Making Connections: Reflection as a Tool for Deep Learning

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Today's Overview

1. Deep Learning and Reflection
2. Reflection in ePortfolios *for* learning
   1. Students examples from different disciplines
3. Activities supporting reflection
4. Keys to reflective activities

Deep Learning and Reflection: Fostering Integrative Learning

Deep Learning

– involves reflection

– is developmental

– is integrative

– is self-directive

– is lifelong

Cambridge as quoted in Barrett, 2004

Integrative Learning

"One of the greatest challenges in higher education is to foster students' abilities to integrate their learning across contexts and over time. Learning that helps develop integrative capacities is important because it builds habits of mind that prepare students to make informed judgments in the conduct of personal, professional, and civic life…"

Huber and Hutchings (2004)

Reflection in ePortfolios *for* Learning

Electronic portfolios (ePortfolios) are collections of digitally represented artifacts that:

- *document* practice
- include *reflection*
- *integrate* experience
- map to *goals* and/or standards
- promote *deep learning* and *knowledge transfer*
- support *meta-cognition and life-long learning*

Developing Reflective Thinking

- Reflection is what makes us learners; we need to practice, assess and perfect it.

- Four criteria characterize the concept of reflection:

  - Reflection is a meaning making process

  - Reflection is systematic, rigorous and disciplined; with roots in scientific inquiry

  - Reflection needs to happen in community

  - Reflection requires attitudes that value personal and intellectual growth

From: Carol Rodgers, "Defining Reflection: Another Look at John Dewey and Reflective Thinking," *Teachers College Record*, 104, 4 (June 2002): 842-866

Making Connections
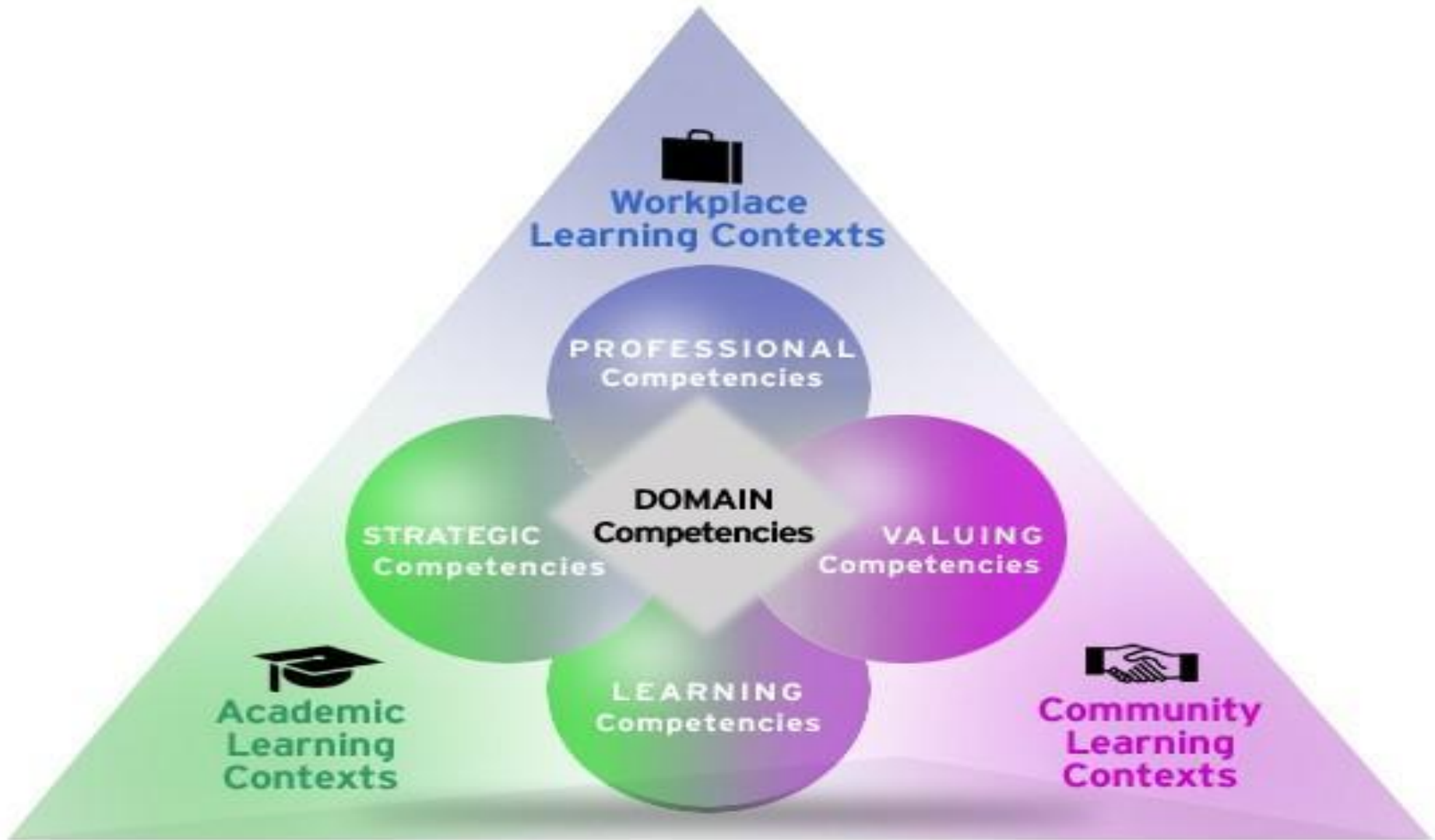
Reflections in Speech Communication: Organizational Leadership

