

# ePortfolio for Teaching and Learning Management:

FuturEd Master Class for MNU 2017

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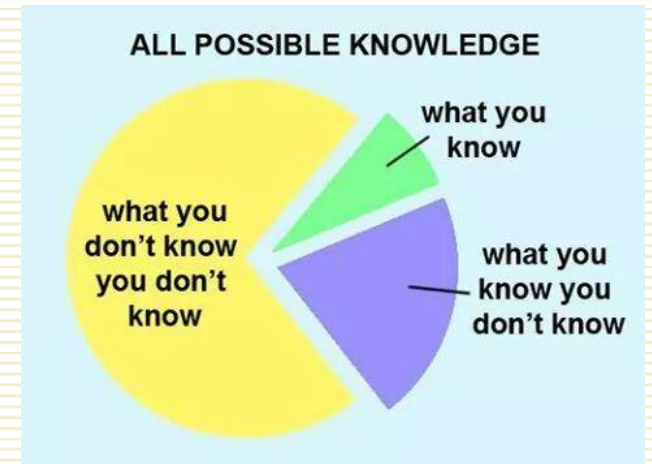
[www.FuturEd.com](http://www.FuturEd.com)

*FuturEd White Paper:*  
ePortfolio for Assessment  
of Learning



# A little about me

- Canadian expatriate (Middle East, China and Malaysia)
- PhD in Education Administration
- Expert in Higher Education, QA, eLearning, Faculty Development, Teaching & Learning, Leadership Development, Intercultural Leadership
- FuturEd is me: consulting education futurist
- Advocating ePortfolio for 15 years
  - FuturEd vision: ePortfolio learning ecosystem
- Now envisioning a Blockchain-managed ePortfolio system
- Dedicated Traveler and Lifelong Learner





# A little about you?

- How do people here know you?
- Do you have an ePortfolio?
- Do you use ePortfolios in your classroom?
- What is your measure of success for today?

# Master Class Overview

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## □ **Content**

- ePortfolio concepts and types
- ePortfolio processes
- ePortfolio tools and products

## □ **Processes**

- Designing ePortfolio assignments (3)
- Assessment of ePortfolios (rubrics)
- Modeling engaged learning

## **Engaged learning**

- Requires active participation by learners
- Based on clearly-stated intended learning outcomes
- Emphasizes vocabulary
- Produces evidence of learning
- Reports competence levels of relevant competencies
- Begins with prior learning assessment

**PRE-TEST**

# Key concepts (ILOs)

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## 1. Teaching/learning

- **ICT skills development**
- **Intended Learning Objectives**
- **Curriculum Alignment**
- **Assessment**
  - Formative & summative
  - Authentic & digital
  - Evidence-based
  - Competence-based
- **Engaged learning**

## 2. ePortfolio

- **Types and uses**
- **ePortfolio tools and services**
- **Digital evidence of learning and badges**
- **Creation processes**
  - Archives
  - \*Reflection\*
  - Presentation
- **Digital rubrics**

# ePortfolio at its simplest:

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- “This is what I know and can do,
- Here’s how I learned it, and here’s the (digital) evidence”

1. Archive everything
2. Presentation as needed



**Most  
complex:  
My Digital ID**

# Sample ePortfolios

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## Tools to make eP

- Personal URL
- Free website
- Free presentation
- Open Source
- LMS embedded
- Commercial / HCM
- Professional
- Personal
- No hassle

## Sample

- [www.FuturEd.com](http://www.FuturEd.com)
- [About Me](#)
- [Google Sites](#)
- [Marhara](#) (for Moodle)
- [CourseNetworking](#)
- [Portfolium](#)
- [LinkedIn](#) or FB page
- Social networking
- ppt

# Sample types of ePortfolios in education systems

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- ❑ Individual **student ePortfolios (by class, program, institution)**
- ❑ Lifetime learning ePortfolios (including formal, non-formal and informal learning, accidental and incidental)
- ❑ Collective student ePortfolios for Quality Assurance and accreditation
- ❑ Staff ePortfolios for professional development, Human Capital management



# Assessment ePortfolios

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- 1. Developmental (over time, self-assessment)**
- 2. Proficiency (high-stakes, exit)**
- 3. Showcase (best works)**
4. Admission / employment (relationship to requirements)
5. Communications (personal, sharing)

**Planning for and  
Assessment of Learning**

# Workshop outcomes

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Outcomes: new KSA

Output: 5-slide ePortfolio of

1. Prior knowledge / what I learned (sample digital evidence)
2. Creating a developmental eP assignment
3. Creating an eP proficiency assignment
4. Assessing an ePortfolio presentation
5. Next steps for me and/or MNU (“I want to know more..”)

