Center for Business Research Purpose
To provide applied educational and research experiences to undergraduate and graduate students in a variety of research areas related to business, to provide faculty with additional avenues to enhance intellectual contributions, and to provide research services to organizations inside and outside the University (from Sunset Report approved by BOR).

Center for Business Research Background
The Center for Business Research (CBR) was renewed by the BOR in Fall 2012 (see appendix A: President’s support for reauthorization of CBR to the BOR). The CBR fosters linkages between WCSUs Ancell School of Business faculty and students (undergraduate and graduate), and WCSUs Business and Community Stakeholders. Over 100 organizations (nonprofit, for profit; international, domestic; large, entrepreneurial start-ups) have benefitted from working with faculty and students on a wide variety of faculty-led student projects – from the development of comprehensive business and marketing plans, helping companies with cost-accounting systems to the development of e-commerce strategies and web site analysis. These faculty-led student projects have spanned continents to include China and India to developing an award winning study for the American Association of Retired Persons (AARP) which gained our MBA students national recognition. The CBR has hosted events as a national case writer’s conference where students and faculty across the US engaged with companies in case writing opportunities and publication to forums on ‘Doing Business in China’ for students, faculty and local community. The CBR has offered comprehensive training programs to local companies where area companies benefit from engaging with faculty experts.

Center for Business Research Activities & Projects for 2014-2015
A. Classroom Faculty-Led, Student-Industry Collaborative Projects

CBR Faculty-Led, Student-Industry Collaborative Projects are either course-based or independent student / faculty-led initiatives, depending on the scope and complexity of the project. Projects are highly focused and short-term in nature, typically running from a few weeks, to no longer than the 15-week semester. Our students, led by qualified faculty, have helped companies solve multiple problems and challenges over the years, both domestic and international in nature. All client organizations actively engage with faculty and students throughout the project’s life.

The CBR welcomes all industry partners who seek practicable and pragmatic business solutions meeting mutual needs.

3. Biscotti Etc. LLC – Marketing Club (AMA Collegiate Chapter)-based Think Tank Project and Mini-Consulting Project
4. FrozenQ – Course-based Case Research & Writing Project (MBA MKT 598) on Entrepreneurship
6. Edgarton – Advising & Training Project

B. **Verizon Innovation Center Trip (March 24th 2015) – Sponsored by the IW Group (see attached document)**

Working together with the IW Group, Drs. Chris Kukk (Honors Program) and Karen Koza (CBR) selected 6 Honors Program students (3 STEM students; 3 Business students) to traveled to Waltham, MA to tour Verizon’s Consumer and Enterprise Innovation Labs. Each school participating could bring up to 6 students and two faculty members. This opportunity was granted to 3 Universities – University of Florida, Gainesville, Brandeis University and Western Connecticut State University. Verizon opens up this opportunity to only a select few universities. As a result of this experience, two Honors Program students were asked to submit an application for consideration to Verizon’s Internship Program. Highlights from this trip are found in Appendix B.

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00am – 9:30am</td>
<td>Continental Breakfast Set-up in Front Area</td>
<td></td>
</tr>
</tbody>
</table>
| 9:30am        | Move to Theatre for: Opening Remarks (5 - 8 minutes)  
Innovation Video  
Overview Slides of Innovation Program | • Elva Lima – Director – Verizon  
Global Diversity & Inclusion  
Pam Gentile - HR Business Partner  
Mike Sullivan |
| 9:45 – 10:45am | Tour throughout facility  
Walking through the showcase area demos/solutions | • Hosted by: Mike Sullivan – Supv New Product Development |
| 10:45am       | Closing Remarks                                     | • Elva Lima                               |
| 11:00am       | Tour Complete                                       |                                           |

C. **Center for Business Research Process Improvement Certification for Business Program Proposal**  
(Program Proposal with Draft CBR Budget and other supporting documentation; see attached files)