- Student voices - (Spcom)

Craig's Eportfolio

| Homepage | Inspired Insights | Magnificent Failures | Unanticipated Connections |

Magnificent Faleures

Okay, there have been good explanations for the other sections, but by now you're probably wondering what a section about failures possibly be good for? Well let me tell you. When was the last time you fell on your face walking down a nice, clean, level street? Proba long time ago wasn't it? You might say that over the years you've learned to competently move yourself from place to place by walki now let me ask you, how did you learn? It wasn't by standing still or staying in bed, I'll tell you that much. You tried to walk--and you Probably many, many times. I choose to see these failures as part of the learning process, and I see their magnificence as a result. Wl take beginners snowboarding with me, I make them fall. If you don't fall, it means you're not trying hard enough. That's the concept this page--times I tried so hard that I fell. Writing about these times is how I pick myself up to try again...

Organizational Leadership
3ʳᵈ Year Course

Eportfolio activity---30%

builds on 2 main course themes

- Homepage
- Constraining Challenges (course theme)
- Creative Explorations (course theme)

- Each page includes 3 substantial pieces of your writing (cite academic readings, engage ideas from in-class and on-line discussions, revisit an online journal submission incorporating feedback to the initial entry)

- Encourage use of music, photos, videos etc. along with reason for including these.

Process

- **Week 2** - *Introduction to assignment* and 2 *hands-on sessions* introducing students to *eportfolio software*. Students encouraged to *share their eportfolio through discussion board*
- *Technical Support available throughout term* by arranging an appointment
- **Week 7**- *submit ePortfolio* in progress- *circulate to a team member for feedback*
- **Week 10-** *peer feedback due*
- **Week 12-** *eportfolios due*
- **Week 13** – *presentation to class*

Rubric provided to students

Type /Level of Reflection	Indicators	Integration of learning
Critical Reflection	With evidence, **questions root causes and assumptions, engages with ambiguities** about culture, systems, self, authority, meaning… . **Asks "How did it come to pass?", "Why?", and/or "What if…?" along with "How do I know this?"**	Critically examines theories, class discussions, concepts, frameworks from this course and/or other courses.
Analytical Reflection	**Provides explanations** related to the specific situation, or a **personal reaction** to a situation. **Asks "What?", "Why?" and/or "How?"**	Relates situation to theories, class discussions, concepts, and/or frameworks from this course and/or other courses.
Descriptive Thought	Provides **a description of a situation and a reaction to it**. (e.g. "This is what happened and this is how I felt.") **Reports on experience instead of interpreting experience.** This is **no/little attempt made to uncover assumptions of the situation**.	Little /no integration of theories, class discussions, concepts, or frameworks from this course and/or other courses.

