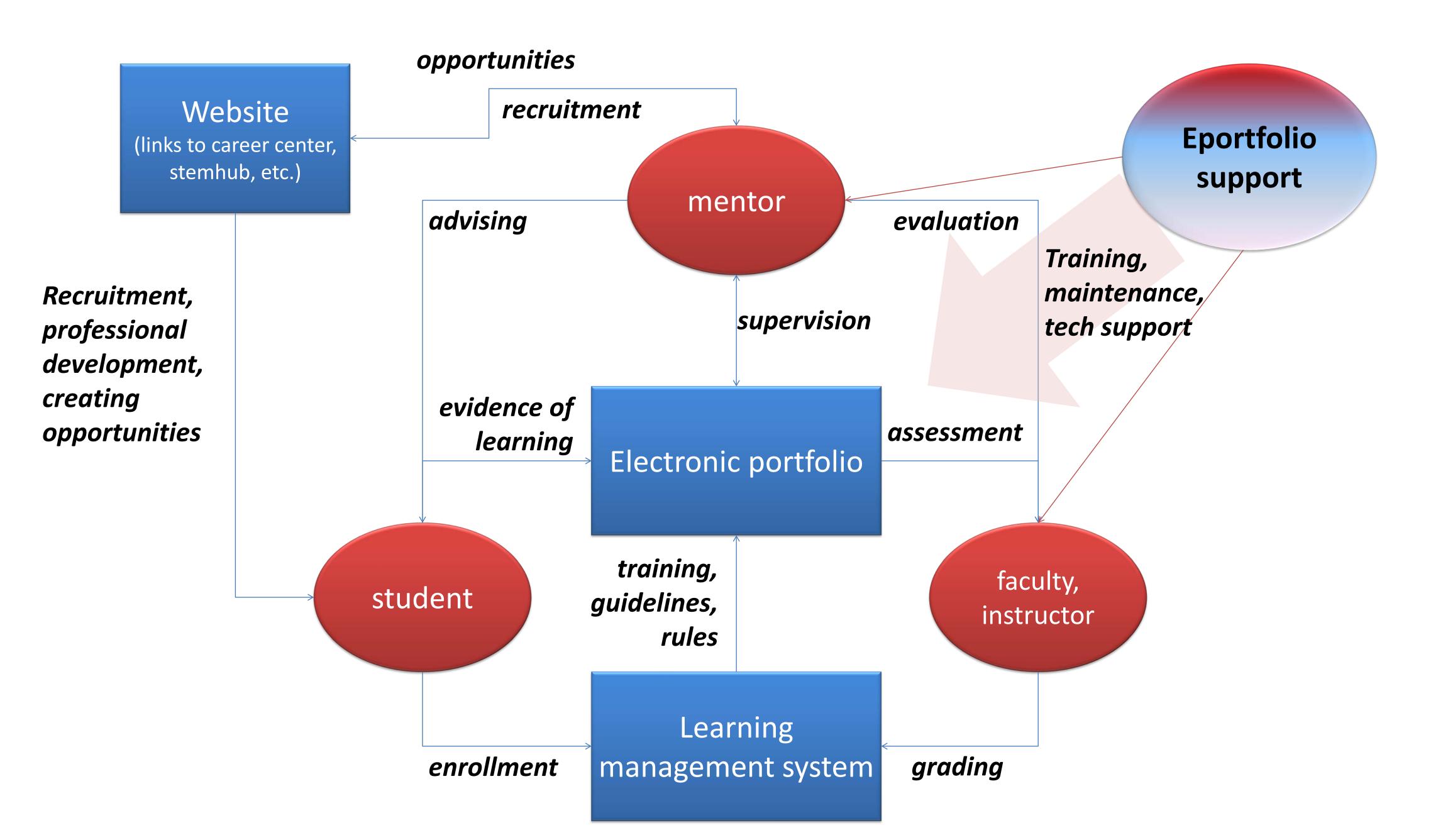
## **Innovative Instruction Technology Grant Project:** Electronic Portfolios to Enhance **Experiential Learning and Assessment in** Internship Courses

Gary P. Halada **Department of Materials Science and Engineering Stony Brook University** gary.halada@stonybrook.edu





## **Concept map of eportfolio support of experiential learning**





## Engineering Internship Template Home Bio Resume Internship Experience Gained Instructions and Grading Rubric Employer/Mentor S Home Add an image and a quote that describes your professional charac to continue to browse your eportfolio. Welcome Bio Place professional photo and motto (quote Bio Professional Philosophy Professional Goals Resume See the Career Center to co into this field. Internship Add a link to

Description Journal Summary of Activities Resources

Describe your i

List and describe your projects and tasks.

