

Competency-Based Assessment: Is It Right for You?

Presentation for the
National Organization for Competency Assurance

Learning objectives

- Understand major concepts related to competency-based assessment
- Using a real life case study, learn how competency-based assessment models can play an important role in distinguishing your certification program from both the competition and from educational credentials
- Evaluate the benefits and challenges of competency-based assessments to determine the feasibility of this approach for your program

Why should you be interested in competency-based assessment?

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- Consumers have become highly educated and demand quality products and services and protection from incompetent practices
- Pew Commission (1998) recommended that all healthcare professionals be required to meet specific competency requirements throughout their careers

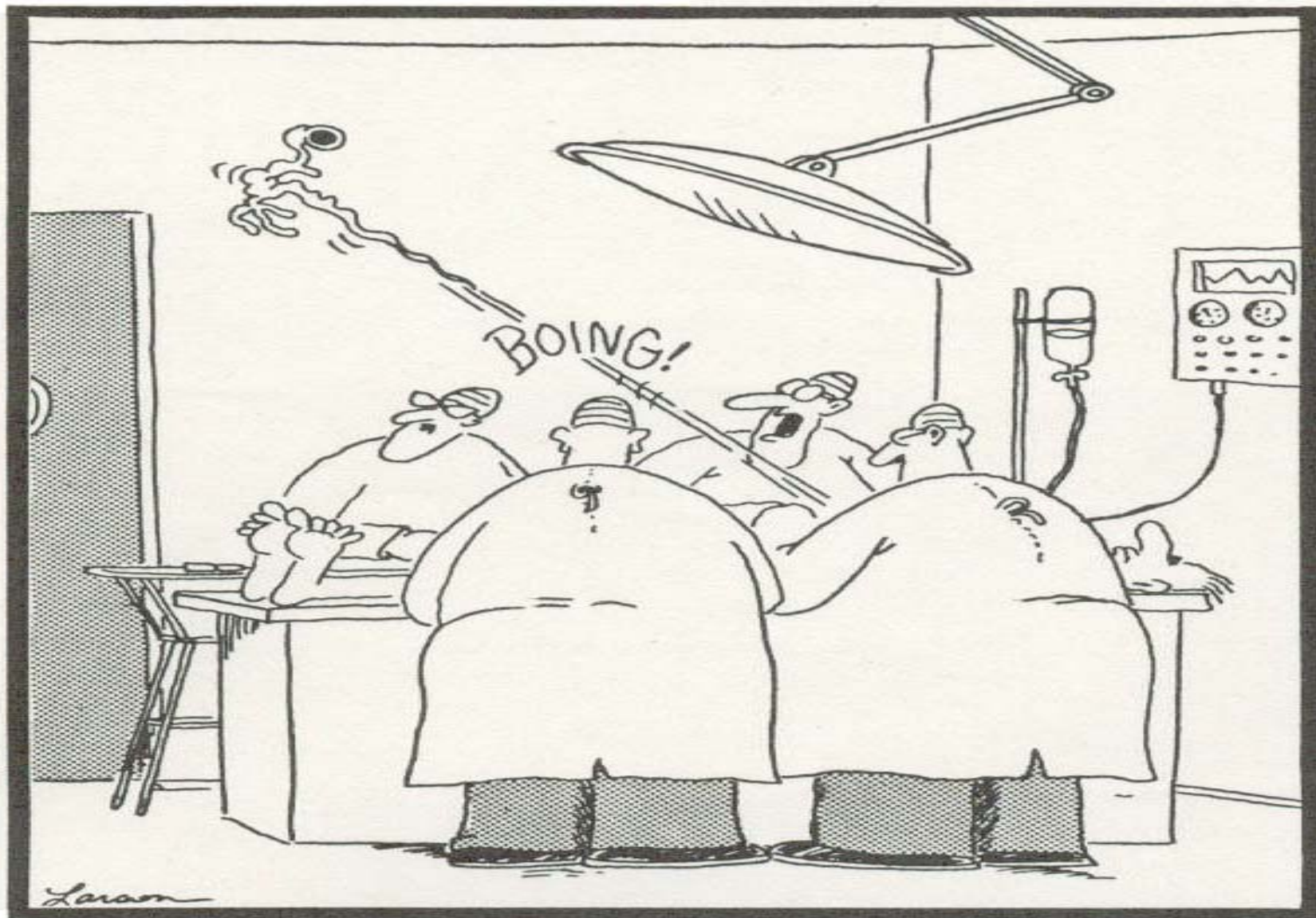
Why should you be interested?