Doreen Bentson, Certified Six-Sigma/Lean Master Black Belt and Quality Leader for GE Capital, worked with the CBR in developing a proposal for process improvement certification program for regional business and WCSU community. This proposal, coupled with the survey in part D, formed the basis of a feasibility study for the proposed program. Details of this proposal with supporting documentation are found in Appendix C.
D. Center for Business Research Exploratory Study of Regional Business Needs – Spring 2015

In order to understand the educational and training needs of our regional businesses, and to support student learning through experiential projects, the CBR worked with Dr. Xiaoqi Han and her spring 2015 MKT 415 Marketing Research class in surveying issues that concern regional businesses. The findings from this research project will help inform the CBR in the designing and delivering of future educational and training solutions. Summary of activities between CBR and Dr. Han’s MKT 315 Marketing Research class:

1. The CBR worked with Dr. Xiaoqi Han in the development of an online survey (using Qualtrics, a web-based survey software tool) to be sent out to regional companies as part of Dr. Han’s MKT 415, Marketing Research course. The purpose of the research survey was to determine the training/educational needs of employers in the region.
2. The CBR and Dr. Han, developed a database of regional companies using multiple sources.
3. The CBR visited Dr. Han’s class multiple times during the semester to address the focus of the study, answer any questions students may have during the course of the semester, and observe the student-teams’ final presentations and give feedback to the students.

E. Center for Business Research Funding

CBR actively seeks to secure funds to support student job skill needs and projects, as well as to support regional business needs. In the spring of 2015, the Barden Foundation generously granted the following funds to the Center for Business Research, to be used for the following purposes:

1. $5,000 seed money for developing a six sigma program for WCSU students and regional businesses
2. $3,000 for student external training needs

Hence, in 2014-2015 Academic Year, the CBR was granted $8,000 from the Barden Foundation.

Respectfully submitted to University Senate from Dr. Karen L Koza
Appendix A – Letter of Support for Reauthorization of WCSU CBR from WCSU President to BOR

To: Braden Hosch, Ph.D.
   Director of Policy & Research and Interim Director of Academic Affairs
   Connecticut State Colleges and Universities (ConnSCU)

From: James W. Schmotter

Date: September 4, 2012

Re: Reauthorization of WCSU Center for Business Research

I recommend a five-year renewal of the Center for Business Research (CBR) at Western Connecticut State University’s Ancell School of Business. As the attached report demonstrates, this center is not only achieving its established objectives, but also serving as a vehicle for the development of important new initiatives, especially with regard to entrepreneurship.

The Center for Business Research continues to foster linkages between Ancell School faculty and students and Western’s business stakeholders. Dozens of organizations in our region – both businesses and non-profits – have benefitted from consulting projects performed by students with direction from CBR faculty. These projects have also included a series of consulting projects for companies in China and India, which have elevated our students’ global perspectives as well as an award-winning study for the American Association of Retired Persons which gained a team of our MBA students national recognition.

An expanded focus on entrepreneurship by the center over the past five years has forged valuable new relationships between the Ancell School and business stakeholders in the region. Our annual “Entrepreneur of the Year” program has grown in scope and sophistication with each passing year, and some of the most notable individuals in the greater Danbury community are now involved on a regular basis in its planning. As we further expand our entrepreneurship curriculum, we will leverage this stakeholder interest and involvement in a variety of ways.

The Center for Business Research is solidly funded at present and poised to attract additional support. Its co-directors, Professors Karen Koza and Fred Maidment, are engaged and conscientious leaders, and Ancell School Dean Allen Morton provides enthusiastic support. The center is a model for the facilitating of active student learning through community reach. I am, again, pleased to recommend its reauthorization.

cc: J. McBride Gates, WCSU
    K. Koza, WCSU
    F. Maidment, WCSU
    M. McClay, ConnSCU
    A. Morton, WCSU
Appendix B – Verizon Innovation Center Trip

Date: Tuesday, March 24, 2015

Event Schedule: 9:00amET – 11:00amET

Location: 50 Sylvan Road, Waltham, MA 02451

Overview: Bringing together students with a focus on STEM careers, academic staff and community leaders from two local universities to showcase Verizon’s cutting edge innovation.

