opportunities the digital world offers us. Building on the Victorian Government’s history of investment in ICT infrastructure and the solid work of principals and teachers, the Victorian education workforce is well-placed to lead our students and parent community forward. Together we will move into a new phase of delivering world-class 21st century learning for our students and preparing them to be the best they can be. We continue to do all we can to allow everyone involved in the Victorian school system the opportunity to shine.
Our promise: we will give you a learning environment to meet your needs
8. Victoria government initiatives, resources and partnerships

- Bastow Institute of Educational Leadership:

- Catalyst: Changing Teacher Practice:

- eLearning planning resources:

- ePotential ICT Capabilities Resource:

- FUSE:

- ideasLAB:

- Innovating with technology:

- Learning On Line:

- Netbook Project Trial:

- Notebooks for Teachers and Principals Program:

- Technical Support to Schools Program (TSSP):

- Ultranet:

- VicSmart:

- Victorian Schools Plan:
9. Commonwealth Government initiatives

- Building the Education Revolution:

- Digital Education Revolution:
10. List of references


We can all be learners together.