National Convergence Technology Center
2015– 2016 Evaluation Highlights

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Evaluation Highlight Discussion

- ATE Mission and Purpose
- Highlights to date for 2015-16
- Full report Late June 2016
- Continuing Impact of National Center

Evaluation of ATE

- Mixed Methods
  - Data (mostly surveys – comparative analysis)
  - Story (mostly interviews)
  - Outcomes (expectations vs. reality)
- Evidence Based
  - Using numerical data, testimony & observation

C T C

- – Developed new curriculum
- – Leveraged DOL funding
- – Provided vital linkages between education and industry (BILT)
- – Researched CT jobs and provided guidance to regional economic development organizations
- – Made CT visible to stakeholders

* Convergence Technology defined: Integration of voice, video, data, and image into one flexible network with interoperability of various technologies and vendor products into business solution essentially information technology and communications technologies

Leveraging DOL TACT Grant

- $20 million DOL grant to facilitate development of national footprint aids CTC work
- Major equipment infusion
- BILT-driven curriculum infusion (Open Educational Resources [OER], online)
- Virtual laboratories
- Career coaches
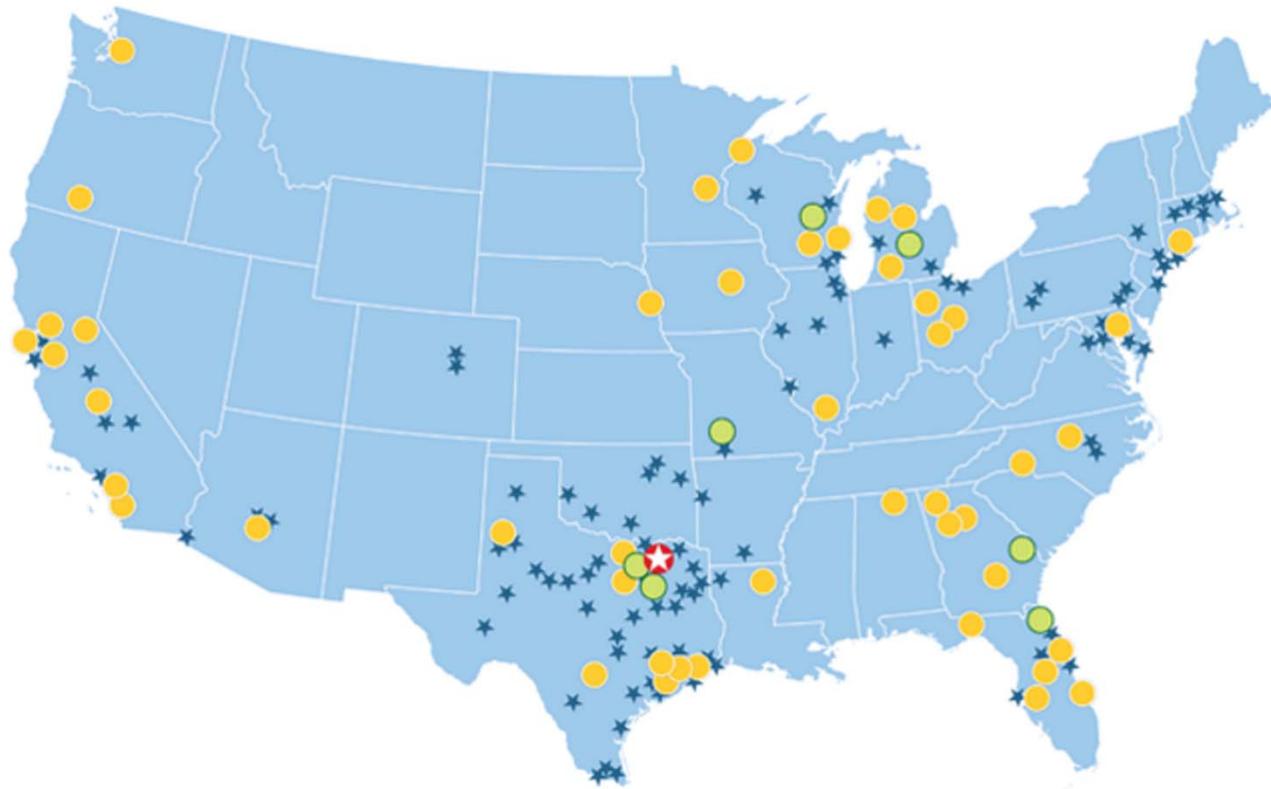- Tutors
- Ended in September 2015

