

# Authentic assessment

Singapore Seminar on Authentic assessment (Part 3)  
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**EDUCATION AND  
SOCIAL WORK**

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## Using Portfolios for Authenticity



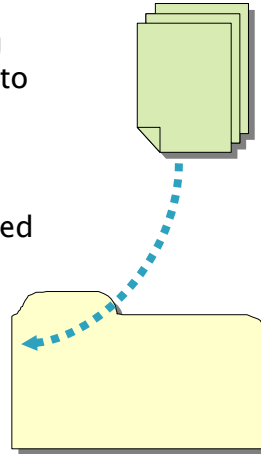
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## Etymology

<http://www.etymonline.com/index.php?term=portfolio>

### ▶ portfolio

- 1722, from Italian *portafoglio* "a case for carrying loose papers," from *porta*, imperative of *portare* "to carry" + *foglio* "sheet, leaf," from L. *folium*.
- Meaning "collection of securities held" is from 1930.
- THUS: a collection of documents that can be carried about



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## Portfolio as simulated reality

- ▶ How are portfolios used and judged in the real world?
  - Models, artists, architects
- ▶ Show variety, strengths
- ▶ Explain message/ideas



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## 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)

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## Characteristics



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- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>▶ Empowerment – student ownership, motivation, self-efficacy etc.</li> <li>▶ Collaboration – student(s) &amp; teacher</li> <li>▶ Integration – theory and practice</li> <li>▶ Authenticity – links beyond classroom</li> <li>▶ <b>Critical thinking &amp; reflection</b></li> <li>▶ Accountability – student &amp; teacher/school</li> <li>▶ Feedback – to student &amp; teacher</li> <li>▶ Multi-modal → make use of multi-media technologies to incorporate sound, image, objects, not just words</li> </ul> | <ul style="list-style-type: none"> <li>▶ Time to evolve → loss of motivation</li> <li>▶ Labour intensive – student &amp; teacher</li> <li>▶ Difficult to specify expectations</li> <li>▶ Difficult to assess (incl. reliability/validity)</li> <li>▶ Extensive teacher PD required</li> <li>▶ Volume vs quality</li> <li>▶ Storage</li> </ul> |
|---|---|

Eportfolio Technology can be both a solution and a challenge

Strengths

Difficulties

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## 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, ...

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## Assessment Issues

- 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

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## Model Portfolio Scoring: AP Studio Art Portfolio Content



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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
<b>Quality</b>	Five actual drawings; maximum size is 18" x 24"	Five actual works; maximum size is 18" x 24"	Five works; two slides of each one are submitted
<b>Concentration</b>	12 slides; some may be details	12 slides; some may be details	12 slides; some may be second views
<b>Breadth</b>	12 works; one slide of each is submitted	12 works; one slide of each is submitted	Eight works; two slides of each are submitted

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## Harrison Drawing Portfolio AP

- ▶ Sample concentration drawings
- ▶ Total score 5
- ▶ <http://lhs.loswego.k12.or.us/z-mcbrides/AP/Portfolio/breadth07.htm>



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## High–Stakes Scoring of AP Studio Art

- ▶ All portfolios brought to one site; 7–10,000 per year
- ▶ 25 readers (all experienced in studio art) score all portfolios
- ▶ Each section is given 2 or 3 ‘readings’ using holistic rubrics
- ▶ 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

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## Educational Criteria



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### Breadth

Show that you have covered the full range of required material



### Depth

Show that you have specialised at least in one important aspect of the required material



### Development

Show that you have improved in at least one important aspect of the required material; trace the change.

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## 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 now Dr. David San Jose
  - San Jose, D. L. (2017). Evaluating, comparing, and best practice in electronic portfolio system use. *Journal of Educational Technology Systems*, 45(4), 476–498. doi:10.1177/0047239516672049

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Essential Technology Features	MyPortfolio (Mahara) System	Google Sites System
<b>Technology</b>		
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.
<b>Personalization &amp; Customization</b>		
Layout options	✓	✓
Showcasing	Several	Several
Privacy	✓	✓
Direct text and private messaging	✓	✓
Linkage to external email systems (e.g., school)	✓	✓
<b>Communication</b>		
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.
<b>Assessment and Evaluation</b>		
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**

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## Student Concerns



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Negative Features	MyPortfolio (Mahara)	Google Sites
<b>Technology</b>		
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
<b>Personalization</b>		
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
<b>Showcasing</b>		
Flash plug-ins	✗	✗
Page order	Simple	Moderate
Image & text integration	Difficult	Easy
Adjustable display	Easy	Difficult
PDF display	✓	✗
<b>Communication</b>		
Teacher feedback	No assessment feedback page	No assessment feedback page