Describe how your tasks and activities contributed to the company. How important was this to the company's mission? How did this experience meet your professional goals? What are the next steps you would suggest to the company to continue with your project? How can these activities be sustained?

Start a daily or weekly journal and reflect on your work and involvement with the company or firm. Think about the following questions as you post your journal entries. •What are you learning from your day to day experiences? •What are you learning from the professionals on the job? •How do you see yourself fitting in to the workplace? •What contributions could you make?

List resources and technology you used on the job.

<u>site map</u>	template         Input from:         Faculty         Industrial advisory board, amployors		
Survey cter. Invite the viewer			
e) here.	employers ≻Undergraduate program committee ≻ criteria) Program assessors (accreditation		
omplete a professional resume. Copy	and paste your resume		
description with image of the compa their website. responsibilities.	ny or firm hosting your internship. Provide a		

## Value of reflection – student demonstrates learning gains

## Experience Gained

Reflect on the following points:

- What professional skills and abilities did you gain from this experience?
- 2. How did this experience give you a greater insight into the Engineering Field?
- 3. What skills and abilities did you observe diplayed by the engineers as they went about their daily work?
- 4. How would you describe this experience to a friend?
- 5. How would you describe this experience to a future employer?
- 6. What new goals and career paths has this experience set for you?
- 7. How does your professional goals compare with the company goals?

address for more space.)

Create a short 3 minute presentation on experience gained from internship - Try making a Prezi (http://www.prezi.com. Create an account with your Stony Brook email Evaluation Rubric for ESM 488: Cooperative Industrial Practice Note: Not all internships will include all these aspects, though they all must include Learning Objectives 1-5.

Learning Objectives 1-5.					
h	7 Intern chould aveal at	Evcol at 1	Can adoquately Ch		
	<ul> <li>8. Intern should excel at identifying, formulating, and solving engineering problems.</li> <li>(Evidence: projects, journal )</li> </ul>	Excels at recognizing the necessary mathematical and critical reasoning concepts needed to solve a problem; can identify the necessary variables, standards and scientific data required when faced with a complex problem; can clearly and effectively apply	Can carry out all basic engineering problem solving methods required; can adequately find and apply general mathematical, statistical and scientific principles	Unable to apply basic problem solving methods with any degree of independence; unable to identify mathematical or critical reasoning concepts or standards required to solve a problem	
		this knowledge			
		assessment and life cycle analysis			

## rubric

Assessment by: ≻Faculty coordinator ≻Industrial mentor PART II: Student Learning Objectives (what our students should know or what skills they should possess): (employers asked to **rate** how well intern meets this learning outcome on a 1 to 5 scale)

**Student Outcome 1:** Graduates of the Engineering Science program should possess an ability to apply knowledge of mathematics, science, and engineering

**Student Outcome 3:** Graduates of the Engineering Science program should possess an ability to design a system, component, or process to meet desired needs

**Student Outcome 4:** Graduates of the Engineering Science program should possess an ability to function on multi-disciplinary teams

**Student Outcome 5:** Graduates of the Engineering Science program should possess an ability to identify, formulate, and solve engineering problems

**Student Outcome 6:** Graduates of the Engineering Science program should possess an understanding of professional and ethical responsibility

**Student Outcome 7**: Graduates of the Engineering Science program should possess an ability to communicate effectively

Student Outcome 8: Graduates of the Engineering Science program should possess the broad education necessary to understand the impact of engineering solutions in a global and societal context

**Student Outcome 9:** Graduates of the Engineering Science program should possess a recognition of the need for, and an ability to engage in life-long learning

**Student Outcome 10:** Graduates of the Engineering Science program should possess a knowledge of contemporary issues

**Student Outcome 11:** Graduates of the Engineering Science program should possess an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

### PART I: Program Educational Objectives -- How important are they?: (answered on a 1 (not important) to 5 (very important) likert scale...)

## **Program Objective 1**

Graduates of the Engineering Science program will be conducting careers in engineering or science-related disciplines or completing graduate studies in top ranked institutions.

## **Program Objective 2**

Graduates of the Engineering Science program will be participating in interdisciplinary research, design, and/or policymaking teams in industrial, academic or government settings.