**Let's get started: Open PPT – 5 slides and skip down to #5**

# ePortfolio Defined\*

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- “a collection of authentic and diverse evidence, *drawn from a larger archive*
- representing what a person or organization has learned over time *on which the person or organization has reflected,*
- and designed for presentation to one or more audiences *for a particular rhetorical purpose”*

**6 key concepts**

\* (NLII 2003 and FuturEd 2005)

# Reflection practice (in teams)

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You are preparing for a job interview.  
You will be asked:

1. What was your last job? What were your key tasks?
2. What did you excel at? Do you have evidence? **THIS** takes reflection.
3. Can you produce digital evidence?

Critical importance of your **archive!**

Same for students!

# ePortfolio development

## **\*\*eP Process\*\***

1. Collection ARCHIVE
2. REFLECTION\*
3. Selection
4. Projection: the learning
5. Presentation

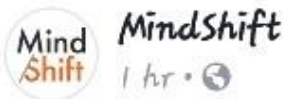
• **Taking time  
to think critically**

## **e.g. Reflection tools**

**(GOOGLE it 😊)**

1. Critical questions
  - **What did you learn?**
  - **How do you know you learned it?**
2. Blogging / journaling
3. Teach another
4. Self-assessment
5. Gap analysis (pre-post)
6. SWOT analysis

# \*Metacognition and Reflection\*



Metacognition helps us apply knowledge, skills and character qualities to new contexts.



The Role of Metacognition in Learning and Achievement  
wwz.kqed.org

— GEORGIA MOHDAN SPARKS-LANGER AND AMY BERSTEIN COITON —

## Synthesis of Research on Teachers' Reflective Thinking

The value of teachers' own interpretations of their work now supplements technical views of teaching, and researchers are exploring three elements of reflection—cognition, critical thinking, and narrative inquiry undertaken by teachers themselves.

**R**eflective thinking is not a new idea—Dewey (1933) referred to it in his early works—but only a handful of researchers and practitioners were using the term until Schön (1983, 1987) began to write about reflective practice in education and other professions. Now, those who have always believed in the importance of the critical and analytical thinking of teachers are rallying around the idea.

This shift toward an interest in reflective thinking has come about partly as a reaction to the overly technical and simplistic view of teaching that dominated the 1980s. Gradually, however, experts in supervision, staff development, and teacher education have begun to recognize that teaching is a complex, situation-specific, and dilemma-ridden endeavor. Recently they have begun to study teachers' values and philosophies in the face of their everyday dilemmas. Today, professional knowledge is seen as coming both from sources outside the teacher and from the teachers' own interpretations of their everyday experiences. It is difficult to pin down the exact meaning of the term reflection. Most

who use the term would probably agree that the opposite of reflective action is the mindless following of unexamined practices or principles. But within that agreement, there is quite a range of opinion regarding what reflection is and what it looks like in action.

This article presents three elements that are important in teachers' reflective thinking. The first is the cognitive element, which describes how teachers process information and make decisions. The second, the critical element, focuses on the substance that drives the thinking—experiences, goals, values, and social implications. The final element of reflection, teachers' narratives, refers to teachers' own interpretations of the events that occur within their particular contexts.

**The Cognitive Element of Reflection**

The cognitive part of teacher reflection focuses on how teachers use knowledge in their planning and decision making. Shulman (1987) has described six categories of knowledge: (1) content/subject-matter knowledge; (2) pedagogical methods and theory;

(3) curriculum; (4) characteristics of learners; (5) teaching contexts; and (6) educational purposes, ends, and aims. Shulman's idea of "pedagogical content knowledge," which encompasses the first three categories, refers to how teachers portray important ideas specific to their content. These representations (or metaphors) enable the teacher to convey complex ideas in ways that bring meaning to students.

Most cognitive researchers have not delved deeply into how teachers think about the last two categories of the knowledge base: teaching contexts and educational purposes, ends, and aims. They usually stick with what Van Manen (1977) calls the technical level of reflection, where the ethical and moral purposes of education remain unexamined.

