

Search for the Bigger Picture

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Best Assessment Processes VII

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The Search

- History of EC2000
- Understanding the Pictures
- The ABET Professional
- The Bigger Picture
- Assessment in the Future



History

- Pressures to Change in the late 80s
 - Prepare for practice in the workplace
 - Provide a coherent educational experience
- Birth of EC2000 in 1996
- Phase-in, Fall visits 1998 to 2000
- All visits in Fall 2001
- Fall 2005 visits will complete transition



More History

- Need for training recognized early
- Training of teams began Fall 1996
- Faculty Development Workshops 1998
 - Two faculty members from every institution
 - Course versus whole program curriculum
 - Difficulty “seeing the big picture”
- All of ABET adopts outcomes
- Bigger picture problem becoming bigger



Understanding The Old Picture

- Old frames of reference
 - Academic discipline
 - Courses taught
- Need for common reference patterns
 - Communication
 - Teaching and Learning
 - Fixed foundational patterns
 - Patterns that change



The Old Picture

- Foundational Patterns
 - Program curriculum
 - Program title and curriculum content
 - Program criteria
 - Non-traditional programs



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Understanding the Current Picture

- What is our pattern after seven years?
- Are the outcomes foundational patterns?
- Where are old foundational patterns?
 - Calculus based physics
 - Design
- The current foundational patterns
 - Some outcomes not strongly accepted
 - Few content requirements still present



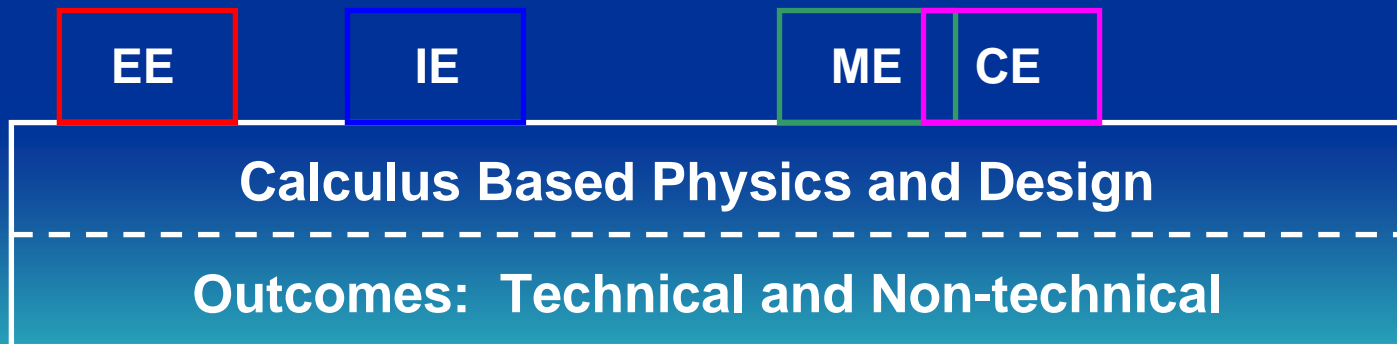
Patterns in the Current Picture

- Foundational Patterns
 - Outcomes: Technical and Non-technical
 - Calculus based physics
 - Design



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Change in the Current Picture

- Software Engineering change accepted with discomfort
- Biology being accepted without understanding impact
- Winds of change much more than “blurring of the disciplines”



Moving to the Bigger Picture

- The challenge of change
- Lessons from EC2000
 - Rapid acceptance by other countries
 - All ABET commissions changing
 - **technical AND non-technical outcomes**
 - **focus on student preparation for practice**
- The ABET Professional
 - Foundational pattern for the Bigger Picture

