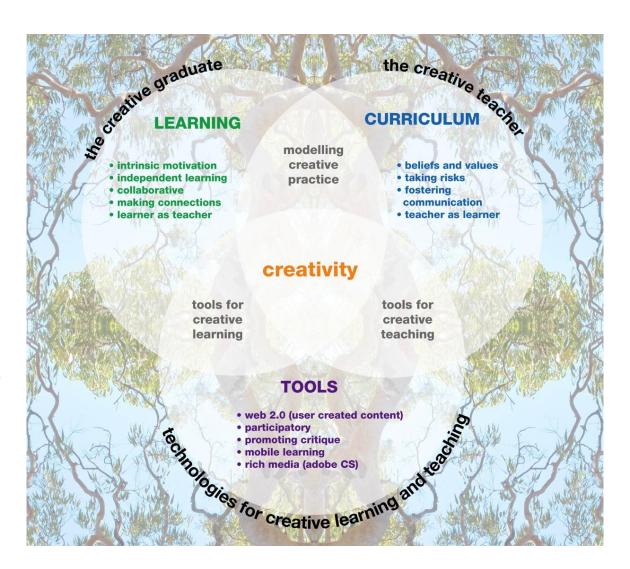


Why creativity?

- Educational designer and academic developer.
- Background in visual art.
- PhD candidate topic:
 Creativity as a graduate
 attribute: How is creativity
 conceptualised and enacted
 in 'non-creative' disciplines?
 How can it be learned (and
 taught)? How could
 technology enable creative
 learning and teaching in HE?



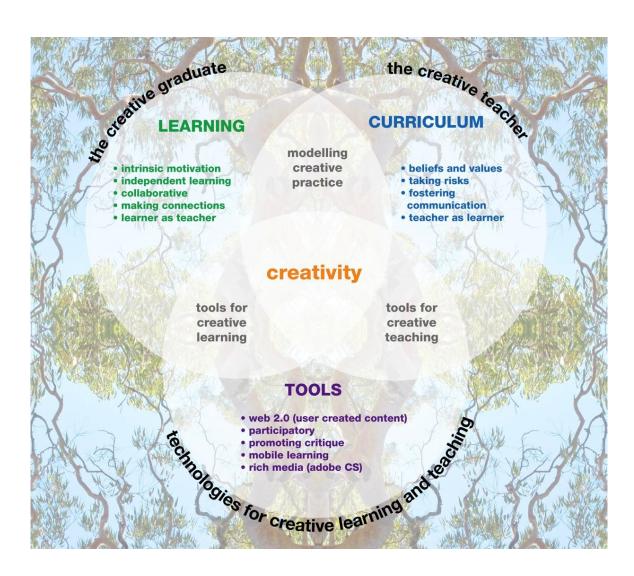


Personal philosophy

Creativity

- Is intrinsic to human life, experience, communication
- Can contribute to social good
- Is a way of being, seeing and doing
- Is not divorced from skills which are context specific

Everyone is able to be creative





Creativity – why is it important?

- Creativity as generic capacity.
- Important dimension of 21st Century professional practice (Florida, 2002; Pink, 2005)
- Gap in the focus of school education, required for social good, and for personal happiness (Robinson, 2000) http://youtu.be/ga2CYYCrtNE (see Ken Robinson on TED Talks)
- Identified by industry and government studies as key capability.
- Promoted as a graduate attribute in higher education (McWilliam & Dawson, 2008).
- Whose creativity, for whom?



