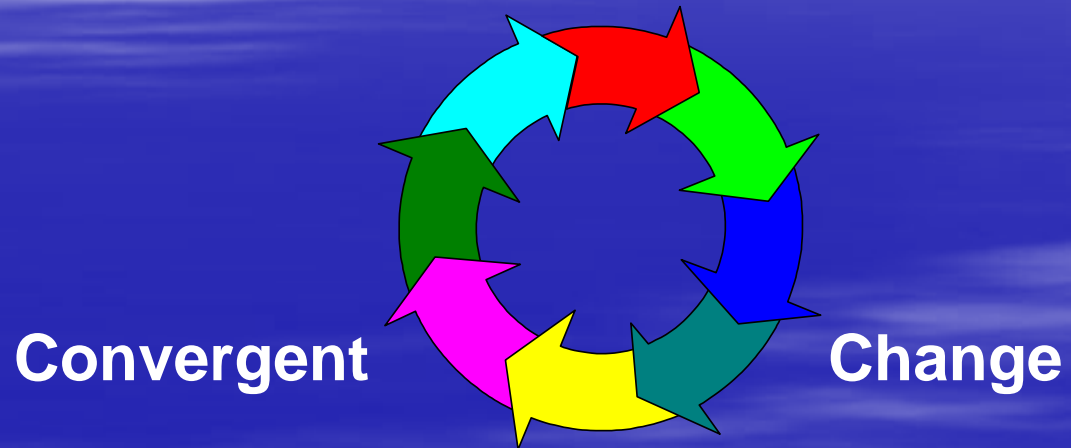


Assessment and Convergent Change

M. Dayne Aldridge
Dean and Kaolin Chair of Engineering
Mercer University

RPI
May 16, 2005

Assessment



Convergent

Change

WHY DO ASSESSMENT ?

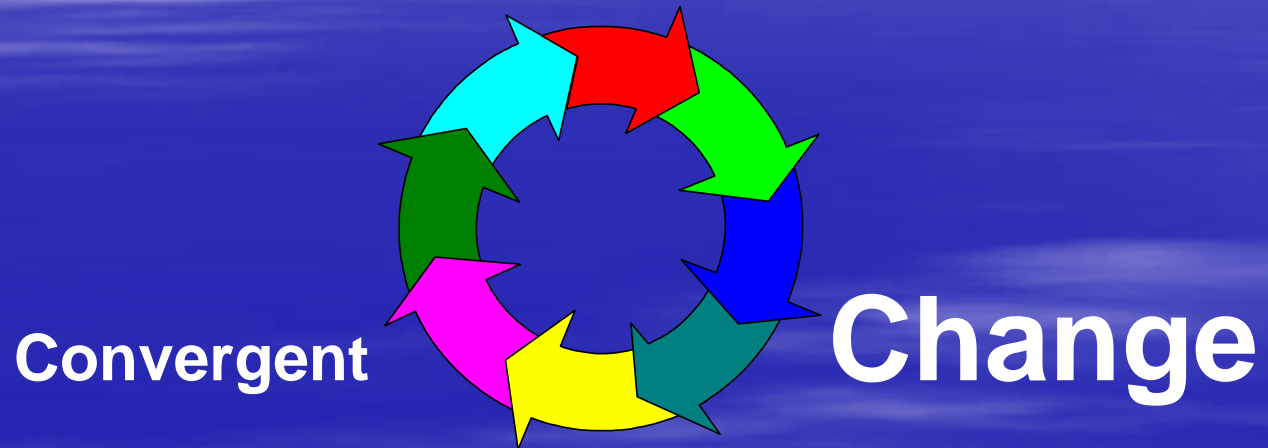
History

- Need for Change in the late 80s
- Birth of EC2000, 1993-1996
 - Pressure Directly from Industry
 - More Non-technical Curricula
- Visible Changes In Progress
 - Program Advisory Groups
 - Faculty Rethinking Curricula
 - Adoption around the world

Assessment

- **Facilitates Change**
 - Objectives and Outcomes
- **Empowers Faculty**
 - Close the Loop!
- **Shifts Foci**
 - Student and Employer
 - Whole Curriculum
- **Needs Reference Points**