Evidence of learning

Online Reflective Journal Entries

Reflective Online Journal #3

I have learned a tremendous amount throughout this course not only about organizational communication, but also about myself through my own personal development. I have found that the course readings, in addition to my invaluable experience at my placement at Kitchener Waterloo's Special Olympics, have aided me in gaining a more complete and concise understanding of the various dimensions of organizational communication. I have also learned strategies to implement positive, humane change in my involvements with organizations in my future career.

Initially, I thought [he] was just being extremely generous in treating us to lunch without his presence, **but now after further examining this chapter I believe that he was …trying to stimulate strategic dialogue**.

Evidence of learning

Online Reflective Journal Entries

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my initial focus on change when I wrote this article led me to think about organizational committment, …. made me think about how I might not be very committed to the storytelling of the organizations I have been a part of. When I wanted more information on this topic, I consulted an article ……, what has happened in my own experience is I have not yet found an organization with which I feel I can fully invest myself into.

Sexual Ethics – 3rd Year Course

- ePortfolio Culminating Activity – 20% > Addresses course learning outcomes especially,
  - Reflect on and articulate your own view of sexual ethics in relation to the research literature and the "real" world.

- ePortfolio includes evidence to support articulation of personal sexual ethics as students document and demonstrate how they have connected what we have done in class (lectures, discussions, research) to their overall knowledge of sexual ethics.
  - Variety of reflective activities facilitate learning over the term

Process

- **Week 1** - *Introduction to sexual ethics (what is sexual ethics?) via group discussion and individual reflections in class*

- **ePortfolio hands-on sessions offered outside of class and technical support available throughout term*

- **Week 2-** *initial concept mapping in groups*

- **Week 6-** *revisit early reflections/concept maps for additions/changes and group feedback*

- **Week 11-** *reflection on group presentations and consideration of changes to ethical stance*

