Learning with digital portfolios

This edition gives teachers and administrators a snapshot of the latest thinking on using digital portfolios (ePortfolios) and embedding them into whole-of-school practices for teaching and learning.

The digital portfolio is valuable for 21st Century learning.

Portfolios no longer have to consist of the one-dimensional paper or print format. With the growing trend of ICT integration into the curriculum, teachers and students can now create vivid and dynamic portfolios that best reflect their development, vision and purpose.

Digital portfolios have been used for the past decade as a holistic approach to presenting and communicating an individual's progress and achievements. Used effectively, digital portfolios enable intellectual activity that was not practically possible without the access to ICT.

Increasingly, digital portfolios are used in schools and universities worldwide. They are a time capsule for condensing learning over time, demonstrating the efforts applied and progress achieved for specific goals. They also provide a platform for presenting capabilities to teachers, accrediting bodies and potential employers.

In a nutshell

- A digital portfolio is a learning process and a product, showcasing skills, achievements and ideas.
- A whole-of-school approach to integrating digital portfolios delivers consistency and sustainability.
- It is best to support and resource the use of digital portfolios in schools.

About this research byte

Welcome to the first edition of *Smart Classrooms Bytes*. This publication is designed to provide school teachers and administrators with advice on the latest information and communication technologies (ICT) trends for education.

Smart Classrooms Bytes will support school teachers and administrators to embrace ICT as an everyday part of education so students can achieve the best possible outcomes.

Smart Classrooms Bytes aims to help build workforce capacity in leading 21st Century schooling in the knowledge economy while fostering clever, skilled and creative Queenslanders. It is aligned with school priorities and departmental agendas such as the Department's Strategic Plan 2007–2011.

What is a digital portfolio?

A digital portfolio is a purposeful collection of learnings over time that documents personal, academic and professional development. It is a visual guide that maps where you have been, where you are going and how you plan to get there. In this context, a digital portfolio is a tool to communicate what you know and can do.

A learning tool for teachers

For the purpose of the Smart Classrooms Professional Development Framework, a digital portfolio is an organised and annotated set of documents or examples that provide authentic evidence of knowledge. It is a collection of carefully selected or composed professional experiences and thoughts threaded with reflection, evidence and self-assessment.

A learning tool for students

A better understanding of a student's abilities and accomplishments can be attained through a digital portfolio. Students can use digital portfolios to compile their best work in all key learning areas and community activities. By doing so, they present a more accurate description of their capabilities.
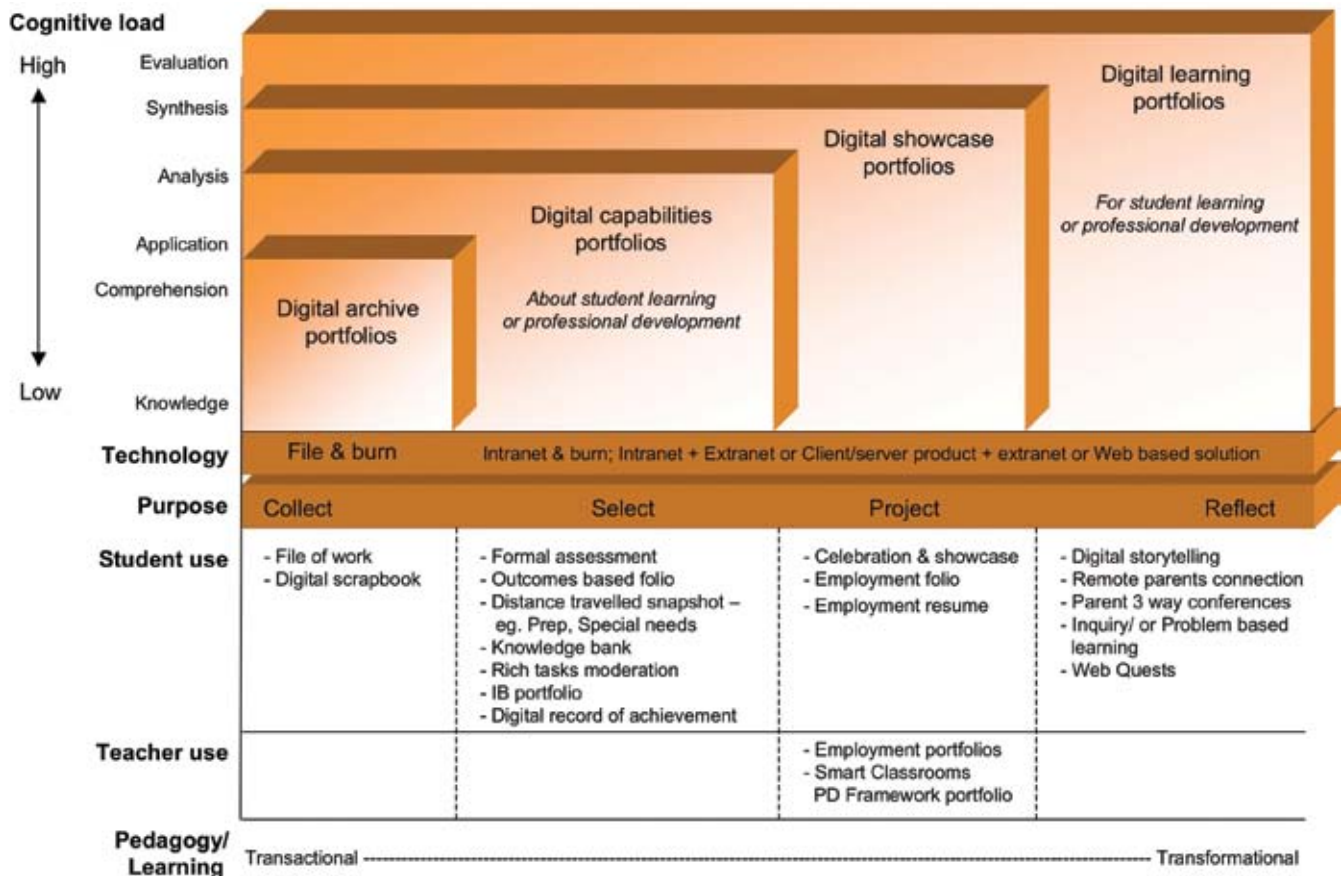
Example