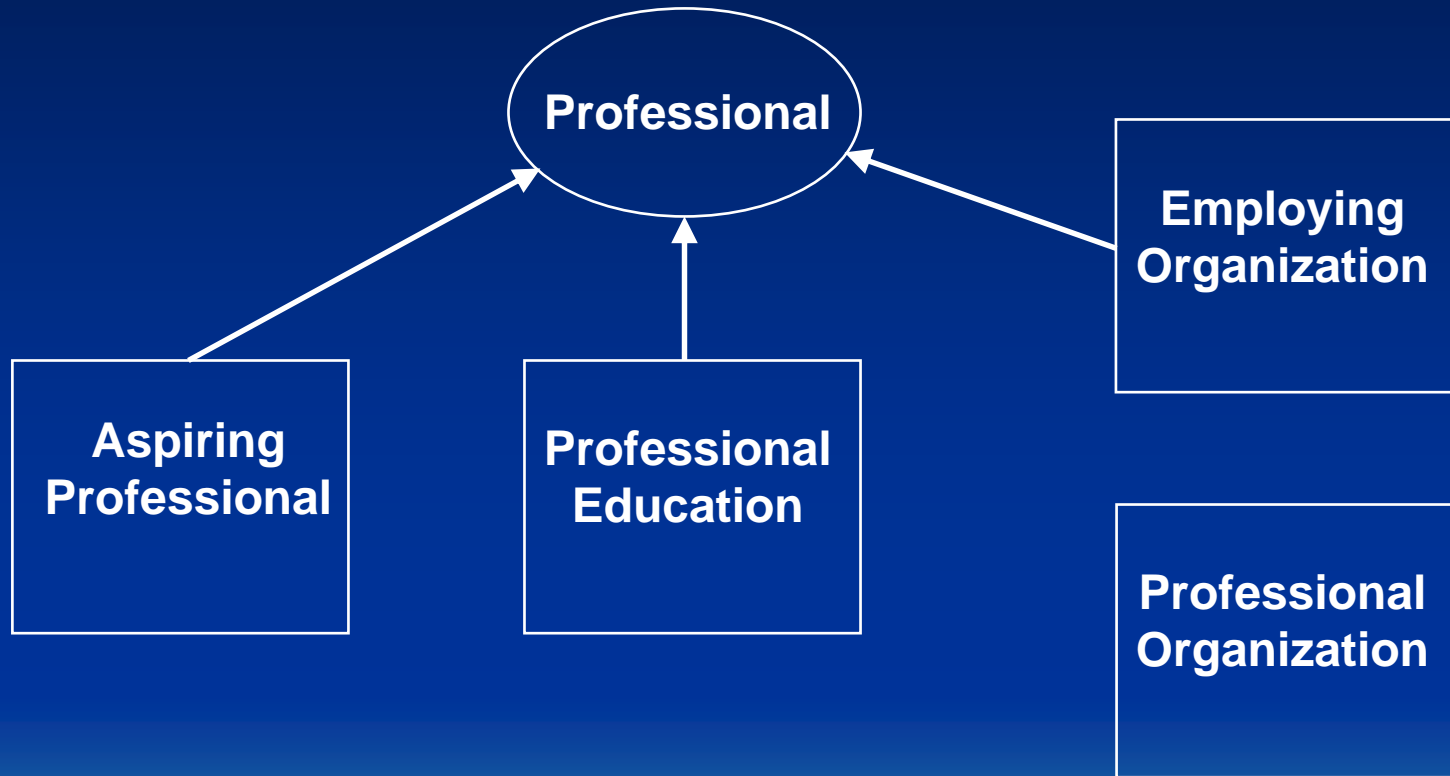


The Organizational Professional

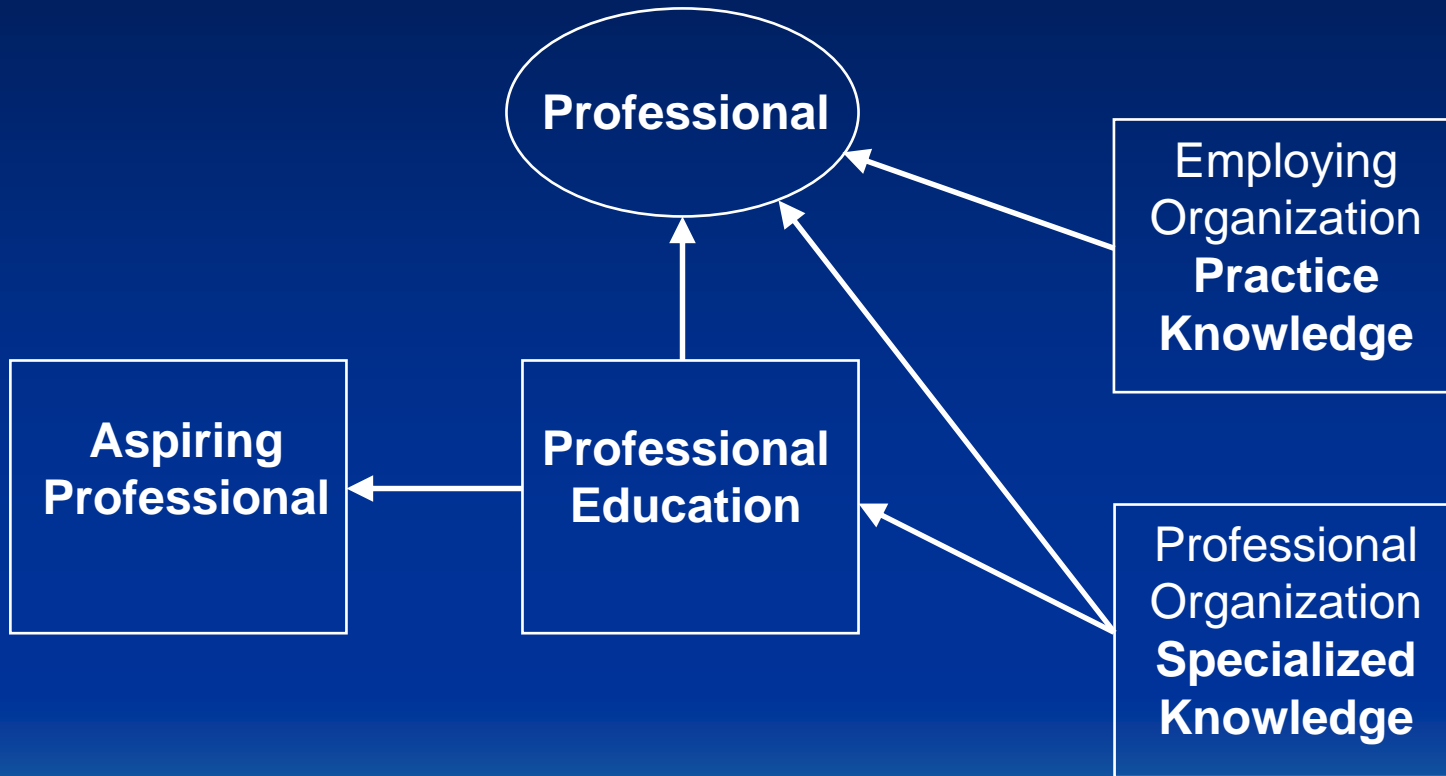
- Specialized Knowledge
 - Developed and nurtured outside employing organization
- Practice Knowledge
 - Developed and nurtured inside employing organization