- **Week 13** – *ePortfolios due*
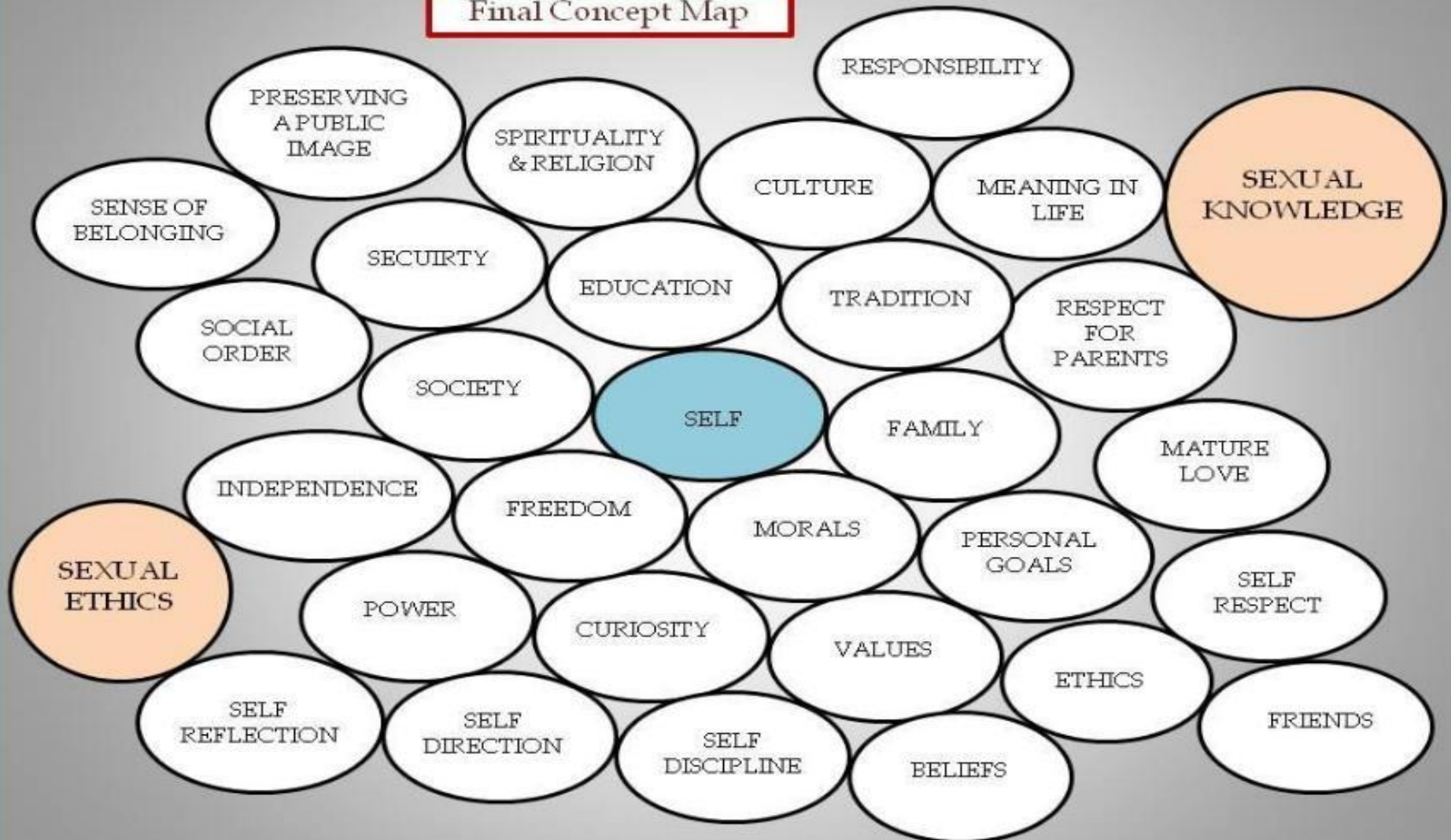
Evidence of Student Learning: Concept Mapping
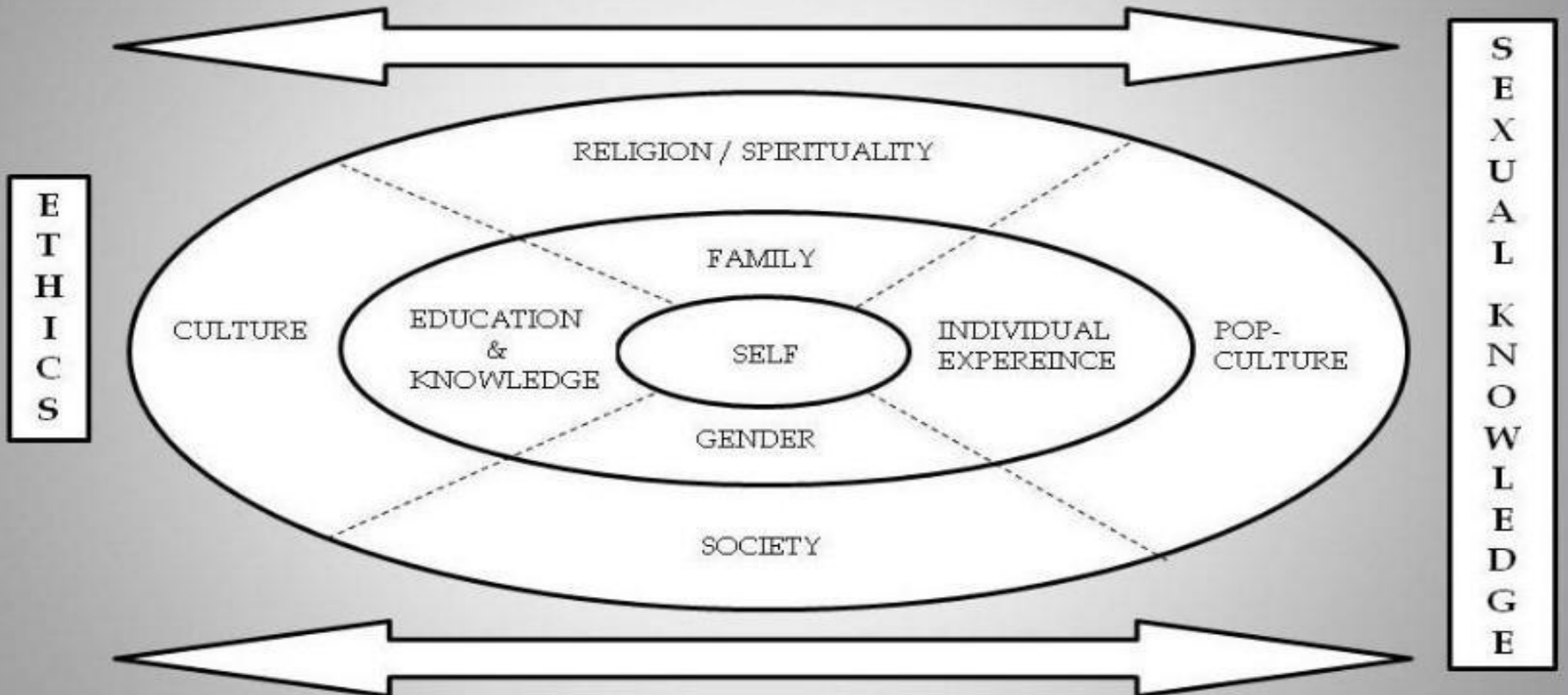
Evidence of Student Learning: Concept Mapping