Overall DOL Highlights

- Created 250 virtual lab exercises that aligned with courses.
- In September 2015, the National Convergence Technology Center (CTC) took over the role of granting virtual lab access and supporting the students among the Convergence College Network (CCN) member colleges.
- CTC is broadly disseminating the 82 courses that pertain to CTC's mission: networking, cybersecurity, and some programming.

Headlines for CTC

- Continuous support for legitimization of Convergence Technology as a career
- BILT is strong and growing
  - 50%+ CCN members attending calls
- Working Connections impact since 2008 ~ over 73.5K students
- Instructors Bureau
  - 65 vetted instructors (90+ topics)
- Graduates
  - 1245 AS/AAS degrees
  - 2107 Certificates
- April 1, 2015 - March 31, 2016 Activity Highlights
  - 2,073 Faculty & Staff Participants
  - 7,730 Student & Parent Participants
  - 670 Business Participants

CTC's Convergence College Network (CCN)

National Convergence Technology Center   CTC Partner Colleges   CCN Member Colleges   Colleges represented at Working Connections

Current CCN Colleges

50 mentored institutions in 20 states.

Partner Colleges

Collin College
El Centro College, Dallas County Community College District
Florida State College at Jacksonville
Fox Valley Technical College
Georgia Southern University
Lansing Community College
Ozarks Technical Community College
University of North Texas

Convergence College Network Members

Anne Arundel College - MARYLAND
Calhoun Community College - ALABAMA
Century College - MINNESOTA
City College of San Francisco - CALIFORNIA
Clark State Community College - OHIO
Cleveland Community College - NORTH CAROLINA
Collin College - TEXAS
Daytona State College - FLORIDA
Diablo Valley College - CALIFORNIA
Eastern Florida State College - FLORIDA
El Centro College, DCCCD - TEXAS
Ferris State University - MICHIGAN
Florida State College at Jacksonville - FLORIDA
Fox Valley Technical College - WISCONSIN
Georgia Northwestern Technical College - GEORGIA
Georgia Southern University - GEORGIA
Guilford Technical Community College - NORTH CAROLINA
Gwinnett Technical College - GEORGIA
Herzing University - GEORGIA
Houston Community College - TEXAS
John A. Logan College - ILLINOIS
Kellogg Community College - MICHIGAN
Klamath Community College - OREGON
Lansing Community College - MICHIGAN

