# 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, H. Councill Trenholm State Technical College
### Montgomery, Alabama

**Computer Information Systems**

## THE FUNDAMENTALS OF e-PORTFOLIOS:

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 ePortfolios: …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.
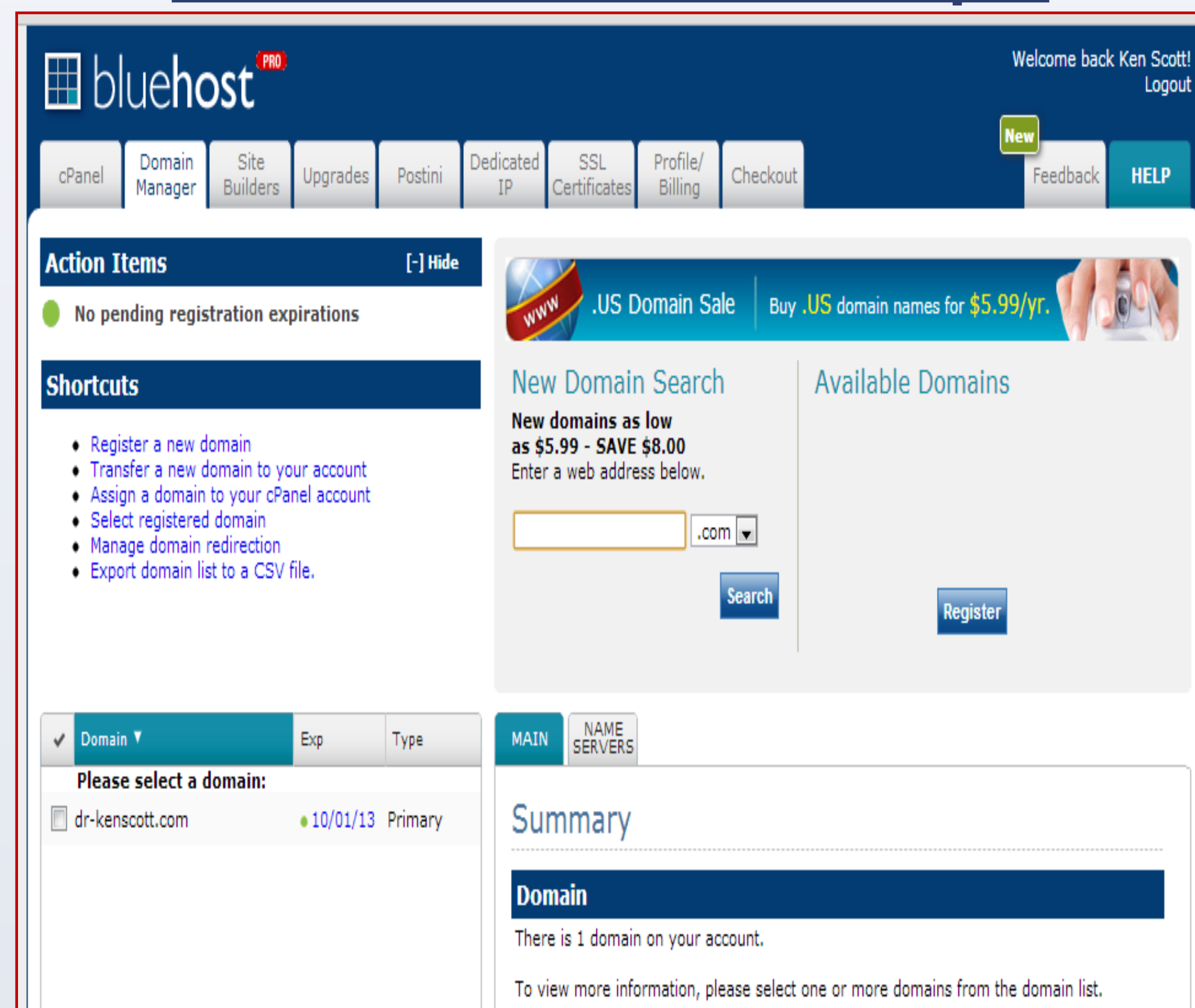
## RECOMMENDED RESOURCES (MINOR Sampling):

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

International Journal of ePortfolio (IJeP)…to encourage the study of practices and pedagogies associated with ePortfolio in educational settings. Web site: http://www.theijep.com/.

