

# The Regional Technology Corporation The National Center for Information & Communications Technologies

## A Partnership

Ellen Bembem and Gordon F. Snyder Jr

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# The National Center for Information and Communications Technologies

*A National Science Foundation Advanced Technological Education Resource Center of Excellence focused on Information and Communications Technologies (ICT)*

# Center History

1997

- Northeast Center for Telecommunications Technologies (NCTT) launched with \$3M National Science Foundation ATE grant as a division of Springfield Technical Community College in Springfield, Massachusetts.
- Serves New England and New York secondary and post-secondary institutions.
- Focused on areas of computer networking, fiber-optics and wireless communications.

2003

- Changed from the Northeast Center to the National Center
- Expanded from “physical layer” content offerings to encompass emerging technologies and more comprehensive technician education.

2005

- Center launches blog and adds other Web 2.0 content including audio and video podcasts, wiki’s and micro-blogs.

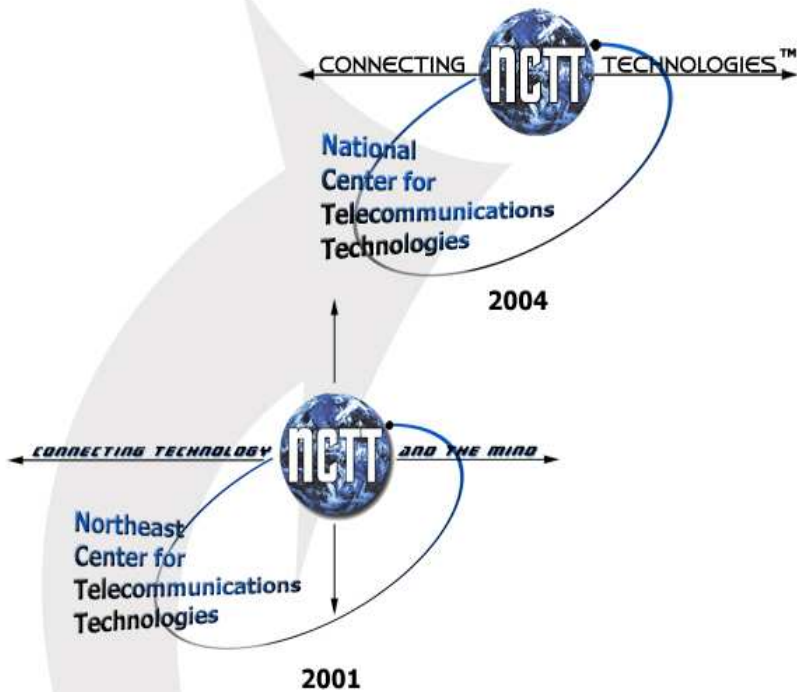
2008

- Center changes name to **National Center for Information and Communications Technologies** and formalizes community.



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Northeast Center for Telecommunications Technologies

**NCTT**

An Advanced Technological Education Center

1998



1997



2008



**ictcenter.org**



# Our Primary Goal

Create a comprehensive and sustainable national education system for the Information and Communications Technologies (ICT) industries.