*Again almost identical; weak on assessment processes*

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## Student perceptions



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- ▶ Our students considered Mahara moderately more satisfying and usable

	MyPortfolio (Mahara)		Google Sites		Difference statistics			
	<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 at HKU — it's very individual
  - *Perhaps it depends in part on teacher competence with the technology?*

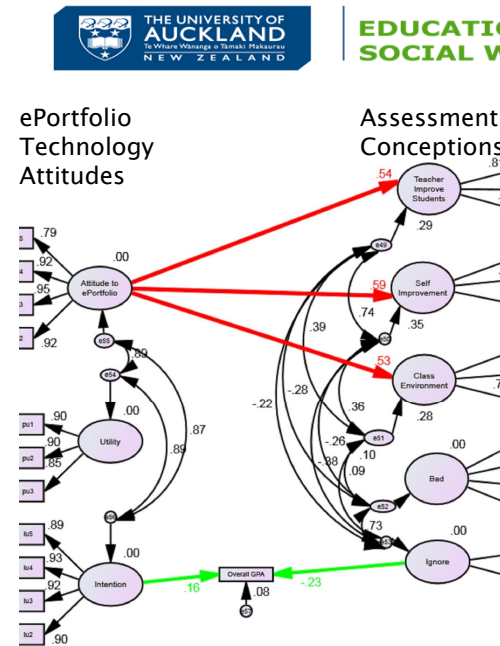
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## Student Perceptions of technology and assessment functions

- ▶ HKU study: multiple faculties, multiple eportfolios
  - Positive attitude to eportfolio technology increases formative assessment beliefs and GPA
  - So both student understanding of technology and assessment matter

Deneen, C. C., Brown, G. T. L., & Carless, D. (2018). Students' conceptions of eportfolios as assessment and technology. *Innovations in Education and Teaching International*, 55(4), 487-496. doi:10.1080/14703297.2017.1281752



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**Course Information**

About Me

Topic 1: Historic, Definitions and Health outcomes

Topic 2: Strategies and target groups

Topic 3: Hypokinetic diseases

Topic 4: General diseases

Topic 5: Arenas

Topic 6: Behaviour

**Topic 7: Reflections related to activity tracker intervention**

### Topic 7: Reflections related to activity tracker intervention

Please write here the reflections related to your experiences with the mi tracker. Do not forget to add date, media (like screenshots of the device, pictures or other media) related to your reflection. The reflection has to be done every week and takes about 10 minutes time.

Please add your thoughts related to the following points if applicable:

- Actual date (20.02.2016)
- Did you feel healthier this week in comparison to last week? (explain changing in well-being like e.g., I slept more and moved more, or I was sick.)
- Which type information did you consult from the tracker (e.g., this week I was concerned about my heart rate when I get up in the morning. I factivities using the tracker in the past week; I was specially interested in the weekly calorie use statistic of the last month).
- Frequency of use of the tracker (I consulted the heart rate information daily, I did not care about the sleep statistics).
- Changes in using behavior of the tracker (I did not consult the heart rate monitor anymore because...)
- Special events like hike, training, (where the tracker has been used)
- Astonishing effects on your behavior in relation to the health information delivered by the tracker (e.g., I was so astonished, that the hearth rate I measured every morning relates to the week days so I checked information related to the heart rate in the morning on the internet. I wanted to know if heart rate in the morning correlates to the amount of sleep, but I did not find this information through google. I had to perform a forum search....)
- Interactions with other participants of the course like exchange of experiences, of information related to health, common training, .... or interchange of data.
- Information searched on the web, in forums in social networks related to the use of the tracker (I visited the following site <http://...> I was very astonished about what I learned related to the...)
- Active collaboration in health or well-being forums like questions asked, posted answers.
- General reflections, comments, remarks about your health, about activities using electronic media like Internet or other in relation to your well-being (e.g., I started to count the calories I eat every day and compare with the calorie usage)

Please publish last reflection entry on top of the page e.g.  
02.02.2016... bla  
27.01.2016... bla

**Reflections:**

**17.04.2016**

This should be the last update for my Mi-tracker record. For the record this week, I walked for the range between 477 to 14,573 steps and slept for averagely 7 hours per day. I think it mis-record my walk count on Wednesday (13/4/2016) since it was a normal day and I was quite sure that I walked more than only 477 steps. Also, on the same day, my sleeping hours was not being tracked. I really think that the Mi-tracker can give a very general picture towards the walk count and sleeping hour count, but error or inaccuracy of data may be resulted due to factors like not sensing well, or lack of battery, I bet.

