Communities of Practice: Secrets of Successful Implementations

Part II

March 24, 2016

The Webinar Begins At 3 PM Eastern
Webinar Details

• For this webinar you will be in listen only mode using your computer or phone
• Please ask questions via the question window
• This webinar is being recorded – you will be sent a recording link
Disclaimer: This material is based upon work supported by the National Science Foundation under Grants # 1205077 and # 1261893. Any opinions, findings and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.
The CCTA IS Led By

- National Center for Convergence Technology (CTC) based at Collin College in Frisco, TX (lead)
- South Carolina ATE National Resource Center (SCATE) based at Florence Darlington Technical College in Florence, SC
- Florida ATE Center (FLATE) based at Hillsborough Community College in Tampa, FL
- Bio-Link Next Generation National ATE Center for Biotechnology and Life Sciences (Bio-Link) based at City College of San Francisco in San Francisco, CA
- Networks Resource Center based at the Maricopa Community College District in Phoenix, AZ
CCTA Purpose

- Respond to a request from the Department of Labor (DOL) to the NSF to have ATE Centers provide technical assistance services to DOL TAACCCT grantees
  - Success coaching
  - In-person convenings
  - Knowledge management / best practices
  - Peer-to-peer learning
CCTA Activities are Relevant for

- Department of Labor grants
- National Science Foundation Projects and Centers
- Workforce-oriented programs of all kinds
Deliverables

• Topical Webinars and Teleconferences On
  – Existing and new solutions
  – Live/recorded with attendee Q&A
  – Archived on www.atecentral.net

• Other online media including videos and transcripts
Deliverables Continued

• Invitations to regional discipline-specific conferences
• Identify and document best practices
• Host convenings
Poll #1: Your Affiliation

A. I am involved with an NSF grant
B. I am involved with a TAACCCT grant
C. Both
D. Neither
Evolution From a Network to a Community of Practice

Ann Beheler
PI & Executive Director
National Convergence Technology Center (CTC)
What is a CoP

- A Community of Practice (CoP) is a group of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.

(*from Communities of Practice 2002 by E. Wenger, R. McDermott, & W Snyder).
Similar Groups

• Community of Practice—practitioners, organic, passion, genuine striving for deepening of knowledge, and cultivation of relationships;

• Networks – nodes, linkages, information flows;

• Project Team – Driven by deliverables; defined by roles and tasks;

• Community of Interest – Not experts or practitioners, just interested.
Problem #1: Needed to find a way to share curriculum, materials and processes developed by the grant.

Idea #1
- Curriculum in a Box – disseminated on website through module packaging (syllabus, learning modules, labs, classroom slides and assessments)
CTC – Evolution of a CoP

• This created Problem #2:
  – Potential adopters wanted to know:
    • What lab equipment is needed?
    • How does curriculum fit within my existing IT degrees and certificates?
    • How does convergence fit into the existing context of IT?
    • Do businesses hire students with convergence education and training?
    • How do I bring my faculty up to speed in this technology?
CTC – Evolution of a CoP

• This generated Idea #2:
  – Colleges needed some mentoring beyond the free curriculum, so...
  – Components of mentoring relationship developed:
    • Create a business team to provide direction and validate job skills
    • Identify and fill curriculum gaps
    • Ensure instructors are prepared to teach updated and new courses
    • Develop strategy to recruit students
CTC – Evolution of a CoP

• NVC challenge:
  – Spread the program throughout the region based upon the success of the grant’s college partners
  – Target 6 new colleges
    • Based upon the capacity of grant staff to handle one-on-one mentoring
    • Grant staff: 1 full-time director, 1 part-time program manager, 1 PI and 2 Co-Pi’s working limited hours
CTC – Evolution of a CoP

• This generated Idea #3:
  – Program did not need to be replicated but could be adopted and adapted to meet colleges’ needs
  – Spread this adoption beyond one-on-one mentoring
    • Conference calls
    • Yearly face-to-face meetings with entire group
CTC – Evolution of a CoP

• This was the beginning stage of a type of community of practice:

• (See: http://wenger-trayner.com/wp-content/uploads/2012/01/06-Brief-introduction-to-communities-of-practice.pdf)
The Rest of the Evolution to a Community of Practice (so far)

Helen Sullivan
Director
National Convergence Technology Center (CTC)
CTC – Evolution of a CoP

• Continuing growth of network spurred:
  • Idea #4:
    – Evolve the group into an active network of colleges who participate and help grow convergence programs
    – Created Mentored College Advisory Board
      • 4 mature college leaders from network
      • Helped determine direction of program and started mentoring new members
CTC – Evolution of a CoP

• This generated Idea #5:
  — College leaders on Advisory Board became hubs in their region
  • Mesh network is the same as a CoP
  • Mesh network model supports expansion of colleges participating
  • Mentoring still occurs with new members
  • Mature members share information, best practices and leadership
CTC – Evolution of a CoP

