

**2012 STEM^{tech} CONFERENCE, OCTOBER 28-31, 2012,
KANSAS CITY, MISSOURI**

***“E-PORTFOLIOS: METHODOLOGY TO VALIDATE AND PROMOTE
CRITICAL WORKFORCE STEM SKILLS”***

Ken Scott, EdD

kscott@trenholmstate.edu,

334-420-4392

H. Councill Trenholm State Technical College

Director: Cisco Networking, SkillsUSA, AITP



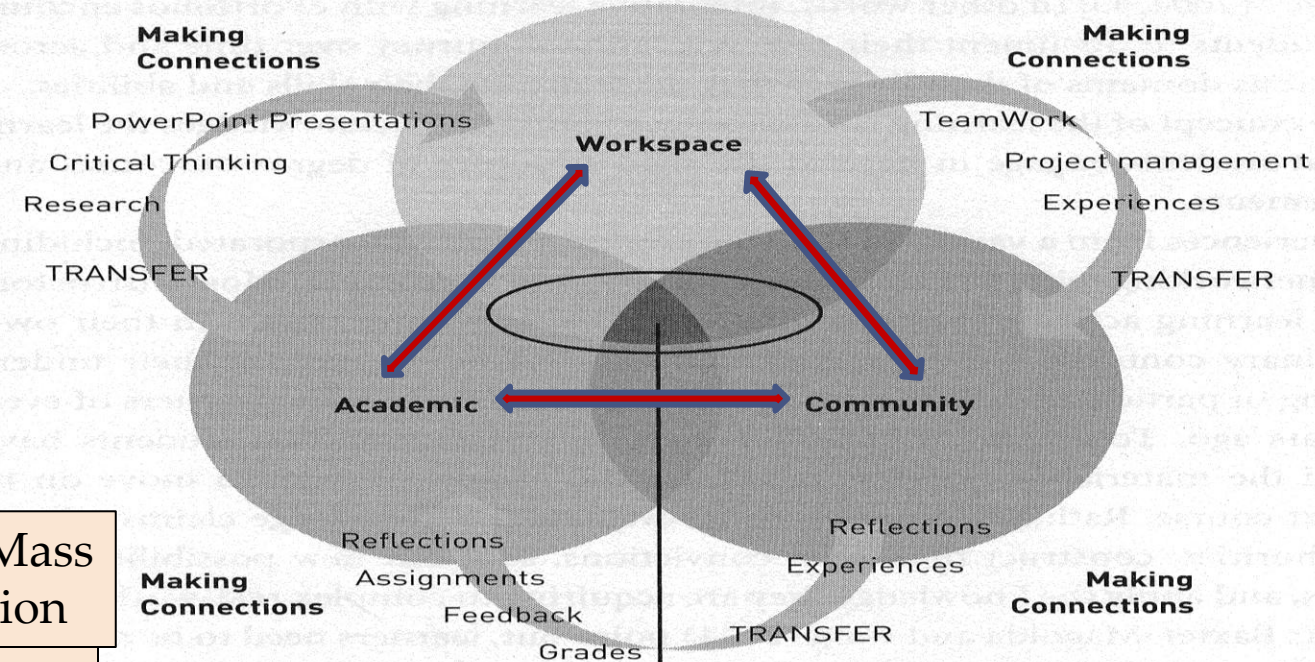
Participants will learn how the e-portfolio is used to validate and promote workforce readiness in the STEM areas of concentration. This session is particularly valuable To community college faculty members.

Question for the audience:

By show of hands,
How many of you
currently have an **active**
e-Portfolio and/or teach
classes that **develop**
student e-Portfolios?

A 'best practices' definition for e-Portfolio(s)

Figure 1.5 The Learning Landscape



Source: Adapted from Tosh, Werdmuller, Chen, Penny Light, and Haywood, 2006, 27.

Penny Light, T., Chen, H., & Ittelson, J. (2012). *Documenting learning with ePortfolios: A guide for college instructors*. Jossey-Bass: San Francisco, CA. (Used with permission)

A revised 'best practices' definition for e-Portfolio(s)...

“Workademicunity”



Joanna Colgan's ePortfolio Sign In

Home Blog Introduction Essay Sample Speech Sample Blog Sample



Joanna's ePortfolio

Welcome to my ePortfolio!

My name is Joanna. I am a freshman (class of 2013) studying the exhilarating subject of Anthropology at Penn State, and I created this ePortfolio for my LA101H class, or, "Rhetoric and Civic Life."