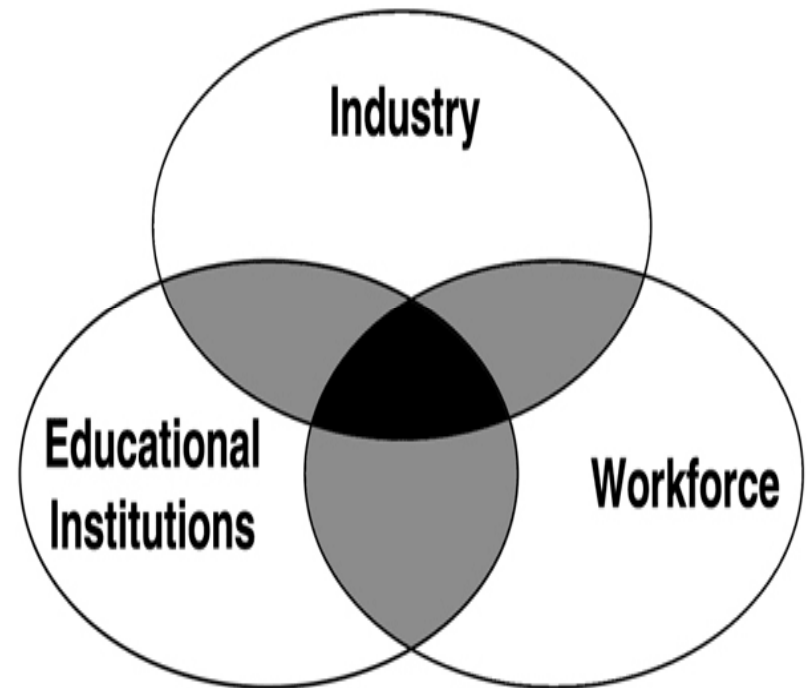
# Three Challenges

1. How can ICT pedagogy - both content and means of delivery - be kept **current**?
2. How can a group of highest quality subject matter experts be readily **engaged**?
3. How can the best of this knowledge be shared and disseminated across the nation **quickly**?

# Community of Practice

A new vision for ICT education, partnership and collaboration

- An expanding group of of academic professionals and industry experts who share a common goal of ensuring a quality and industry-relevant education for all ICT students
- Spans Grade 11 through community college and four-year college levels
- Formal partnerships with 14 academic institutions in 10 states



# ICT Center's Actions

- Develop a nationally validated set of ICT skill standards
- Quickly disseminate innovative, effective, and current curriculum models to faculty
- Make the knowledge of subject matter experts readily accessible to industry and academia
- Provide information and training for ICT students and technicians that will match industry needs
- Share strategies for inclusion of underrepresented populations in the ICT field

# Connecting Technologies

- Web-based Curriculum Development
- Second Life  
(<http://slurl.com/secondlife/NCTT/128/128>)
- iTunesU  
part of the National Science Foundation Digital Library (NSDL)
- and AMSER
- Web 2.0
  - Blogging ([ictcenter.org/blog](http://ictcenter.org/blog))
  - Podcasting ([ictcenter.org/podcast](http://ictcenter.org/podcast))
  - YouTube ([www.youtube.com/user/NatCtrTelecomTech](http://www.youtube.com/user/NatCtrTelecomTech))
  - Moodle ([ictcenter.org/ocp](http://ictcenter.org/ocp))
  - iTunes  
(<http://phobos.apple.com/WebObjects/MZStore.woa/wa/viewPodcast?id=117349746>)

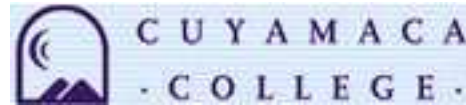


# Connecting People

- Center draws on the knowledge of subject matter experts,
- Listens to the needs identified by industry professionals, and responds to faculty requests.
- People are the source, the tool and beneficiaries of Center's inventive programs.
- Impact on more than 100,000 students, including incumbent workers and students in 2 and 4 year institutions.



# Regional Partners



# Collaborating Partners Regional Members



**Rend Lake  
College**



**ictcenter.org**



# The Regional Technology Corporation (RTC)



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# RTC Mission:

The mission of the Regional Technology Corporation ("RTC") is to be the market driven catalyst for growth and development of technology-based industries in Western Massachusetts and the Knowledge Corridor. In affiliation with the Western Massachusetts Economic Development Council, the RTC coordinates and manages the region's technology economic development strategy as it relates to business development, attraction and creation.



# RTC History:

## Created:

- Expressly to increase the number of technology-based businesses in western Massachusetts.
- In direct response to an assessment by the Economic Development Council of Western Massachusetts that the region needed a more precisely focused technology development strategy.

EDC, together with the University of Massachusetts and others, commissioned the Battelle Institute to conduct a study of technology clusters, which was completed in 2000 and resulted in a National Science Foundation Grant of \$600,000 to the University of Massachusetts Amherst.



# RTC History:

2000

NSF grant created the Regional Technology Alliance (RTA) which fostered three technology clusters, one each in information technology, advanced manufacturing and materials and biotechnology.

2002

EDC retained Battelle to describe the best practices of similarly sized regions around the country that had developed strong technology development programs.