## **Program Objective 3**

Graduates of the Engineering Science program will be engaging in lifelong learning (including professional society membership and support; conference attendance, presentations or organization; and knowledge transfer or community-based outreach activities in their organizations).

## **Program Objective 4**

Graduates of the Engineering Science program will be conducting themselves in the engineering professions in a manner which holds paramount the importance of public health, safety and welfare, as well as their own ethical responsibilities.

**Student Outcome 2:** Graduates of the Engineering Science program should possess an ability to design and conduct experiments, as well as to analyze and interpret data

#### Emma Tobias - Internship

Welcome About Me Resume Internship Experience Gained

#### Internship

site map

Description Journal Summary of Activities Resources Software and Programs



Home About Me Resume Internship Experience Gained

Hello,

#### Home

Welcome

Welcome to my online portfolio of my experience as an intern at Basaran Grinder Corp. As you navigate through this portfolio you will get to know me as a student as I begin my journey to transform into a profession. I will share with you my complete experience and explain how beneficial this opportunity really was.

-Gerard Harley



#### ESM 488 - Ram Pandya

Home About Me Resume Internship Experience Gained

#### Internship

#### Internship Report: Weeks 13 & 14

Project Management Internship at Leviton Manufacturing Summary of Bi-weekly Activities Leviton

These last two weeks concluded this semester's internship course. I am continuing on with this internship however I had a few things that I had to do such as intern assessments and a presentation on the major projects I've done.

The presentation was pretty nerve-racking because it was supposed to be in front of the VP and many high level people. I had to practice a lot and work on a proper speech that would be appealing to everyone and not bore them. I started with an interesting story that had to do with playing basketball with some of my co-workers. This story was pretty funny and many people enjoyed it.

After I went from the story to talking about how I loved the environment at Leviton and how it was so family oriented. I enjoyed talking about this because it wasn't I force I really felt that everyone at Leviton was so friendly and it was a great place to work. I lastly got into what I learned and the things I accomplished.

Everyone was very happy with my growth and they were looking forward to working with me in the future. It took a lot of practice but I eventually made a speech and practiced enough to sound completely nervous. I had people look over my speech and had them listen to me and tell me if I did a good job or not. Everyone congratulated me and multiple people came up to talk to me about everything from where I played basketball to what kind of projects I worked on. It was a great experience and it helped me grow and I took a lot away from this experience

My manager talked to me about future projects that she had for me in the upcoming year and she asked me to come in for winter break full time if I could so I could get a head start on my project. She said that the project had to do with a system for packaging labels and she said that I would have to work with many people so I am extremely excited to get started on that.

This internship has taught me a lot and I am extremely excited to learn and grow with this company.

Feedback to: ►Intern ➤ Faculty >Industrial advisory board > Program assessors > Potential mentors and employers

#### h Nowak Engineering Internship

About Me Resume Internship Experience Gained

#### ernship

iption mary of Activities urces

<u>site map</u>



My summer internship was only for about a month, but even in that short of a time I learned a lot and worked with some really amazing people! My first major project was to go over the layout of the parking lot for a new dollar general to be built. Let's just say my CAD skills improved tremendously. Aside from the technical, I learned about SALDOs (SubDivision and Land Development Ordinances), HOPs (Highway Occupancy Permints), and the many other ordinances that new construction has to be within the limits of, as well as how to prepare the reports to be submitted for approval

to expect in the real world, and Binal Sheth - Internship Though my time there was on

them, as well as gaining plenty

Home About Me Resume Internship Experience Gained

#### About Me

Bio Professional Philosophy Professional Goals





"Don't wait until everything is just right. It will never be perfect. There will always be challenges, obstacles and less than perfect conditions. So get started now and with each step you take, you will grow stronger and stronger, more and more skilled, more and more self-confident and more and more successful."

-Mark Victor Hansen

Ed's Aircraft Refinishing, owned and operated by Ed Yezarski has been a fixture at Brookhaven for over twenty years and has grown quite a reputation for quality work and on time delivery.



Company Website

### assessment

<u>site map</u>

**Dissemination:** 



## Farmingdale State College

State University of New York











NEW YORK INSTIT OF TECHNOLOGY



The State University of New York

## Long Island Alternative Energy Consortium

 Developing a multi-campus, multi-disciplinary undergraduate energy education curriculum

Supporting workforce development in energy and green jobs

Creating a network to foster communication and research in advanced energy technology

# Developing and supporting experiential learning through internships