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Innovations Conference 2017

GROUP KNOW-HOW:
HARNESSING COMMUNITIES
OF PRACTICE

Agenda

- Who we are
- What is a CoP?
- Evolution of our CoP
- Features of our CoP
- 10 Essentials and 5 Failures

Who We Are

National Convergence Technology Center
- Collin College – Frisco TX
- Funded by a grant from National Science Foundation
- National ATE Center starting fall 2012
- Support IT infrastructure programs across the country – increase enrollment/completion and job placement
- Community of practice – 60+ schools
- Co-led by group of IT business/industry leaders
- Free professional development for IT faculty

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Who We Are
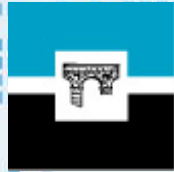
What is a CoP

- 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).*

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What is a CoP

- The "non-reinvention of the wheel"
- Exchange of know-how, maybe across org boundaries
- Success measured by number of shared practices, not a clear metric/goal
- Foster new approaches to problems
- Informal and organic, yes, but do benefit from management (tension)
- Middle Age guilds – group of professionals honing knowledge, learning from each other

What is a CoP

A Snapshot Comparison

Communities of practice, formal work groups, teams, and informal networks are useful in complementary ways. Below is a summary of their characteristics.

	What's the purpose?	Who belongs?	What holds it together?	How long does it last?
Community of practice	To develop members' capabilities; to build and exchange knowledge	Members who select themselves	Passion, commitment, and identification with the group's expertise	As long as there is interest in maintaining the group
Formal work group	To deliver a product or service	Everyone who reports to the group's manager	Job requirements and common goals	Until the next reorganization
Project team	To accomplish a specified task	Employees assigned by senior management	The project's milestones and goals	Until the project has been completed
Informal network	To collect and pass on business information	Friends and business acquaintances	Mutual needs	As long as people have a reason to connect

"Communities of Practice: The Organizational Frontier" – Etienne Wenger and William Snyder, 2000

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Evolution of the CTC's Community

Sharing curriculum, materials and processes developed by the grant

Curriculum in a Box – disseminated on website (syllabus, learning modules, labs, classroom slides and assessments)

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Evolution of the CTC's Community

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Problem: adopters all had questions

One size does not fit all; adapt and adopt

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Evolution of the CTC's Community

- 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?

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Evolution of the CTC's Community

Solution: provide some mentoring to the adopters

How to help them better?

- Create a business team to provide direction and validate job skills
- Find a way to identify and fill curriculum gaps
- Ensure instructors are prepared to teach updated and new courses
- Develop strategy to recruit students

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Evolution of the CTC's Community

Solution: provide some mentoring to the adopters

National Visiting Committee wanted us to expand beyond just those three partners and get six more schools to join our community

"Mentored College Network" membership

1:1 assistance – grant staff helping the schools

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Evolution of the CTC's Community

Solution: provide some mentoring to the adopters

National Visiting Committee wanted us to expand beyond just those three partners and get six more schools to join our community

"Mentored College Network" membership
1:1 assistance – grant staff with the schools

Problem: can't mentor 20 schools

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Evolution of the CTC's Community

Solution: share the mentoring with four of the more mature schools (Leadership Group)

Make it more of a mesh network (both: mentor new members, more mature share and lead)

We don't have all of the answers

"Mentored College Network" became the "Convergence College Network"

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Evolution of the CTC's Community

Pushing out curriculum in a box

⬇

1:1 Mentoring

⬇

Leadership team, group sharing

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CCN
60 schools
23 states

Convergence College Network

- ◉ 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

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Convergence College Network

- 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

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Convergence College Network

- Community engagement
  - Four quarterly webinars (3 web, 1 in person)
  - One-off webinars
  - Conferences
  - E-mail
  - Resource wiki
  - Off line

  Sustainable beyond the grant

  Shared passion

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Convergence College Network

- Community engagement

Convergence College Network

- Community engagement

Convergence College Network

- Two strategies for engagement
  - Levels
  - Points

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Convergence College Network

- Two levels of engagement:
  - Level 1 – receive more benefits/more responsibilities
  - Level 2 – receive fewer benefits/fewer responsibilities

  More engagement = more benefits

Convergence College Network

Benefits to becoming involved in the CCN

CCN BENEFITS	LEVEL 1	LEVEL 2
Participate in unique cost-reduction virtual labs that share technology resources online among several schools	✓	
Register early for National CTC free professional development events in advance of the general public	✓	
Request sizable travel reimbursement help for National CTC free professional development events	✓	
Access a robust collection of IT/convergence curricula and classroom resources created by instructors	✓	✓
Collaborate with other CCN member IT/convergence instructors across the country to incorporate new technologies, build academic alliances, develop strategies for program improvement, and share models for recruitment and retention	✓	✓
Learn how to develop your own regional Business and Industry Leadership Team (BILT) and get your program aligned with workforce needs	✓	✓
Network with National CTC leaders who have written successful grants to brainstorm ideas and get feedback on proposals as time permits	✓	✓
Receive regular updates on current industry trends and jobs skills needs from the National CTC's Business and Industry Leadership Team (BILT)	✓	✓