These studies and experiences combined with the input from business consultants located in the region, venture capital fund managers and technologists resulted in the decision to create a corporate entity through which most services required to foster the development of technology based businesses would be channeled.

2003

The RTC was officially launched in June 2003 and became an affiliate of the Economic Development Council of Western Massachusetts at the end of the summer.



# Today RTC:

- **Expedites** technology business transactions that lead to job growth and financial investment
- **Helps** leverage the hundreds of millions dollars of research at UMASS Amherst, Baystate Health Systems and other regional institutions
- **Supports** the activities of three regional technology business networks (TEC, MMTN, BETA)
- **Identifies** gaps in technology business infrastructure and facilitates development of the region's technology business resources
- **Advises** technology service providers and other organizations that work with technology-based businesses
- **Tracks** national and global opportunities that play to the region's strengths
- **Serves** as a single point of contact for the region's technology businesses, affiliated organizations and for technology economic development strategy
- **Markets** the region's technology assets outside the region and educates government officials about economic development opportunities that draw on the strengths of the region's technology assets.



# The RTC Networks (TEC, MMTN, BETA)



# Technology Enterprise Council (TEC)

A regional, industry-led organization working hand-in-hand with academic institutions and other non-profit organizations to advance the growth and success of companies driven by information and communications technologies. TEC's strategy is to work independently and in collaboration with others to:

- Improve the physical and services infrastructure needed by our members.
- Expand the depth and breadth of financing resources and financial services available.
- Cultivate resources to support new ventures and technology transfer.
- Enhance and expand the workforce.
- Raise the visibility of our community within and beyond the region.



# Bio Economic Technology Alliance (BETA)

The mission of BETA is to foster the growth and development of the bioscience and bioengineering cluster in Western Massachusetts. The cluster will grow through the attraction of companies to the region, the development of new products by existing firms, and the development of new companies through technology transfer from the research institutions in the Knowledge Corridor.



# Materials & Manufacturing Technology Network (MMTN)

Brings together companies and academic institutions using coatings, adhesives and other polymer substances. Members include paper and plastics companies, with areas of common interest including manufacturing, environmental and technology commercialization issues. The network exists to increase business opportunities and competitiveness for member companies by promoting complementary resources and shared technologies.

# A partnership on a collision course...



Regional Technology Corporation



Regional Technology Corporation

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# In The Beginning....

- 2 years ago RTC hires new President with vision.
- RTC needed new direction and started with its Technology Enterprise Council (TEC) Network.
- Gordon Snyder becomes TEC chair, resulting in new energy and the start of the Digital Marketing series.
- NSF Center/STCC became the catalyst for RTC growth and subsequent regional business development.

# RTC Digital Marketing Series

- Technical series focused on digital marketing.
- Events run at Springfield Technical Community College Technology Park and sell out quickly.
- 2008 seminars in this educational series include:
  - Podcasting
  - Viral Marketing
  - Using Social Networks as Marketing Tools
  - Business Blogging
  - Using Video to Enhance Marketing
  - Web Trends
  - SaaS
  - Web Analytics
- Web 2.0 based solutions are being used for training, all aspects of marketing including advertising, public relations and building brand equity as well as other types of corporate technology transfer.

# Successes Realized

- All events with STCC/RTC have been video taped.
- By holding RTC TEC events at STCC Tele-classroom, we have been able to expose attendees (avg. of 60 to 70) to the room and the multimedia capabilities resulting in a greater than 50% increase in Multimedia Center business.
- As a consequence, STCC also directly marketed
- RTC membership went from 86 to 138 = growth of 60.4% growth in one year
- RTC Monday Newsletter grows in popularity with 2500+ (<1500 in 2006) weekly readers.
- RTC contracts with ICT Center to develop and maintain new RTC website.
- ICT Center films first RTC video podcast.
- Surge in use of new digital marketing tools by regional businesses.
- Blogging and podcasting in the region broke out:
  - Podcasts (audio and video) for membership
  - MassLive.com joins RTC in economic development by blogging and podcasting
  - Numerous tech job openings previously unknown are exposed to public.