Brandeis University is an American private research university with a liberal arts focus. It is located in Waltham, Massachusetts, 9 miles (14 km) west of Boston. The university has an enrollment of approximately 3,600 undergraduate and 2,200 graduate students. It was tied for 32nd among national universities in the United States in U.S. News & World Report’s 2014 rankings. Forbes listed Brandeis University as number 51 among all national universities and liberal arts colleges combined in 2013. Brandeis was founded in 1948 as a nonsectarian Jewish community-sponsored coeducational institution on the site of the former Middlesex University. The university is named for Louis Brandeis (1856–1941), the first Jewish Justice of the Supreme Court of the United States.

Western Connecticut State University (also referred to as Western or WestConn, or abbreviated WCSU) is a public university located in Danbury, Connecticut. Founded in 1903, Western has an arts and sciences curriculum, a business school, and several professional programs including elementary and secondary education, nursing, music performance, and social work. It is also home to The Jane Goodall Center for Excellence in Environmental Studies.

Attire: Business Attire

Contacts:
Event Lead: Bill Imada – IW Group - 310-890-4871
## Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Action</th>
<th>Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00am – 9:30am</td>
<td>Continental Breakfast Set-up in Front Area</td>
<td></td>
</tr>
<tr>
<td>9:30am</td>
<td>Move to Theatre for:</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Opening Remarks</strong> (5 - 8 minutes)</td>
<td>Elva Lima – Director – Verizon Global Diversity &amp; Inclusion</td>
</tr>
<tr>
<td></td>
<td><strong>Innovation Video</strong></td>
<td>Pam Gentile - HR Business Partner</td>
</tr>
<tr>
<td></td>
<td><strong>Overview Slides of Innovation Program</strong></td>
<td>Mike Sullivan</td>
</tr>
<tr>
<td>9:45 – 10:45am</td>
<td>Tour throughout facility</td>
<td>Hosted by: Mike Sullivan – Supv New Product Development</td>
</tr>
<tr>
<td></td>
<td>Walking through the showcase area demos/solutions</td>
<td></td>
</tr>
<tr>
<td>10:45am</td>
<td>Closing Remarks</td>
<td>Elva Lima</td>
</tr>
<tr>
<td>11:00am</td>
<td>Tour Complete</td>
<td></td>
</tr>
</tbody>
</table>

### Consumer Lab

![Consumer Lab Image](image1.png)

### Enterprise Lab

![Enterprise Lab Image](image2.png)
Attendees

**Western Connecticut State University**

- **Megan Driscoll**, A sophomore double majoring in Interactive Marketing and Spanish. Active member in the WCSU chapter of the American Marketing Association, holding the positions of treasurer and Vice President of Fundraising. In October 2014, Megan won the Big Idea Competition for her innovative product. The product she came up with is an insulin pump holder that allows for one to conceal their insulin pump from the outside world. Her long-term goal is to secure a position at a marketing firm, focusing on product development while utilizing her Spanish knowledge along the way.
- **Juan Vasquez**, A senior majoring in marketing and an active member in the American Marketing Association. Honorable discharge from the US Marine Corps. Juan organized multiple art shows, music shows, videos, photo shoots, albums and calendars in the last four years.
- **Hieu Nguyen**, A freshman with sophomore standing Math major.
- **Melissa DiNino**, A senior Fulbright finalist Biology major.
- **Dr. Chris L Kukk**, (PhD from Harvard): Honors Program Director; Professor of Political Science; Director of the Center for Compassion, Creativity & Innovation
- **Dr. Karen L. Koza**, (DBA from Boston University): MBA Coordinator; Professor of Marketing; Co- Director of the Center for Business Research
- **Orquidia Moreno**, Student
- **Alexis Koukos**, Student