Assessment



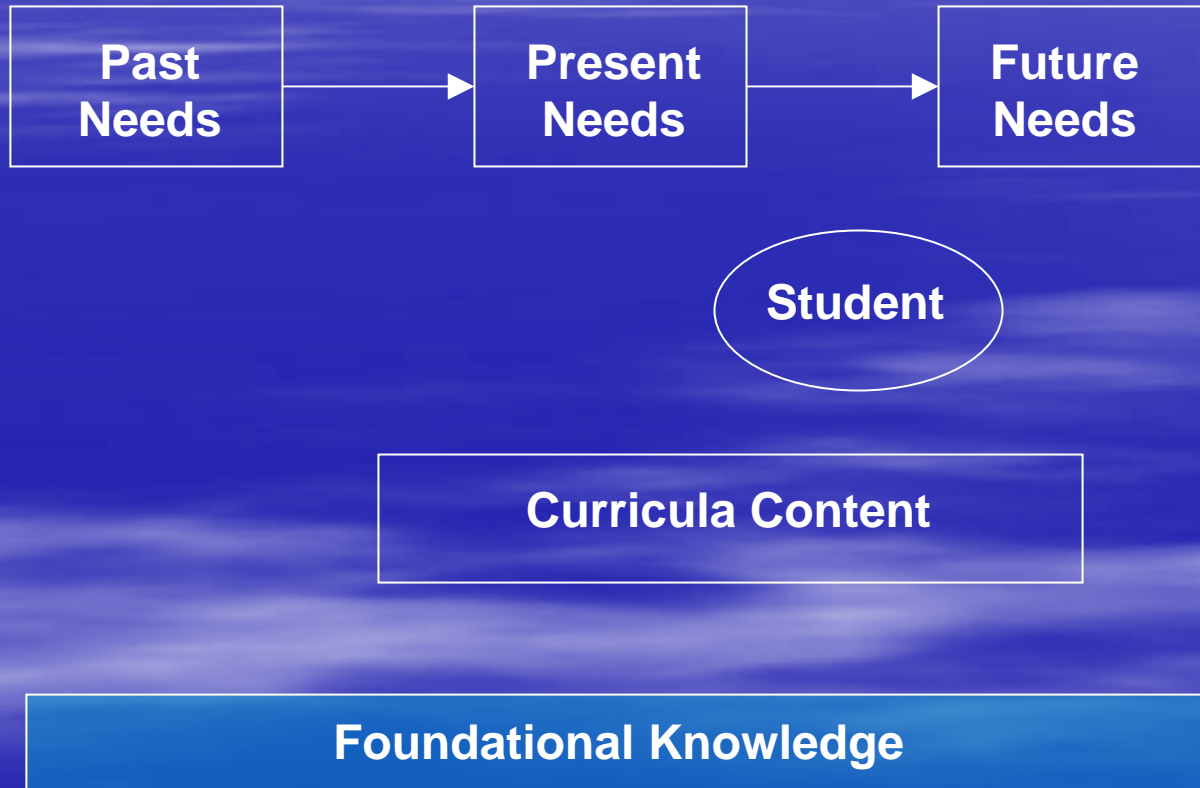
Convergent

Change

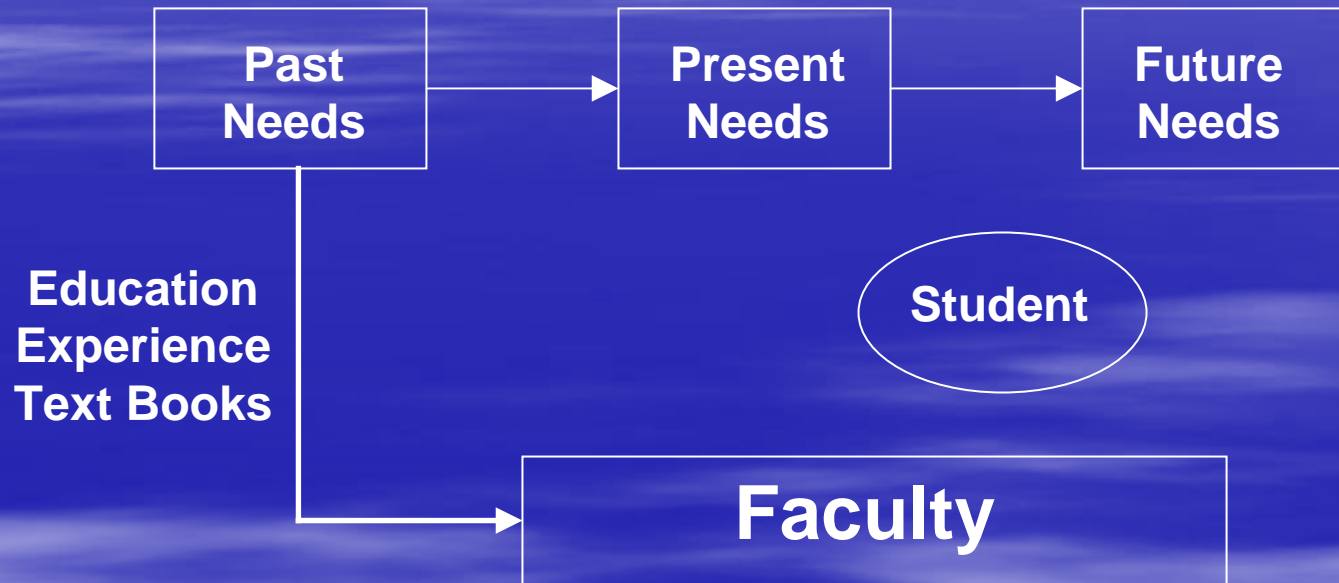
Change

- Many Views of Change
 - Human Resistance to Change
 - Life is Experienced Through Change
- Three Views of Change
 - Time
 - Faculty
 - Groups

