

# Successful Programs and the Role of Adjunct Faculty

**The Conference for Industry and Education Collaboration (CIEC)  
Phoenix, Arizona  
February 6-8, 2013**

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# Overview

- ❑ Roadmap of Logic
- ❑ Overview of ProSTAR
- ❑ Understanding **Our** Professional Working Adult Learners (andragogy)
- ❑ Engineering to Technologist Knowledge Spectrum
- ❑ Pure to Use Inspired Research
- ❑ Theory- to Application-Based Knowledge

# Roadmap of Logic

- To better serve our target population
  - We need to understand who they are
  - What work they perform
  - How they perform their work
  - What motivates them to learn
  - Who best can teach them

# ProSTAR Overview

- ❑ ProSTAR – Center for **Pro**fessional **S**tudies in **T**echnology and **A**ppplied **R**esearch
- ❑ Approved by the Provost on February 9, 2009, as an academic center in College of Technology
- ❑ Self-supported, revenue generating and premised on fee-based programs
- ❑ 1<sup>st</sup> cohort program was fall 1998
- ❑ 1<sup>st</sup> distance program was fall 2010

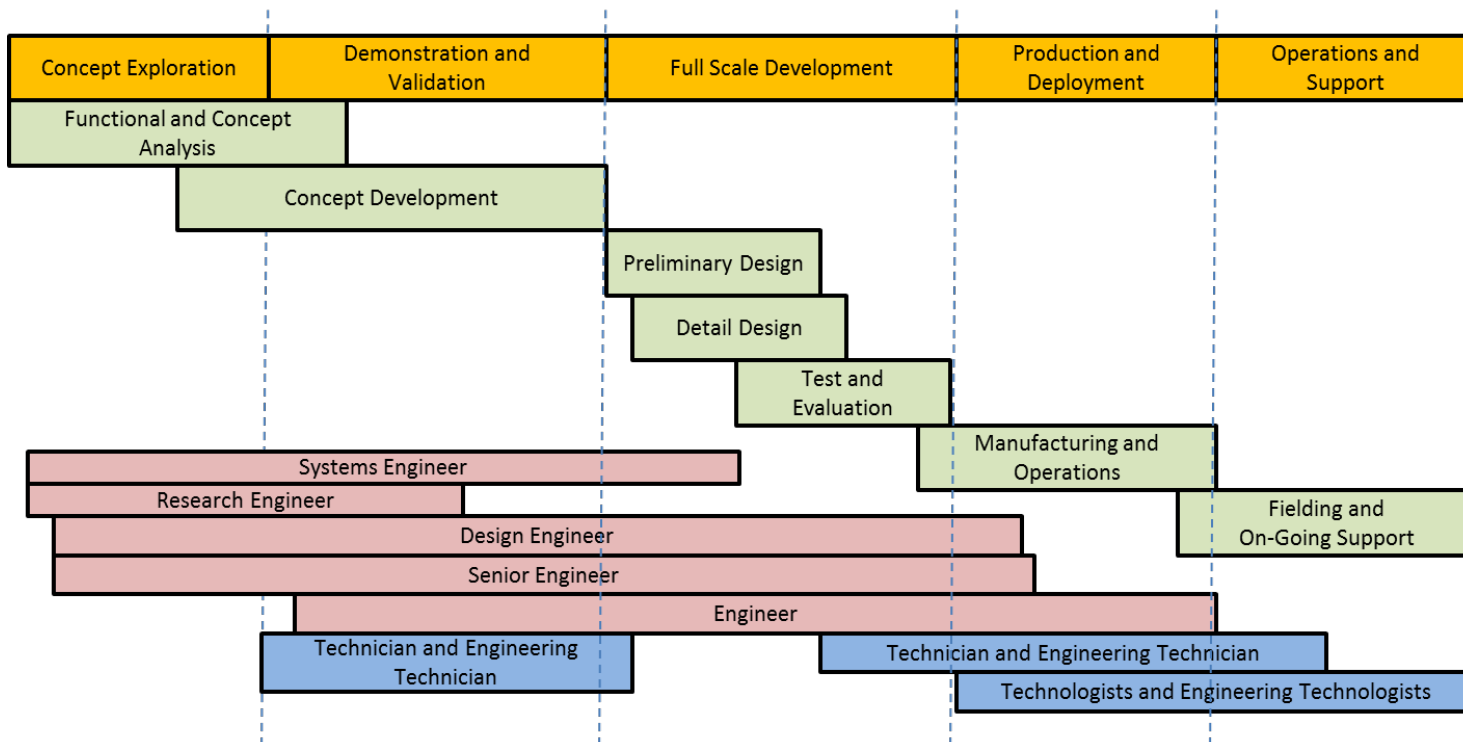
# Understanding Our Professional Working Adult Learners