• What CTC offers CCN:
  – Free professional development (Working Connections)
  – Travel reimbursement help
  – Robust resource wiki
  – Way to plug into network of IT faculty
  – Access to National BILT meeting content
  – Help maximizing your own local BILT relationship
  – Virtual labs
  – Feedback from CTC leaders on grant proposals
CTC – Evolution of a CoP

• Responsibility of CCN Members:
  – Engage with the group/share expertise
  – Develop an active Business & Industry Leadership Team that meets regularly and to prioritize KSAs and guide programs
  – Attend CCN meetings/activities
  – Help recruit other schools to CCN
  – Submit yearly CCN report
CTC – Evolution of a CoP

- Two levels of engagement:
  - Level 1 – receive more benefits/more responsibilities
  - Level 2 – receive fewer benefits/fewer responsibilities
- Points system developed for accountability and encouraging engagement
# CTC – Evolution of a CoP

## Convergence College Network POINTS - due April 1, 2016

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Level 1</th>
<th>Level 2</th>
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<tbody>
<tr>
<td><strong>MANDATORY</strong></td>
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<tr>
<td>Provide yearly evidence of two local/regional BILTs (attach minutes)</td>
<td>✓</td>
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<tr>
<td>One of your two yearly local/regional BILTs must validate job skills annually (after first list, then you're only submitting the revisions)</td>
<td>✓</td>
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<td>Submit yearly CCN status report (enrollment #s, graduation #s, etc)</td>
<td>✓</td>
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<td><strong>POINTS SYSTEM</strong></td>
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<tr>
<td>Participate in one CCN meeting (phone call or in-person) - July 17, 2015</td>
<td>1</td>
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<tr>
<td>Participate in second CCN meeting (phone call or in-person) - Oct 9, 2015</td>
<td>1</td>
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<tr>
<td>Participate in third CCN meeting (phone call or in-person) - Dec 17, 2015</td>
<td>2</td>
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<tr>
<td>Participate in fourth CCN meeting (phone call or in-person) - Feb 26, 2016</td>
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<td>Attend one National BILT call/meeting - May 12, 2015</td>
<td>1</td>
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<td>Attend second National BILT call/meeting - August 11, 2015</td>
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<tr>
<td>Attend third National BILT call/meeting - Nov 10, 2015</td>
<td>2</td>
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<tr>
<td>Attend fourth National BILT call/meeting - Feb 9, 2016</td>
<td>2</td>
<td></td>
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<tr>
<td>Participate in one &quot;CCN admin&quot; call - May 15, 2015</td>
<td>1</td>
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<tr>
<td>Recruit an administrator to participate in one &quot;CCN admin&quot; call*</td>
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CTC – Evolution of a CoP - 2006

GROWTH and OUTREACH of the CTC
2006 - 2007
CTC – Evolution of a CoP - 2016

Growth and Outreach of the CTC
March 2016
branches show mentor relationships
Communities of Practice/Secrets of a Successful Implementation

An example of how one college joined and leads the community
Fox Valley Technical College - situated in the Midwest

- How did we at FVTC originally get involved
  - Need was the driver
    - Our employer’s needed graduates with a skill
    - Our instructor’s needed proven curriculum to teach the skill
    - And, everyone wanted to know what others were doing to get the two items above accomplished
Benefits Were the Rewards

• What did we get out of our relationship with the community
  – A network of talented professionals working together
  – Shared talent and resources
  – Open dialogues across the county
  – Integration of resources
  – Camaraderie, friendships, and contacts
Insights as We Move Forward

– Better positioned to deal with upcoming change
– Supported by a system of hundreds of instructors, deans, department managers and employers all with the same focus
– Lessons learned along the way
  • Flexibility is key when dealing with change and growth
  • Working together on a concerted effort takes time to mature and grow
Learning team skills: The Toothpick Factory
Networking in person
CCN by the Numbers

21: Updated Courses
15: New Courses
13: New Degrees
41: New Certificates
22: Modified Degrees
5: Modified Certificates
92: Conferences attended/presented
83: Student recruitment events
28: Colleges invited to join CCN
Questions?
Join Us – All Webinars 3 pm Eastern

• April 28 - Highlights of Advance Manufacturing and Engineering Technology Resources from ATE Centers

• Looking for manufacturing education resources? All NSF ATE Centers develop a wealth of best and promising practices, skills alignments, curriculum, and other resources that support 2-year academic technical programs. Learn more about 6 Manufacturing focused centers, their resources and how best to access them in this fast paced lighting round type webinar.
Join us in Pittsburgh, PA!

July 25-28, 2016

www.highimpact-tec.org
Register for HI-TEC and TAACCCT Convening

HI-TEC Conference July 27-28 in Pittsburgh, PA
Preconference workshops July 25-26
- Register at http://www.highimpact-tec.org/registration.php

Free TAACCCT Technical Assistance Convening July 29, 8:30-12:30
- Register for this convening at same URL as above
- Appropriate for NSF grantees, TAACCCT grantees, and others leading workforce programs
Q&A and Contacts

• Ann Beheler, abeheler@collin.edu
• Helen Sullivan, hsullivan@collin.edu
• Elizabeth Halweg, halweg@fvtc.edu