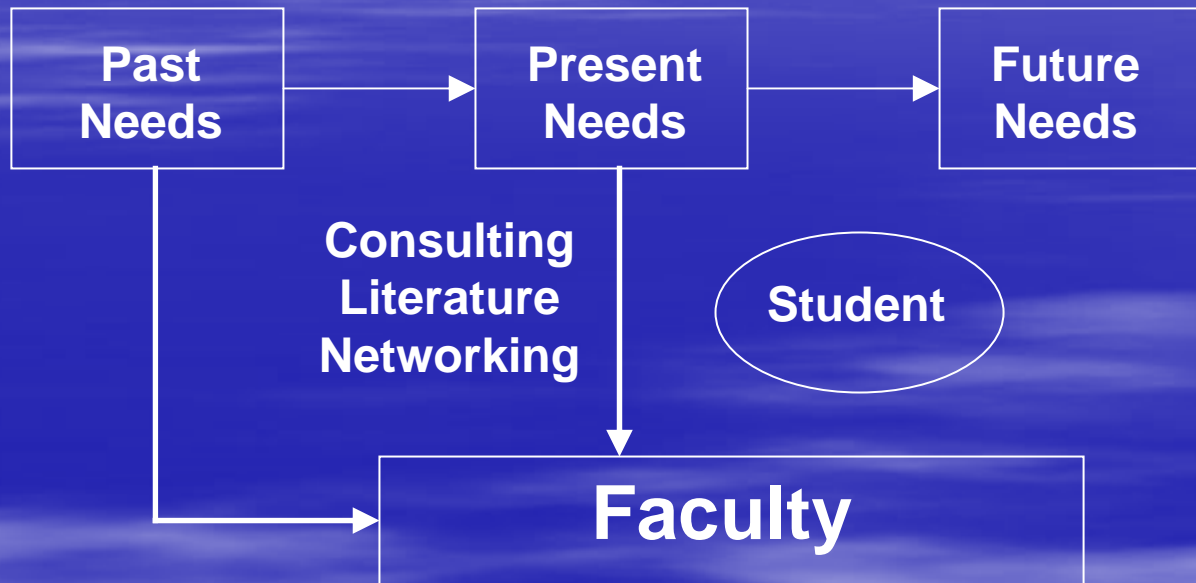
Time View of Change



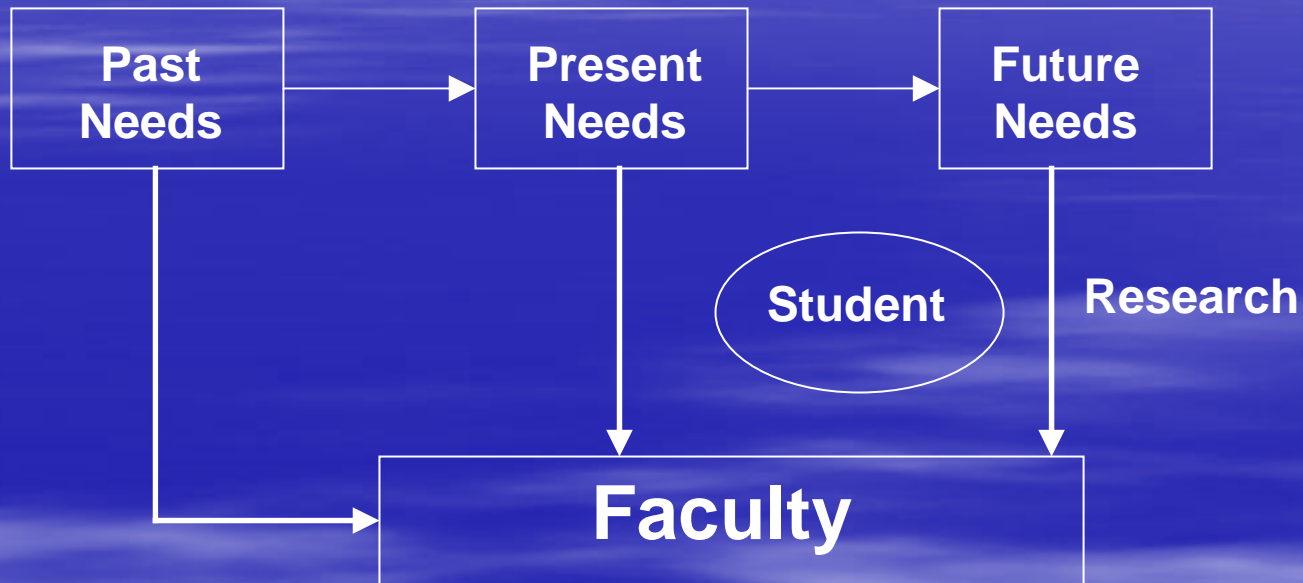
Faculty View of Change



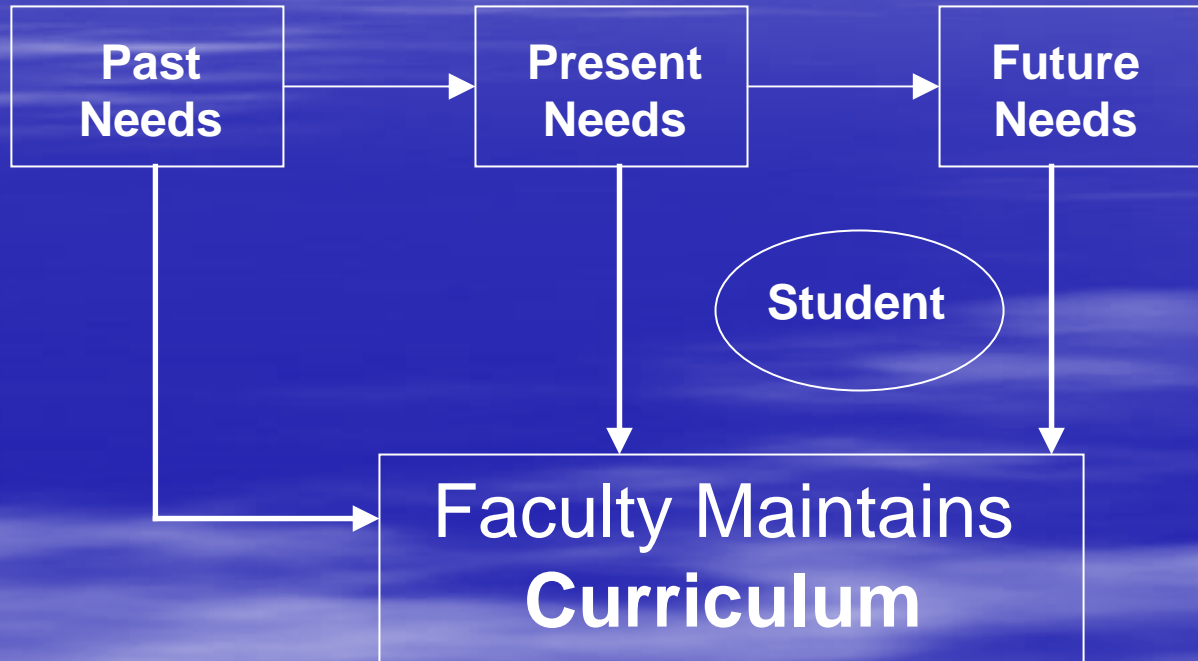
Faculty View of Change