Current understandings

- "The process of having original ideas that have value" Robinson (2006)
- "difficult to discern whether creativity is an attribute of a person, an object, a process or an idea." Reid & Solomonides (2007, p27)
- Large-C and small-c conceptions (Csikszentmihalyi, 1996; Craft 2001)
- first-generation and second-generation creativity (McWilliam & Dawson, 2007)
- social networking capability is a key indicator of successful creative innovation Bridgstock, Dawson & Hearn (2011)

First generation creativity concepts	Second generation creativity concepts	
Serendipitous, non-economic	"Hard" and an economic driver	
Singularisation	Pluralised / team-based	
Spontaneous / arising from the inner self	Dispositional and environmental	
Outside the box or any other metric	Requires rules and boundaries	
Arts-based	Transdisciplinary	
Something out of nothing	Something to something else	
Natural or innate	Learnable	
Not amenable to teaching	Teachable	
Not assessable	Assessable	

From McWilliam, E. & Dawson, S. (2007)
Understanding
creativity: A survey of 'creative' academic teachers.
Carrick Institute for Learning and Teaching

in Higher Education.



Creativity as disposition

 "the truly creative is always that which cannot be taught. Yet creativity cannot come from the untaught. ... The elements of a creative solution can be taught, but the creativity itself must be selfdiscovered and self-disciplined."
 (Torrance, 1988, p58)

 "extraordinary talent, personality and cognitive ability do not seem to be enough - it's the 'labor of love' aspect that determines creativity."
 (Amabile, in Torrance 1988, p67)



- Tardif & Sternberg, 1988: Articulate and fluent, good imagination, flexible and skilled decision-maker, copes well with novelty, and finds order in chaos.
- "being-for-uncertainty", which focuses on the kind of dispositions essential for a creative response to future unpredictable challenges. (Barnett, 2004)
- Creativity as systemic (Csikszentmihalyi, 1999)
 Cultural production embedded in culture and 'habitus' (Bourdieu, 1993)



Creativity as graduate capability

- Vocational focus vs. personal development
- In academia a range of understandings and definitions that were complex and frequently contradictory (Jackson et al, 2006). Combine firstand second- generation conceptions (McWilliam & Dawson, 2009)
- Student perceived conflict between creativity and 'academic' expectations (Oliver et al, 2006)
- Creative teaching as enabling students to be creative.
- "huge variation in the way creativity is understood in different learning domains. ... creativity is not a stable idea but one that is constituted differently within different domains." (Reid & Petocz, 2004, p59).
- Shared academic conceptions: originality, use of imagination, exploration and risk-taking, making sense of complexity, and story-telling (Jackson et al, 2006).





Creative teaching

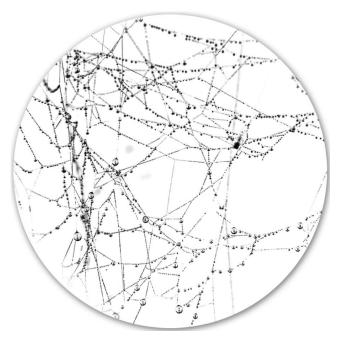
- Teacher as a role model for creative practice (Sternberg, 1996)
- Academics and students correspondence between creative teaching and the opportunity for creative learning (Jackson et al 2006)
- Creative approach to teaching ie. diverse and unusual learning activities and assessment tasks that would provide the opportunity to practice creative thinking (Jackson et al, 2006; Petocz et al, 2009).
- Appropriate tasks in flexible environment to promote and support creative responses, allow risk-taking and mistake-making in a safe environment.
- Design for CREATIVE learning.
- Teacher opportunities for innovating their own practice in a safe environment to enhance their self-perception as creative practitioners.