Lee College - TEXAS
Lone Star College - TEXAS
Louisiana Delta Community College - LOUISIANA
Marshalltown Community College - IOWA
Metropolitan Community College - NEBRASKA
Milwaukee Area Technical College - WISCONSIN
Montcalm Community College - MICHIGAN
North Central Texas College - TEXAS
Northwest Vista College - TEXAS
Ohlone College - CALIFORNIA
Orange Coast College - CALIFORNIA
Ozarks Technical Community College - MISSOURI
Polk State College - FLORIDA
Porterville College - CALIFORNIA
Renton Technical College - WASHINGTON
Rhodes State College - OHIO
San Jacinto College - TEXAS
Santa Ana College - CALIFORNIA
Scottsdale Community College - ARIZONA
Seminole State College of Florida - FLORIDA
Sierra College - CALIFORNIA
Sinclair Community College - OHIO
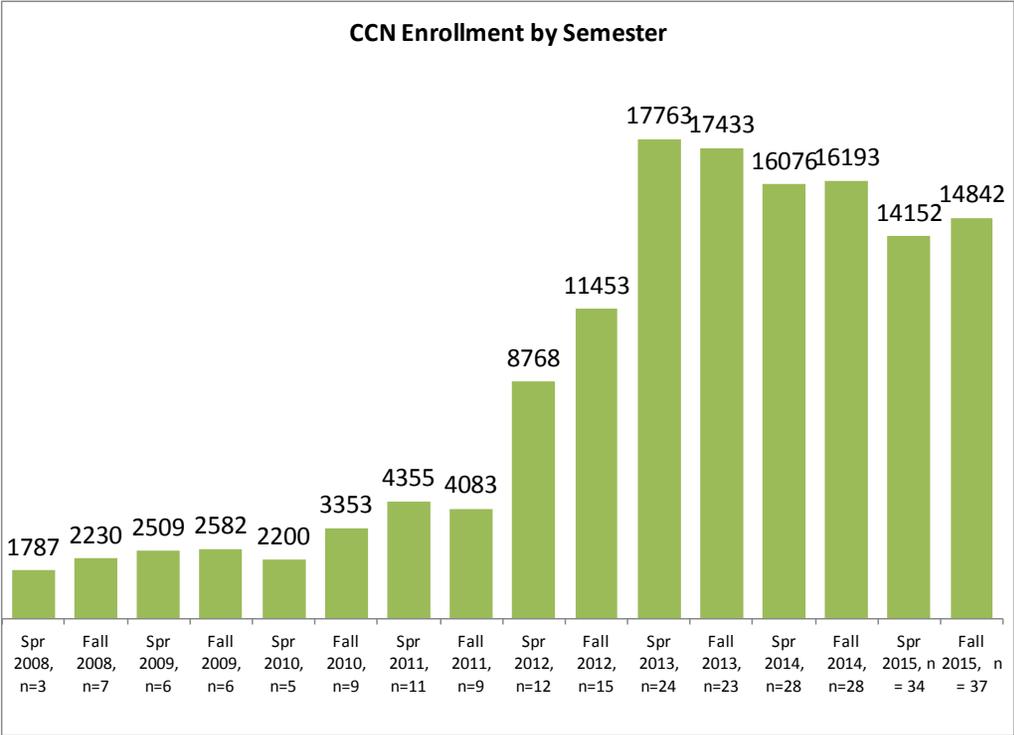
South Plains College - TEXAS
Tallahassee Community College - FLORIDA
Tarrant County College - TEXAS
University of Bridgeport - CONNECTICUT
University of North Texas - TEXAS
Waukesha County Technical College - WISCONSIN
Wiregrass Georgia Technical College - GEORGIA
Wisconsin Indianhead Technical College - WISCONSIN

11 CCN New Members Over Past 12 Months

- Rhodes State College (OH)
- Herzing College (GA)
- Klamath Community College (OR)
- South Plains College (TX)
- Renton Technical College (WA)
- Scottsdale Community College (AZ)
- Georgia Northwestern Technical College (GA)
- Lee College (TX)
- Marshalltown Community College (IO)
- University of Bridgeport (CT)
- North Central Texas College (TX)

CCN

CCN Enrollment by Semester

Semester	Enrollment
Spr 2008, n=3	1787
Fall 2008, n=7	2230
Spr 2009, n=6	2509
Fall 2009, n=6	2582
Spr 2010, n=5	2200
Fall 2010, n=9	3353
Spr 2011, n=11	4355
Fall 2011, n=9	4083
Spr 2012, n=12	8768
Fall 2012, n=15	11453
Spr 2013, n=24	17763
Fall 2013, n=23	17433
Spr 2014, n=28	16076
Fall 2014, n=28	16193
Spr 2015, n = 34	14152
Fall 2015, n = 37	14842

Despite the overall enrollment downturn, seven schools have reported an increase in enrollment and three others report essentially the same numbers.

	2013		2014		2015	
	total	schools reporting	total	schools reporting	total	schools reporting
Spring enrollment	17763	24	16076	28	14152	34
Fall enrollment	17433	23	16193	28	14842	37
Degrees completed	2156	24	2508	26	1245	34
Certs completed	n/a		n/a		2107	30

CCN

- In 2013-2014, transitioned to a point system to break out the group into two levels.
- Four quarterly CCN meetings (July 2015, October 2015, December 2015, February 2016)
  - July 2015 meeting was in conjunction with end of Summer Working Connections
  - 45 CCN faculty members in attendance in person at Collin
  - Featured a two-hour presentation on flipped classrooms (Don Taylor, Blue Ridge CC)
- Four quarterly BILT meetings (May 2015, August 2015, November 2015, February 2016)
- May 2015 meeting was a "face to face" job skills discussion.
- Two annual CCN Administrators meetings (May 2015, October 2015)
  - One new subgroup: CCN University (first meeting: November 2015)

CCN

- CTC also hosted three special webinars for the CCN
  - one focusing on future IT trends
  - one offering a detailed overview of the CCN community
  - one sharing how to implement a "PC clinic" into an IT program.
- All created a positive impact among attendees.