**Attendees

**Brandeis University**

- **Caroline O’Shea**, Assistant Director of Employer Relations, Hiatt Career Center
- **Andrew Flagel**, Vice President of Students and Enrollment (Yes)
- **Michael Dettelbach**, Assistant Vice President, Corporate & Foundation Relations
- **Rebecca Menapace**, Associate Provost for Innovation, Executive Director of Technology Licensing
- **Jordan Pollack**, Computer Science Professor
- **Grace Zimmerman**, Professor, International Business School, Heller School For Social Policy & Management - Business/Marketing
- **John Wardle**, Professor - Division of Sciences Head, Physics Department, Astrophysicist
- **Larry Simon**, Professor of International Development, Director of the Brandeis Center for Global Development and Sustainability
Elva Lima was named director of global diversity and inclusion for Verizon in March 2014. In this role, Lima is responsible for providing leadership oversight to ensure the success of corporate policies and strategies that sustain the company’s commitment to diversity and inclusion.

Before being named to this position, she had responsibility for community relations and multicultural communications for Verizon Wireless. In that role, Lima was responsible for the development and implementation of Verizon Wireless’ national public relations and multicultural media relations programs, as well as directing Verizon Wireless’ philanthropic investments, including HopeLine® from Verizon. During her 34-year career with Verizon, Lima has held a variety of positions within sales, external affairs, internal and external communications and public policy.

Lima was a former board member of the California Utilities Diversity Council and the National Minority Supplier Development Council, an organization which works to help solve the growing need for supplier diversity. She also served as a member for the following organizations: Greater Sacramento Urban League, California Hispanic Chambers of Commerce Corporate Advisory Board, Los Angeles League of Women Voters - Education Fund, Los Angeles Economic Development Corporation, United Latino Fund, Children’s Museum of Los Angeles and other nonprofit organizations. The National Latina Women Business Association honored her with the 2009 Corporate Leader of the Year Award. The National Latina Alliance, Casa de Esperanza, Pomona Valley Boys and Girls Club, Greenlining Institute, Golden State Minority Foundation and the Tri-Council of Big Sisters of Los Angeles have also recognized Lima for her commitment to community service.

Lima holds a Bachelor of Science degree in Organizational Management from the University of LaVerne in California, where she graduated magna cum laude and a Master’s degree in Public Policy and Administration from California Lutheran University, where she also graduated magna cum laude.
Bill Imada is founder, chairman and chief collaboration officer of IW Group, a minority-owned and operated agency focusing on the growing multicultural markets. For more than 20 years, Mr. Imada has represented some of the top companies in the U.S., including American Airlines, Bank of the West, The Coca-Cola Company, Farmers Insurance, McDonald’s, MetLife, Nissan North America, Pacific Gas and Electric Company, Southern California Edison, Walmart Stores, Walt Disney Imagineering, Warner Bros. Pictures, Verizon and many others. His areas of expertise include multicultural communications, marketing, advertising, strategic public relations, cross-cultural training and crises management.

Mr. Imada is very active in the Asian-American community, and serves on several nonprofit boards. He has also invested in several start-up companies focusing on real estate, crowd-funding and music. Several years ago, Mr. Imada sold 49 percent of his company to True North (now Interpublic Group).

Mr. Imada holds a bachelor’s degree in business administration with an emphasis in human resources and marketing from California State University, Northridge. He is also a graduate of the Coro Foundation’s leadership training program in public affairs and an AMBEP graduate from the Tuck School of Business.
Process Improvement Certification for Business

Program Proposal
CBR Meeting; November 2014

Submitted by:
Doreen Bentson, MS Information Systems; Certified Six-Sigma/Lean Master Black Belt; GE Capital
# Table of Contents

Program Proposal .................................................................................................................. 12  
Overview .............................................................................................................................. 12  
Why Process Improvement? ................................................................................................. 12  
Product Offering .................................................................................................................. 12  
What is Six-Sigma? ................................................................................................................ 12  
What is Lean? ....................................................................................................................... 12  
Approach .............................................................................................................................. 12  
Phase 1 – Discovery Session Plan ........................................................................................ 13  
Next Steps ............................................................................................................................ 13  
Appendix A .......................................................................................................................... 14  
  Proposed Curriculum ......................................................................................................... 14  
Appendix B ............................................................................................................................ 15  
  Sample Mailing .................................................................................................................. 15  
Appendix C ............................................................................................................................ 16  
  Proposed Session Feedback ............................................................................................... 16
Program Proposal

Overview
The following proposal details the recommendation and approach to introducing a process improvement-learning program to the Western Connecticut State University community.

