



ePortfolios: Supporting Reflection and Deep Learning in High Impact Practices

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Why ePortfolios?

- **Showcase student work and skills**
- **Support deep reflections**
- **Integration across curricular & co-curricular activities**



High Impact Practices

- First Year Seminars
- Service-Learning
- Linked courses/Learning Communities
- Research with Faculty
- Internship or Field Experience
- Study Abroad
- Capstone Senior Experience

ePortfolios at Muhlenberg

- **Capstone Senior Experiences**
 - Student Teaching in Education Program
 - Business Program
 - Media/Communication Capstone
 - Studio Art Senior Seminar
- **First-Year Seminars**
- **Learning Communities**
 - Linked Cluster Courses in General Education
- **Service Learning Courses**
 - Psychology & Honors program
- **Undergraduate Research**
 - Neuroscience Research Lab

High Impact Practices

- Require extensive time and effort outside classroom
- Support meaningful interactions with faculty and other students
- Provide opportunities for collaboration with diverse others
- Allow for frequent and significant feedback on student work

ePortfolio Assessments

- Student surveys
- Observations of student training sessions
- Reflections on work with faculty
- Guided discussions with ePortfolio faculty

Student Surveys

Items	Mean (SD)	%
I understand the goals and purposes of creating my ePortfolio.	4.11 (.71)	91.7%
Developing an ePortfolio has helped me to reflect on the skills that I have developed in my coursework or my RA experience.	3.60 (1.06)	68.6%
Developing an ePortfolio has helped me to reflect on the goals for my educational experience.	3.42 (1.34)	61.1%
The integration of ePortfolio closely ties to my course/curriculum goals or RA experience.	3.49 (1.01)	60.0%
Developing an ePortfolio has enriched my learning experience.	3.17 (1.06)	44.5%

(N=36)

What was the most important thing you learned from developing an ePortfolio?

- How to both synthesize (translate) and develop skills for future employment
- Reflecting on experiences and why that is important
- How to set-up, design, and manage an ePortfolio or blog
- How to integrate an ePortfolio to enhance a resume or cover letter
- How to give feedback and/or reflect through written form
- Helpful in valuing and understanding the larger goals of the course

What suggestions do you have for improving how students develop the ePortfolios?

- More feedback and opportunities for continued learning
- Not as relevant for specific course; would prefer as an outside workshop
- Clarified instructions and guidelines for organizing ePortfolio
- Creating ePortfolio either too early (freshman year) or too late (senior year) to understand value and larger context

Participatory Observations (students)

Contexts: During in-class workshop
& one-on-one consultations with IDC

- Did not understand the value of ePortfolio development – see it as busy work
- Failed to see how creating an ePortfolio could provide a different and more integrative lens to view their educational experiences



Informal Interviews (faculty)

Having a hard time

- Making the connection between eportfolio requirements and overall course goals and objectives visible and easy to grasp for students
- Transforming existing course assignments into high-impact practices with ePortfolios
- Developing prompts that supported deep reflection and integrative learning
- Focusing on the pedagogy of ePortfolios. Concerned more about training students on the tool (WordPress)



DNA 281: Dana Honors Seminar in Community Partnership

- Working with IDC
- Creation of eportfolio template
- Revised the prompts in the SL course to support development of personal growth learning skills
- Timeline & workload



ePortfolios Template in DNA 281

- Welcome
- About Me
- Final Reflection
- Knowledge Gain
- Service Learning
- Media Gallery

Knowledge Gain

- What knowledge did I gain through writing these three reflection papers?
- How did these writing help me construct my understanding of those issues discussed in the readings?
- What impact did these reflection papers have on your understanding of the real world? Did it challenge any of your preconceptions?
- How did this reflection papers connect with what you learned in another course?



Service Learning

- What did you do with the local high school students?
- What impact did these working with the local community group have on your understanding of the real world? Did it challenge any of your preconceptions?
- How did you apply the conceptual knowledge you gained from the readings into working with the local communities?
- How did the service-learning partnership help you better understand the main concepts you learned from the readings?

ePortfolios in Neuroscience Lab

- Student researchers develop ePortfolios to support lab experience goals
- Lab syllabus includes rationale for ePortfolio development
- Highlights the value of ePortfolios for honing analysis/synthesis skills and for connecting research experience to other learning

Reflections Linked to Goals

Gain experience with all aspects of scientific process

ePortfolio includes reflections on:

- Research Goals
- Literature Review
- Experimental Design
- Results

Reflection Prompts

Research Goals

- What are your general goals for the semester?
- What questions do you intend to address with your study?
- What are your specific hypotheses?
- What skills do you hope to learn or refine?

Literature Review

- What are the key findings, and how do they pertain to your project?
- Did you notice any confounds? What could be done to diminish them?
- How does this study relate to past literature and to your project?
- What suggestions do you have for future research on this topic?

Reflection Prompts

Experimental Design

- What is the general design of your study?
- What groups will you have?
- What materials will you use?
- Why are you choosing this design? How does the past literature inform your choices?

Results

- How did you analyze your data?
- What do your results mean?
- How do your findings mesh (or not) with your hypotheses?
- How do your findings fit (or not) with past literature?



ePortfolios Support Research Experience

- Provide record of research activity
- Develops abilities to analyze and synthesize research literature
- Supports deeper reflection of research experience
- Creates a tool for future applications (summer REUs, grad school, job)

Small Group Work

- What characteristics exist in a reflection that shows deep learning?
- What type of prompts support deep reflection and integration?

Reflection Prompts

- Direct
- Succinct
- Connected to course goals
- Reflect on specifics (prior learning, present experience, course readings, and future improvement)

General Reflection Prompts

1. “Identify one important concept, research finding, theory, or idea ... that you learned while completing this activity.”
2. “Why do you believe that this concept, research finding, theory, or idea ... is important?”
3. “Apply what you have learned from this activity to some aspect of your life.”
4. “What question(s) has the activity raised for you? What are you still wondering about?”

Lessons Learned

- ePortfolios need to be closely linked to course and program goals with clear rationale
- ePortfolios need to engage students in deep reflections
- ePortfolio prompts need to be carefully constructed to support this type of reflection