Nambour Special School students have a valuable means of communicating with new carers, teachers, employers and agency staff. Their DVD folios, created by teachers and the students, are advocacy tools that facilitate treatment, employment and support from other agencies. The DVD folios also document students' abilities, achievements, support needs and growth over time.

The Department of Education, Training and the Arts is committed to establishing Smart Classrooms of the future, where ICT is the bedrock of 21st Century schools.

Queensland **the Smart State**

Queensland Government
Department of **Education, Training and the Arts**

Digital portfolios sustain learning

Digital portolio framework

The framework above shows four digital portfolio dimensions with the following structure:

Cognitive load		Digital archive portfolios	Digital capabilities portfolios *About student learning or professional development*	Digital showcase portfolios	Digital learning portfolios *For student learning or professional development*
High	Evaluation				
	Synthesis				
	Analysis				
	Application				
	Comprehension				
Low	Knowledge				
Technology		File & burn	Intranet & burn; Intranet + Extranet or Client/server product + extranet or Web based solution		
Purpose		Collect	Select	Project	Reflect
Student use		- File of work - Digital scrapbook	- Formal assessment - Outcomes based folio - Distance travelled snapshot – eg. Prep, Special needs - Knowledge bank - Rich tasks moderation - IB portfolio - Digital record of achievement	- Celebration & showcase - Employment folio - Employment resume	- Digital storytelling - Remote parents connection - Parent 3 way conferences - Inquiry/ or Problem based learning - Web Quests
Teacher use				- Employment portfolios - Smart Classrooms PD Framework portfolio	
Pedagogy/ Learning		Transactional -- Transformational			

The framework outlined above can help teachers and administrators plan and use digital portfolios.

It presents four different digital portfolio dimensions. Based on the educational requirements of Queensland state schools, each offers a unique purpose and potential.

The digital archive portfolio

A digital archive portfolio stores samples of student work as evidence of learning.

This type of portfolio is ideal for teachers who need to store many samples for students who lack engagement in learning.

Typically, every student has a CD of work that travels with them through their schooling. Working from electronic folders on school computers, teachers transfer samples of work that best indicate students' capabilities.

Each student leaves school with a digital document of their achievements.

Tip: Consider whether student learning is enhanced by archiving.

The digital capabilities portfolio

A digital capabilities portfolio reflects formal assessment. This portfolio is developed and assessed at the end of a term, semester or year. It can be used to evaluate the level and capabilities of learning for each student.

Tip: Consider the purpose. Is it to monitor progress or to evaluate?

The digital showcase portfolio

A digital showcase portfolio celebrates excellence and innovative achievements. It can be used as an employment folio and resume.

Students can create this type of portfolio by themselves. They are designed for a specific audience, such as parents or future employers.

Tip: Encourage students to include a range of evidence that demonstrates their breadth and depth of learning.

The digital learning portfolio

A digital learning portfolio is a learning space. It can be used to reflect focused learner-centred activities that involve designing, decision making, goal setting and scaffolded reflection: the processes students use to create knowledge.

Digital portfolios at home and abroad

Queensland
To seek accreditation with the Smart Classrooms Professional Development Framework, teachers need to develop digital portfolios.
www.education.qld.gov.au/smartclassrooms/strategy/tsdev_pd.html

Proposed changes to teacher recruitment ratings include the need to develop digital portfolios. These changes will be implemented in 2008.
www.education.qld.gov.au/hr/recruitment/apply/getr.html

Canada
All students in British Columbia have a physical or electronic graduation portfolio demonstrating their knowledge, skills, and competencies.
www.bced.gov.bc.ca/graduation/portfolio/welcome.htm

United Kingdom
Every school and college will have a personalised online learning space by 2007–2008 with the potential to support ePortfolios.
http://partners.becta.org.uk/index.php?section=pv&catcode=_pv_ep_02

Norway
Digital portfolio assessment should be in use at all levels of the educational system in Norway by the end of 2008.
www.insight.eun.org/ww/en/pub/insight/thematic_dossiers/articles/eportfolio/enter_eportfolio.htm

United States of America
A growing trend in schools across the United States, is that students develop digital portfolios for graduation.
www.electronicportfolios.com

This type of portfolio has a selection of the following features:
- a repository to store digital materials
- working spaces for creating, collaborating, enquiring and building new knowledge through reflective practice
- online tools to support the learning process, including collaboration, communication, interaction, information, feedback and goal setting
- learning spaces for individualised, student-controlled and creative qualitative records
- learning spaces that combine formal and informal learning areas such as personal information, stories, results, future goal and plans.