During this class, we created weekly blogs in response to prompts from the professor; this ePortfolio contains all of these blogs under the "Blogs" page, as well as an introduction of what I have gained from this class, and samples of my best essay, speech, and blogs, including reflections on all three.

If you have any questions or comments, feel free to email me.

Thank you for visiting,
Joanna Colgan

Note: unless otherwise stated, all photos are compliments of Flickr.com

SEARCH THIS BLOG

Full Text Tag

Search

RECENT ENTRIES

Mine Class's Magnificent Residual Message
From taking this class, I have learned the importance of starting a speech or essay with a good attention grabber...
By JOANNA COLGAN | Comments (0)

The World's Repatriation of Antiquities
I think that the strengths of my essay were my strong language choice, the flow between ideas, and the amount...
By JOANNA COLGAN | Comments (0)

The following is based on true events...

The
Story
of the
ORACLE

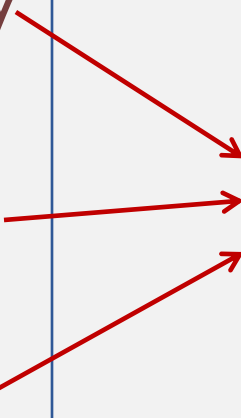
...the moral of the story...

√ **methodology**

√ **validation**

√ **promotion**

**Critical
Workforce
STEM
Skills**



What about methodology, validation, and promotion?

Methodology of Investment

- Type of web design used
- Developmental e-Portfolio
- Employment e-Portfolio
- Holistically-Merged e-Portfolio Approach
- What approach to design/develop

Relevant Validation

- Student learning outcomes
- Community Service
- Workforce/Professional Development
- WLO projects required by employers

Effective Promotion

- Widest search engine population
- Quality vs. Quantity
- Accessible 24x7 via reliable web services
- Balanced materials of interest to employers

“WorkademIncunIt’y”

e-Portfolio Categories:

- I. **Developmental e-Portfolios:** ...evidence of a student's learning and his/her reflection on work completed; a record and evidence of learning and growth supported by meaningful documentation of the learner's competencies, abilities, and efforts;

- II. **Employment e-Portfolios:** ...showcase relevant experiences and employment skills that employers use to evaluate the level of work preparation and readiness.

* Suskie, L. (2004). *Assessing student learning: A common sense guide*. Boston, MA: Anker.

Underlying Issues Impacting the Necessity of e-Portfolio Development & Design

The Skills Gap:	...filling critical jobs with employees who have the right knowledge, skills, and abilities, including STEM skills
ASTD (2009) surveyed 1,179 organizations:	...79.2% of the participants noted that “there is a skills gap in [my] organization now”
OECD (2010), in its PISA report:	...measured knowledge, higher-order thinking, problem-solving, & other skills critical in today’s information-rich age...several categories, American students ranked ‘average’/worse among 34 developed nations

A few more facts...offered in evidence

National Association of Manufacturers, October 2011 report: *A Manufacturing Renaissance: Four Goals for Economic Growth*, the goals identified were:

The United States will be the best place in the world to manufacture and attract foreign direct investment;

The United States will expand access to global markets to enable manufacturers to reach the 95 percent of consumers who live outside our borders;

Manufacturers in the United States will have the workforce that the 21st-century economy requires; and,

Manufacturers in the United States will be the world's leading innovators.

A few more facts...offered in evidence

Specifically targeting a trained workforce, the National Association of Manufacturers report also strongly emphasized the following:

“The United States must develop a skilled workforce that includes the best talent from inside and outside the country. World-class manufacturing demands world-class talent. Our workforce must be proficient in science, technology, engineering and mathematics (STEM) and must possess the skills that manufacturers seek.” (NAM, 2011, p. 9)

**A part of the solution: The e-Portfolio
“Advertise the Artifacts”**

For Your Consideration...

→ **Personal branding expert and *Forbes* author Dan Schawbel predicts that, within 10 years, résumés will be a thing of the past;**

→ **If e-portfolios are to become platforms for gaining employment upon graduation, many members in our colleges need to make a coordinated effort to help students produce a polished, professional, and compelling online presence; validation gathering needs to occur during a student's tenure at the institution**

→ **Do we know for certain that graduating students who bring electronic portfolios to their job interviews will be more competitive than students who furnish paper-based portfolios?**

For Your Consideration...redux.

