

Focusing on what you value: A considered approach to assessing ePortfolios

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**EDUCATION AND
SOCIAL WORK**



Educational Portfolios



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- “**Systematic collections** of student work selected to provide information about students’ attitudes and motivation, level of **development** and growth over **time**.”
 - » (Kingore, 1993)
- “A **purposeful, chronological collection** of student work, designed to reflect student **development** in one or more areas over **time** and student outcomes at one or more designated points in **time**.”
 - » (French, 1992)
- “**Purposeful collection** of student work that exhibits the student’s efforts, **progress**, and achievements in one or more areas.”
 - » (Del Vecchio et.al, 2000)

Purpose, Longitudinal, Collection: this matters to assessment opportunities and demands

What Purpose, Educational Sophistication?

- Types

- Working (holding tank; necessary precursor)
- Display (demonstrate the highest level of achievement)
- Assessment (document achievement of required outcomes)
- Class (demonstrate group activities & learning)

Danielson & Abrutyn, 1997

- Levels

- 1: Scrapbook Collection
- 2: Curriculum Vita (professionally required?)
- 3: Curriculum collaboration student & faculty,
- 4: Mentoring by faculty to student mastery,
- 5: Authentic evidence for assessment, evaluation, and reporting.

Love, McKean, & Gathercoal, 2004

Intended Strengths

- Empowerment - student ownership, motivation, self-efficacy etc.
- Collaboration - student(s) & teacher
- Integration - theory and practice
- Authenticity - links beyond classroom
- ***Critical thinking & reflection***
- Accountability - student & teacher/school
- Feedback - to student & teacher
- Multi-modal → make use of multi-media technologies to incorporate sound, image, objects, not just words

Implemented Difficulties

- Time to evolve → loss of motivation
- Labour intensive – student & teacher
- Difficult to specify expectations
- Difficult to assess (incl. reliability/validity)
- Extensive teacher PD required
- Volume vs quality
- Storage

- Eportfolio Technology can be both a solution and a challenge

Guidelines for effective implementation

- Set out purpose – must be central to curriculum & programme
- Provide clear guidelines for evaluating the intended outcomes – a **RUBRIC**
- Provide clear guidelines for samples – content, layout, sources of evidence, ...
- Develop scoring quality assurance systems (moderation) if scoring will count
- Detail management requirements – deadlines, access, time, storage, archiving, ...
- Set aside time for work on portfolio
- Be available – encourage, support, advice, ...

Possible Assessed outcomes



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Clarify the outcomes you care about to be achieved by the portfolio. This statement defines the operational guidelines for design and evaluation of portfolios.

- Creativity and originality
- Variety
- Understanding of content or concepts
- Completeness
- Depth of reflection
- Perseverance
- Quality of product
- Self-regulation of learning
- Visual appeal
- Cross-curricular connections
- Organization and presentation
- Communication of ideas
- Problem solving
- Demonstration of change, development or improvement

Assessment Issues



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- Vague or unclear or ambiguous or unscaffolded ambitious learning outcomes
- Students driven by technical or compliance approach instead of awareness or reflection about their own deep & personal learning
- Students don't want 'extra' work! (Reward ?)
 - Focus is passing papers
 - Don't see papers being connected
- Demands on student time, finance, other activities etc...
- Difficulty in developing formative feedback relationship over a long time
 - Easy to start with a sizzle but is it feasible with other teacher demands?
- Thinking this will be an easy assessment process

Model Portfolio Scoring: Advanced Placement (AP) Studio Art Portfolio Content

High-stakes end of secondary school, voluntary and paid-for assessment with admission to elite universities or exemption for Stage 1 papers as consequences

Criteria	Drawing	2-D Design	3-D Design
Quality	5 actual drawings; maximum size is 18" x 24"	5 actual works; maximum size is 18" x 24"	5 works; 2 slides of each are submitted
Concentration	12 slides; some may be details	12 slides; some may be details	12 slides; some may be second views
Breadth	12 works; 1 slide of each is submitted	12 works; 1 slide of each is submitted	8 works; 2 slides of each are submitted