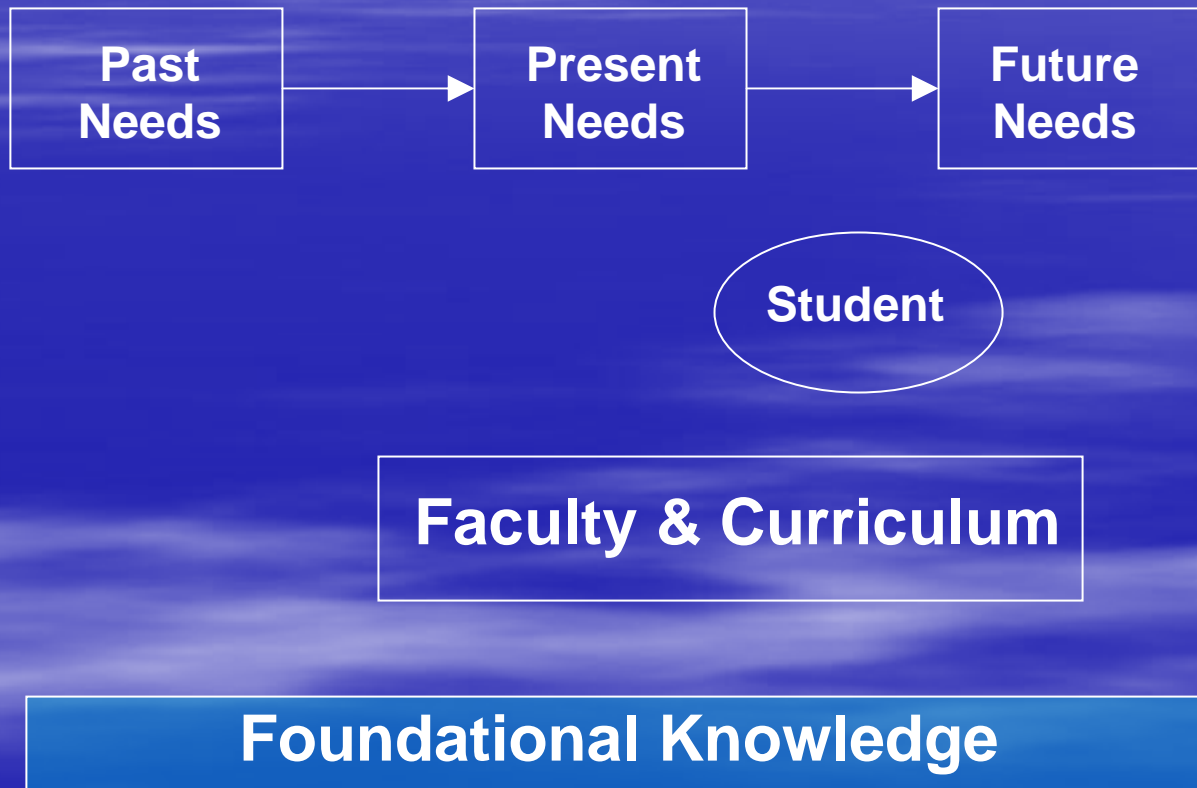
Faculty View of Change



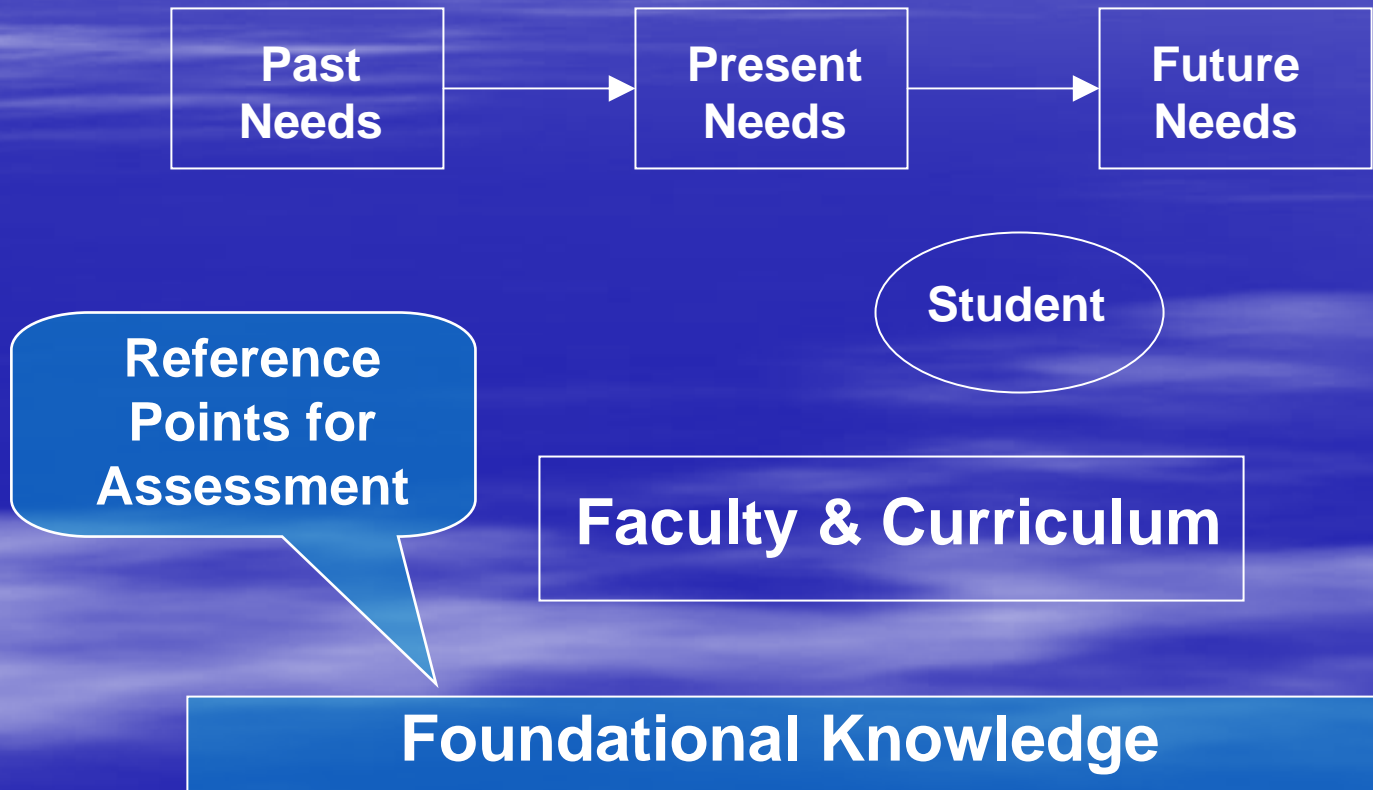
Faculty View of Change



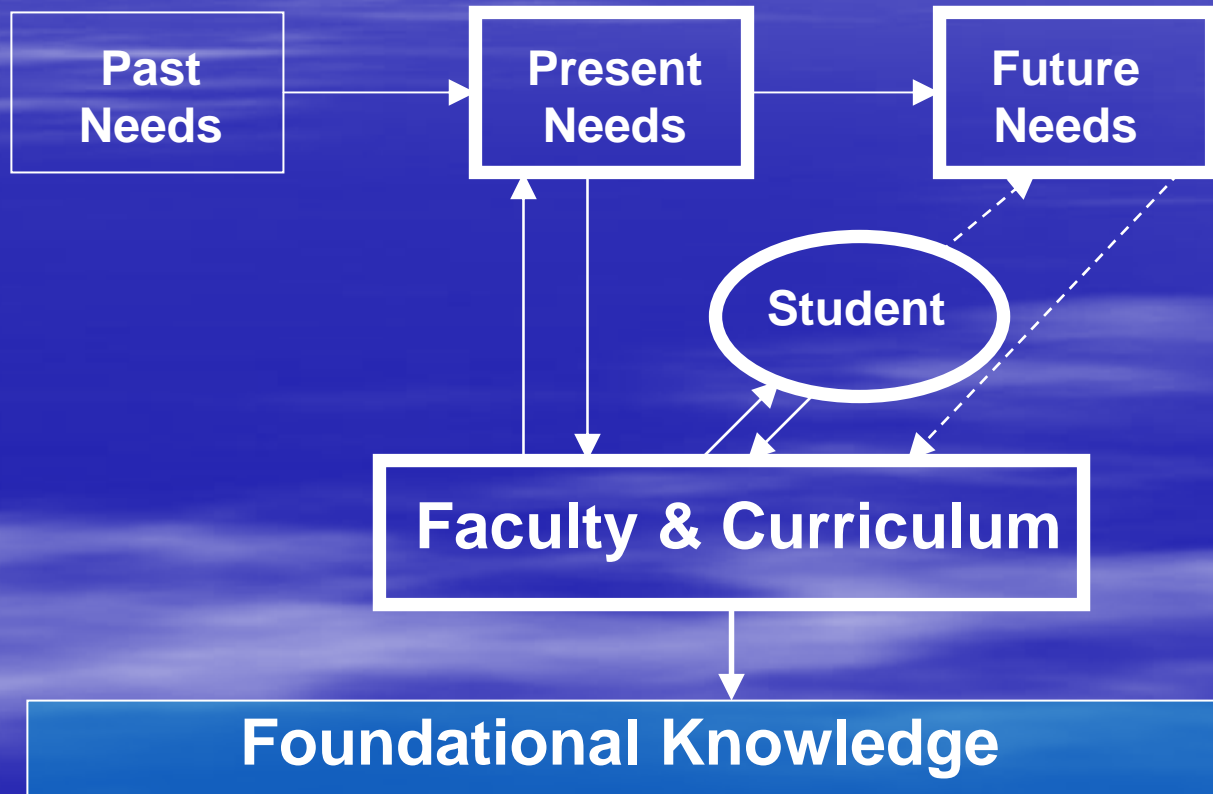
Faculty and Time View