- In the international context, competency-based curricula and assessment are the foundation of credentialing in many professions and in countries
- In some countries/regions, U.S. credentials are perceived as “basic” or inferior because they are not viewed as being competency based

Why should you be interested?

- Not heeding trends in competency-based assessment could result in:
 - Loss of public confidence in your profession
 - Additional regulation of your profession
 - Failed efforts to achieve a global reach for your credentials

What are the consequences of incompetence?



**“Whoa! Watch where that thing lands
—we’ll probably need it.”**

What are the consequences of professional incompetence?

- Buying a home infested with termites
- Purchasing a hearing aid that will not help you with your specific hearing problem
- Having insufficient income for your retirement years
- Can lead to death re: healthcare professions

What are the consequences of incompetence in your profession?

- Loss of credibility of your certification program and loss of confidence on the part of stakeholders
- Increased vulnerability to regulation
- Higher insurance rates and difficulty getting coverage
- Legal action

How is competency defined?

What is **“competence?”**

What is a **“competency?”**

What are the components of a
“competency?”

Competency statement

- A more global or comprehensive characterization of performance than task, knowledge, skill, or ability statements alone
- Typically incorporates performance of several related tasks and/or requires the use of a variety of knowledge domains
- Often indicates something about how the knowledge, skills and abilities are used to carry out the job element

Competency statement: Example

- The pharmacy technician can enter demographic and prescription data.

VS.

- The pharmacy technician can verify that the entry of the demographic and prescription data is accurate and complete.

Competency statement: Example

- The portfolio manager determines an appropriate rebalancing strategy to ensure that an investment portfolio remains consistent with the agreed upon asset allocation guidelines and the client's investment policy statement.
- The cardiovascular nurse selects the appropriate nursing interventions to reduce current and potential cardiovascular risks at primary, secondary and tertiary levels of intervention.

Competency Models/Frameworks

Continuing competence

- “Can the public be confident that a healthcare professional who demonstrated a minimum level of competence when he/she earned a license continue to be competent years and decades after they have been in practice?” (Citizen Advocacy Center, 1995)

**Does certification
assure competency?**

What the professions say about their certifications

American Society of Association Executives (ASAE)

The CAE program recognizes accepted levels of expertise in the profession with the goal of improving professional standards in association management. However, no certification program can guarantee professional competence.

What the professions say about their certifications

American Institute of Certified Public Accountants (AICPA)

To admit individuals into the accounting profession only after they have demonstrated the entry-level knowledge and skills necessary to protect the public interest in a rapidly changing business and financial environment



Our experience. Your success.

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What the professions say about their certifications

American Board of Internal Medicine (ABIM)

Certification is designed to assure the public that the specialist has successfully completed an approved educational program and an evaluation, including a secure examination designed to assess the knowledge, experience, and skills requisite to the provision of high-quality patient care



Our experience. Your success.

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What the professions say about their certifications

Council on Certification of Nurse Anesthetists (CCNA)

To protect and serve the public by assuring that the individuals who are credentialed have met predetermined qualifications or standards for providing nurse anesthesia services

What the professions say about their certifications

National Board for the Certification of Hospice and Palliative Nurses

Certification involves a process that validates and evaluates one's expertise in a specialty area. While licensure assures minimal competency to practice in a field, certification indicates mastery of a defined body of knowledge.

What the professions say about their certifications

American Academy of Nurse Practitioners Certification Program

The examinations are competency-based and reflective of nurse practitioner knowledge and expertise in each of these specialties

What the professions say about their certifications

Project Management Institute (PMI)

Certification connotes the holder as one who has demonstrated the knowledge, experience and leadership skills required to competently practice project management

What the professions say about their certifications

CFA Institute

The Chartered Financial Analyst® (CFA®) designation is one of the fastest growing professional credentials in the world and is a globally recognized standard for measuring the competence and integrity of investment professionals

What the professions say about their certifications

Certified Financial Planner™ Board of Standards

The Certified Financial Planner™ certification process is the best means of demonstrating financial planner competency and ethical behavior

What attorneys say about certification and competence

- More accurate to characterize certificants as those who have met criteria of competence -- not as those who are competent
- Cannot guarantee competence; only measures factors that may indicate competence
- Misleading to state that certificants are competent as it implies that noncertificants are incompetent
- Certification is only one factor that may be used in measuring competence

What is competency-based assessment?