AFM 131 – School of Accounting and Finance

- Reflections on team skills at: beginning, mid-point and end of term.
- Beginning – benchmarking yourself based on past experiences
- Mid-point – reflecting on team experiences; feedback on first reflection, and peer formative evaluation; goal setting for remainder of term
- End of term – reflecting on team experiences; assessing learning; re-visit benchmarking

Use of reflection in co-op work term

- Growth over time

e PwC Experience

nd coop term, I was able to continue
ricewaterhouse Coopers LLP as a Term 2
iate, in the midst of downtown Toronto. I
opportunity to audit many different types
s term such as insurance companies,
, NPOs, and currency exchanges. I have
ty on two of my clients from my last coop
Fraternal Benefit Society
NPO) and Travelex Americas Currency
e other audit engagements that I have
year include Morgan Meighen &
Pooled Funds), Newshore Capital Group,
Global Investment (Pooled Funds).

audit teams that I have been part of were
; however, I have also worked on a larger
ut ten individuals on Travelex Currency
ch team consists of a partner, manager
ssociates and a number of associates.
f a large team, allowed me to focus on a
ned section in depth and understand all
at section, i.e. Inventory. My involvement
dits, however, has been more significant
chance to complete and understand the
s from start to finish.

T2 coop associate varied, depending on
ne audit. Although overall, I was given
sibility that my last term, on bigger teams
ne chance to work on completion steps
On the final engagement during the work
n a team of two auditing a Mutual Fund
r Global Investment. The senior on the

Communication

End of Term Employer Evaluation

Employer Evaluation - Page 1

Employer Evaluation - Page 2

End of Term Self Evaluation

Self Evaluation - Page 1

Internal communication must work well inside the organisation
(Illustration by Anne-Marie Gorneveldt)

Communicating at Work

As an auditor, oral communication is a vital part of our
job. We have to communicate with our team - seniors,
managers, and partners. And a significant portion of our
time is spent communicating with the client to
accurately understand the business processes. In order
to succeed in such a career, it is important to improve
my communications skills so that I can speak more
confidently.

