

NSF grant award #1205077

National Convergence Technology Center Overview, April 2014

Ann Beheler, PI



Dr. Gerhard Salinger



Dr. Salinger

- Dr. Gerhard Salinger. Ph.D. in Physics
- Taught at Rensselaer Polytechnic Institute for 11 years
- Joined the NSF in 1989 and co-founded the ATE program with Dr. Elizabeth Teles in 1993; co-led the program for close to 20 years
- Program Officer for all Collin NSF ATE grants from the project grants through the CTC Regional Center until now
- Retired a couple of years ago, but stayed on as a permanent half-time program officer, our program officer
- Apparently will actually retire in early May



When Dr. Salinger Looks Back

We cannot begin to imagine all the lives Gerhard has helped to change, but there is no doubt he definitely has made that proverbial difference for students affected by our programs as well as students affected by programs for numerous other NSF centers and projects.

We thank you for your guidance, your frankness however tough it may have been at times, your teaching, and your constantly pushing is by asking "so what?" just when we were beginning to be proud of what we had accomplished.

You made the difference. You will always be a member of our team.



Lead Federal Program Officer

- Dr. Celeste Carter, Ph.D. in Microbiology
- Joined Faculty at Foothills College in 1994 to lead a Biotechnology program
- Served as a NSF Program Director, DUE 2001-2003
- Returned to Foothills College in 2003 to resume being Director of both Biotechnology and Bioinformatics programs
- Returned to NSF as a Program Director 2007-2008
- Again returned to Foothills College in 2008 to resume teaching
- Accepted position as Lead Program Officer for the ATE program at NSF in 2009



National Convergence Technology Center

- Built on the work of 2 ATE project grants and 2 Regional Center grants
- Award period 8-15-2012 through 7-31-2016
- 19 months into a 48 month grant
- Currently has 8 partners
- This NVC focuses on the CTC even though the work of the CTC is leveraging a \$20 million DOL TACT grant awarded 10-1-11



National Convergence Technology Center Partners



NVC focuses on the CTC grant only

- DOL grant was built on the work of 4 NSF Centers, with the Networking/Convergence Center based at Collin being one of these
- Key DOL funding being leveraged to assist the work of the CTC at Collin including
 - Equipment for a virtual laboratory and a fortuitous update to all Cisco labs at Collin
 - Open source online curriculum content – both “lecture” and virtual labs for 30+ courses
 - Virtual internship/externship initial work
 - Career coaches and IT-specific tutors

CTC Goal 1

- **Goal #1: Program Improvement to meet workforce needs by incorporating mobile network technologies and other emerging technologies such as cloud computing and technical support for video delivery to equip faculty to teach courses/modules to address emerging convergence technologies supporting end-to-end communication via the mobile network**

CTC Goal 1 Accomplishment Highlights

- **Objective A: Effectively engage Business and Industry to guide all curriculum efforts**

The BILT is the lead for all our work

- Still meets quarterly, 3 x annually via webinar, 1 x Face to face for KSA analysis to guide curriculum
- Evaluated virtual internship/externship capstone
- Has provided speakers of all kinds

CTC Goal 1 Accomplishment Highlights

- **Objective B: Invigorate classroom curriculum based on job task analysis and create e-book modules and interactive tools to support hybrid and/or fully online delivery of courses.**
 - Residential Networking Content Created by faculty from OCC and Lansing; Wireless updated
 - Other new courses as indicated by KSAs annually
 - Also leveraging DOL work that is creating 30+ new online courses and virtual labs (through 9-30-15) <http://nter.riosalado.edu> for draft

CTC Goal 1 Accomplishment Highlights

- **Objective C: Invigorate faculty to teach emerging technologies courses through professional development.**

- Working Connections
 - North and South Initiated – Lansing MI and Jacksonville FL in 2013
 - Working Connections Texas had 108 attendees in 2013
- Began list of traveling instructors from within our own network
- Continued longitudinal surveys to follow up true impact of usage of education received by faculty at Working Connections
 - Longitudinal reporting indicates approx 42,000 students directly affected and approx 1800 sections affected with only partial reporting of attendees(continuing from Regional Center work)

CTC Goal 2 Accomplishment Highlights

- **Goal #2: Provide access for technology-enabled instructional support systems to assist colleges in launching convergence programs**



CTC Goal 2 Accomplishment Highlights

- **Objective A: Provide virtual lab capability for students nationwide to reduce costs and accelerate implementation of new convergence programs**
 - Georgia Southern is to provide this capability; equipment recently installed, configured, and ready to support VMware and EMC ISM courses
 - Florida State Jacksonville has extensive virtual lab that is being used by several Florida colleges for a wide variety of courses, with many colleges already part of the CCN
 - Collin has broad virtual lab capability but usage is limited to DOL partners until 9-30-15; then the equipment goes to CTC usage and can be used by our partners



CTC Goal 2 Accomplishment Highlights

- **Objective B: Provide open access online courses, including capstone internship/externship course**
 - Original plan was to use Moodle
 - Current plan is to make development documents available for use in a given college's LMS as shown in demo of NTER
 - NTER will be installed on Collin equipment prior to end of DOL grant, and anyone can use content (OER) and/or download the development documents that are fully ADA compliant for use in any LMS
 - Virtual internship/externship demo



CTC Goal 3 Accomplishment Highlights

- **Goal 3: Increase the number of degree/certificate completers ready to meet workforce needs**



CTC Goal 3 Accomplishment Highlights

- **Objective A: Implement nationally-known best practices for recruiting, retaining, and graduating underserved students**
 - IWITTS training occurred
 - Career coaches, tutors, follow-up
 - NAPE workshop schedule in process
 - Plan to have active implementation webinars with partners and CCN with evaluation follow-up
 - Partners will present regarding their accomplishments with women and minority recruitment and retention



CTC Goal 3 Accomplishment Highlights

- **Objective B: Increase the number of students in general who complete certificates and degrees (2 yr and 4 yr) via innovative means**
 - DOL participants (these students are also CTC participants at Collin) receive:
 - Career coaches, tutors, follow-up monthly
 - Transcender test prep software
 - Resume workshops
 - Interview preparation workshops
 - Job fairs
 - WOS cohort for Vets at Collin
 - Other partners, for example Fox Valley, Lansing, and El Centro, have strong women and minority programs
 - Stackable certificates are being broadly adopted by multiple partners and CCN members, OCC for example
 - UNT BAIT program will be updated during UNT presentation



CTC Goal 4 Accomplishment Highlights

- **Goal #4: Capacity Building/Dissemination:**
- **Objective A: Expand the Mentored College Program with Partner Centers to reach more colleges.**
 - Currently 33 CCN members, more in the pipeline
 - Many others have expressed interest, notably 12+ are interested in CCN and in implementing Convergence degrees and certificates, just from AACC (Lone Star in Houston , for example)
 - Bay Area Colleges – We worked with 25 colleges to perform Job Skills analysis on April 11 with several indicating interest in CCN



CTC Goal 4 Accomplishment Highlights

- **Objective B: Disseminate all Materials and processes.**
 - CTC website used to publish processes, curriculum and materials
 - Social media highlights in evaluator report
 - Numerous presentations at conferences by grant staff and partners



CTC Overview Summary

- Partners will elaborate
- Off to a good start
- Students are our focus
- Questions welcome

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