Competency-based assessment

- Evaluates how a range of skills, knowledge and understandings are combined together to successfully complete practical workplace tasks
- Assesses performance in against pre-defined occupational standards
- Is outcome-oriented – based on criterion-referenced methods; performance is assessed against criteria provided to the candidate; candidate and the assessor are clear on what performance is required

Performance criteria: Example

The cook selects and prepares correct ingredients and weighs and measures them properly to ensure adherence to the recipe

- Ingredients selected match recipe
- Prepares ingredients for weighing/measuring in accordance with measurement standards (e.g., washes and dices vegetables that should be measured in diced form)
- Selects correct measuring devices (e.g., cup, tsp.) for type of ingredients measured
- Selects correct scale for weight/volume of ingredient

Why have so few certification programs adopted competency-based assessments?

Types of assessments that might be required

- Low fidelity, written simulations (e.g., case studies MCQs)
- Constructed response questions (e.g., essay, short answer)
- Portfolios
- Oral examinations
- High fidelity simulations (e.g., virtual reality, standardized patients)
- Performance evaluations

Other forms of assessment

- Record review
- Chart stimulated recall
- 360° ratings
- Procedure or case logs
- Patient survey

Challenges of competency-based assessments

- Ability to sample all the relevant competencies may be limited
- Development and scoring are usually expensive and complex
- Generally expensive to administer
- Scoring is subjective (e.g., use of human judges)
- More difficult to achieve acceptable level of reliability

But there are upsides

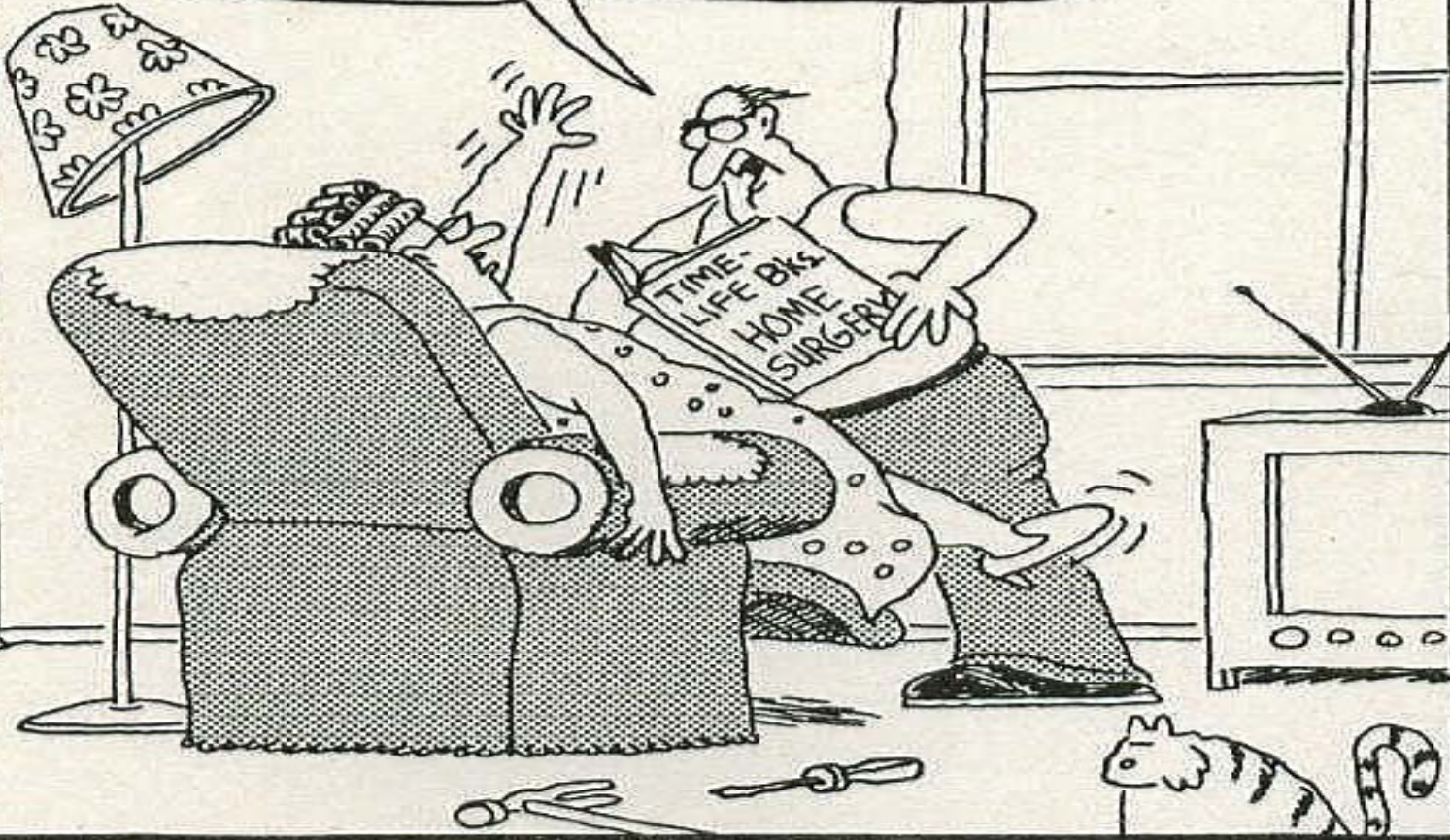
- High fidelity to practice
- Has the appearance of measuring more than knowledge or lower-level cognitive skills
- May satisfy the needs of the public and other stakeholders for competency assurance
- Good vehicles for assessing continuing competence (recertification)

