Competency-Based vs. Faith-Based Education: Are We Serious about Practicing What We Preach?

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Competencies not a new concept (even in med ed)
- Mid-’90s in UGME
- Turn of millennium: ACGME, Scottish Doctor, CANMEDS
- Present: numerous schools, postgrad programs, speciality organizations
Many Frameworks

• Scottish Doctor: 12 categories in 3 broad domains
• CANMeds: 7 roles
• ACGME: 6 domains
• IIME: 7 categories

• All share many similarities with some special emphases
Competencies and Education

• Programs and schools mapping curricular goals onto competencies
  – Often use nationally-defined competencies
  – Many develop their own

• Impact of this focus varies
  – For many, rearranging deck chairs
  – For others, impetus for real reform
Broadly Based Movement

- Not just medical education
- Other health sciences
- K-12 education (teacher and learner competencies)
- Other professions (clinical counseling, engineering, public health)
But Aren’t We Already Competency-Based?

- **TIME-based education**
  - Students need a defined amount of time on task or topic to become competent
  - e.g., 6 weeks in pediatrics, 140 hrs with anatomy, 90 minutes on ethics
  - [But we really have no clue how much time it takes]
But Aren’t We Already Competency-Based?

• TIME-based education
• FAITH-based education
  – Take on faith that within a set time, students will learn what they need to learn and (miraculously) be competent
  – [But we really have little evidence for that belief]
Background for What Follows

- Group commissioned by Dean to rebuild med ed from scratch
- Not just curriculum, but everything from admissions onward
- 10 educators, ½ day/week, three years
- Lots of blind alleys (lots of fun)
ENCORE

- “Ensure competence, inspire excellence”
- Competency- or outcome-based framework
- 120 presenting complaints to organize content
Nine Competencies

- Communication
- Clinical skills
- Self-assessment and learning management
- Professionalism
- Scientific reasoning
- Social context of health and disease
- Systems of care delivery
- Diagnosis and risk assessment
- Therapeutics and management
## Outcomes as Driver

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<tr>
<th>Learning Activities</th>
<th>Learning Objectives</th>
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- Learning Activities
- Learning Objectives
- Outcomes
- Assessment
- Competency Criteria
120 patient symptoms

Breast Mass
Headache
Jaundice
Joint Pain
Chest Pain
Trauma
etc
Implications of Competency-Based Education (CBE)
What Drives the System

- Competency outcomes drive curriculum objectives
- Curriculum does NOT drive outcomes
When Curriculum Drives Competencies

Learner

Competencies → Outcomes

Student / Learner Assessment

Standards?

Teacher

Objectives → Teacher / Curriculum Evaluation

Curriculum (learning activities)
When Competencies Drive Curriculum

Learner
- Competencies
- Outcomes
  - Student / Learner
  - Assessment
  - Standards

Teacher
- Curriculum (learning activities)
- Objectives
  - Teacher / Curriculum
  - Evaluation

Standards

Teacher / Curriculum
What Drives the System

- Competency outcomes drive curriculum objectives
- Curriculum does NOT drive outcomes
- Fundamental shift from teacher-centered to learner-centered orientation
Curriculum Organization

• One size does NOT fit all learners
  – Start in different places
  – Proceed at different rates
  – Have different goals
  – Attain competence at different times

• Requires flexibility in learning activities, timing, and duration
Assessment

• Assessing competence becomes central
• Assess many things we aren’t doing now - need new methods
• Sampling of competencies and contexts
• Address risk of counting only what is measurable
Setting Standards

• Reveals the hidden differences in faculty beliefs about ‘competence’
  – Is ‘competent’ really good enough? Don’t we want ‘excellent?’

• Specific to outcome, assessment method, and stage of learning

• Formative vs. summative standards

• A lot of work
Assessment and Learning

• Separate teaching from assessing
  – Conflict of interest for faculty in conflating teaching and evaluation
  – Learners fear exposing ignorance

• Clearer separation of formative and summative feedback

• Shift in balance between summative and formative assessment
Curriculum Management

• Learning management system
  – Thousands of competencies, outcomes, objectives
  – Individualized progress through system
  – Sequencing of educational activities
  – Flood of assessment data
  – Explosive combinatorics
Learners

• Changing learner responsibilities
  – Self-direction
  – Self-assessment
  – Comfort with ambiguity and choice

• Learning community
  – Asynchrony among learners ⇒ no longer ‘class’ based
Faculty

• Changing faculty responsibilities
  – NOT teach whatever you want, whenever you can
  – Create experiences
  – Set expectations
  – Mentoring and advising
  – Perform “real” assessment (designated, trained assessors)
In Summary...

- CBE could be a revolutionary change from time(faith)-based education
- But revolutions are painful and messy
  - Fundamental shift in ‘power’
  - Assessments (and standards) are key
  - Managing CBE is a challenging prospect
  - Daunting logistics
Are We Ready for a Revolution?

- Flexnerian revolution of 1910
  - Full implementation took c. 40 years
  - 200+ proprietary schools closed
  - Bitter, acrimonious, and protracted battles

- Can we afford the status quo?
Thank you
ENCORE Next Step

• 6-week pilot, 12 student volunteers
• 3 complaints: trauma, hypoglycemia, renal failure
• Develop learning experiences, assessments
• Examine student experience and acceptance
• Explore logistics