



# Enhancing Teaching and Student Leadership in Entrepreneurship and Finance

May 22, 2013



# Agenda

- What is CTEP?
- NJDOE-OCTE/MCCC/SREB Partnership
- The Research
- Fixing the Skills Gap
- Entrepreneurship Programs of Study
- Finance Programs of Study
- Benefits for School Districts
- Benefits for Students

# What is CTEP?

- The Career and Technical Education Partnership of New Jersey (CTEP) is supported by funds from the Federal Carl D. Perkins Career and Technical Education Act of 2006, and administered by the New Jersey Department of Education, Office of Career and Technical Education. The mission of CTEP is to help New Jersey students become career- and college-ready by developing rigorous project-based Programs of Study which prepares students to succeed as global citizens for career opportunities for the 21st Century and to support healthy economic growth within the state.



# How CTEP creates links



# National Collaboration

New Jersey Department of Education, Office  
of Career and Technical Education

Mercer County Community College



South Regional Education Board

# South Regional Education Board (SREB)

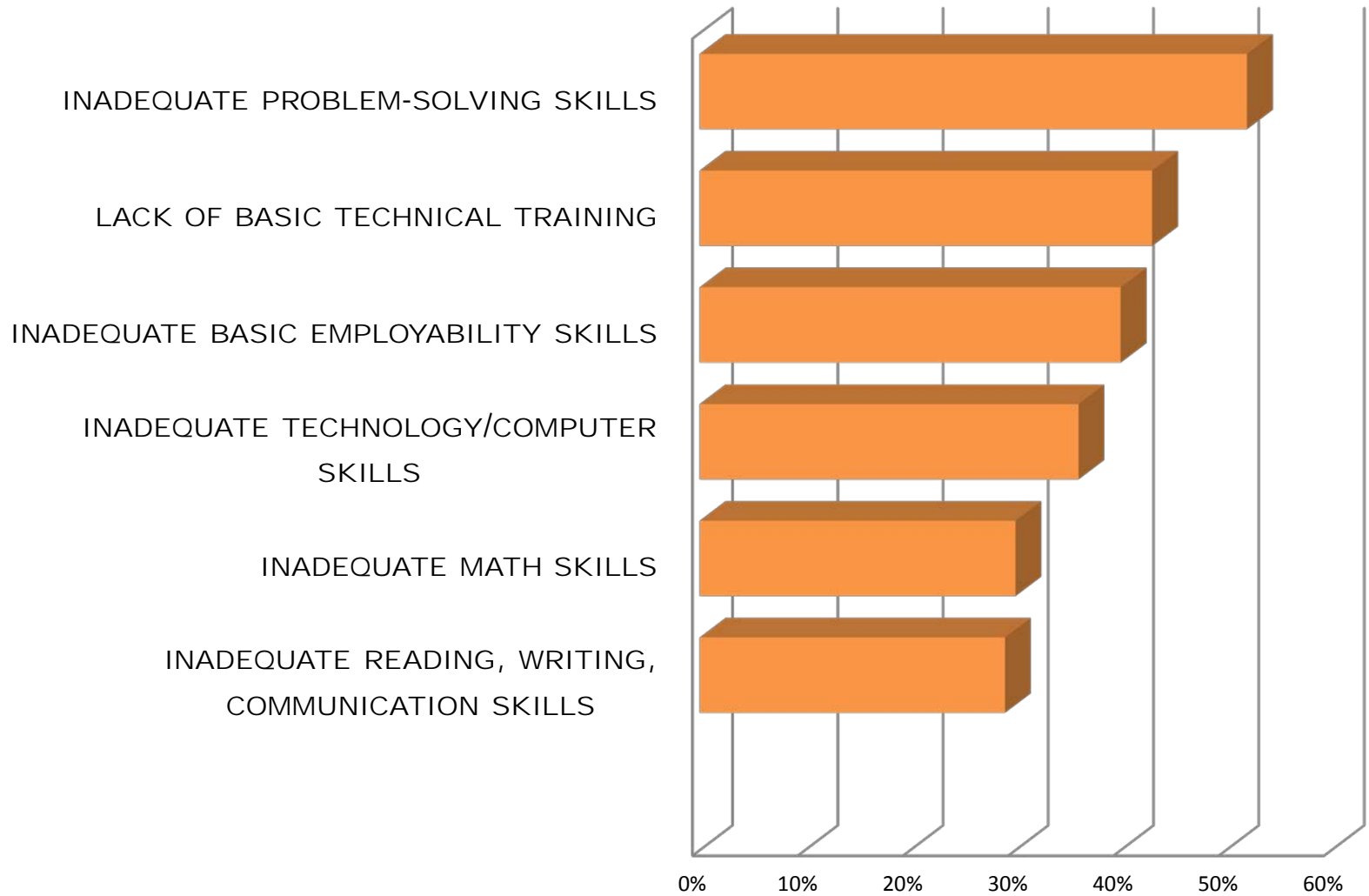
- The nation's first regional interstate compact for education, SREB is today the most comprehensive, working directly with state leaders, schools and educators
- Recognizes the link between education and economic vitality
- Works with 16 member states to improve public education at every level, from pre-K through Ph.D.
- SREB helps states focus on what works in both policy and practice
- Works directly with public schools and educators