→	Virginia Tech is working to unify undergraduate experiences through the use of ePortfolio tools for the university's Quality Enhancement Plan (QEP), part of Virginia Tech's reaccreditation effort through SACS;
→	<i>International Journal of ePortfolio (IJeP)</i>...to encourage the study of practices and pedagogies associated with ePortfolios in educational settings. Web site: http://www.theijep.com/;
→	e-Portfolios are becoming the new standard that every person has to have...and have broken out of the educational sector and are being adopted for employees in companies;
→	"e-Portfolios and Faculty Development: Charting the Impact on Teaching, Learning, and Campus Culture." - Pace University;

The baseline of e-Portfolios

As the United States economy continues to struggle with high unemployment and the effects of the recession, it's [more] critical [than ever] that job applicants demonstrate the knowledge, skills, and abilities they bring to the workplace.

Holtzman, D., & Hadley, A. (2011). *E-portfolios: Providing evidence of Workforce Readiness*. Campus 2010 Technology, 17th Annual Education Technology Conference.

How the e-portfolio is used to **validate** and promote workforce readiness in the STEM areas of concentration.

- Validation: Faculty/Students**
- Written reports, proposals, case studies, etc.
 - Workforce, academic, community awards
 - Blueprints, schematics, diagrams, artwork, logos, or other work products
 - Performance/workforce readiness evaluations
 - Job descriptions
 - Licenses, certificates, certifications
 - Grants awarded or other types of fund raising
 - Team projects/outcomes (strategic outcomes)
 - Community service & soft-skills
 - Professional development

How the e-portfolio is used to validate and *promote* workforce readiness in the STEM areas of concentration.

Promotion: Faculty/Students

- Quality of the web design/page(s)
- Care in 'over-use' of personal info/encryption
- Demonstrate outcomes in workforce & STEM terms ('the rubric of WLOs')
- Give attention to copyright laws
- Use appropriate humor, but use it!
- FaceBook, LinkedIn, Blogs, 'tweets', etc.
- Don't get too flashy on the web page
- Encourage feedback on your design
- Include info that appeals to employers
- Register a domain & populate search engines and keywords

• PAID SERVICES & SUPPORT

Domain Registration & Search Engines

Web Space, Speed, Support, Email, Subdomains

These activities may also require the use of tools such as Adobe *DreamWeaver* CS6, versions of html5 or other coding, flash image creation, web design and development skills, paid services, etc.

The screenshot displays the Bluehost cPanel interface. At the top, the Bluehost logo is on the left, and a welcome message for Ken Scott is on the right. A navigation bar contains various tools: cPanel, Domain Manager, Site Builders, Upgrades, Postini, Dedicated IP, SSL Certificates, Profile/Billing, Checkout, Feedback, and HELP. Below this, there are sections for Action Items (No pending registration expirations), Shortcuts (Register a new domain, Transfer a new domain to your account, Assign a domain to your cPanel account, Select registered domain, Manage domain redirection, Export domain list to a CSV file), and a New Domain Search tool. The search tool includes a text input field, a dropdown menu for domain type (currently set to .com), and buttons for Search and Register. Below the search tool, there is a table of domains and a summary section for the selected domain.