North
Appleton, WI
June 6 - 10, 2016

Summer Working Connections

Working Connections
IT Faculty Development Institute
Founded by: AACC | Microsoft | NWCET

Texas
July 11 - 15, 2016

Summer Working Connections

Working Connections
IT Faculty Development Institute
Founded by: AACC | Microsoft | NWCET

South
Jacksonville, FL
June 20-24, 2016

Summer Working Connections

Working Connections
IT Faculty Development Institute
Founded by: AACC | Microsoft | NWCET

Working Connections

- Three events in 2015
  - Summer Texas (Collin College)
  - Summer South (Jacksonville, Florida)
  - Winter (Online)
- 175 registrations total
- Registration totals have remained essentially the same for the last three years
  - 90s-100s for Summer Texas
  - 30s- 40s for Summer South
  - 40s-50s for Winter

Working Connections

- Continues to be best of breed
- High level of overall satisfaction with
  – Timeliness of topics
  – High value (usability and quality) of content
- Directly actionable
  – Expand or update existing courses
  – Start new programs or courses
  – Invoke new teaching/assessment methods

Working Connections

- Longitudinal surveys rolling 5 year window
- 3,799 related class sections taught since 2008
- Estimated students impacted = 73,500+ based on longitudinal survey results

What do WC Attendees Do?