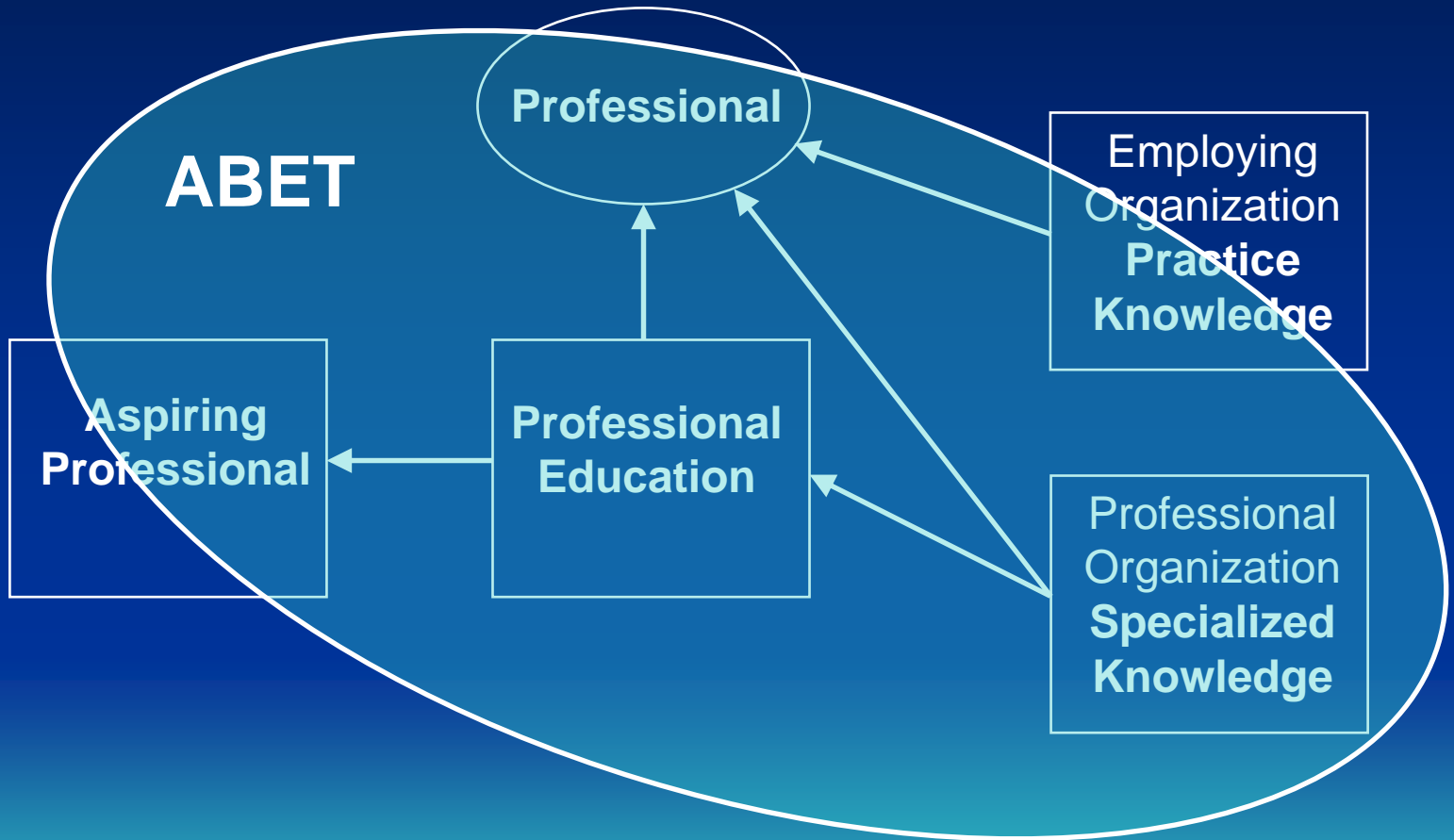
The Bigger Picture



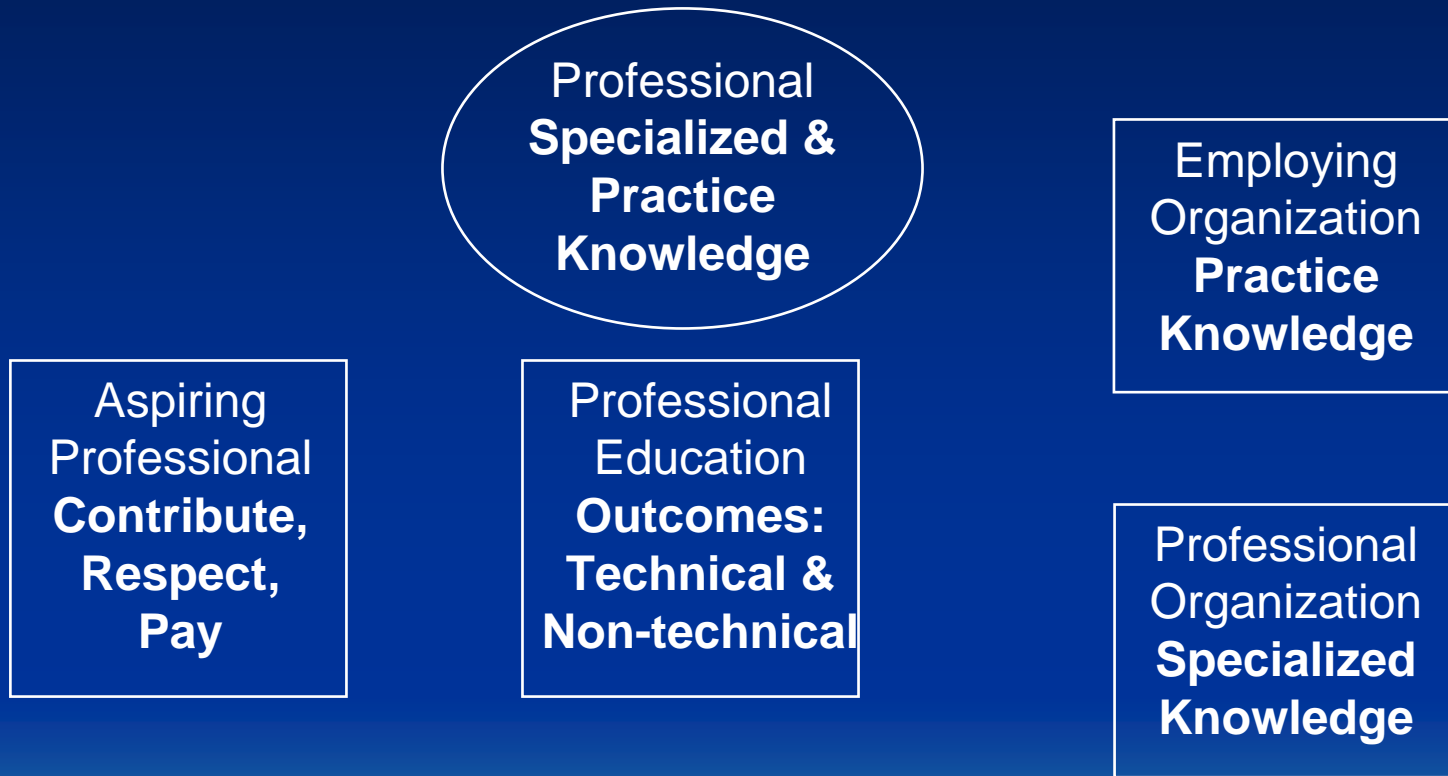
The Knowledge Picture



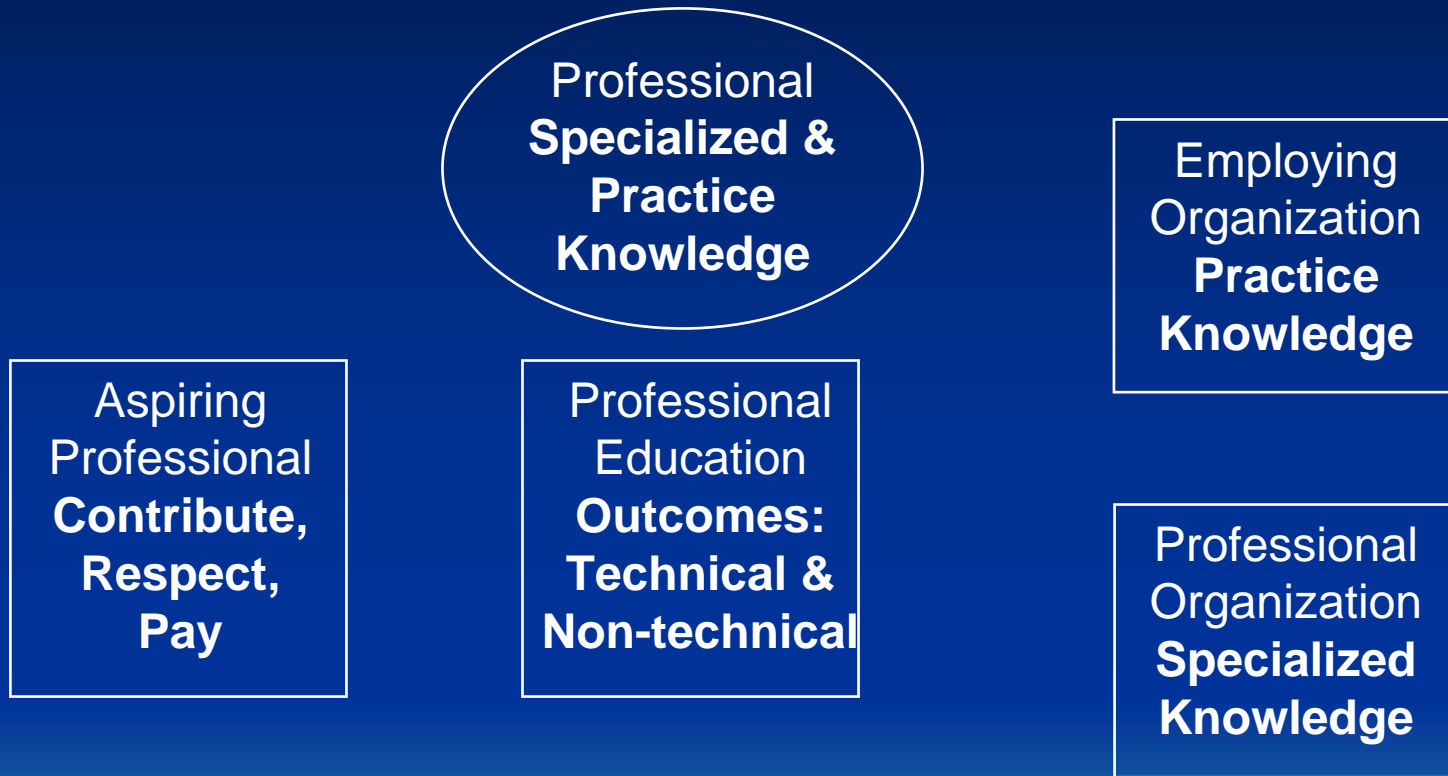
The ABET Picture



The Changing Picture



The Changing Picture



Specialized Knowledge = Technical and Practice Fundamentals

Patterns in the Bigger Picture

- New Foundational Patterns
 - The ABET Professional
 - Outcomes
 - Specialized and Practice Knowledge
 - Merging of the Commissions



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ASAC | CAC | EAC | TAC

Outcomes: Specialized and Practice Knowledge

The ABET Professional

Assessment in the Future

- Assist Movement to the Bigger Picture
- Focus on the ABET Professional
- Focus on Specialized Knowledge
 - *Technical and Practice Fundamentals*
- Focus on Foundational Patterns
 - *For all ABET*
- Assessment ties the pictures together
 - *Course, Program, Commission, ABET*



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