## Adult Learners – Malcolm Knowles (andragogy)

- ❑ Learner's Need to know – why they need to know it before learning it
- ❑ Self-Concept of the Learner – need to be seen as self-directed
- ❑ Prior Experience – quantity and quality of past experiences
- ❑ Readiness to Learn – things they need to know
- ❑ Motivation to Learn – internal; job satisfaction, self esteem
- ❑ **Orientation to Learning – appreciate real-world experience**
  - ❑ **Problem centered**
  - ❑ **Contextual**

# Engineering to Technologist Knowledge Spectrum

## Technologist and Engineering Roles Mapping to Product Life Cycle Phases



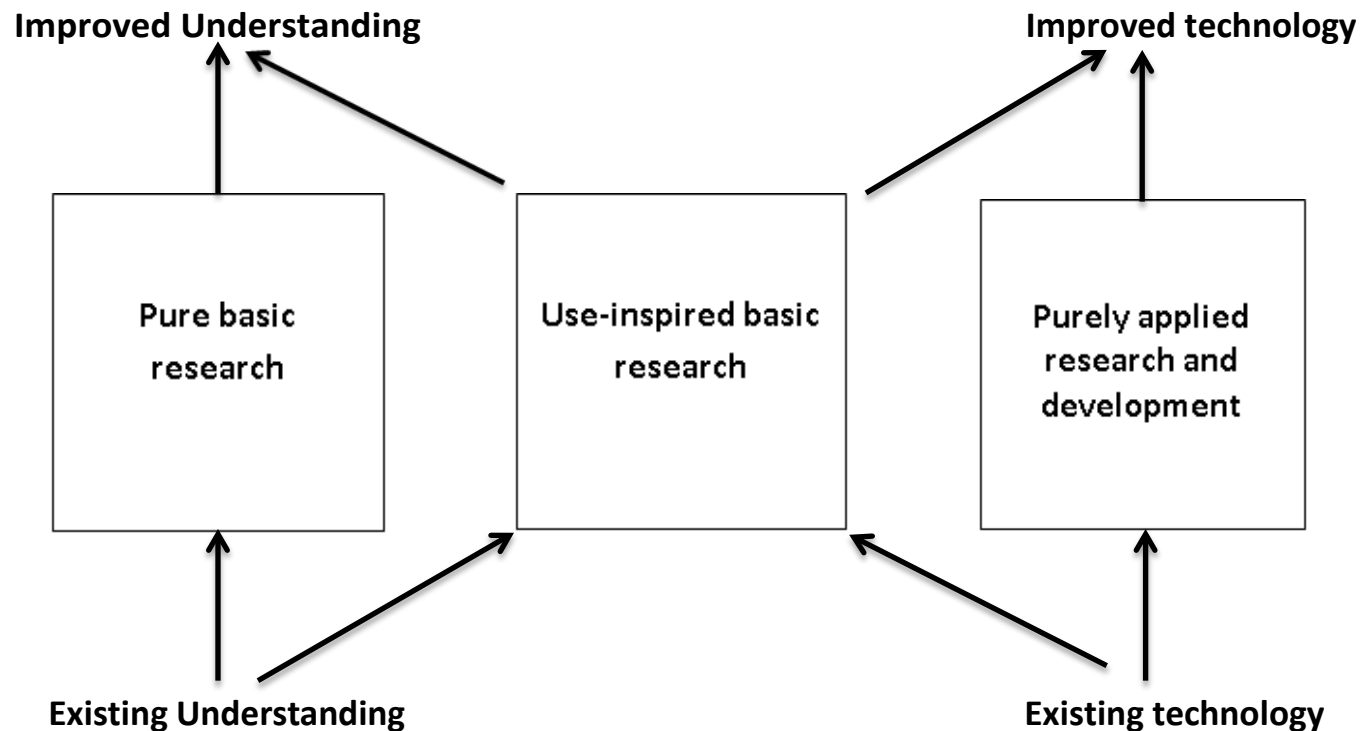
# Pure to Use-inspired Research

Research is inspired by:

		Considerations of use?	
		NO	YES
Quest for fundamental understanding?	YES	Pure basic research (Bohr)	Use-inspired basic research (Pasteur)
	NO		Pure applied research (Edison)

(adapted from *Pasteur's Quadrant: Basic Science and Technological Innovation*, Stokes 1997).