Is competency-based assessment feasible?

Cost-benefit analysis, including consideration of:

- Psychometrics
- Level of effort required
- Stakeholder perceptions
- Fulfillment of mission

Aha! There's the ol' gall bladder... Dang it, Lois! Would you knock off all this squirmin' around business?



Competency-Based Assessment and Certification: The Canadian CFP Experience

Cary List, CA, CFP
Financial Planners Standards Council

A Little About the CFP

- Founded in the U.S. in 1973
- Introduced in Canada in 1996, bringing together several long-standing Canadian financial planning designations
- Currently over 50,000 CFPs in the U.S., 17,000 in Canada, and 100,000 in 18 countries worldwide
- Represents the gold standard for professional financial planning

CFP – Historical Approach

- CFP certification program developed from U.S. model
- Job Analysis leading to “topics list” laying out all of the knowledge required as a CFP professional
- Lots of work on job analysis; less empirical work on linking of the resulting tasks list to the “topics”
- Examination syllabus based exclusively on topics list
- Job tasks only used for weighting topics on examination

CFP Program History

- Certification program requirements:
 - Education
 - Experience
 - Examination
- All based on syllabus
- Requirements ultimately based on acquisition of *knowledge*, not *competence*

Traditional Approach: Strengths

- Knowledge-based certification well understood
- Relatively easy to test with multiple choice
- Relatively easy to assess
- Relatively easy to create consistent, reliable exams
 - CFP exam reliability has exceeded 0.90

Traditional Approach: Weaknesses

- Students: “Why do I have to know *that*”
- CFPs: “Getting the designation was not demonstration of my ability to perform financial planning”
- Employers: “I hire a CFP, who knows a lot, but we still have to teach them how to be a planner”
- The Public: “How do I know exactly what a CFP can do for me?”
- Internationally: “A CFP in Canada doesn’t mean the same as a CFP in Hong Kong”

CFP in Canada: A New Approach

- Embrace and enhance our strengths
- Acknowledge and address the criticisms

CFP in Canada: Competency-Based Approach

- In 2003, FPSC embarked on a new Job Analysis project
- Coined it a “competency analysis” to emphasize that it wasn’t solely about knowledge, or even job tasks, but about competency

CFP in Canada: Competency-Based Approach

- FPSC approaches competency as follows:
 - “Competencies provide a description of the abilities that a CFP professional must possess and represent not just the tasks, but also incorporate the job-related skills, knowledge, attitudes and judgements required for competent performance by members of the profession.”
 - A competent professional must demonstrate the inherent characteristics of a professional, not just knowledge and skill
 - Knowledge, abilities and professional skills all contribute to competency

CFP Competency Profile: FPSC Approach

- Create competency profile first
- Worry about assessment later
- Use a zero-based approach

CFP Competency Profile: FPSC Methodology

- Establish an oversight body to create a framework
- Establish task forces from across the country to build competencies
- Validate through survey