# Regional Technology Corporation – Members (8/6/2008)

## Corporate Sponsors

Al Griggs  
Baystate Health  
Biomedical Research Models, Inc.  
Blackstone Medical  
Bulkley, Richardson & Gelinas, LLP  
Buxton  
Cantor Colburn  
Court Square Group  
Davis Foundation  
Doherty, Wallace, Pillsbury & Murphy  
Friendly Ice Cream Corporation  
Hampden Bank  
Kollmorgen  
Long River Ventures  
Mass Mutual  
Microsoft  
Microtest Labs  
NuCedar Mills, Inc.  
The O'Connell Companies, Inc.  
Solutia  
Tiziani Whitmyre  
UMass Amherst  
U.S. Tsubaki, Inc.  
Vann Group  
Video Communications Inc.  
Wolf & Company  
Yankee Candle

## Materials & Manufacturing Technology Network

Apex Resource Technologies, Inc.  
Asnuntuck Community College  
Atlantic Fasteners  
Boyd Converting Company, Inc.  
Buxton  
Capaccio Environmental Engineering  
Clear Vision Alliance  
Cold Spring Technology  
Ct. Valve & Fitting Company  
Development Associates  
DNV  
Dymotek  
Field Eddy & Bulkley, Inc.  
Fire Fighting Equipment  
FloDesign Inc  
Group Insurance Management Services  
Hampden Bank  
Hayden Corporation  
Jennings Real Estate  
Lym Tech Scientific  
Massachusetts Export Center  
MassMEP  
NuCedar Mills, Inc.  
Package Machinery Company, Inc.  
PRIMA North America, Inc.  
Quabbin Sales & Engineering LLC  
Riverside Industries Inc  
Rockwell Automation  
Savage Arms, Inc.  
Solutia  
Southworth Company  
Specialized Technology Resources (STR)  
Titeflex Corporation / Gastite  
Toner Plastics  
Uncommon Clarity, Inc.  
U.S. Tsubaki, Inc.  
United Bank  
United Personnel  
Vaupell Northeast Molding & Tooling  
Western New England College  
WGI, Inc.  
**INDIVIDUALS** Giancarlo Tosi  
Janice Greenberg, Lynne Thoma  
Ted Wysocki

## BioEconomic Technology Alliance (Life Sciences)

Airgas East  
Asnuntuck Community College  
Asparagus Systems  
Baystate Health  
BEACON  
Biomedical Research Models, Inc.  
Blackstone Medical  
Bulkley, Richardson & Gelinas, LLP  
Capaccio Environmental Engineering  
Clear Vision Alliance  
Court Square Group  
Development Associates  
Field Eddy & Bulkley, Inc.  
Fire Fighting Equipment  
FloDesign Inc  
Group Insurance Management Services  
Hampden Bank  
Hartford Hospital  
Jennings Real Estate  
Microtest Labs  
Miti Investment Group, LLC  
Pioneer Valley Life Sciences Institute  
Qserve America Inc  
Springfield Technical Comm College  
UMass Amherst  
Uncommon Clarity  
United Bank  
United Personnel  
Vaupell Northeast Molding & Tooling  
Westfield State College  
Winstanley Associates  
Western New England College  
Zentek Automation US, Inc.

### INDIVIDUALS

Jay Gilchrist  
Janice Greenberg  
Lynne Thoma



## Regional Technology Corporation – Members Continued (8/6/2008)

### Technology Enterprise Council (IT and Communications)

Affiliated Chambers of Greater Springfield  
Applied Software Technologies  
Asparagus Systems  
Associated Industries of Mass (AIM)  
Atalasoftware, Inc.  
Bank of Western Massachusetts  
BellHawk Systems  
BreakThrough Business Advisors  
Bulkley, Richardson and Gelinis  
BTP Systems  
Cantor Colburn LLP  
CapuanoMall.com  
City of Northampton, Ma.  
Clear Vision Alliance  
Computer Aided Products  
Concept Telecom, Inc.  
Connecticut Technology Council (CTC)  
Convergent Solutions, Inc.  
Court Square Group  
Development Associates  
Elm Electrical, Inc.  
Field Eddy & Bulkley, Inc.  
Fire fighting Equipment  
FIT Solutions  
FloDesign Inc.  
Franklin Regional Council of Governments  
Garvey Communication Associates, Inc.