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Convergence College Network

- Two levels of engagement:
  - Level 1 – receive more benefits/more responsibilities
  - Level 2 – receive fewer benefits/fewer responsibilities

  Problem: arbitrary – who's in which level?
  Getting the Level 1 benefits without engaging

Convergence College Network

- Created a point system
  - Quantify who gets "Level 1" benefits
  - Every 12 months, "Level 1" schools must...
    - Conduct two meetings with their business group
    - Discuss job validations with their business group
    - Submit an annual report
    - Score 20 points (gamification element)

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Convergence College Network POINTS - due April 1, 2017

		Level 1	Level 2	proof
MANDATORY				
Provide yearly evidence of *two* local/regional BILTs (attach minutes)	1st BILT meeting	✔		attach minutes to CCN Yearly Report
	2nd BILT meeting	✔		attach minutes to CCN Yearly Report
One of your two yearly local/regional BILTS must validate job skills annually (after first list, then you're only submitting the revisions)^		✔		attach proof to CCN Yearly Report
Submit yearly CCN status report (enrollment #s, graduation #s, etc)		✔		CCN Yearly Report

POINTS SYSTEM	Level 1	proof
Participate in one CCN meeting (phone call or in-person) - July 10, 2016	1	National CTC keeps attendance & minutes
Participate in second CCN meeting (phone call or in-person) - Nov 4, 2016	1	National CTC keeps attendance & minutes
Participate in third CCN meeting (phone call or in-person) - Feb 24, 2017	2	National CTC keeps attendance & minutes
Attend one National BILT call/meeting - May 10, 2016	1	National CTC keeps attendance & minutes
Attend second National BILT call/meeting - Aug 16, 2016	1	National CTC keeps attendance & minutes
Attend third National BILT call/meeting - Nov 15, 2016	2	National CTC keeps attendance & minutes
Attend fourth National BILT call/meeting - Feb 14, 2017	2	National CTC keeps attendance & minutes
Participate in one "CCN admin" call - May 13, 2016	1	National CTC keeps attendance & minutes
Recruit an administrator to participate in one "CCN admin" call* - May 13, 2016	3	National CTC keeps attendance & minutes
Participate in second "CCN admin" call - Dec 2, 2016	1	National CTC keeps attendance & minutes
Recruit an administrator to participate in second "CCN admin" call* - Dec 2, 2016	3	National CTC keeps attendance & minutes
Attend "CCN 101" informational webinar - May 12, 2016	1	National CTC keeps attendance & minutes
Send one or more faculty member to Summer Working Connections	3	National CTC keeps attendance
Send one or more faculty member to Winter Working Connections	2	National CTC keeps attendance
Send a team to the Diversity Summit	3	National CTC keeps attendance
Make efforts to promote CCN (to non-CCN member schools) and recruit new members	1	CCN Yearly Report
Secure one or more new CCN members	5	National CTC keeps list
Develop/update degree or certificate plan based on job skills outcome (including adding or modifying courses)	3	CTC's "Degrees and Certificates" spreadsheet plus CCN Yearly Report
Employ specific department/program recruitment and retention strategies separate from general efforts made by your school	2	CCN Yearly Report
Attend *and present* at one or more IT/convergence professional development conference†	5	CCN Yearly Report
Attend *only* at one or more IT/convergence professional development conference†	2	CCN Yearly Report
Host one or more local recruitment events	2	CCN Yearly Report
Submit an article or link to a good IT/convergence article that the CTC can post to social media	1	National CTC keeps list