Tip: Consider the best way to format the information for reflection and learning.

Example

A number of Prep teachers in Queensland are developing digital portfolios as referenced in the Early Years Curriculum Guidelines. Nanango State School Prep teacher Kylie Heiner has used digital portfolios with students for the past four years. In that time, her practices have moved from teacher-directed portfolios to student-constructed portfolios. When her students were in Years 1 and 2, Ms Heiner prepared digital presentations of what they had learned. The presentations were used at student-led conferences with parents. These students, now in Year 4 and beyond, are currently making digital movies of their learning, in preparation for discussions with their parents.

Get started

Find these items on the Learning Place's Curriculum Exchange resource centre. Search by the title or resource number.

www.learningplace.eq.edu.au/cx/resources

Learning Place course for teachers

Digital portfolios for students with disabilities (02929)
This is an online learning course, guiding teachers through the development of a digital portfolio for students with a disability.

Teacher-developed student digital portfolios

Student digital portfolios (02963)
This resource illustrates the creation of student digital portfolios.

Digital imagery within a Special Education context (02335)
This project illustrates the use of the digital camera to support students who are visual learners.

Digital portfolios for Art students: a beginning (02223)
This example of a digital portfolio outlines the first steps in developing digital portfolios for Year 12 Art students.

Student-developed digital portfolios

Years 1 and 2 are really cool. Look at what we do at school! (02270)
This is an example of a digital portfolio created by students to showcase their work to parents.

Rich tasks and digital portfolios (02481)
This is two units designed to help students create a digital portfolio for an assessment task.

Bright Sparks Inc (02251)
This unit helps students gain knowledge through the process and planning of a project, which is demonstrated on a digital portfolio.

Student portfolios and visual literacy (02454)
This introduces the procedures for creating a student web-based digital portfolio.

Digi me (02085)
This includes a template for a web-based portfolio and introduces a web based-portfolio project by Wamuran State School.

Take the lead

As a principal I need to...

- consider why you could use digital portfolios as contemporary learning tools
- think about the purpose and audience for digital portfolios
- establish systems and provide recourses to support the integration of digital portfolios
- consider digital portfolios as progression tools for teachers and students
- allow time for staff to develop and implement digital portfolios
- support early adopters and innovators to share their experiences with colleagues
- involve natural leaders in any planning process
- nurture intellectual quality and development, rather than technical skills.

As a teacher I need to...

- identify the advantages of a digital based file over a paper based file
- consider digital portfolios for all key learning areas
- recognise the advantages of students negotiating their learning by making choices in creating their digital portfolio
- discuss the possibilities of digital portfolios with students and parents
- identify the criteria for a digital portfolio type before choosing content
- identify work samples and artefacts that represent a student's progress, not just their best work
- maintain digital portfolios through the year, highlighting students' capabilities
- ensure a digital portfolio includes reflection, dialogue and decision making
- understand what it means to manage and maintain a digital portfolio.

Example

"Creating a digital portfolio outlining the way in which I incorporate ICT into my teaching was a turning point in the way I teach. It forced me to question why I was teaching certain material, causing me to find more pedagogically sound methods of integrating ICT into my lessons." *Nanango State High School teacher Linda Stern*

Professional development

Teachers in Queensland state schools can be recognised for their strengths and practices in using ICT by seeking accreditation with the ICT Certificate, ICT Pedagogical Licence or ICT Pedagogical Licence Advanced. These are part of the Smart Classrooms Professional Development Framework.

To demonstrate their strengths and practices, teachers need to develop digital portfolios by:

- considering how to effectively store and organise items and evidence
- recording and collect professional experiences, thoughts and goals
- collecting evidence of classroom work such as student work samples
- self-assessing and reflecting on their work.

For recommendations on how to get started on this type of digital portfolio, log onto: www.education.qld.gov.au/ smartclassrooms/strategy/tsdev_ pd.html

Example

At Chancellor State College, *My Digital Journey* is the central tool used for all learning and experiences for students in the middle school. It will extend further into the primary and senior school in 2008. The school vision for *My Digital Journey* is to make every student's learning visible through powerful reflective conversation and for every student's digital portfolio to be a dynamic celebration and story of deep learning.

Upcoming editions

Upcoming editions of *Smart Classrooms Bytes* will cover:
- interactive whiteboards
- implementing student 1:1 laptop programs
- effective eLearning.

Visit the Smart Classrooms website to access the latest editions as they are released: www.education.qld.gov.au/smartclassrooms

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