Another focus of cognitive research is how the knowledge base is organized. One current model depicts information as organized into a network of related facts, concepts, generalizations, and experiences. These organized structures, called schemata, constitute the individual's comprehension of the world and allow a large body of information to be stored and accessed

MARCH 1991

# Creating a Developmental eP assignment

## Slide #2: Competence development

### Potential competencies

- 21<sup>st</sup> century skills
- Graduate Attributes
- Employability or transferability skills



You will assign the 5 steps

# Developmental ePortfolio

Over  
time....

## Steps (ppt slide #2)

1. Pick on attribute or skill, e.g., collaboration
2. Carefully define it as a competence (reference – Google or Wikipedia)
3. From a university / LLL perspective, where could it be learned? What would evidence of achievement look like? **Digital evidence?**  
Where is the reflection part?
4. From your course perspective, how could this be **assessed?**  
Evaluated?



later

## Principles

- Incorporating all forms of learning: formal and informal
- Demonstrates actual learning
- Evidence for “employers”
- Quality assurance and accountability



# Digital evidence: how and why

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## **Creations, e.g.,**

- ❑ Video clips
- ❑ Audio clips
- ❑ Photographs
- ❑ GIFs
- ❑ Scanned documents
- ❑ Hyperlinks
- ❑ Blogs / journals
- ❑ Badges
- ❑ QR Codes

## **Advantages**

1. Accessible
2. Portable
3. Examinable
4. Replayable
5. Reviewable
6. Sharable
7. Personalized
8. Creative

# Digital Evidence: the basics

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## Storage & presentation

1. Archive on your computer and/or the cloud
2. Presentation
  - Website
  - Open Source
  - Google sites
  - System tools (Moodle)
  - Commercial tools
  - Ppt tools

## Policy Issues

- Creation tools to use
- Storage requirement
- Sharing methods
- Internet Ethics
- Legality / ownership
- Utilization

**Put it in writing and  
KISS**

**YouTube Videos**

# Assessment of student learning should be: (QA standards for assessment)

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1. authentic, i.e., accurate representation of the contexts encountered in the field of study or in real-life tests faced by learners
2. against stated learning outcomes
3. frequent and timely
4. appropriate and responsive to the needs of the learners
5. in various forms such as written and oral assignments, self-assessment, demonstrations, portfolio assessment, and exams
6. competence-based
7. valid and reliable
8. conducted by trained assessors

# Creating a summative eP assignment

(new ppt slide #3)

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## Standards-based (ILO), proficiency eP

- 1 \_\_\_\_\_ is an important task or concept in your discipline
- 2 An associated **learning objective** is \_\_\_\_\_? \*\*
- 3 Competence can be demonstrate by (verb!) \_\_\_\_\_
- 4 Acceptable digital evidence would be \_\_\_\_\_
- 5 The reflection element is \_\_\_\_\_
- 6 Learning would be assessed against \_\_\_\_\_
- 7 The eP would be evaluated against \_\_\_\_\_
- 8 The assignment would be managed by \_\_\_\_\_

# \*\* A good intended learning objective (ILO) is...

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- Clearly stated
- Relevant (useful & appropriate to learner)
- Observable / demonstrable
- Measurable
- Achievable and realistic
- Appropriate in rigor to degree awarded
- Consistent with the provider's mandate
  
- Competence-based and competency-based**

# Evaluating an ePortfolio of learning achievement

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1. Stated learning objective (ILO)
2. Digital evidence submitted
3. Levels of competence – inadequate to excellence
4. Self-assessment (optional but recommended)
5. Teacher scoring (comments recommended)
6. Evaluation: level of achievement?

# Rubric for assessment of learning

**Demonstrable? Measurable?**  
**Rubric must be digital**

Learning Objective	Evidence Submitted	Unacceptable achievement	Acceptable achievement	Excellence	Self / Teacher Assessed
Create a blog		No entries	Entries	Engaging	
Express what s/he learned		Repeats course objectives	Translates objectives into own word	Actively reflects on before and after	
Share what s/he has learned		No ability to transfer	Use of appropriate tools	Links new learning to old and to plans	

# Rubric for assessing an ePortfolio- it IS the evidence

Skills to develop	Levels of required Achievement	Assessment and/or evaluation
How to make an ePortfolio		
Planning and gap analysis		
Creating digital evidence		
Reflection		
Self-assessment		
Creativity and ICT innovation		