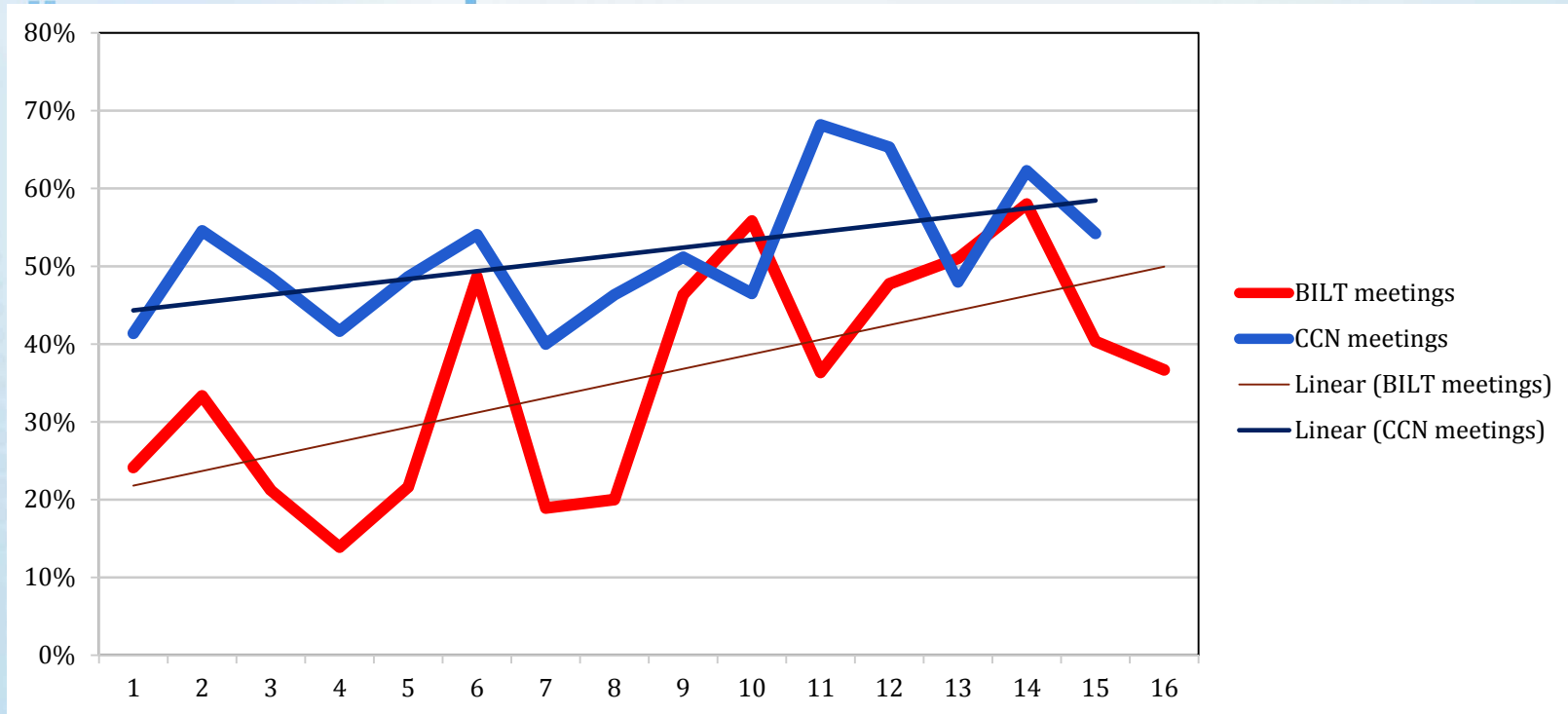|	
Maximum possible total	48
Level 1	20+
Level 2	1-19

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Convergence College Network

- Created a point system
  - Increased meeting attendance

Convergence College Network

- From Fall 2012-Fall 2016…
  - 10,800 enrollments (duplicated)
  - 8810 graduations

- From January 2015-December 2015…
  - 21 updated courses
  - 15 new courses
  - 41 new certificates
  - 92 conferences attended

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10 Essentials for a Successful CoP

- 57 leaders of corporate CoPs
- "Why Communities of Practice Success and Why They Fail" – Probst and Borzillo

10 Essentials for a Successful CoP

1. Stick to strategic objectives
   Clear purpose, concrete direction

2. Divide objectives into sub-topics
   Taxonomy of objectives, provides clarity

3. Use a "governance committee"
   Assess the CoP activity, develop strategy
   for presenting to management

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10 Essentials for a Successful CoP

4. Use a "best practice control agent"

    Leader needs to be an expert, keeps everyone
    on task

5. Regularly feed the CoP with external experts

    Provide new perspectives

6. Promote access to other networks

    Expand expertise, energize members

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10 Essentials for a Successful CoP

7. Leader must be promoter and driver

   Managing sub-topics and multiple CoPs

8. Overcome hierarchy-related pressures

   "Risk free" atmosphere, no fear of repercussions (mistakes, ignorance)

9. Provide measureable performance

   Metrics to show results

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10 Essentials for a Successful CoP

10. Illustrate results for CoP members

    Post written experiences, prove the CoP works

5 Reasons for a CoP Failure

1. Lack of a core group

   Need highly engaged core

2. Low level of 1:1 interactions

   No communication

3. Rigid competencies

   Less willing to try new ideas, only trust self

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5 Reasons for a CoP Failure

4. Lack of identification with CoP

    Don't see it as meaningful or useful

5. Practice intangibility

    Ineffective sharing

3 ways to support CoP with technology

- ⊙ Linking
  - Connectivity

- ⊙ Repository
  - Shared resources

- ⊙ Discussion tools
  - Support the conversation

"What Is a Community of Practice and How Can We Support It?" – Hoadley, 2012

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What can you do?

- Determine if there is an interest (or if there is already one at work)
- Ask if administration will support it
- Decide on the purpose
- Create a system for communication
- Invite energetic experts
- See what happens

Sources

"Communities of Practice: The Organizational Frontier" – Etienne Wenger and William Snyder, 2000

https://hbr.org/2000/01/communities-of-practice-the-organizational-frontier

"What is a Community of Practice and How Can We Support It?" – Christopher Hoadley, 2012

https://steinhardt.nyu.edu/scmsAdmin/uploads/006/677/CHAP12HOADLEY.pdf

"Why Communities of Practice Success and Why They Fail" – Gilbert Probst and Stefano Borzillo, 2008

https://www.researchgate.net/publication/222834798_Why_communities_of_practice_succeed_and_why_they_fail

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Questions?

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