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

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Why should you be interested in competency-based assessment?
Why should you be interested?

- 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.
- 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.
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.
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.

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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

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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”

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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

<table>
<thead>
<tr>
<th>COLLECTION</th>
<th>ANALYSIS</th>
<th>SYNTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CORE FINANCIAL PLANNING COMPETENCIES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.0 Collects the information required to create a financial plan.</td>
<td>2.0 Identifies potential opportunities and constraints and assesses information to formulate strategies.</td>
<td>3.0 Synthesizes information to formulate and evolve financial plan.</td>
</tr>
<tr>
<td>1.001 Identifies the client’s objectives, needs and values that have financial implications</td>
<td>2.001 Analyzes the client’s objectives, needs, values and information to prioritize the financial planning components</td>
<td>3.001 Prioritizes recommendations from the financial planning components</td>
</tr>
<tr>
<td>1.002 Identifies the information required for the financial plan</td>
<td>2.002 Identifies inter-relationships among financial planning components</td>
<td>3.002 Consolidates the recommendations and action steps into a financial plan</td>
</tr>
<tr>
<td>1.003 Determines client’s attitudes and level of financial sophistication</td>
<td>2.003 Identifies opportunities and constraints and assesses collected information across financial planning components</td>
<td>3.003 Determines the necessity to revise the financial plan</td>
</tr>
<tr>
<td>1.004 Identifies material changes in the client’s personal and financial situation</td>
<td>2.004 Assesses the impact of economic, political and regulatory environment</td>
<td></td>
</tr>
<tr>
<td>1.005 Prepares information to enable analysis</td>
<td>2.005 Measures the progress towards achievement of objectives of the financial plan</td>
<td></td>
</tr>
<tr>
<td><strong>Fundamental Financial Planning Practices</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 Collects the quantitative information required to create a financial plan</td>
<td>1.2 Collects the qualitative information required to create a financial plan</td>
<td>2.1 Identifies potential opportunities and constraints</td>
</tr>
<tr>
<td>1.101 Collects information regarding the client’s assets and liabilities</td>
<td>1.201 Determines the client’s propensity to save</td>
<td>2.101 Determines whether the client is living within financial means</td>
</tr>
<tr>
<td>1.102 Collects information regarding the client’s cash flow, income and/or obligations</td>
<td>1.202 Determines how the client makes spending decisions</td>
<td>2.102 Determines the issues relevant to the client’s assets and liabilities</td>
</tr>
<tr>
<td>1.103 Collects information necessary to prepare a budget</td>
<td>1.203 Determines the client’s comfort with debt</td>
<td>2.103 Determines the client’s emergency fund provision</td>
</tr>
<tr>
<td>1.104 Identifies the legal issues that affect financial management</td>
<td>1.204 Identifies potential cash management vehicles</td>
<td>2.104 Assesses financing alternatives</td>
</tr>
<tr>
<td>1.105 Prepares statements of the client’s net worth, cash flow and budget</td>
<td></td>
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</tr>
<tr>
<td><strong>Financial Planning Components</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.106 Collects information necessary to prepare a detailed statement of investment holdings</td>
<td>1.205 Determines the client’s risk management objectives</td>
<td>2.105 Calculates required rate of return to reach client’s objectives</td>
</tr>
<tr>
<td>1.107 Determines the client’s current asset allocation</td>
<td>1.206 Determines the characteristics of investment holdings</td>
<td>2.106 Determines the client’s risk management objects</td>
</tr>
<tr>
<td>1.108 Identifies cash flows available for investment</td>
<td>1.207 Identifies the client’s return expectations</td>
<td>2.107 Determines the implications of disposing of assets</td>
</tr>
<tr>
<td>1.109 Collects details of the client’s existing insurance coverage</td>
<td>1.208 Identifies the client’s horizon</td>
<td>2.108 Identifies potential risk management vehicles</td>
</tr>
<tr>
<td>1.110 Determines potential financial obligations</td>
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<tr>
<td>1.209 Determines the client’s risk management objectives</td>
<td></td>
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<tr>
<td>1.210 Determines the client’s tolerance for risk exposure</td>
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<tr>
<td>1.211 Determines relevant lifestyle issues</td>
<td></td>
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<tr>
<td>1.212 Determines health issues</td>
<td></td>
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<tr>
<td>1.213 Determines the client’s willingness to take active steps to manage financial risk</td>
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</table>

**Notes:**
- CFP: Certified Financial Planner
- Financial Planning Functions
- Core Competencies
- Fundamental Practices
- Financial Planning Components
- Collection
- Analysis
- Synthesis
<table>
<thead>
<tr>
<th>INDICATORS OF PERFORMANCE</th>
<th>PROFESSIONAL SKILLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS.101 Establishes a client relationship based on trust</td>
<td>MS.201 Adheres to professional code of ethics and standards of professional practice</td>
</tr>
<tr>
<td>MS.102 Offers and provides professional services with integrity</td>
<td>MS.202 Makes appropriate judgements in areas not addressed by existing ethical or practice standards</td>
</tr>
<tr>
<td>MS.103 Demonstrates objectivity in providing professional services</td>
<td>MS.203 Maintains awareness of changes in the economic, political and regulatory environment</td>
</tr>
<tr>
<td>MS.104 Acts in the best interest of the client in providing professional services</td>
<td>MS.204 Engages in continuous learning to ensure currency of knowledge and skills</td>
</tr>
<tr>
<td>MS.105 Recognizes limits of competence and voluntarily defers to and involves other professionals when appropriate</td>
<td>MS.205 Conducts appropriate research when performing analysis and developing strategies</td>
</tr>
<tr>
<td>MS.106 Performs professional services in a manner that is fair and reasonable</td>
<td>MS.206 Exercises substantial autonomy and initiative in the</td>
</tr>
</tbody>
</table>
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

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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