Domain	Exp	Type
dr-kenscott.com	10/01/13	Primary

Summary

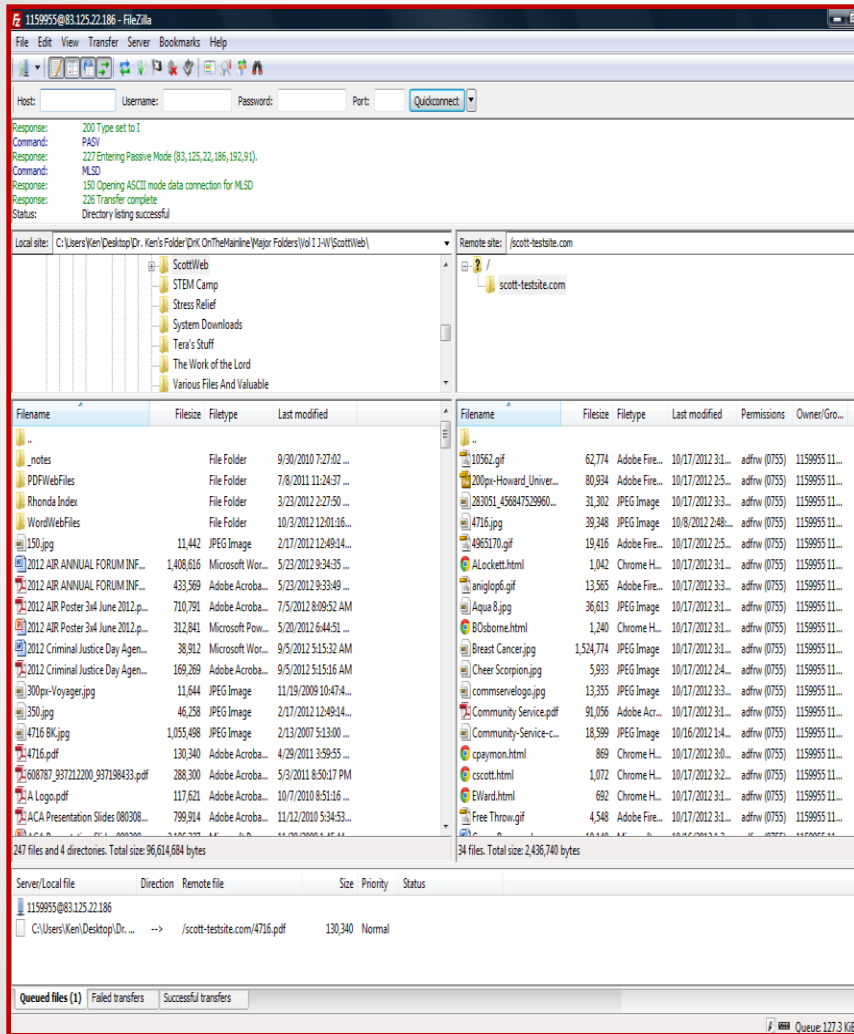
Domain

There is 1 domain on your account.

To view more information, please select one or more domains from the domain list.