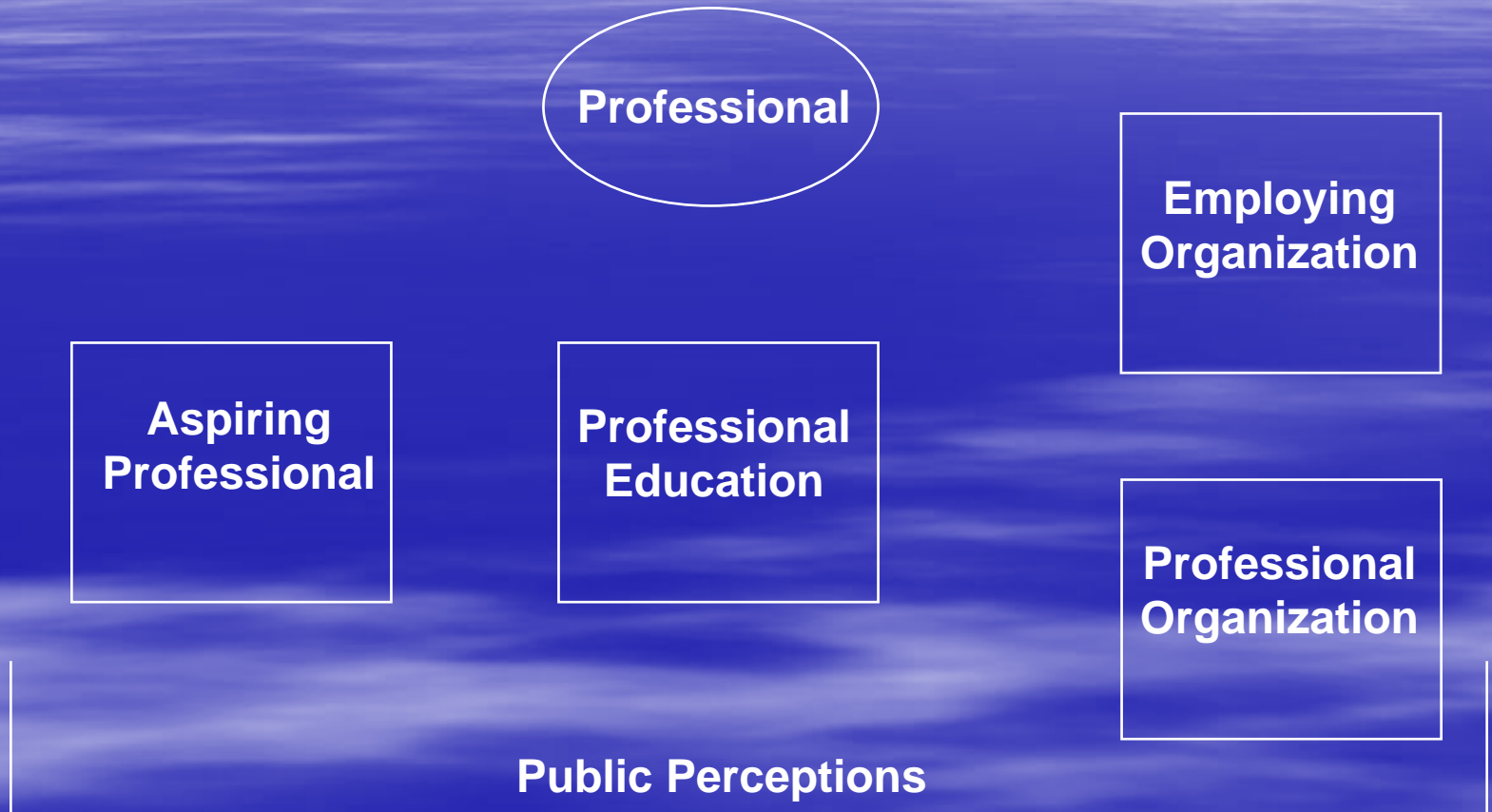
Faculty and Time View



Group Relationships



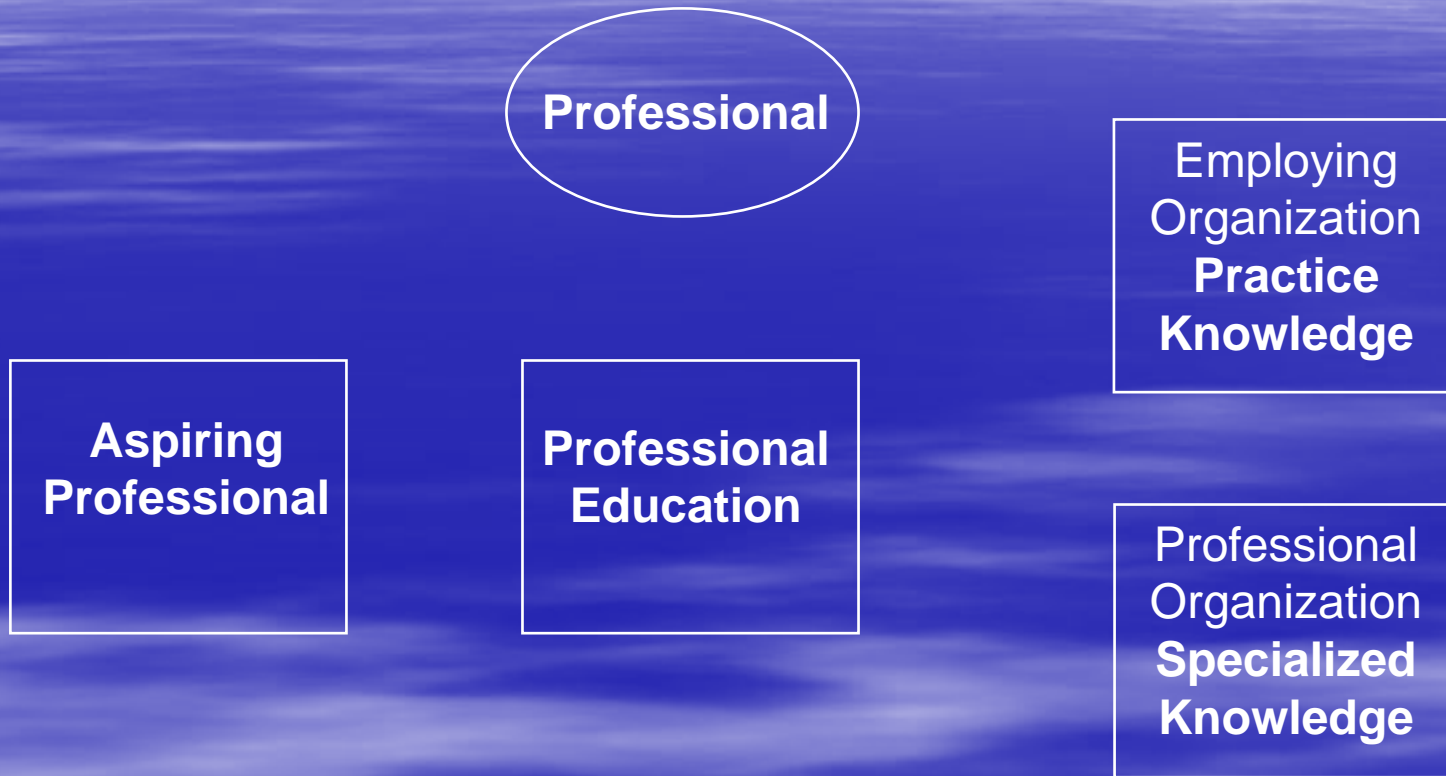
The Group View



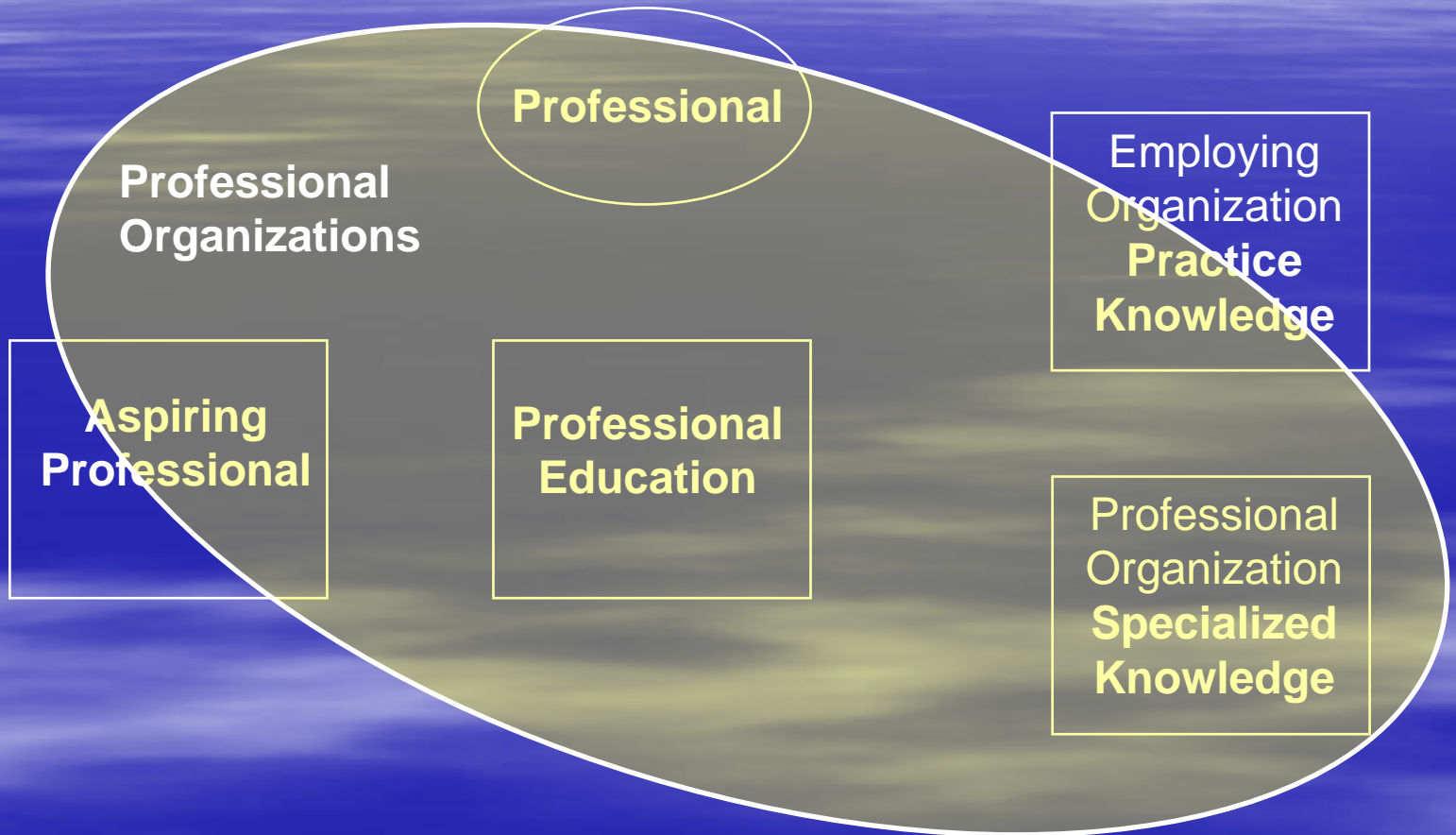
The Organizational Professional

- Specialized Knowledge
 - Developed and nurtured **outside** employing organization
- Practice Knowledge
 - Developed and nurtured **inside** employing organization