# THE RESEARCH...



# Most Serious Skills Deficiencies in Current Employees





## ...Research

- Over one million High School dropouts annually (National Center for Education Statistics-<http://nces.ed.gov/>)
- As participation in CTE courses increases, the graduation rate increases (National Research Center for Career and Technical Education )
- By 2018, two-thirds of American jobs will require an Associate's Degree – we will fall short by 3 million (Georgetown Center on Education and the Workforce)

# Fixing the Skills Gap

Aligning NJ Common Core Standards - Math, Language Arts Literacy, and Science with Entrepreneurship and Finance Programs of Study

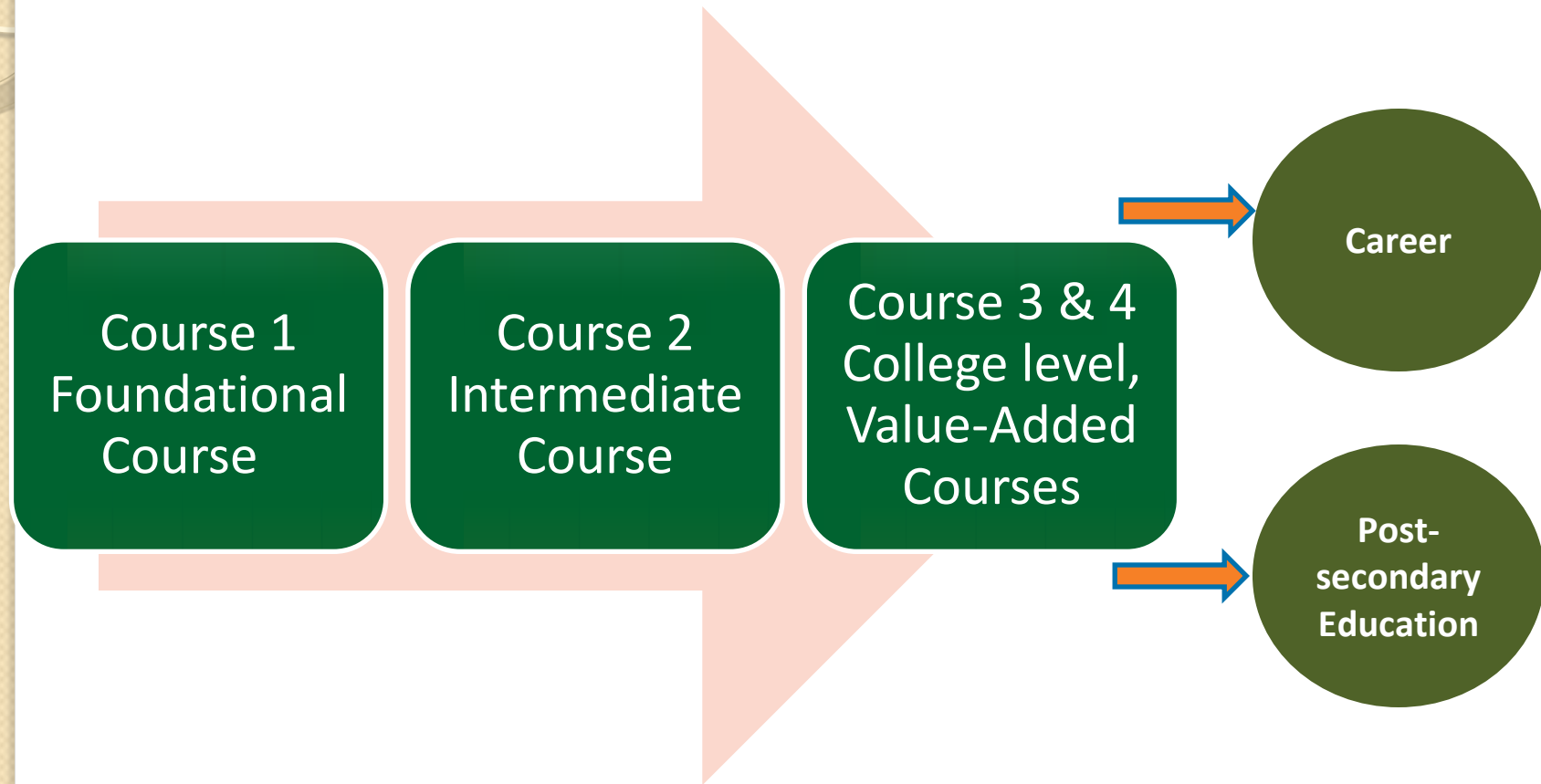


- Do Career and Technical Education Programs of Study Improve Student Achievement?