\*Please see the attached pdf file (Photo for 17.04.2016) for the photo since the site has insufficient room for storage

**Fig. 23 Inaccurate measurement for my walking count on 13/4/2016**

As it is the last update, I want to make a summary for my walking count record and sleeping hour record. The following table shows my weekly average record.

Week	Average walking counts (steps)	Average sleeping hours (hours)
74.74		4.6

Perhaps the most important part of a portfolio—the so what question

Figure 3. Instructions and a sample entry in the ePortfolio

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## Portfolio Conclusion

- ▶ A great idea but really hard to do
- ▶ Worth doing only if you do the hard work
- ▶ Multiple markings by multiple markers required
- ▶ Issues with the portfolio technology
  - Paper easy
  - ePortfolios have different strengths & weaknesses
- ▶ Did we mention you need a RUBRIC or SCORING GUIDE?

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## Table Talk

- ▶ **Could you use eportfolios?**
  - **Discuss with people in a zoom chat room ...**
  - Putting aside logistics, do you think eportfolios would increase the authenticity of your assessment?

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# Managing Risks in Authentic Assessment



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- ▶ Valued but not implemented?
  - Easier in Teaching & learning, but assessment?
  - Singapore school teacher study shows values/practices mismatch

Table 4

Factor scale descriptive statistics by construct.

	Values		Practices		Proficiencies		Difference High to Low
	M	SD	M	SD	M	SD	d
Alignment	4.06	0.60	3.74	0.56	3.26	0.61	1.32
Involve Students (PASA)	4.10	0.46	3.27	0.65	3.14	0.60	1.80
Sustaining Engagement	3.94	0.66	3.45	0.66	3.01	0.71	1.36
Grading/Reporting	3.65	0.66	3.77	0.53	3.25	0.57	0.95
Difference High to Low (d)	0.79		0.84		0.38		

Deneen, C. C., Fulmer, G. W., Brown, G. T. L., Tay, H. W., Tan, K., & Leong, W. S. (2019). Value, practice and proficiency: Teachers' complex relationship with assessment for learning. *Teaching and Teacher Education*, 80, 39–47. doi:10.1016/j.tate.2018.12.022

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# Managing Risks in Authentic Assessment



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Table 1. Coding results.

Types of resistance	Exemplars
Epistemic	Why should we be assessing outcomes?
Procedural	Assessment changes have to be approved through the department teaching and learning committees
Pragmatic	You don't understand how busy I am!

Deneen, C., & Boud, D. (2014). Patterns of resistance in managing assessment change. *Assessment & Evaluation in Higher Education*, 39(5), 577-591. doi:10.1080/02602938.2013.859654

Staff resistance to assessment change

- ▶ Authentic assessment is different to previous methods that got me where
- ▶ Change might threaten my with what I know thanks.



Swimming in unknown waters vs. summative safe harbour

Struyven, K., & Devesa, J. (2016). Students' perceptions of novel forms of assessment In G. T. L. Brown & L. R. Harris (Eds.), *Handbook of human and social conditions in assessment* (pp. 129-144). New York: Routledge.

Student resistance to assessment change

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## Managing Risks in Authentic Assessment



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- ▶ Managing Change
  - Accountability effects
    - Change doesn't always work and you may not get same results.
    - Will this be used to evaluate instructors, courses, programs, institutions?
    - Might lead to 'badge engineering';
      - Use the new language, but do the old tasks
  - Needs manager approval & support for risk taking
    - Time & safety to experiment and develop
    - Costs (\$, %)



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## Authentic assessment



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- ▶ Requires serious discussion and agreement around
  - Role of education in society, employment, and life
  - Nature of an institution as an educational organisation
  - Role of intellectual depth
  - Role of risk management
  - Expectations of employers and society

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# Table Talk



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- ▶ **Do you need to change your system?**
  - **Discuss with people in a zoom chat room ...**
  - What does your program/institution need to work on to make sure assessments are authentic, educational, and assured?
  - What mechanisms would you need to change or introduce to demonstrate robust evaluative judgments by markers around authentic performances?
  - What does your end-user community expect of students who complete your program? How do you know what they expect?
  - Do end-users believe your grades or certification? How do you know what they think about your grading?