Why Process Improvement?
Today’s businesses are still struggling since the economic unrest of 2008. With costs rising and customers tightening spend; businesses need options for improving productivity; doing more with less. By increasing the efficiency of a process, a business can realize a direct improvement to productivity. That productivity can be realized in expense reductions, faster product delivery to a customer, decreased cost of production as well as competitive advantage.

Product Offering
The proposal is to offer a series of courses designed to teach a process improvement toolset including communication, teaming, Six Sigma and Lean. The learnings from these courses can lead to a certification in the industry standard white, yellow, green or black belt proficiency levels.
At a business level, employees would return to the work environment prepared to implement change in their environment as well as influence co-workers and spread a process efficiency culture. For Students, the additional training would offer a differentiator in the market place, with only a few universities offering such a certification process at a reasonable price point.
Professional associations offer such programs, which can start at over $2,000 in training and certification, which can leave students, as well as businesses, at a disadvantage not able to afford the high cost of this method of certification. Most of these programs are also on-line with no personal instructor interaction.

What is Six-Sigma?
Six-Sigma is a methodology and tool set first developed by Motorola in 1986 and later adopted as a tool used to minimize defects across industries. Six Sigma seeks to improve the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability in manufacturing and business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization ("Champions", "Black Belts", "Green Belts", "Yellow Belts", etc.) who are experts in these methods.

What is Lean?
Lean manufacturing is a management philosophy derived mostly from the Toyota Production System (TPS). Lean is a production philosophy that considers the expenditure of resources in any aspect other than the direct creation of value for the end customer to be wasteful, and thus a target for elimination. Working from the perspective of the client who consumes a product or service, "value" is any action or process that a customer would be willing to pay for. Essentially, lean is centered on making obvious what adds value by reducing everything else.

Approach
The overall proposal is broken into two phases:
Phase I – Target Audience – Small to medium sized local businesses +/- 60 miles from Western Connecticut State University Campus. Offer White Belt/Yellow Belt curriculum. Leverage a discovery session to test the viability of the approach.

Phase II – Target Audience - Undergraduate and graduate students. Offer includes any of 3 curriculum types (see Appendix A).

In order to build a sustainable program, the first step is to determine the need in the area for this type of program. Determining the need in the local business community will help to determine the level of implementation of the curriculum in order to meet the direct needs of the customers.

If, based on customer feedback, it is determined there is in fact a need – a program can be implemented first for the local businesses and their employees, then as a phase II, expand this offering to both the undergraduate and graduate students.

Phase 1 – Discovery Session Plan
- Send direct mailing to all local businesses based on proposed target audience. (Sample contained in Appendix B)
- Invitation to ½ day weekend/weekday seminar to learn program approach and gather feedback for final determination
- Calling campaign to follow up on mailing and finalize attendees
- Day of Agenda:
  - 1 hour Networking
  - 15 mins Welcome and Overview
  - 30 mins Overview of why process improvement matters
  - 1 hour Curriculum review
  - 30 mins Q&A
  - 1 hour Facilitated Feedback Session (Appendix C)

Next Steps
In order to begin, grant funding needs to be confirmed to initiate program launch. Once funding is approved, date for launch session should be set and materials developed and sent. Upon completion of the discovery session, a committee will review the collected feedback and make a determination of whether to proceed or not for Phase I and subsequently Phase II.
Appendix A of Program Proposal

Proposed Curriculum

**White Belt (6-8 hours)**
- Overview of Lean & Six Sigma
- Project Chartering & Problem Development
- Overview of Process Mapping
- Cause & Effect Analysis
- Implementing Change

