



Bridging the Role of Academic and Practitioner in Teaching About Technology in Your Career Field

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CENTER OF EXCELLENCE
HOMELAND SECURITY-EMERGENCY MANAGEMENT

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Background

The Centers of Excellence for Homeland Security Emergency Management and Global Trade & Supply Chain Management collaborated to conduct a follow-up workshop from 2018 Security the Supply Chain Forum: The Digital Transformation of Supply Chain. University of Washington (UW) Jackson School of International Studies and Foster School of Business supported both Centers on doing a follow-up workshop and provided a \$150 stipend to participants. The April 2018 Forum identified the issue of “how information technology should be taught to students”. The Centers advocated not teaching actual technology in depth but rather teach the impact. The topic would be perfect for faculty professional development for all of our career pathway instructors.

Overview

Jeanette Smith-Perrone was the Workshop Facilitator. She entered the technology industry in 1976. Jeanette is currently in the process of earning a PhD in Psychology. She has experience in technology support of corporate operations for fast-paced logistics, legal, healthcare, education, cloud provider, ISP, hosting provider, carrier, finance, retail, utility, food product, grocery, graphic design, manufacturing, distribution, software development, non-profit and government organizations. Designed TCC Networking & Cybersecurity Program with unique pedagogy focused on team centric learning of applied ethics, foundation skills building, technical competencies, communication, critical thinking, and project management.

It is becoming more apparent that today’s college students have become very dependent on technology. Students are shown to be comfortable working in teams, handle constructive criticism, and unwilling to take second chances when/if failing in first attempt. “With lightning-fast technology at their fingertips, they accept the first ‘hit’ of a global search engine as the last word on a subject.” Outside of class, students’ appear to be solely concentrated on their virtual “lives” (e.g. Facebook, Twitter, Instagram, Snap-Chat, etc.).

The old “my dog ate my homework” excuse has now turned into “I lost my thumb drive”, “I can’t find my saved work”, “The compute must have deleted it”, “I wasn’t able to print it,” and “My printer ran out of ink.”

Technology is a powerful tool that can help support learning. However, if used arbitrarily it can hinder learning. Like most learning tools, it takes investment of time from instructors/professors.

A great deal of education, preparation, and hands-on experience will make the incorporation of technology in the classroom a valuable addition for students.”

Key Findings

Are technology academics speaking the same language as digital natives and industry?

2015 Americans-

- Seventy-eight percent own a desktop or laptop
- Seventy-five percent had a handheld computer such as a smartphone or other handheld wireless device.
- Seventy-seven percent had a broadband internet subscription.
- Sixty-five years and older lagged computer ownership, use, and are highly vulnerable to digital exploitation.

2018 Americans –

- American schoolchildren grade 5-12; 8-9 out of 10 bring digital devices to school.
- Ninety-five percent of Americans shop online.
- The number of people using the Internet in China is more than double the population in the U.S.
- Number of Internet users: 3.95 billion in June 2018. In 2017, 3.7 billion.

Software and internet jobs have increased between 500-600%.

Penetration tester – vulnerability management

Vulnerability management is the "cyclical practice of identifying, classifying, remediating, and mitigating vulnerabilities", particularly in software. Vulnerability management is integral to computer security and network security.

Employers want their potential employees to have a vast knowledge of technology. It can be challenging to get instructors, particularly those who are tenured, to change their way of thinking/instructing. Many are resistant to new methodologies and technologies.

It is how one communicates to students and incorporates new methods of learning into curriculum.

Be willing to incorporate other peoples' concepts.

Educational Gaps and Analysis

The purpose of the Workshop was not to “fix” the teaching style of instructors. Instead, a good approach is to have an open conversation with instructors. What are their teaching styles? What has been successful for them in getting their message across to students? This is a good starting point. The point is to help elevate their teaching styles more efficiently and effectively. If an

instructor is not comfortable with technology, allow them to go at his or her own pace. For example, DropBox or Google Drive could be a great start-up tool for instructors on how they distribute handouts or assignments. “Tailor your approach to each faculty member, with specific ideas to facilitate and/or enhance their teaching. As they become comfortable with new tech, they will very likely be open to conversations about other digital tools you are using in your own work.”

For more information: <https://plpnetwork.com/2013/03/27/hesitant-teachers-technology/>

Takeaways from Attendees

Conclusion