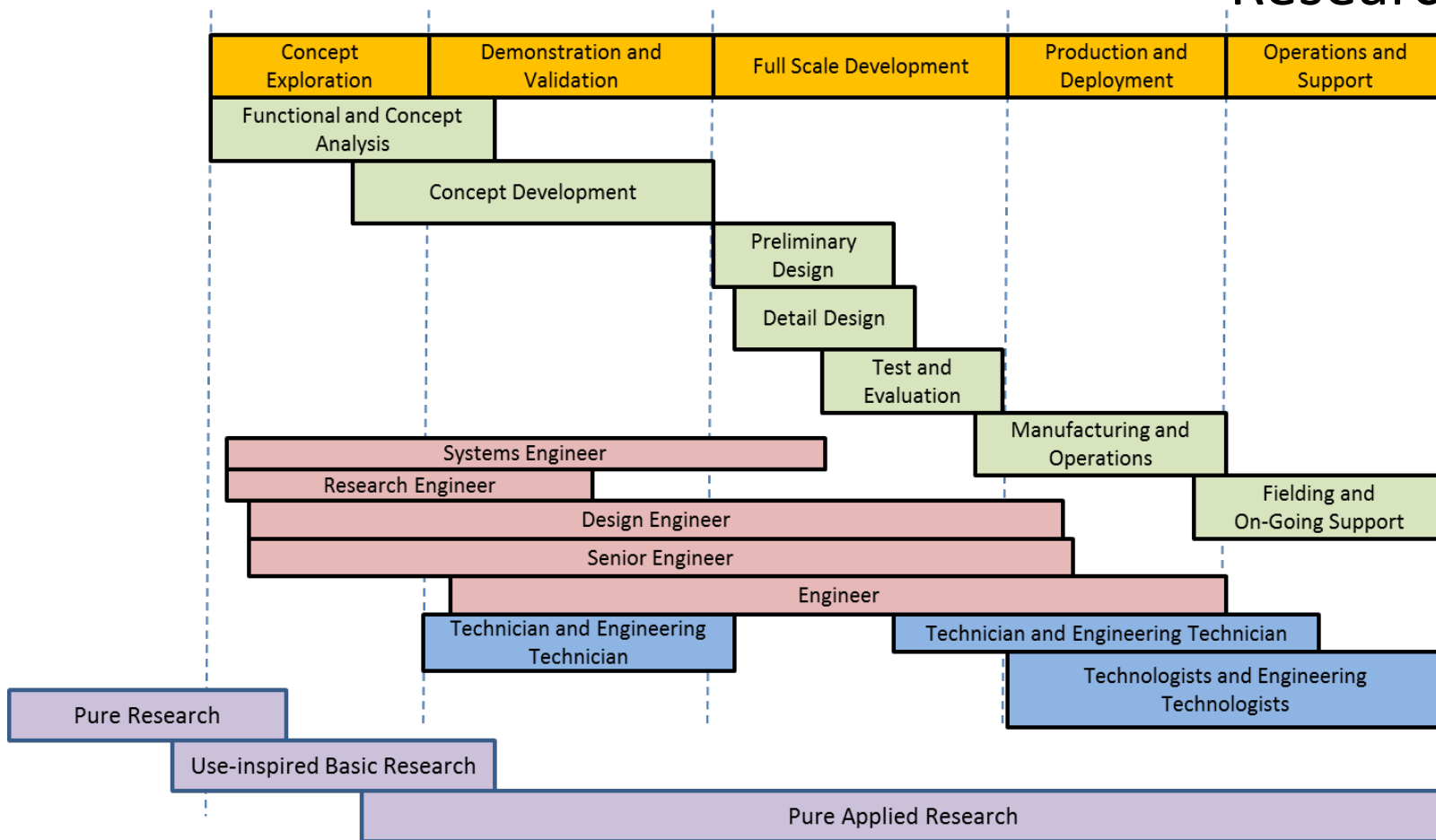
# Theory- to Application-Based Knowledge





## Technologist and Engineering Roles Mapping to Product Life Cycle Phases

## Life Cycle with Research



# Example

- ❑ 35 years of business/industry experience with Fortune 100 company
- ❑ Academic scholarship and teaching experience
- ❑ Expertise in quality initiatives, supply chain, purchasing and engineering practices
- ❑ Strong communications and team building skills
- ❑ Positive, energetic, well respected
- ❑ Understands: product life-cycle, titles, roles, theory to practice knowledge and research continuum