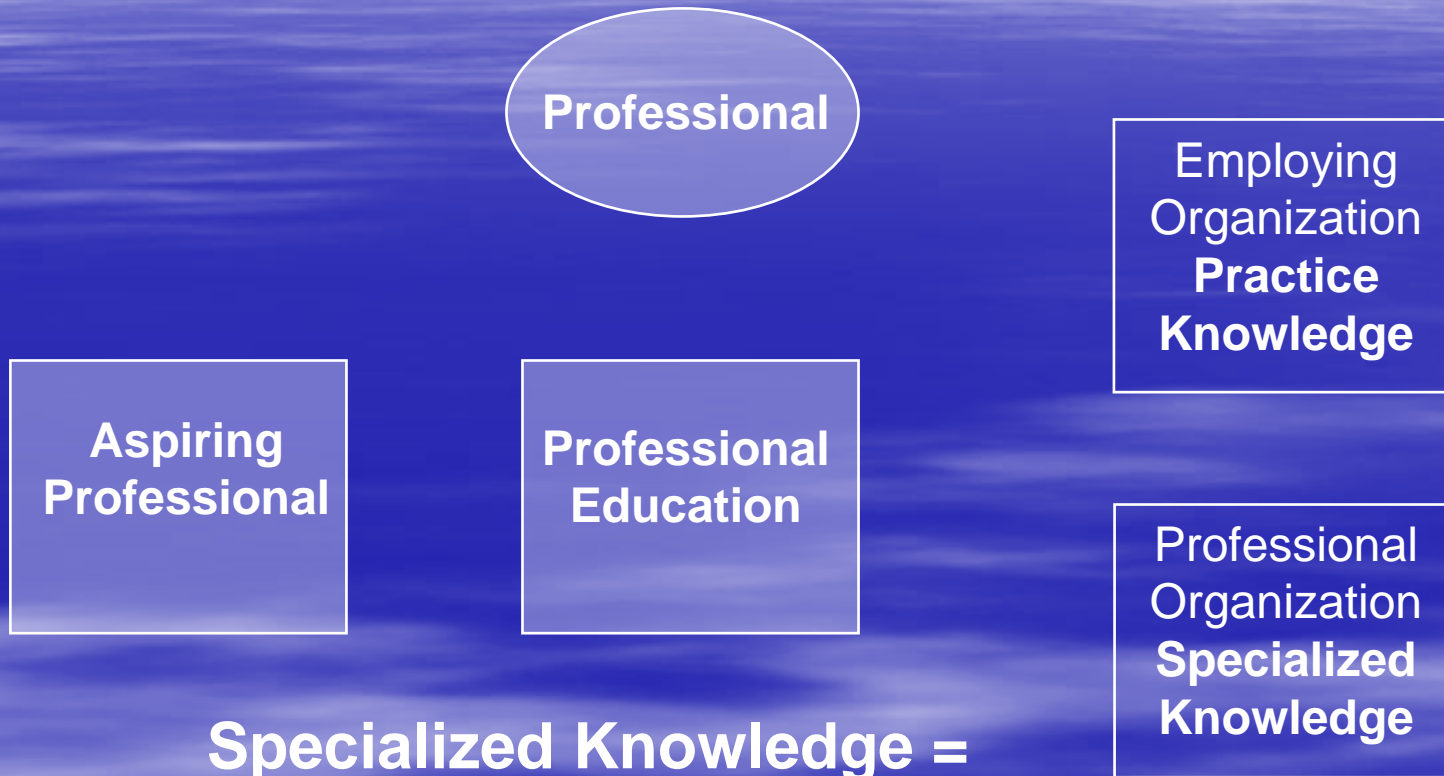
The Organizational Professional



The Organizational Professional



Old View

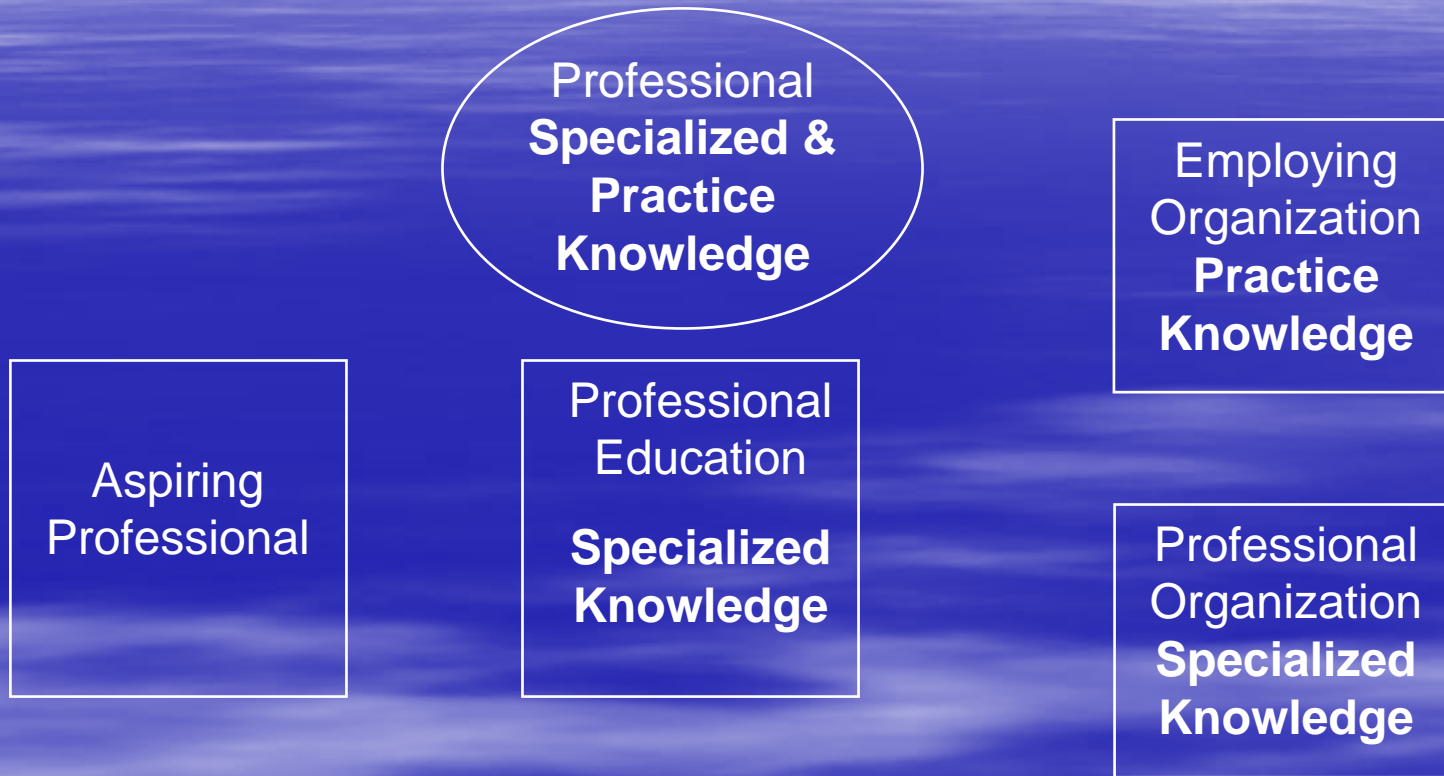


**Specialized Knowledge =
Only Technical Knowledge**

Changing Knowledge



Changing Knowledge

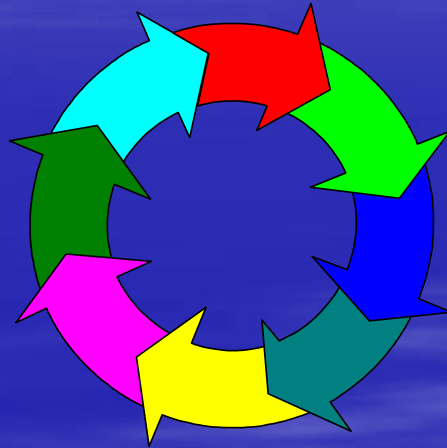


**Specialized Knowledge = Technical and Practice Fundamentals
(technical and non-technical outcomes)**

Changing Groups



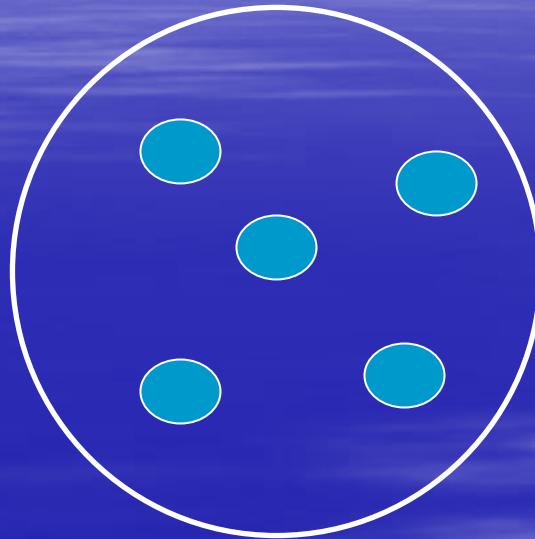
Assessment



Convergent

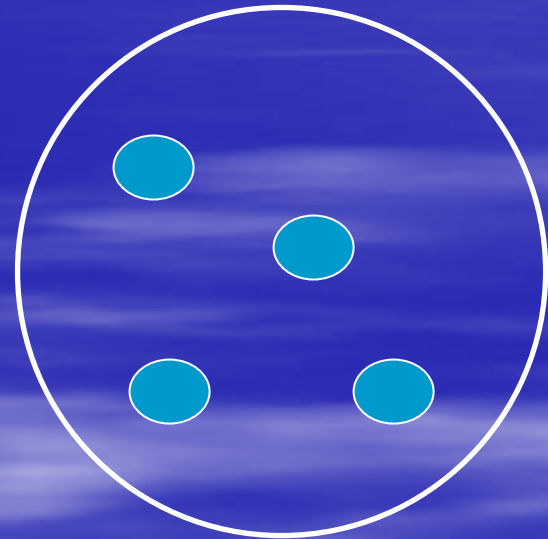
Change

Group View



Foundational Knowledge

Group Separation



Foundational Knowledge

Group Separation



Foundational Knowledge

Group Separation



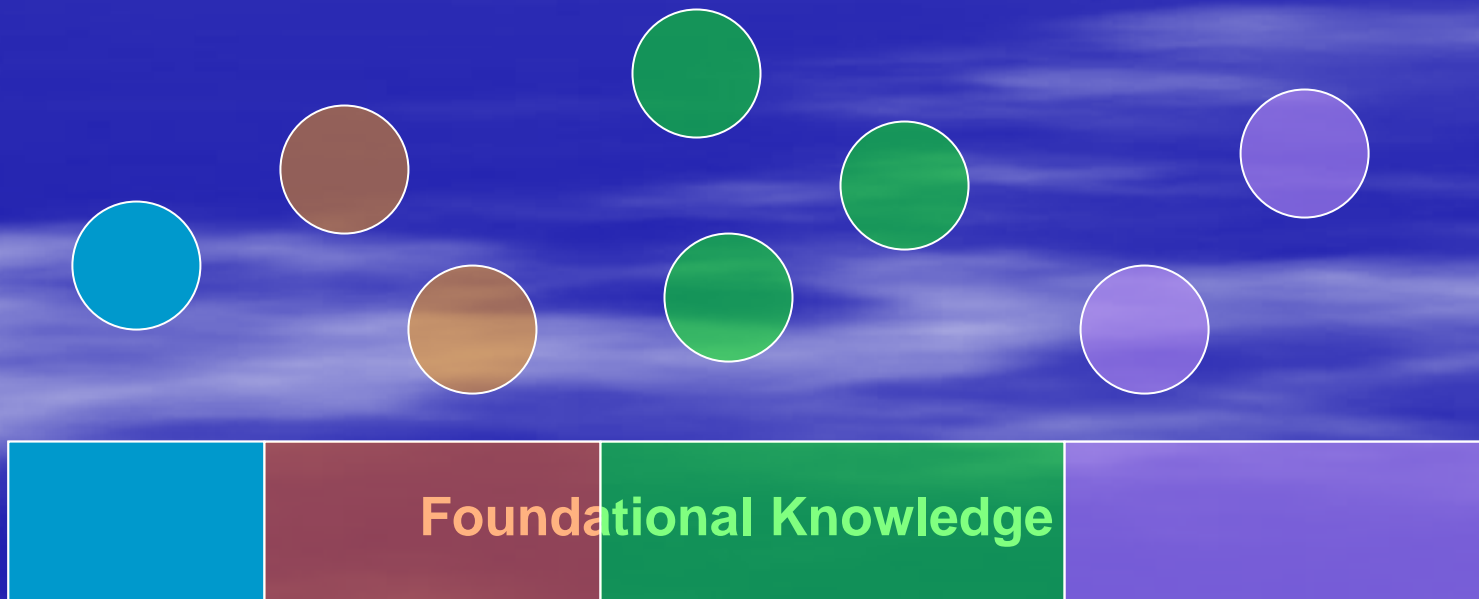
Foundational Knowledge

Group Separation



Foundational Knowledge

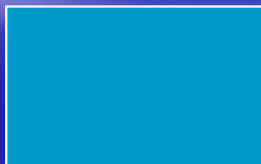
Divergent Change



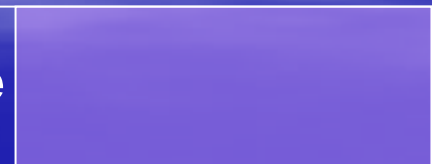