Portland State University. ePortfolio: Fundamentals. Web Site: http://www.pdx.edu/unst/eportfolio-fundamentals-start.

Miller, R., & Morgaine, W. (2009). The benefits of e-portfolios for students and faculty in their own words. *Peer Review, 11*(1), 8-12.

Clark, J., & Eynon, B. (2009). E-portfolios at 2.0— Surveying the field. *Peer Review*, *11*(1), 18-23.

Burnett, M., & Williams, J. (2009). Institutional uses of rubrics and e-portfolios: Spellman College and Rose-Hulman Institute. *Peer Review*, *11*(1), 24-27.

Yancey, K. (2009). Electronic portfolios a decade into the twenty-first century: What we know, what we need to know. *Peer Review*, *11*(1), 28-32.

Okoro, E., Washington, M., & Cardon, P. (2011). Eportfolios in business communication courses as tools for employment. *Business Communications Quarterly*, *74*(3), 347-351.

\* For a full listing, send email request to kscott@trenholmstate.edu.

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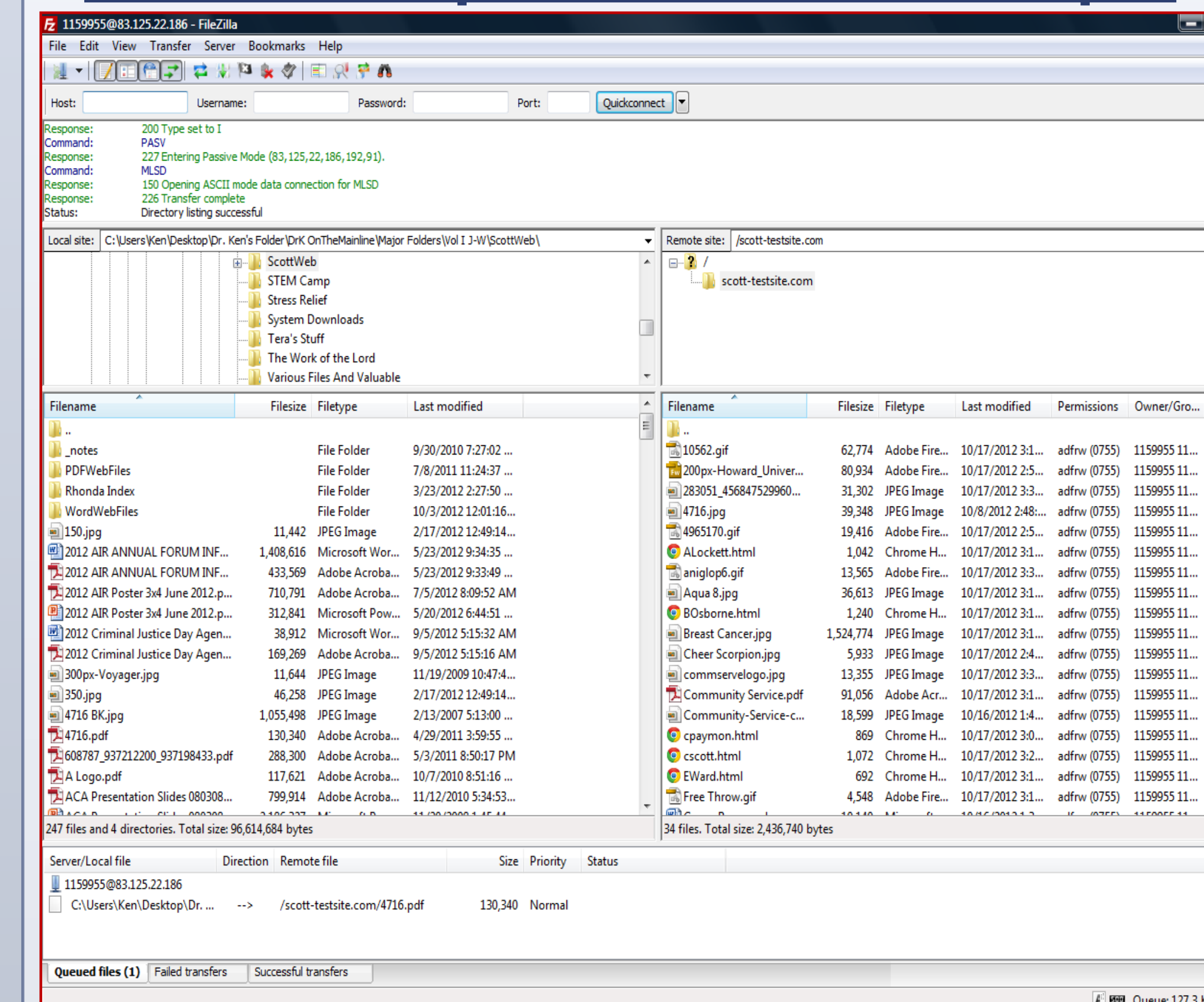## TECHNICAL CONSIDERATIONS FOR DESIGN AND DEVELOPMENT OF e-PORTFOLIOS