Throughout my last coop term, I learned that it is very
important to inform the senior of any important
discoveries. However I also learned that it is just as
important to let the senior know about my progress.
During an audit this term, the senior had asked me to
evaluate and express my opinion on the testing
performed in last year's audit. It was difficult for me to

AFM 131 – School of Accounting and Finance

- Illustration of an "aha moment" in terms of personal and intellectual growth:

  - I would just like to say that I never knew just how important the team reflections from AFM 131 would be, until I began preparing for interviews for summer internships at accounting firms. I figured they would ask about teaming [sic] experience (which they did) and I was fully prepared to answer their questions because I referred to what I had wrote [sic] in my team reflections. On a side note, I have received an offer… and I owe a lot of that to the reflections! Virtually all of their questions were about experiences in teams."

    Student email, February 25, 2007

E-Portfolios as an Integrating Tool

The most important thing I learned…was how to look at the "big picture". In school so far, we've studied many accounting concepts
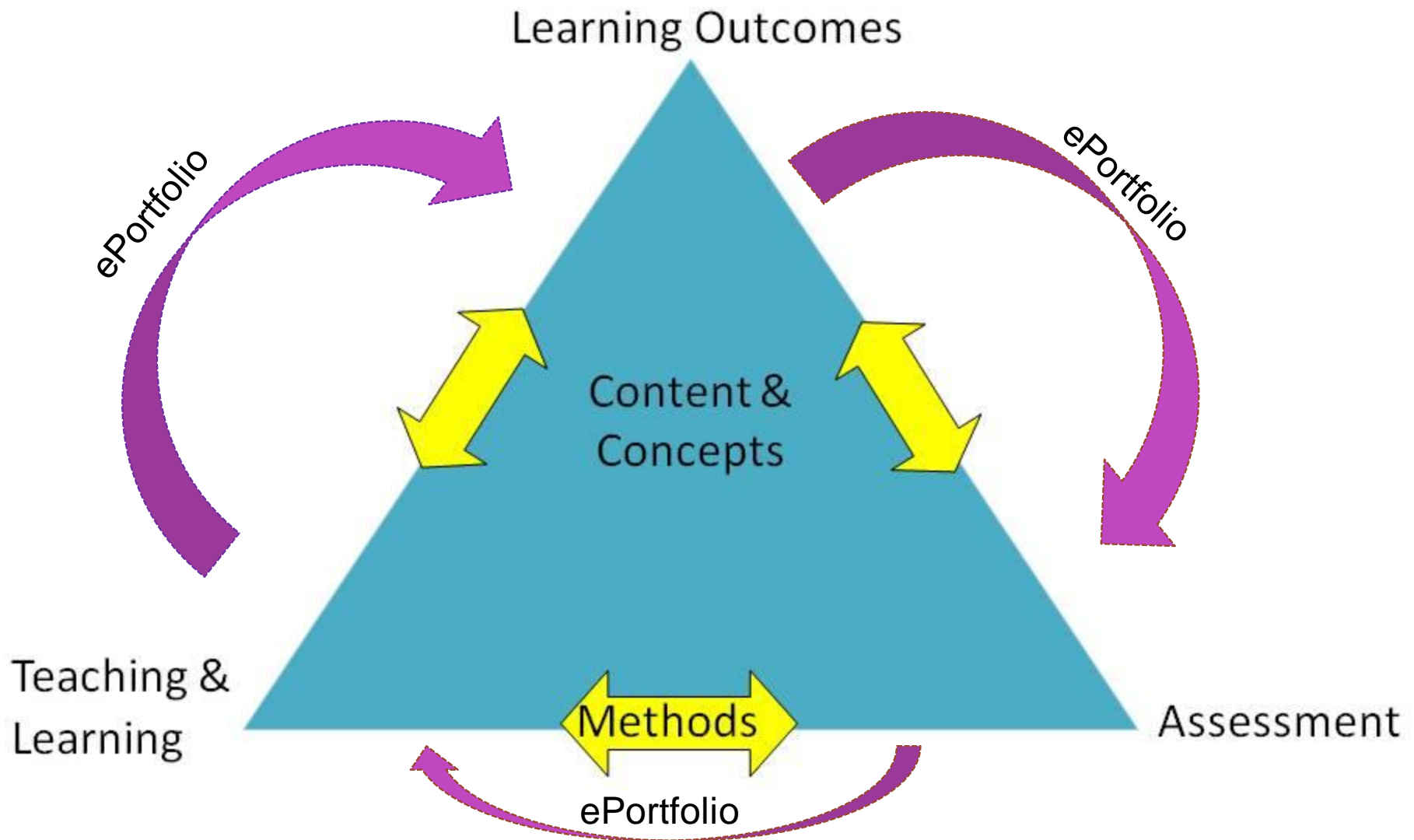
…