Group Insurance Management Services  
H.L. Dempsey  
Hampden Bank  
Hogan Communications  
Holland & Bonzagni  
I.C.E. Business LLC  
Innovative Business Systems (IBS)  
ITT Power Solutions  
Jennings Real Estate  
Karen Lauter Utgoff Consulting  
Masslive LLC  
McCormick, Paulding & Huber LLP  
Mercy Medical Center  
MetaComet Systems  
Miti Investment Group, LLC  
Pioneer Training, Inc.  
Point Software, Inc.  
ProShred Security  
Robert Half Technology  
Rumetagro Relationship Technologies  
Sovereign Bank  
Speak Easy  
TechCavalry, Inc.  
TnR Global  
Tortus Technologies

Trust Company of Connecticut  
TSM Design  
Uncommon Clarity, Inc.  
United Bank  
Universal Mind, Inc.  
Veritech Corporation  
Video Communications, Inc.  
Willard Financial Group  
Winstanley Associates  
World Affairs Council

#### EDUCATIONAL INSTITUTIONS

Asnuntuck Community College  
Holyoke Community College  
Smith College  
Springfield Technical Community College  
University of Massachusetts-Amherst  
Western New England College  
Westfield State College



# Successes Continued

- Economic Development groups now recognize community colleges must lead the way in workforce development and STEM education.
  - PVSTEMNET - Pioneer Valley STEM Network
  - Commonwealth Covenant Fund (STEM) with State Treasurer Timothy Cahill
  - UMASS/Amherst Partnership
  - Mass Rehabilitation Council
- State borders get fuzzy, STCC/RTC now partnering with CT community colleges for precision manufacturing training.
- RTC members to STCC for timely technology focused programs
  - Photovoltaics
  - School of Engineering Technologies agreement with UMASS Amherst
  - CNC training
  - Computer Science
  - Precision manufacturing – IT programs, Robotics, Automation
  - Active STCC Business Incubator (only one currently in Western Mass)
- RTC / STCC to establish two additional incubators (Biotech and Medical Devices and IT)
- RTC funding explored by gathering 40+ CEO's at STCC for exposure to STCC technical capabilities.
- RTC launches IT CEO Roundtable with MSBDC at STCC
  - Confidential Forum for IT CEO's; 1st meeting 07/17/08, 2nd meeting 09/16/08
  - mostly small to mid-sized companies with common needs (#1 issue is workforce)

# Into The Future....

- Tentative agreement with several regional community TV stations to broadcast taped and future taped ICT Center/RTC programming.
  - First broadcast of Social Networking seminar in August 2008.
  - Fills regional programming niche that is no longer available from national and public TV.
  - Potential expansion to 10-station network in the Northeast
- Talks underway with The Frank Peters Show in Silicon Valley to expand ICT Center/RTC programming to the West Coast.
- Strategic plans underway to expand programming on the east coast.
- Export and expand high level ICT Center blogging and podcasting in region
- ICT Center/RTC start new entrepreneurial programming for 2009
  - Student focused through Grinspoon Foundation
  - New partnerships with local venture capitalists and angels.
- Next!
  - Technology enabled green tech = new biz ops for IT members and STCC
  - Telemedicine and Connected Health
  - Exploring offshore opportunities (Ireland and EU)
  - Opportunities in New Media



# How to sustain this high-value, high profile partnership and GROW it?

- **Original NSF RFP team reconvened July 2008 to build on initial NSF investment in the Knowledge Corridor.**
  - **Large, multi-year funding sought**
  - **Center moves to replicate the success of this regional partnership nationally utilizing the ICT Center / RTC template.**

# Contact Info

Ellen Bemben  
President, RTC  
(413) 755-1320  
[ebemben@rtccentral.com](mailto:ebemben@rtccentral.com)  
[www.rtccentral.com](http://www.rtccentral.com)

Gordon F. Snyder, Jr.  
Director, ICT Center  
(413) 755-6550  
[gsnyder@stcc.edu](mailto:gsnyder@stcc.edu)  
[www.ictcenter.org](http://www.ictcenter.org)