Group Combination



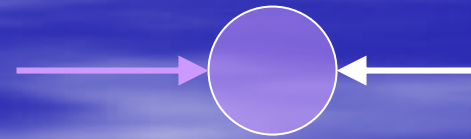
Group Combination



Foundational Knowledge



Group Combination



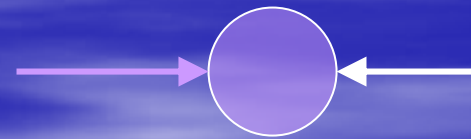
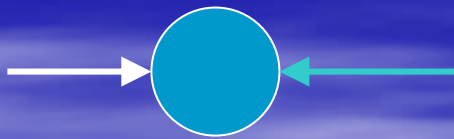
Knowledge Strength



Knowledge Strength



Convergent Change



Convergent Change



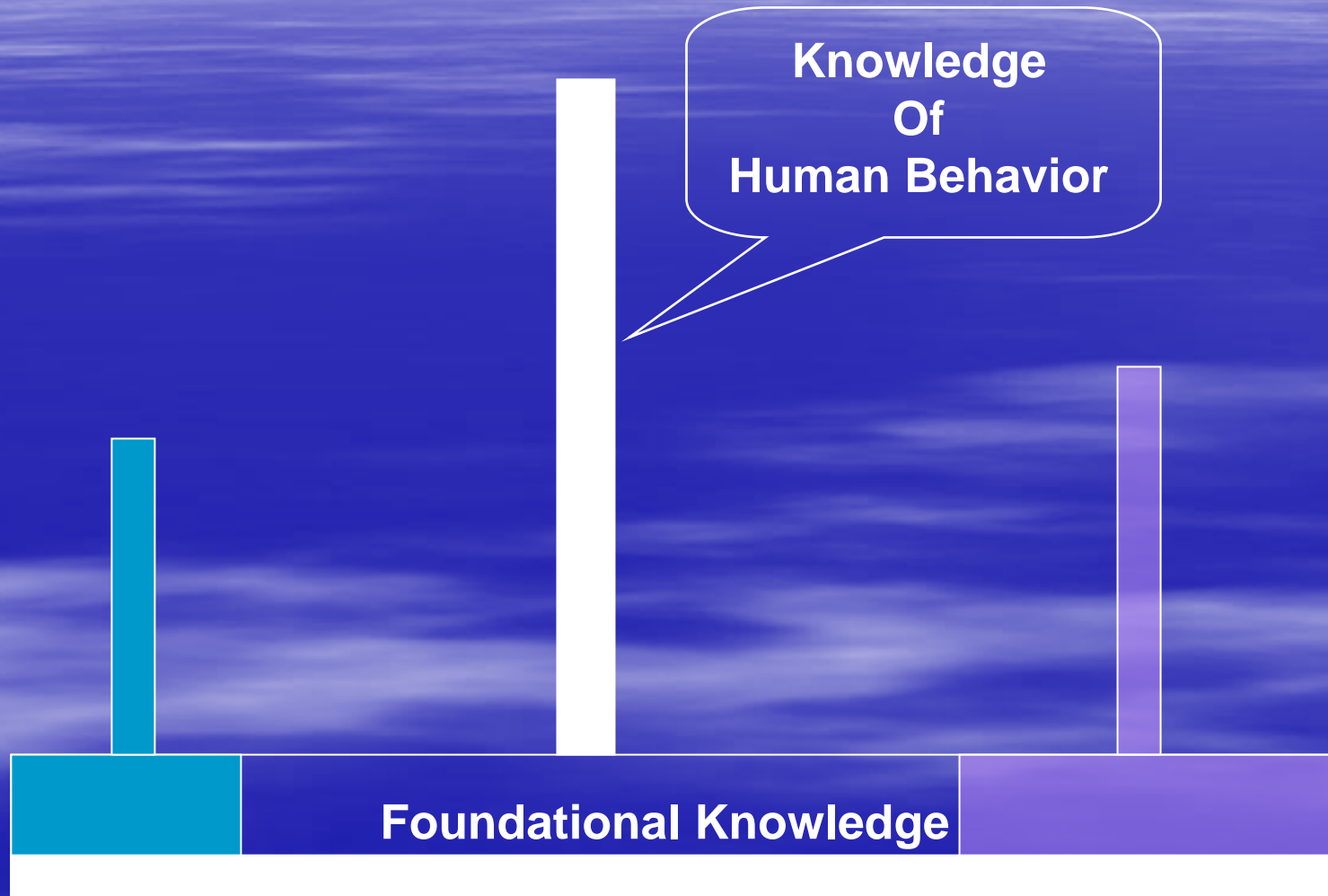
Foundational Knowledge

Convergent Change



Foundational Knowledge

Convergent Knowledge



Finding A New Balance



Technical Outcomes

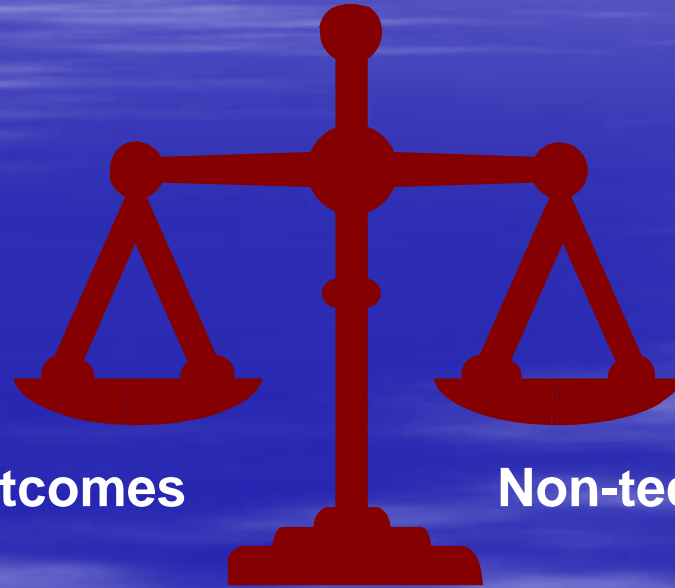
Non-technical Outcomes

**All Groups Need
Human Behavior
Fundamentals**

Assessment

- Fundamental Knowledge Provides Reference Points
- Old Reference Points
 - Basic Science and Mathematics
- Current Reference Points
 - ?
- Future Reference Points
 - How We Think and Do What We Do

New Reference Points



Technical Outcomes

Non-technical Outcomes

How We Think and Do What We Do