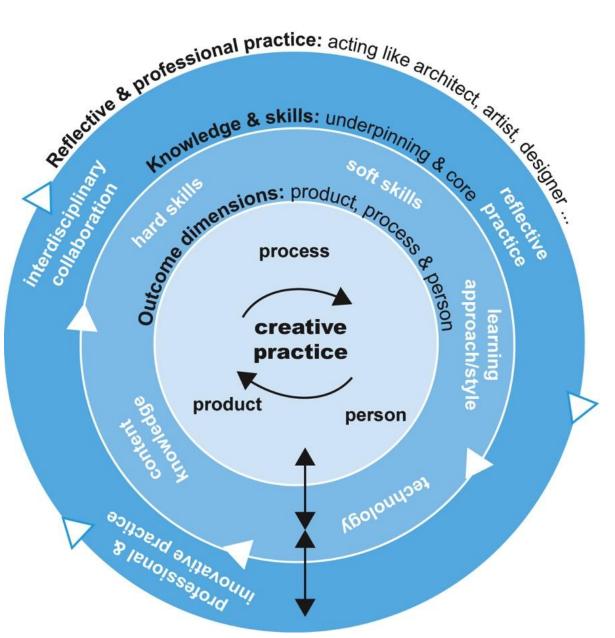


Creative learning

- School students who display creative behavioural characteristics (such as playfulness, argumentativeness, independence) tend to be perceived by teachers as non-conformist and disruptive (Craft, 2001; Aljughaiman & Mowrer-Reynolds, 2005).
- Creative learning is unlikely to occur without a context in which creative behaviour is not only acceptable but supported and rewarded.
- Revised Bloom's taxonomy Creativity outcome is described as: "Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing. Creating requires users to put parts together in a new way or synthesize parts into something new and different, a new form or product." (Anderson, Krathwohl, & Airiasian, 2001).
- "Learning to think for oneself involves becoming critically reflective of assumptions and participating in discourse to validate beliefs, intentions, values and feelings." (Mezirow, 1998, p197)







Assessing creative work

Model for holistic assessment in studio-based disciplines (adapted from De la Harpe et al, 2009, p47)

http://studioteaching.org



Online tools to support learning

Student learning need	Example of student activity	Extended/emerging technology
Developing understanding	Linking information from different sources	e-portfolios, Mashups
Linking theory to practice	Learning by doing	IMS tutorials, Screencasting
Practising articulation of ideas	Reflective journal	Blogs, Podcasts
Practising teamwork	Group projects	Social bookmarking, Wikis

from Mason, R and Rennie, F (2008). E-Learning and Social Networking Handbook - Resources for Higher Education. New York: Routledge, p.49

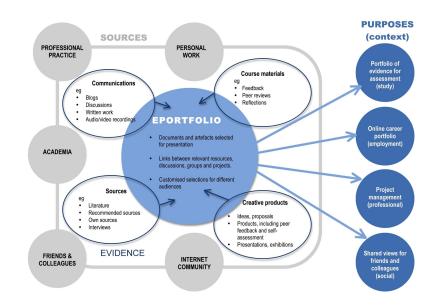
Some of the Web 2.0 tools discussed by Mason and Rennie are: blogs, wikis, podcasts, e-portfolios, social networking, social bookmarking, photo sharing, Second Life, online forums, video messaging, e-books, instant messaging, Skype, games, mashups, mobile learning, RSS feeds and YouTube. Many others are available at: http://www.go2web20.net/