### PAID SERVICES & SUPPORT

#### Bluehost Web Services Example:



### Various Types of FTP Programs

| | | |
|---|---|---|
| SmartFTP | CuteFTP Pro | Wise-FTP |
| FTP Voyager | WS FTP Pro | CoffeeCup Direct FTP |
| AceFTP Pro | FTP Explorer | FileZilla FTP Client |
| FTP Commander Deluxe | BulletProof FTP | |

I. Domain Registration & Search Engines: Total control of the internet presence and the largest number of "hits" on the Internet; costs range from minimal for individual user to $1000's for organizations;

II. Web Space, Speed, Support, Email, Subdomains:
  a. Sufficient web space: to host a combined site for developmental/employment materials, specific to those where employers *evaluate the level of work preparation and readiness*;
  b. Speed, Support, Email, Subdomains: superior transfer/upload-download/bandwidth rates, reliable 24x7 support via live technician, response times; features to configure email from your established domain; and, opportunity to create subdomains for additional internet presence.

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

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### FREE SERVICES & SUPPORT

#### FileZilla FTP Upload/Download Example:



*WordPress* is web software you can use to create a beautiful website or blog. We like to say that *WordPress* is both free and priceless at the same time.
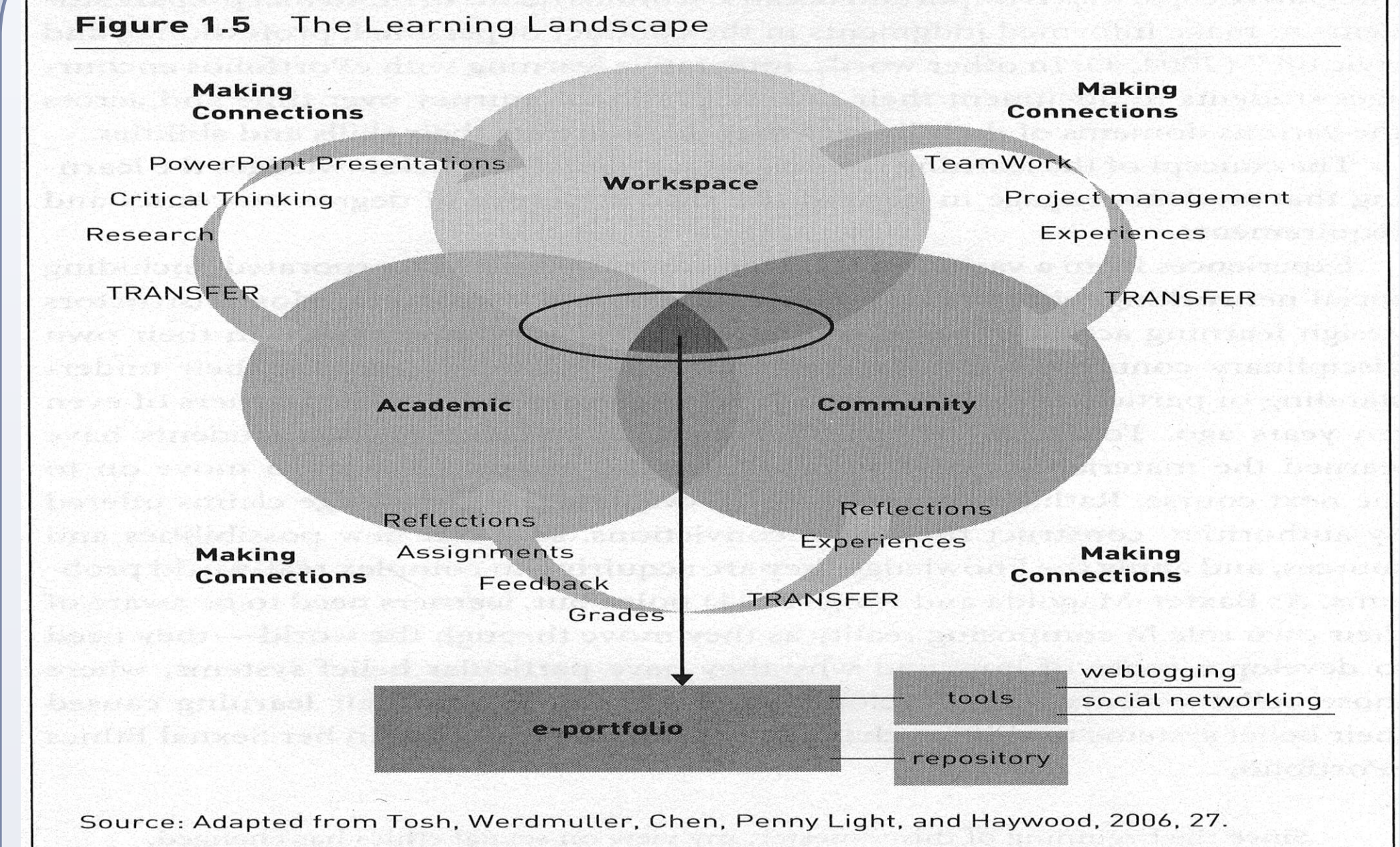
#### Advantages/Disadvantages:

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-PORTFOLIOS: METHODLOOGY TO VALIDATE AND PROMOTE CRITICAL WORKFORCE STEM SKills

| | |
|---|---|
| Methodology | • Type of web design used<br>• Developmental e-Portfolio<br>• Employment e-Portfolio<br>• Holistically-Merged e-Portfolio Approach<br>• What approach to design/develop |
| Validation | • Student learning outcomes<br>• Community Service<br>• Workforce/Professional Development<br>• WLO projects required by employers |
| Promotion | • Widest search engine population<br>• Quality vs. Quantity<br>• Accessible 24x7 via reliable web services<br>• Balanced materials of interest to employers |

#### Critical Workforce STEM Skills = Workforce Learning Outcomes (WLOs)

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## MODEL OF e-PORTFOLIO DESIGN & DEVELOPMENT



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### ISSUES OF E-PORTFOLIO DEVELOPMENT

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

2. 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;

3. 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?

4. 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;

5. 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;

6. "e-Portfolios and Faculty Development: Charting the Impact on Teaching, Learning, and Campus Culture." - Pace University;

7. Mahara – Open Source ePortfolios: https://mahara.org//