However, this is the first time that I have actually slowed down and taken all these small concepts and tried to understand how they are related in the grand scheme of things.

Key to Reflection

- ## *Meaning making/systematic, rigorous thinking with roots in scientific inquiry*
  - Is s/he making more connections to previous learning experiences? Is there evidence that the learner is using lessons learned in one context to make meaning of experiences in another context?

- ## *Reflection in community, interaction with others*
  - Is there evidence that shows the student is learning from interactions with others and planning for the future?

- ## *Attitudes that value the personal and intellectual growth of oneself and of others*
  - What, if any, are the big "aha" moments- the moments that the student suddenly has a significant insight that moves him from a superficial to a deeper understanding?

Issues to Consider:
Alignment in Course/Program Design

Learning Outcomes

ePortfolio

ePortfolio

Content & Concepts

Teaching & Learning

Methods

ePortfolio

Assessment

Implementing Effective Reflective Activities

Be sure to include opportunities for:

- Benchmarking
  - Students need an opportunity to capture where they began their learning so they can plan for future learning opportunities.

- Feedback
  - For learning to occur, students need timely feedback on their work.

- Different Contexts
  - Students need opportunities to make connections to learning outside their course/program (deep learning).

Implementing Effective Reflective Activities

Be sure to include opportunities for:

- Integrated
  - Reflective activities need to be integrated into what students are expected to do – NO ADD-ON's

- Rigor
  - Instructors should model and reinforce that this is a rigorous and academic process > evidence of learning must be provided

- Scaffolding
  - Reflection is a learned ability – students need opportunities to practice within a course/program.

Final Thoughts: Responsibility

"Responsibility helps to bind and ground whole-heartedness, directness, and open-mindedness. It is the reality check. It asks, **'What are the real-life implications of my thinking?'** It also implies that a **carefully considered line of thought should lead to action.**

Dewey (1933) wrote that to be intellectually responsible

> is to consider the consequences of a projected step; it means to be willing to adopt these consequences when they follow reasonably from any position already taken. . . . **Learners must ask for the meaning of what they learn**, in the sense of **what difference it makes to the rest of their beliefs and to their actions**."

(Rodgers, p. 862)

Influences on our Work

- Helen Barrett on digital storytelling. See her work on this and ePortfolios at http://electronicportfolios.com
- Darren Cambridge on Network/Symphonic Selves in Cambridge et. al. (eds.), *Electronic Portfolios 2.0*, 2009.
- Moon, *Reflection for Learning and Professional Development* (1999)
- Rodgers , "Defining Reflection: Another Look at John Dewey and Reflective Thinking," *Teachers College Record*, 104, 4 (June 2002): 842-866.
- Yancey, *Reflection in the Writing Classroom* (1998)

Thank you

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