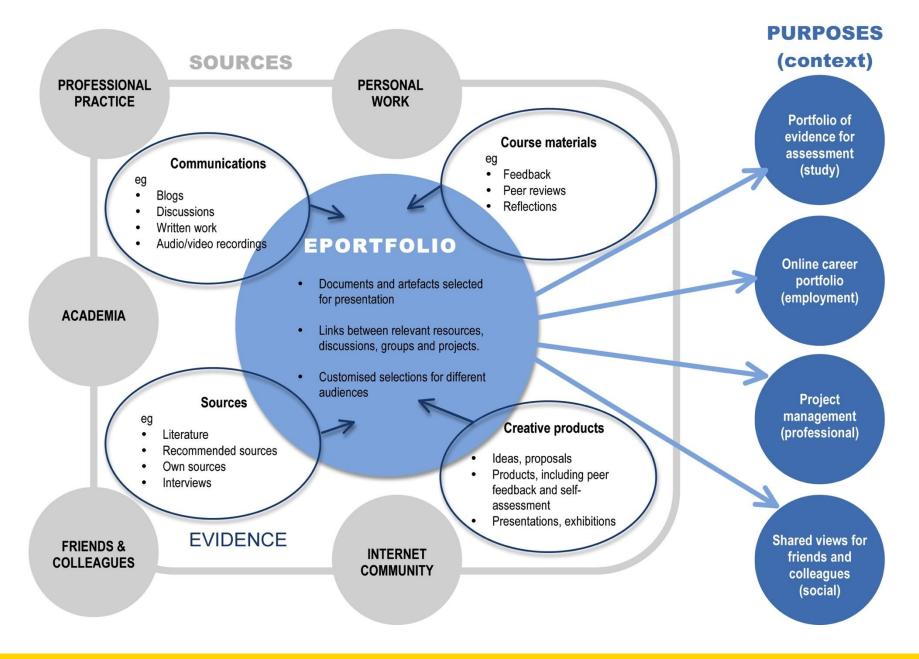


Why eportfolio?

- Presented in a context of learner empowerment and self-critique students
 engage in developing their own learning goals and activities, identifying
 opportunities for critical reflection, and participating in learning as a social process
 that empowers the group.
- The transformation from learner to creator entails developing a creative identity.
- each learner must individually internalise what it means to be creative in their own (disciplinary, social, cultural) context and map their own pathway.
- emancipatory agenda assessment need to be holistic in the dimensions that are addressed, be directed by the learners themselves in both devising and conducting assessment.









Benefits of eportfolio assessment

Eportfolio assessment = sustainable assessment (*Boud, 2000*) Enables students to:

- identify their learning
- make judgements about their learning
- prepare them for future learning.

Assessment should 'not only address the immediate needs of certification or feedback to students on their current learning, but also contribute in some way to their prospective learning'

Eportfolios have the ability to involve students in 'preparing them for the tasks of making complex judgements about their work and that of others and for making decisions in the uncertain and unpredictable circumstances in which they will find themselves in the future' (Boud & Falchikov, 2006)



Unless the students can 'appraise the quality of a work they are in the process of constructing, they have no framework for improving it'.

Eportfolios can encourage the ability to <u>NOTICE QUALITY</u> in a student's own work and that of their peers as they become more familiar with the 'standard' required. (Royce Sadler, 2011)



REFLECTION

ePortfolios encourage student ownership and direction of learning as they select and reflect on their evidence for presentation.

An eportfolio can contain a 'range of materials from a variety of sources', including those produced for course assessment to support reflective practice (Housego & Parker, 2009)

RE-THINKING PEDAGOGY

Teaching and learning beyond the walls of our institution should encompass new thinking about pedagogies and new ways of developing courses for students beyond graduation.

Integrating portfolios at a course and (particularly) program level can enhance the life-long learning need for alignment of learning goals and practice with evaluation. ePortfolio practice supports Barnett's "being-for-uncertainty", which proposes that students "develop powers of critical action." (Barnett, 2000, p240)



MAKING A DIFFERENCE

eportfolios have the potential to provide the core principles for effective assessment:

- 1. Assessment that guides and encourages effective approaches to learning,
- 2. Assessment that validly and reliably measures expected learning outcomes, in particular the higher-order learning that characterises higher education; and
- 3. Assessment and grading that defines and protects academic standards. (James, McInnis & Devlin, 2002)