CFP Competency Profile: FPSC Methodology

- Create competency statements first
- Identify underlying knowledge later
- Do things in the appropriate order
 - don't focus on assessment at this point

CFP PROFESSIONAL COMPETENCY PROFILE

FINANCIAL PLANNING FUNCTIONS

		COLLECTION		ANALYSIS		SYNTHESIS				
		1.0 Collects the information required to create a financial plan.		2.0 Identifies potential opportunities and constraints and assesses information to formulate strategies.		3.0 Synthesizes information to formulate and evaluate a plan.				
Fundamental Financial Planning Practices		1.001	Identifies the client's objectives, needs and values that have financial implications	2.001	Analyzes the client's objectives, needs, values and information to prioritize the financial planning components	3.001 Prioritizes recommendations from the financial planning components 3.002 Consolidates the recommendations and action steps into a financial plan 3.003 Determines the necessity to revise the financial plan				
		1.002	Identifies the information required for the financial plan	2.002	Identifies inter-relationships among financial planning components					
		1.003	Determines client's attitudes and level of financial sophistication	2.003	Identifies opportunities and constraints and assesses collected information across financial planning components					
		1.004	Identifies material changes in the client's personal and financial situation	2.004	Assesses the impact of economic, political and regulatory environment					
		1.005	Prepares information to enable analysis	2.005	Measures the progress towards achievement of objectives of the financial plan					
		CORE FINANCIAL PLANNING COMPETENCIES								
		1.1 Collects the quantitative information required to create a financial plan	1.2 Collects the qualitative information required to create a financial plan	2.1 Identifies potential opportunities and constraints	2.2 Assesses information to formulate strategies	3.1 Formulates and evaluates strategies to create a financial plan				
Financial Planning Components	Financial Management	1.101	Collects information regarding the client's assets and liabilities	1.201 Determines the client's propensity to save 1.202 Determines how the client makes spending decisions 1.203 Determines the client's comfort with debt	2.101	Determines whether the client is living within financial means	2.201	Assesses whether the emergency fund is adequate	3.101 Develops financial management strategies 3.102 Evaluates advantages and disadvantages of each financial management strategy 3.103 Optimizes strategies to make financial management recommendations 3.104 Prioritizes action steps to assist the client in implementing financial management strategies	
		1.102	Collects information regarding the client's cash flow, income and/or obligations		2.102	Determines the issues relevant to the client's assets and liabilities	2.202	Assesses the impact of potential changes in income and expenses		
		1.103	Collects information necessary to prepare a budget		2.103	Determines the client's emergency fund provision	2.203	Identifies conflicting demands on cash flow		
		1.104	Identifies the legal issues that affect financial management		2.104	Identifies potential cash management vehicles	2.204	Assesses financing alternatives		
		1.105	Prepares statements of the client's net worth, cash flow and budget		2.105	Calculates required rate of return to reach client's objectives	2.205	Assesses whether investment return expectations are consistent with risk tolerance		
	Asset Management	1.106	Collects information necessary to prepare detailed statement of investment holdings	1.204	Determines the client's experience, attitude and biases with investments	2.106	Determines the characteristics of investment holdings	2.206	Assesses whether asset holdings are consistent with risk tolerance and required rate of return	3.105 Develops asset management strategies 3.106 Evaluates advantages and disadvantages of each asset management strategy 3.107 Optimizes strategies to make asset management recommendations 3.108 Prioritizes action steps to assist the client in implementing asset management strategies
		1.107	Determines the client's current asset allocation	1.205	Determines the client's investment objectives	2.107	Determines the implications of disposing of assets	2.207 Assesses exposure to financial risk 2.208 Compares the client's risk exposure to current coverage 2.209 Assesses the implications of changes to insurance coverage 2.210 Prioritizes the client's risk management needs		
		1.108	Identifies cash flows available for investment	1.206	Determines the client's tolerance for investment risk	2.108	Identifies potential investment vehicles			
		1.109	Collects details of the client's existing insurance coverage	1.207	Identifies the client's return expectations	2.109 Determines characteristics of insurance coverage 2.110 Identifies potential risk management vehicles				
	1.110	Identifies potential financial obligations	1.208	Identifies the client's time horizon	2.110		Identifies potential risk management vehicles			
	Risk Management	1.109	Collects details of the client's existing insurance coverage	1.209	Determines the client's risk management objectives	2.109 Determines characteristics of insurance coverage 2.110 Identifies potential risk management vehicles	2.207 Assesses exposure to financial risk 2.208 Compares the client's risk exposure to current coverage 2.209 Assesses the implications of changes to insurance coverage 2.210 Prioritizes the client's risk management needs	3.109 Develops risk management strategies 3.110 Evaluates advantages and disadvantages of each risk management strategy 3.111 Makes risk management recommendations 3.112 Prioritizes action steps to assist the client in implementing risk management strategies		
		1.110	Identifies potential financial obligations	1.210	Determines the client's tolerance for risk exposure					
			Identifies potential financial obligations	1.211	Determines relevant lifestyle issues					
			1.212	Determines health issues						
			1.213	Determines the client's willingness to take active steps to manage financial risk						