# Next: Marking a Showcase Assignment (An ePortfolio marking rubric - ppt slide #4)

## Assignment:

### Showcase eP of best work

1. What are the overall course objectives?
2. How is excellence described overall?
3. What constitutes evidence of achievement?
4. What is acceptable digital evidence?
5. **What marking rubric would you give to students?**

## Principles

- Promotes accountability for course objectives*
- Reflects curriculum alignment*
- Incorporates all steps of eP creation*
- Ensures transparent assessment and evaluation*
- Promotes reflection: time to consider over the term*

# Showcase marking rubric

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MUCH simplified...

<b>Learning objectives</b>	<b>Evidence submitted</b>	<b>Levels of required achievement</b>	<b>Self-assessment</b>	<b>Teacher evaluation</b>
Course content				
ePortfolio itself				

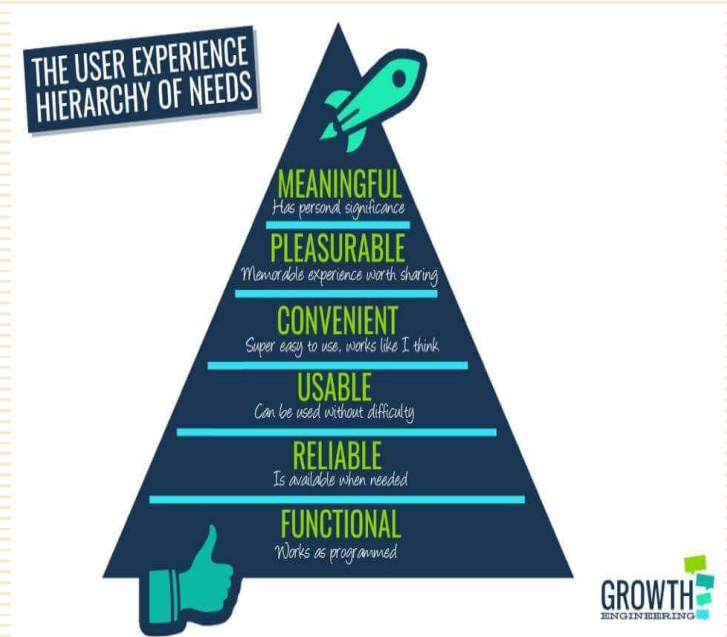
## **How to manage this?**

- **Distribute?**
- **Receive?**
- **Provide feedback?**

# Critical Principles

## An ePortfolio MUST:

- **Be owned by individual / creator**
- **Be secure, with access controlled**
- **Incorporate all forms of learning**
- **Be transportable**
- **Demonstrate ROI**



# Student uses of ePortfolios

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## □ Lifelong learning

- Formal learning
- Informal (on campus, IE)
- Non-formal (community, family)
- Achievements
- Networks

## □ Employability

- Breadth of abilities
- Supporting evidence
- Transferable skills
- References

# ePortfolio Assessment of Learning

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- ❑ Alternative assessment (essays, multiple choice)
- ❑ Authentic assessment (evidence of real tasks)
- ❑ Competency-based (here's the evidence)
- ❑ Flexible assessment (PLA)
- ❑ Reflective learning (process, personalized)
- ❑ Constructivist (over time – a living document)
- ❑ Positivist (asset building)
- ❑ Complementary (to other types of assessment)
- ❑ Motivating (through self- or peer-assessment)
- ❑ Instructive (wealth of info about learners)

# Review: ePortfolio is

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- A **digital approach** in teaching and learning management to achieve, e.g.,:
  - An ongoing digital archive of evidence
  - Presentation of relevant, as-needed KSA
  - A record of learning progress
  - Effective and efficient assessment
  - ICT skills and innovations development
  - Achievement of ILOs
- **Digital** tools, services, evidence – ODL 😊
- Widely used Learning Management tool

# FuturEd ePortfolio learning ecosystem



1. All “teaching” efforts set out as Intended Learning Outcomes (ILO) that are demonstrable/ measurable
2. Full curriculum alignment, and direct testing for the ILOs through authentic and flexible assessment
3. Complete rubric description of levels of achievement from inadequate to excellence.
4. For at least one ILO, the requirement for a digital artefact of competence – assessed against the rubric.
  - ▶ The artefact may take the form of a digital badge
5. Digital artefacts are added to the a person’s digital repository.
6. When necessary or preferred, the digital artefacts are managed and presented by blockchain technology.