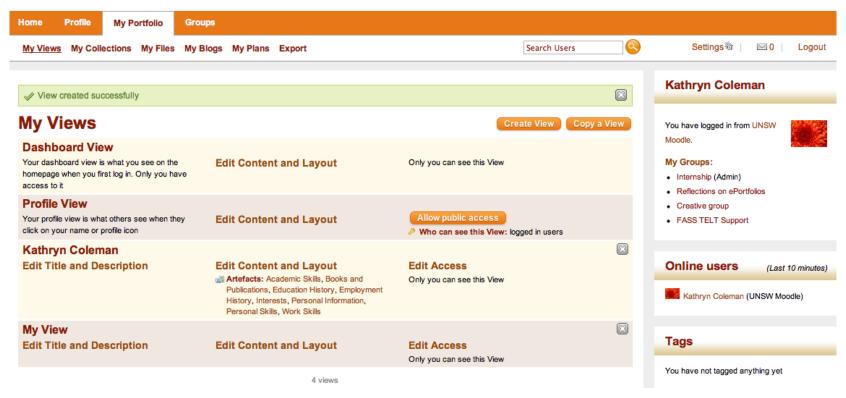
INNOVATION

- Change in assessment practice requires course and program revision.
- Inspiring students by exposure to high quality work is an aspirational goal of an eportfolio in HE.
- As an innovative and transformative pedagogy, eportfolio assessment can lead to more frequent and reflective feedback through more formative assessment.











Eportfolio research at UNSW

Faculty of Arts and Social trialling Mahara eportfolio

- map their use of the system
- experiences and perceptions of the teachers and students
- develop recommendations for use of eportfolios in the Faculty.

Research questions

- What are the perceptions of teachers and students on use of eportfolios for formative and summative assessment?
- What is the perceived change in self-efficacy in different areas that relates to eportfolio use?
- What guidelines could be provided to academics and students to maximise the benefits of using eportfolios?



Eportfolio research at UNSW

Participatory action research

- A qualitative study in a social constructionist epistemology.
- A participatory action research framework empower participants to engage as researchers, support them to document their own personal development.
- Case studies based on individual courses, encourage participants to share their experiences.
- Stage 1 collect data, preliminary analysis, and CoP workshop.
 - Stage 2 through 2012, depending on number of participants and funding available.



What was the impact? Professionally the pre-service teachers viewed the exercise as being useful, purposeful and relevant, even though some struggled with the technology. Personally, they identified a sense of achievement, were proud of their finished product, developed a sense of ownership and worked collaboratively to support each other. Having their work online, shared with peers created an emotional and personal connection, this I believe supported deep learning and purposeful reflection. They had to make decisions, support and justify these decisions and begin to start to see themselves as teaching practitioners.

Through portfolios students learn the skills of marketing themselves to others through their profile, collections and job applications which is an essential ongoing career development skill. E-Portfolios such as Mahara are reflective of real internet-based social media/cloud sites that students are using in their personal lives. The benefit of a university based e-portfolio is that students are working in a safe environment and their info is not publicly available on the internet like it is with other blogs/social media/wikis etc. This gives students a chance to try things out and choose who sees their content within the uni environment before they put it onto the internet. E-portfolios also give the students a space for self-reflection on their Work-Integrated Learning (eg. interships, mentoring, work placement etc.) which is an important professional skill.



Mahara served as a good platform for the students to keep their work together and showcase their capabilities. I introduced Mahara in the third week of the semester, and received feedback in weeks 4 and 5 that most of the students have logged into Mahara shortly after the introduction, although many did not work on their profile. For most of the students, the active use of Mahara did not occur till the last couple of weeks—of the semester. We did not have many issues with this group of students in creating their ePortfolios, in fact most were able to create organised ePortfolios that were easy to navigate through. The submission did cause a bit of confusion but not overtly problematic.

In retrospect, I could have provided a bit more direction/guidance in the use of the system...hence for next semester, I will ensure that they start using Mahara early in the semester first by building their profile and then space out the submission dates for the different artefacts. I'm intending to change some aspects of the assessment and to involve more collaborative work and more feedback (from me and from peers). The way I have used Mahara this year has been for summative assessment. I'm currently re-thinking how best to incorporate some formative assessment and to involve the students in peer-assessment and peer-feedback.



Eportfolio research at UNSW

Outputs

- Support material for academics who wish to use eportfolio for assessment in their courses
- Showcase of current practice
- Workshops to promote and support the uptake of eportfolio
- Academic paper(s) developed with the study participants

Future

- Other disciplines Science, Medicine
- Program level eportfolio implementation



Thanks!

Belinda Allen <u>belinda@unsw.edu.au</u>
Kate Coleman <u>kathryn.coleman@unsw.edu.au</u>
The University of New South Wales



http://belindaallen.wordpress.com