INDICATORS OF PERFORMANCE

PROFESSIONAL SKILLS

PS.1. Ethical Judgement		PS.2. Practice		PS.3. Communication		PS.4. Cognitive	
PS.101	Establishes client relationships based on trust	PS.201	Adheres to professional code of ethics and standards of professional practice	PS.301	Gives attention to what clients and others are saying and takes time to understand the points being made	PS.401	Uses mathematical methods or formulas as appropriate
PS.102	Offers and provides professional services with integrity	PS.202	Makes appropriate judgements in areas not addressed by existing ethical or practice standards	PS.302	Establishes good rapport and relationships with clients and others	PS.402	Gathers data and integrates information from a variety of sources to arrive at a solution
PS.103	Demonstrates objectivity in providing professional services	PS.203	Maintains awareness of changes in the economic, political and regulatory environment	PS.303	Communicates information and ideas orally in a manner understandable to clients and others	PS.403	Uses logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems
PS.104	Acts in the best interest of the client in providing professional services	PS.204	Engages in continuous learning to ensure currency of knowledge and skills	PS.304	Communicates information and ideas in writing in a manner understandable to clients and others	PS.404	Considers the relative costs and benefits of potential actions to choose the appropriate one
PS.105	Recognizes limits of competence and voluntarily defers to and involves other professionals when appropriate	PS.205	Conducts appropriate research when performing analysis and developing strategies	PS.305	Presents logical and persuasive rationales	PS.405	Makes informed professional decisions when faced with incomplete or inconsistent information
PS.106	Performs professional services in a manner that is fair and reasonable	PS.206	Exercises substantial autonomy and initiative in the	PS.306	Deals effectively with objections		
PS.107	Provides appropriate and timely disclosure of conflicts of interest to clients						



CFP Competency Profile: Underlying Knowledge

- Fundamental to competency is knowledge
- FPSC addressed knowledge exclusively in the context of competence
- All knowledge topics and sub-topics were mapped to appropriate competency statements
- If there was no linkage between knowledge and competency, then it was deemed that the knowledge was not required and it was removed from the profile

CFP Competency Profile: Relevance Internationally

- Financial planning, perhaps more than any other profession, have unique country-specific knowledge requirements
- How to build a syllabus that is relevant internationally?
- Using “knowledge in common” you would be left with a meaningless shell
- Financial planning competency is universal – only the underlying knowledge changes from country to country

CFP Competency Profile: Challenges

- So far so easy!
- Impacts requirements in:
 - Education
 - Experience
 - Examination
- Communication challenges

CFP Competency Profile: Addressing Assessment Challenges

- Existing multiple choice exam format problematic
- Considering alternative methodologies
- Provide long lead time
- Build in trial items during transition period

CFP Competency Profile: Addressing Assessment Challenges

- Considering splitting certification into two levels
 - Level 1
 - Retain multiple-choice format to ensure high reliability
 - Focus on lower cognitive levels of profile
 - Level 2
 - Mini-cases
 - Structured constructed response within fixed parameters
- Spending shifting from item development to scoring rubrics, marking keys and markers
- Anticipate increase in assessment costs
- Willing to accept reliability/validity trade-off

CFP Competency Profile: Addressing Assessment Challenges

- Examination is only one element of assessment
- Opportunity to better utilize educational requirements in the certification process
 - Establishing Capstone course requirement
 - Will control, but not deliver, curriculum and assessment
 - Capstone course will require demonstration of ability to perform a financial plan
- Not looking for “guarantees” of competence, but enhanced assurance