NRCCTE Reports that “qualitative results suggest that treatment schools have created school cultures around programs of study that appear to explain improved engagement and achievement.”

# Rigorous High School Programs of Study



**PROGRAM OF STUDY BLUEPRINT**

**PROGRAM SUMMARY:**

**CLUSTER:** \_\_\_\_\_

**PATHWAY:** \_\_\_\_\_

**PROGRAM:** \_\_\_\_\_

GRADE	LANGUAGE ARTS	MATH	SCIENCE	SOCIAL STUDIES	HEALTH/PHYS ED	OTHER STATE REQUIREMENTS	RECOMMENDED ELECTIVES	CTSO/LEARNER ACTIVITIES	CTE/DEGREE MAJOR COURSES
<b>SECONDARY</b>	9	Language Arts (5)	Math (5)	Science (5)	Social Studies (5)	PE/Health (3.75)	World Language* (5)		Career Exploration
	10	Language Arts (5)	Math (5)	Science (5)		PE/Health (3.75)	Visual/Performing Arts* (5)	Practical Art* (5) (Fulfilled by CTE Course)	
	11	Language Arts (5)	Math (5)	Science (5)	Social Studies (5)	PE/Health (3.75)	Financial Literacy* (2.5)		
	12	Language Arts (5)	Technical Math	Physics	Labor History	PE/Health (3.75)			
<b>POST SECONDARY</b>									
	Funded by the New Jersey Department of Education/Office of Career and Technical Education 2011								
	State Required Courses <i>*May be fulfilled during four-year period</i>								
	Recommended CTE Major Courses								
Other Recommended Academic or CTE Elective Courses									
Mandatory Assessments, Advising and Additional Preparation									

# What's in it for the Students?

- Increase the percentage of students leaving high school prepared for postsecondary study
- Increase students motivation to take and succeed in advanced mathematics and science courses
- Commit to pursue postsecondary study or advanced training in the career field of entrepreneurship and finance
- Graduate from high school meeting readiness in Mathematics and Language Arts Literacy

# What's in it for the Pilot School?

- Implement high profile and very rigorous project-based curriculum
- Professional Development for Teachers
  - 2 Week Summer Institute
  - \$1500 stipend for each teacher ( $\$750 \times 2 = 1500$ ) 13-AG96-G06-pg10
- Stipend to Pilot Schools
  - Purchasing small supplies for in-class projects 13-AG96-G06-pg10
- Professional Development for Guidance Counselors
  - One day Summer Institute (\$150) 13-AG96-G06-pg10



# Finance Programs of Study

Presented by

**Robert Carson**

CTEP Finance Curriculum Writer

Business/Technology Educator



# Finance Programs of Study

- **Course #1 – Foundations of Finance**
  - Investing, Managing, Budgets, Careers
- **Course #2 – Economic Systems in a Global Environment**
  - International Markets, Distribution, Consumption
- **Course #3 – Fundamentals of Banking and Financial Institutions**
  - Monetary Policy, Regulation, Interest
- **Course #4 – Financial Ethics**
  - Social Responsibility, Consumer Rights, Values, Morals

# Course #1 Projects

- Analyzing Corporate Finances
  - What's the Story Behind the Name?
- Financial consultant
  - Who's in Charge Here?
- Benefits
  - What benefits me, should benefit you.
- Choosing a Financial Partner
  - Brother can you Spare a Dime?
- Business Re-location
  - Where to Hang the Sign?
- Career Exploration
  - Show me the Money!

# Common Core Standards

- Math
  - Quantitative Reasoning
  - Arithmetic Operations
  - Interpret Functions
- Literacy
  - Reading
  - Writing
  - Speaking
- Science
  - Inquiry

# Common Core Standards

- 21<sup>st</sup> Century Skills
  - Problem Solving
  - Critical Thinking
  - Communication and Collaboration
- NJ CTE
  - Standard 9
    - Information Technology Applications
    - Systems
    - Employability and Career Development
    - Technical Skills

# Project Excerpt

**Essential Question** - What does a project manager do? What are the common traits across many industries and occupations?