Harrison's AP Drawing Portfolio

- Sample showing concentration in drawing
- <http://lhs.loswego.k12.or.us/z-mcbrides/AP/Portfolio/breadth07.htm>



High-Stakes Scoring of AP Studio Art

- All portfolios brought to one site; 7-10,000 per year
- 25 readers (all experienced as studio art teachers in the various disciplines) score all portfolios
- Each section is given 2 or 3 ‘readings’ using a holistic rubric
- Readers are monitored statistically and by a chief reader
 - Inconsistent readers are check-marked by chief; if not improve—let go
 - Consistently harsh or lenient readers adjusted statistically

Eportfolio technology



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- Using technology instead of paper is seen as the modern solution
- Required components
 - Electronic Storage
 - Personalization
 - Showcasing
 - Reflection and Feedback
 - Assessment/Evaluation

Evaluation of 2 eportfolio systems used at University of Auckland Faculty of Education and Social Work for Graduating Teacher Standards fulfilment by David San Jose (PhD candidate)

Essential Technology Features	MyPortfolio (Mahara) System	Google Sites System
Technology		
Electronic Storage Capacity (Max)	1000 MB	100 MB
Upload & download directly	✓	✓
Compatibility	Text, image (jpeg, tif, png, gif), audio (wav, mp3, mp4), PowerPoint (ppt), Word Document (doc), Portable Document Format (pdf), and Excel (xls). Video upload too large and not compatible.	Text, image (jpeg, tif, png, gif), audio (wav, mp3, mp4), PowerPoint (ppt), Word Document (doc), Portable Document Format (pdf), and Excel (xls). Video upload too large and not compatible.
Personalization & Customization		
Layout options	✓ Several	✓ Several
Showcasing	✓	✓
Privacy	✓	✓
Direct text and private messaging	✓	✓
Linkage to external email systems (e.g., school)	✓	✓
Communication		
Dissemination control	Compatible with text, image (jpeg, tif, png, gif), Word Document (doc), and Portable Document Format (pdf) as a form of a message or electronic mail. Messages can be made public or private using a “Wall” feature where peers, mentors, and other users can populate the “Wall” page.	Compatible with text, image (jpeg, tif, png, gif), Word Document (doc), and Portable Document Format (pdf). Available under the comments section and limited characters only.
Assessment and Evaluation		
Direct evaluation or assessment features	✗	✗
Demonstration of Task Completion	Share e-portfolio web page	Share e-portfolio web page
Evaluation processes	External	External

Key: almost identical & NOTHING for assessment

Student Concerns



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Negative Features	MyPortfolio (Mahara)	Google Sites
Technology		
Per file uploading	Max upload 50 megabytes	Max upload 20 megabytes
Peak time upload speed	Slow	Instant
Off peak upload speed	Instant	Instant
Embedding of files	Some HTML understanding required	Some HTML understanding required
Browser Compatibility	Google Chrome & Firefox	Google Chrome & Firefox
Personalization		
Page customization	Limited design option	Several design options
Web page deletion	Easy	Difficult
File deletion	Difficult	Easy
Organization of pages	Easy	Difficult
Photo display	Resizing required not automatic	Resizing required not automatic
Showcasing		
Flash plug-ins	✗	✗
Page order	Simple	Moderate
Image & text integration	Difficult	Easy
Adjustable display	Easy	Difficult
PDF display	✓	✗
Communication		
Teacher feedback	No assessment feedback page	No assessment feedback page