70% Update Course Materials

35.8% Modify Assessments

60% develop new or update existing labs

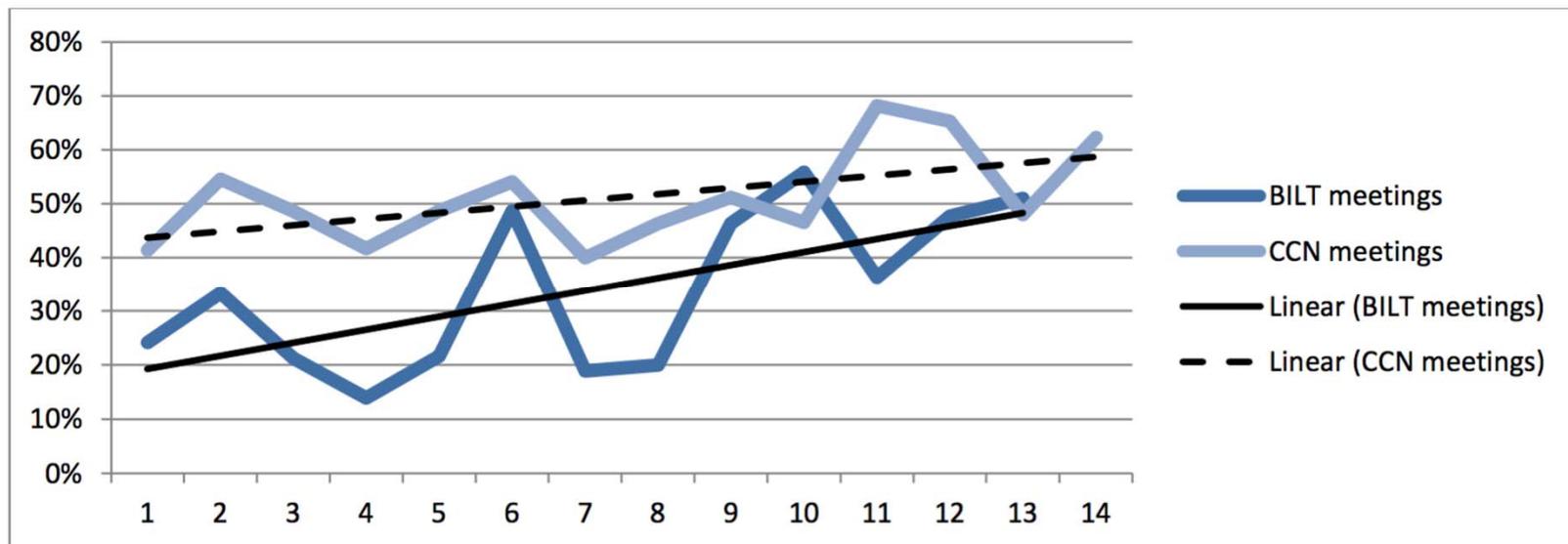43.4% deliver instruction differently

From the end-of-program WC survey

- "Working Connections provided me with high quality IT training."
  - Summer Texas 91% agreed or strongly agreed
  - Summer South 97% agreed or strongly agreed
  - Winter (Online) 95% agreed or strongly agreed

The Think Tank

- At 2015 Summer Working Connections, the National CTC offered a special "best practices" track called "The Think Tank" to provide a deep-dive into a number of organizational and pedagogical processes and strategies – many developed by the National CTC and/or the Department of Labor NISGTC consortium – to help strengthen programs and improve the classroom experience.

- A similar track will be offered at the 2016 Summer Working Connections called "Leadership Academy."
  - Most CCN leads are faculty and may or may not have had experience dealing with supervisors or others like them. Further, several have had difficulties with BILT and outreach and recruitment.
  - Feedback from the 2015 "Think Tank" longitudinal surveys and a focus group discussion motivated the addition of grant writing, time management, and how to teach soft skills.
  - Will offer more time for role-playing the KSA (Knowledge, Skills, and Abilities) process and DiSC (Dominance, Influence, Steadiness, Conscientiousness) personality lessons.

BILT

- Quarterly BILT and CCN meetings trending upward in the percentage of active CCN members that participate.

UNT

- Initial enrollment in the UNT BA-IT program in the Fall of 2008 was 42 students.
  - The first graduate from the program was in December 2010
  - Now have a total 74 graduates from the BA-IT program at UNT-Denton.
  - 22 graduates in 2015.
- Received ABET accreditation in the Spring of 2014 for 3 years and had another visit in the Fall of 2015 for a full six-year accreditation.
- Fall 2016 will start online offerings

Semester	Total	Male	Female	Asian	Black	Hisp	White	NonSpec
Spring 2015	102	91	11	9	8	25	57	4
Fall 2015	112	98	14	10	9	27	61	5

Website

www.connectedtech.org
and
related media outreach

connectedtech.org

- Page views dropped slightly from 7,567 to 6,310
  - 3,101 found via organic search
  - percentage of new visitors vs returning visitors has increased to 78%
  - 49%+ come via Google search
  - 35% through direct link
  - 13% come via referrals
  - 4% email links
  - 65% Windows
  - 14% Macs
  - 17% mobile devices (55% of those mobile devices are iPhones)

- Wiki views approx 4 times website views
  - 79% are by direct links and likely accessed by CCN members

Social Media

- Wiki
  - Used to collaborate and share information
  - 1,356 sessions from 842 visitors viewing 3,357 pages
  - 61% new visitors, 39% returning visitors
- Facebook
  - 131 fans (up from 113) Average 19 views per week with a reach of 110 (up from 50 in 2015) per week
- LinkedIn
  - Group has grown 10% in past year from 156 to 171
- Twitter
  - 192 followers, up from 168 followers last year
- YouTube
  - 1,949 recipients (1,887 last year)
  - Minutes watched >1,300 mins
  - Top video is still: Is teaching wireless networking in your future?
- MailChimp/Newsletter
  - 1,949 recipients (1887 last year)
  - Open rate of 18% (equal to industry standard, also 18%)
  - Click rate average 4% (industry standard 2%)

Challenges/Opportunities/Kudos

- ## Student Impact
  - ### CTC doing great work now
    - enrollments, graduation numbers (certificates and degrees separated for almost all colleges), retention numbers, ethnicities, genders and ages of students, etc.
  - ### Curriculum and virtual labs continue
- ## ID'ing Next New Thing

Thanks

Special thanks to CTC Team

Q & A