**Yellow Belt (1 semester)**
- White Belt Curriculum +
- Waste Identification
- Fundamental Statistics
- Developing Graphs (fundamental quality tools)
- Future state process

**Green Belt (2 semesters – yellow belt training pre-requisite)**
- Yellow Belt Curriculum +
- Six Sigma Deep Dive
- Input Prioritization Tools
- Failure Mode Effect Analysis
- Measurement Systems
- Capability Analysis
- Process Control Plan
- Integration of Lean
- Project Plan & Deliverable
- Advanced Graphical Analysis
- Variation Trees and Funneling
- Hypothesis Testing
- Statistical Analysis Roadmap
- One Way ANOVA
- Process Control Plan
Appendix B of Program Proposal

Sample Mailing

Let us help you make sense of it all!

Joe Customer
1 Small Business Way—Office 270
Danbury, CT 06810

Looking for ways to improve productivity but not sure where to start!

- Learn the industry’s best kept secrets!
- Lean and Six Sigma in the Workplace
- Earn a Yellow or White Belt Certification
- Instant application once course completed
- Conveniently located and affordable
- Weekend or Weeknight classes available

Find Out More
December 15th 10:00 am
Western Connecticut State University Campus
Mill Plain Road
Danbury, CT  06810
RSVP—203-749-5555
Appendix C of Program Proposal

Proposed Session Feedback

1) Conduct a question and answer session with the following discussion topics:
   a. Viability of approach
   b. Program Cost
   c. Ask for additional thoughts

2) Ask attendees to fill out the following survey:

Would your company send employees to a series of sessions to learn the basics of Six Sigma and Lean? (Yes/No)

What program would you be interested in? (White Belt / Yellow Belt / Green Belt – circle all that apply)

How many employees would you consider sending? (#)

Which would be preferable? (Weekday (during work hours) / Weekday (After Work hours) / Weekend )

What would you consider spending per employee? ($500-$1,000 / $1,000–$2,000 / $2,000+)

Would you be interested in a certification program or just the classroom curriculum? (Certification / Curriculum)

Would you be prepared to have enrolled employees come to class with a business problem in hand? (Yes / No)

Would you allow Western Connecticut State University to use your likeness in Customer Testimonials? (Yes/No)
## Draft of CBR's AY 2014-2015 Budget for Process Improvement Certification

### Process Improvement Certification

<table>
<thead>
<tr>
<th>Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior Year Carry-over</td>
<td>$ 4,000</td>
</tr>
<tr>
<td>Donation - Barden Foundation (Six Sigma)</td>
<td>5,000</td>
</tr>
<tr>
<td><strong>Current Total</strong></td>
<td><strong>9,000</strong></td>
</tr>
</tbody>
</table>

- **Training - White Belt Certification ($500 - $1,000 per person; first class 10 candidates)** * 5,000
- **Training - Yellow Belt Certification ($1,000 - $2,000 per person; first class 5 candidates)** *
  
  **Estimated Training Total** 10,000

**Total Revenue** 19,000

### Expenses

**Discovery Session Planning - Phase 1**

- Brochure Development & Reproduction 1,500
- Postage 250
- Materials / Handouts (50-60 people) 150
- Instructor ($75 / hour for approx. 4 hours) 300
- Meal (Breakfast or Lunch) 2,400
- Room & Technology -

  **Estimated Discovery Session Planning Expenses** 4,600

**Curriculum Development - Phase 2**

- White Belt - 45 hour @ $75 / hour 3,375
- Yellow Belt - build off of White Belt Curriculum - 80 hours @ $75 / hour 6,000

  **Estimated Curriculum Development Expenses** 9,375

**Curriculum Delivery - Phase 2**

- White Belt (6 - 8 hour course; instructor @ $75 / hour) ** 600
- Yellow Belt (20 hours; instructor @ $75 / hour) 1,500

  **Estimated Curriculum Delivery Expenses** 2,100

**Total Expenses** 16,075

**Net Fund Balance** $ 2,925

* Used Lowest Pricing Estimate
** Used Highest Cost Estimate