Again almost identical; weak on assessment processes

Student perceptions

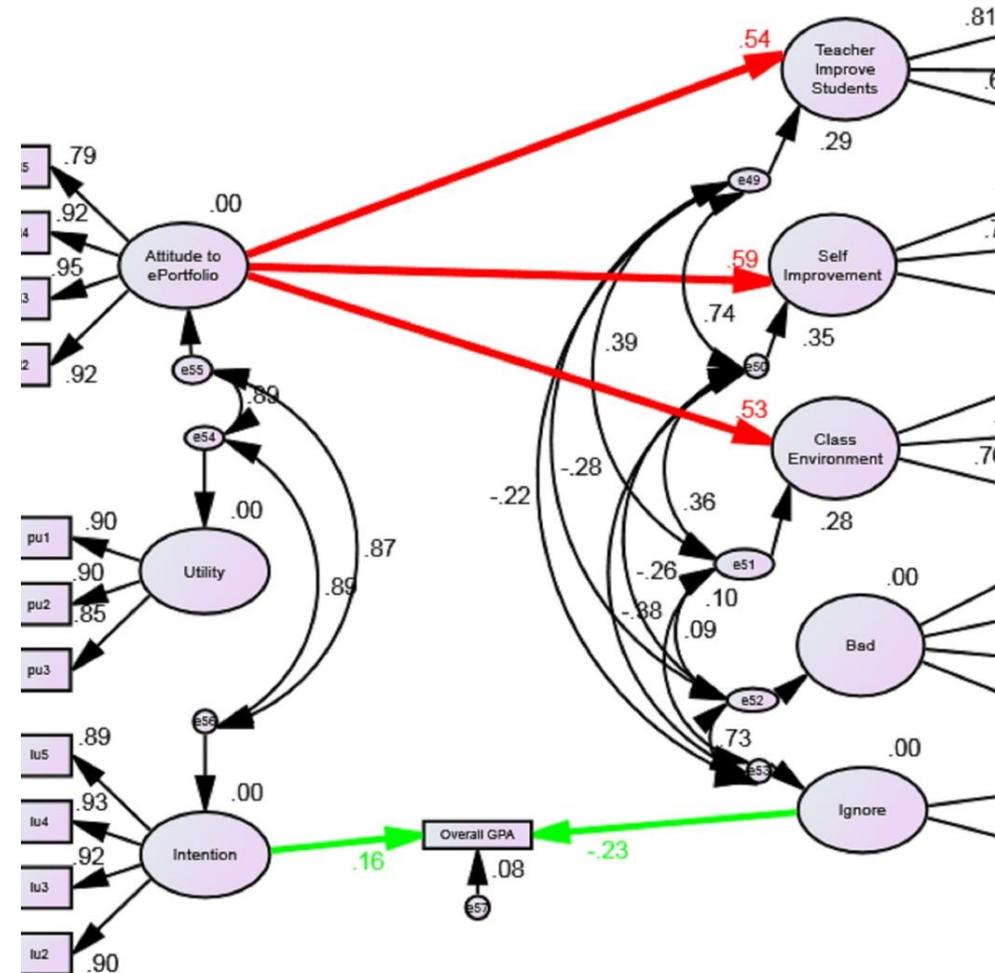
- Our students considered Mahara moderately more satisfying and usable

	<u>MyPortfolio</u> <u>(Mahara)</u>		<u>Google Sites</u>		<u>Difference statistics</u>			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>df</i>	<i>p</i>	<i>d</i>
User Information Satisfaction (UIS)	4.14	1.04	3.62	1.05	5.70	1	.018	.49
Usability Evaluation Method (UEM)	4.16	1.00	3.55	1.18	10.22	1	.002	.66

- But Deneen & Brown (2014) found that this is variable here at HKU—it's very individual
 - *Perhaps it depends in part on teacher competence with the technology?*

Student Perceptions of technology and assessment functions

- HKU study: Deneen, Brown, & Carless, 2015
 - Positive attitude to eportfolio technology increases formative assessment beliefs and GPA
 - So both student understanding of technology and assessment matter



Conclusion



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- A great idea but really hard to assess
- Worth doing esp. if you require students to do reflection and self-monitoring of learning
- **Work starts early so students have stuff from which they can choose and justify their choices relative to learning outcomes (curation)**
- Marking (if expected) has to be guided by your curriculum goals captured in a systematic rubric and marking preferably by 2+ markers
 - **If it counts, otherwise use for dialogue only**
- Almost all eportfolio technology is equivalent—allow choice; concentrate on curricular goals
- Assessment has not been solved in eportfolios so consult literature on judgment grading or marking

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