• Bluehost Web Services Example; WS-FTP •

• FREE SERVICES & SUPPORT

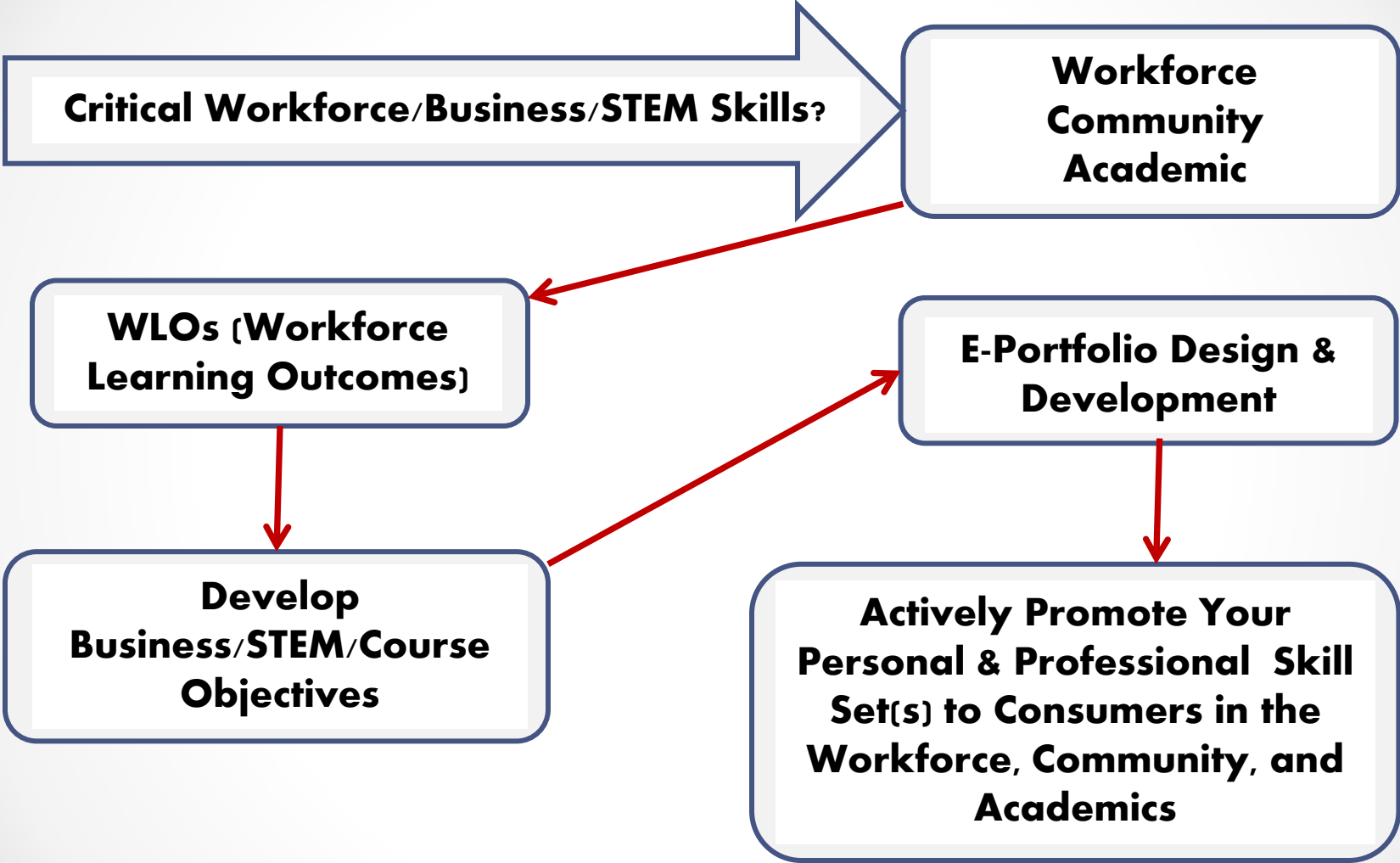


Advantages/Disadvantages:

1. The site may/may not use ads on your web site;
2. Limited web space for the serious minded;
3. Traffic speed may be reduced;
4. Certain development tools may not be provided;
5. Domain registration is minimal;
6. Search engine population may not be provided;
7. Relatively easy to develop a template-based site, e.g. WordPress.

• FileZilla FTP Upload/ Download Example:

• **CURRENT E-PORTFOLIO PROCESS**



- **RESOURCES & TRENDING**

The Innovation Portal

Tens of thousands of high school and post-secondary students complete original engineering design and problem solving projects each year. The vast majority of these students simply close their project portfolios and move on when the course is finished as opportunities to seek recognition for their work beyond the classroom are few and varied. Students who participate in original engineering design and problem solving work are highly valued by post-secondary and industry representatives yet there is no standardized format or vehicle for interested parties to use to view and evaluate these student works.

<http://www.innovationportal.org/>

- **RESOURCES & TRENDING**


Mozilla Open Badges

But it's often difficult to get recognition for skills and achievements gained outside of school. Mozilla's Open Badges project is working to solve that problem, making it easy for any organization or learning community to issue, earn and display badges across the web. The result: recognizing 21st century skills, unlocking career and educational opportunities, and helping learners everywhere level up in their life and work.

<http://www.openbadges.org/en-US/>

Incentivize Participation: Recognition in publications, college web site, leadership opportunities, etc.

www.clemson.edu/academics/programs/eportfolio/awards.html



A-Z Index Calendar Campus Maps CU Safety Phonebook Webcams

SEARCH:

clemson.edu people places

ePortfolio

Academics > Programs > ePortfolio

- Welcome
- About ePortfolio
- Competencies
- ePortfolio Awards
- Getting Started
- Research
- Faculty/Staff Resources (login required)
- Support
- Gallery
- Contact Us

Is Your ePortfolio Award Worthy?

The Pearce Center and the ePortfolio Program would like to congratulate

The 2012 ePortfolio Awards Winners!

- Clemson's Best**, which is an award of \$250. Clemson's Best is the portfolio that brings together creativity, originality, reflection, as well as substantive evidence of learning throughout a student's university tenure in a way unique to the Clemson experience. This award was given to graduating seniors.
Winner: Zakery James
<http://www.wix.com/zrjames/eportfolio>
Runner Up: Alexis Peterson
Honorable Mention: Drew McWhorter
- Best General Education ePortfolio**, which demonstrates a student's ability to analyze and communicate the skills and abilities developed through the university's general education program. This information should be demonstrated through portfolio content, range and depth of connections, creative use of technology, and design. This award was open to all students and is an award of \$150.
Winner: Drew McWhorter
http://people.clemson.edu/~ramcwho/Drew_McWhorters_ePortfolio/Welcome.html
- Best Creative Inquiry**, showcases creative inquiry research projects. The winning ePortfolio will

*Creating student & faculty e-portfolios
should not be an alien event...*



"I'll trade you my ray gun for a good e-portfolio!"

Contact Information

Ken Scott, EdD

* Collaboration on this topic highly sought. *

Trenholm State Technical College
Patterson Campus
3920 Troy Highway
Montgomery, Alabama 36116

Amridge University
1200 Taylor Road
Montgomery, Alabama 36117

Office: 334.420.4392

Cell: 334.312.4751

Email: kscott@trenholmstate.edu

or

kenscott@amridgeuniversity.edu

Efolio: <http://dr-kenscott.com/>

(This e-portfolio is ALWAYS under construction.)