- **Activity #1** - Review from the day before - choose a couple of students to read back their reflections and discuss their thoughts. Ask for volunteers. **5 mins.**
- **Activity #2** - Project Launch – explain the project overview **5 mins.**
- **Activity #3** - Brainstorming - A project manager is a leader of a project who possesses similar traits. Identify skills and common characteristics similar to the leader. **5 mins.**
- **Activity #4** – Project manager skills assessment – review the results, do you agree or disagree? What are the next steps? **25 mins.**
- **Resource** - [http://www.mindtools.com/pages/article/newPPM\\_60.htm](http://www.mindtools.com/pages/article/newPPM_60.htm)
- **Activity #5** - visit the BLS.gov website to see what info is there about project managers. What are the key skills and common characteristics that a manager possesses? **10 mins.**
- **HW** – Where do you think prospective project managers get their training?



# Entrepreneurship Programs of Study

Presented by

**Nancy Ostrowski**

CTEP Business Curriculum Writer

Piscataway High School (Retired)

# Business Management & Entrepreneurship Courses

## ***Course 1 – Concepts of Entrepreneurship***

This is an introductory course designed for students to explore and understand their entrepreneur quotient for starting their own business, join the family business, or work in entrepreneurial firms. The course provides an interactive environment for identifying the right organization, marketing mix, financial and management structures for a business. Topics are introduced through the use of creative exercises, team projects, discussion of entrepreneurship cases and a business venture game that will provide students with an opportunity to apply what they are learning to the creation of a business plan.

## ***Course 2 – Business Organization & Management***

This course will introduce students to the environment in which business is transacted. Students will recognize how business operates and is managed. They will be able to identify forms of ownership, the processes used in marketing, personnel, finance, and management.



# Business Management & Entrepreneurship Courses

## ***Course 3 – Ethics and Social Responsibility***

In this course students will explore ethical practices to be employed by business owners as well as the business's responsibility to the community and the world, such as environmental concerns. Topics are introduced through creative exercises, team projects, and discussion of ethical cases.

## ***Course 4 – Business Practice Firm***

In this course students will network with businesses throughout the country and the world and create their own simulated business. This course will provide articulation with a local community college to complete their assigned tasks.



# Course I – Concepts of Entrepreneurship

## *Programs of Study Projects*

- **Project 1 – Creating a Business**
  - Students will examine their abilities and interests and team with others to develop their concept for a start-up business.
- **Project 2 – The Game of Entrepreneurship**
  - Using the teams formed in Project 1 and their concept for their business, students will create a game that explores the steps needed to form their business.
- **Project 3 – You Can't Do it Alone – The Challenge of HR**
  - Using the knowledge gained from their research in Projects 1 & 2, students will examine how to determine staffing for their business.
- **Project 4 – The Marketing Mix**
  - In this project, students will use what they have learned and research the demographics of the location of their business to create an effective marketing plan.
- **Project 5 - It\$ Always\$ the Money**
  - Using the knowledge gained from the previous projects and their vision for their business, students will create a financial plan.
- **Project 6 – Let's Create the Business Plan**
  - In this project, students will compile the information gleaned from the previous projects and create a plan for their chosen business.

# Project 2 – The Game of Entrepreneurship

- **Project Description:**
- In the previous project, you and your team chose the type of business that you would like to start. In this project, you are a toy manufacturer. You noticed a need for board games that reflect starting a business. Create a simple board game utilizing the game of Life as a model with the success of your business as the ultimate goal. You must use the type of business chosen by you and your team as the foundation for the game.
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- You must first identify the steps necessary to become an entrepreneur and to start the type of business you chose in the previous project.
- Then, you must research and summarize the various forms of business ownership.
- After completing step 2, you must survey local business owners to determine the advantages and disadvantages of business ownership.
- Finally, you must compile the data you collected and create your game.
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- After researching online resources on starting a new business and participating in enabling learning activities intended to assist you in designing, building and testing your game, write a two-page report that defines how to start a business. Support your discussion with evidence from your research and from conclusions you draw from participation in enabling learning activities.
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- Create a prototype of the game. The game can be in any format you choose. (Example: electronic game, board game, card game, etc.) Then, test the game and evaluate its effectiveness. Present your game to the class, then switch games with another group. Play their game, evaluate its effectiveness, and make suggestions. Make revisions to your game and present your findings to the class.

# Questions



# Thank You

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## **Resources:**

- Mercer County Community College CTEP website: <http://www.mccc.edu/ctep/index.html>
- New Jersey Department of Education: <http://www.nj.gov/education/cte>
- Southern Regional Education Board: [www.sreb.org](http://www.sreb.org)
- The National Research Center for Career and Technical Education: <http://www.nrccte.org/core-issues/programs-study>
- Deloitte and The Manufacturing Institute Boiling point? The skills gap in U.S. manufacturing <http://www.themanufacturinginstitute.org/~media/A07730B2A798437D98501E798C2E13AA.ashx>
- Marisa Castellano, Kirsten Sundell, Laura T. Overman, and Oscar A. Aliaga Apr 2012: <http://www.nrccte.org/resources/external-reports/do-career-and-technical-education-programs-study-improve-student>