HENCE **Blockchain portfolios** of competencies

**A vision of a Preferred Future**

# Me, ePortfolio and learning assessment at MNU... on slide #5

□ Post-test

□ Making slide #1

Slide #5

□ I want to try..

□ I want to learn..

□ MNU could...  
■ Opportunities?  
■ Obstacles?

*It's now*

- *Life-long (live longer, keep learning)*
- *Life-wide (life skills, growth mindset)*
- *Life deep (EQ, ethics, empathy, values)*

**BI** *Business Insider*  
16 Aug at 09:15 • 🌐



*"The notion that you're born, go to school, get a job, retire, die. That's gone."*



# Presentations / volunteers?

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## 5-slide ePortfolio

1. This is what I learned...
2. Here is my developmental eP assignment
3. This is an proficiency ePortfolio assignment
4. This rubric is to assess an eP assignment
5. Next steps for me and/or MNU

# More Information:

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[www.FuturEd.com](http://www.FuturEd.com)

ePortfolio research and white papers



Dr. Kathryn Chang Barker

[kbarker@futured.com](mailto:kbarker@futured.com)

# Websites / FB pages

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## **Education**

- Edutopia
- Yidan Prize
- eLearning Coach
- Mindshift
- The Atlantic
- Education Technology
- WISE Qatar Foundation

## **Leadership**

- World Economic Forum
- Entrepreneur
- Business Insider
- Big Think
- Futurism
- LinkedIn

# Some eP web resources

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- ❑ Consumer Guide to ePortfolio Tools and Services (FuturEd)
- ❑ Glossary of terms <https://kb.iu.edu/d/aqhz>
- ❑ Quizzes <http://www.quia.com/cz/48859.html>
- ❑ Templates <http://electronicportfolios.com/nets.html>  
<http://eportfolio.nku.edu/downloadpage.htm>
- ❑ Using Front Page  
<http://www.usca.edu/essays/vol142005/hyndman.pdf>
- ❑ eP rubric <http://office.microsoft.com/en-us/templates/TC300050481033.aspx>
- ❑ eP for assessment  
<http://www.slideshare.net/georgeroberts/eportfolios-and-assessment>
- ❑ all about: <http://www.jiscinfonet.ac.uk/infokits/e-portfolios/index.html>
- ❑ eP for teachers:  
[http://ucat.osu.edu/teaching\\_portfolio/teaching\\_port.html](http://ucat.osu.edu/teaching_portfolio/teaching_port.html)

# ePortfolio Resources

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## Tools / services

- CourseNetworking ePortfolio
- Mahara / Moodle ePortfolio
- Google Sites eP
- Portfolium
- PebblePad
- LifeWire
- About Me
- IO Grid
- SimpleSite

## Resources

- FuturEd Consumer Guide to ePortfolio Tools and Services
- list of tools
- PhD2Published
- CN Badges
- Guide to Badges
- Synthesis of Research on Teacher's Reflections

# Potential applications

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- ❑ **K-12** – demonstration of learning
- ❑ **PSE / HE** – assessment of learning
- ❑ **Lifelong learning** – continuous “reflective” learning, inventory of learning
- ❑ **Workplace** –
  - recognition of all forms of learning (PLA)
  - Human Capital Assets Management (HCA)
- ❑ **eLearning** – LMS and KM, online tools, web services
- ❑ **Organizational and/ or economic development** – asset mapping, quality assurance
- ❑ **eCitizenship** – Digital identity

# ePortfolio...

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- A term used to encompass (1) tools, products and systems that can be used by (2) individuals, educators, employers and entire nations for the purposes of (3) describing, assessing, recognizing and using knowledge and skills (4) acquired through all forms of learning (5) with evidence that is digitally created, stored and managed through (6) practices that meet quality standards to assure transportability, usability, and security (FuturEd 2007)



What Footprints Are You Leaving Behind?



kintsukuroi

(n.) (v. phr.) "to repair with gold"; the art of repairing pottery with gold or silver lacquer and understanding that the piece is more beautiful for having been broken

"you're supposed to start before you're ready and before you're good at it and that's how you get ready and that's how you get good at it"  
-Elizabeth Gilbert, *Magic Lessons* season 2



think of it as an adventure