It’s Not a Matter of Time

Competency-based learning at the tipping point

Carol A. Aschenbrener, M.D.

For the GRMC, Fall 2012
MEDICAL EDUCATION
IN THE
UNITED STATES AND CANADA

A REPORT TO
THE CARNEGIE FOUNDATION
FOR THE ADVANCEMENT OF TEACHING

BY
ABRAHAM FLEXNER

WITH AN INTRODUCTION BY
HENRY S. PRITCHETT
PRESIDENT OF THE FOUNDATION

BULLETIN NUMBER FOUR

235 FIFTH AVENUE
NEW YORK CITY
### The Flexnerian Box

<table>
<thead>
<tr>
<th>Year One</th>
<th>Year Two</th>
<th>Year Three</th>
<th>Year Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>BASIC SCIENCE</td>
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<td>ELECTIVES</td>
</tr>
</tbody>
</table>
Curriculum Innovation

**Year One**
- **BASIC SCIENCE**
- **PATIENT EXP.**

**Year Two**
- **BASIC SCIENCE**
- **ICM**

**Year Three**
- **CLERKSHIPS**

**Year Four**
- **CLERKSHIPS**
- **ELECTIVES**
- **CAPSTONE**

**Early Patient Experience**
- Nutrition

**PBL**
- Cultural Competency
- Substance use

**Communication**
- Ethics

**End-of-life**
- Human Sexuality

**LGBT**
Drivers to Transform Care

COMPILATION OF PATIENT PROTECTION AND AFFORDABLE CARE ACT

[As Amended Through May 1, 2010]

INCLUDING

PATIENT PROTECTION AND AFFORDABLE CARE ACT
HEALTH-RELATED PORTIONS OF THE HEALTH CARE AND
EDUCATION RECONCILIATION ACT OF 2010

PREPARED BY THE
Office of the Legislative Counsel
FOR THE USE OF THE
U.S. HOUSE OF REPRESENTATIVES

MAY 2010
2012 AAMC Annual Meeting

http://innovationlabs.com/summit/
## Shifting Paradigm of Competence

<table>
<thead>
<tr>
<th>Physician centered practice</th>
<th>Patient centered practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual physician autonomy</td>
<td>Collaboration as a team in a system</td>
</tr>
<tr>
<td>Anecdotal practice</td>
<td>Evidence-based standards</td>
</tr>
<tr>
<td>Focus on illness and cure</td>
<td>Focus on health promotion and wellness</td>
</tr>
<tr>
<td>Passive patient role</td>
<td>Involved patients and families</td>
</tr>
</tbody>
</table>
# Shifting Paradigm of Competence

<table>
<thead>
<tr>
<th>Knowledge based assessment</th>
<th>Demonstrated competence and performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episodic assessment and education</td>
<td>Continuous assessment and education</td>
</tr>
<tr>
<td>Arbitrary assessment and education</td>
<td>Practice-relevant assessment</td>
</tr>
<tr>
<td>Opaque/unmeasured care</td>
<td>Transparent/measured care</td>
</tr>
<tr>
<td>Questionable competence ignored</td>
<td>Questionable competence remediated or removed</td>
</tr>
</tbody>
</table>
Year 1: Science lectures

Year 2: Clinical lectures

Year 3: Clerkships

Year 4: Electives
Competency-based learning: It's not about time, it's about outcomes
Will UME be Stranded?

K-12  PreMed  GME  CE
Competency-based education

Curriculum

Educational objectives

Assessment

Health needs
Health systems

Competencies outcomes

Assessment

Curriculum
Competency

An observable ability of a health professional related to a specific activity that integrates knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition. Competencies can be assembled like building blocks to facilitate progressive development.

Physicians will spend their careers, from premed to retirement from practice, on a developmental trajectory, building mastery in 8 domains of competence.
## Paradigm of CBLA

<table>
<thead>
<tr>
<th>Content &amp; Knowledge Acquisition as driving force for curriculum</th>
<th>Outcomes &amp; Knowledge Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher as driving force for process</td>
<td>Learner as driving force for process</td>
</tr>
<tr>
<td>Hierarchical pathway for learning</td>
<td>No hierarchy</td>
</tr>
<tr>
<td>Teacher as responsible party for learning</td>
<td>Teacher Learner Partnership</td>
</tr>
</tbody>
</table>

“...the kind of learning that will define the twenty-first century is not taking place in a classroom – at least not in today’s classroom. Rather, it is happening all around us, everywhere, and it is powerful.”

D Thomas & J S Brown: A New Culture of Learning
Collectives are the medium for participation in the new learning culture.
<table>
<thead>
<tr>
<th>Course Title</th>
<th>Start Date</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fantasy and Science Fiction: The Human Mind, Our Modern World</td>
<td>Jul 23rd 2012</td>
<td>11 weeks</td>
</tr>
<tr>
<td>Clinical Problem Solving</td>
<td>Jan 28th 2013</td>
<td>6 weeks</td>
</tr>
<tr>
<td>Know Thyself</td>
<td>Mar 4th 2013</td>
<td>10 weeks</td>
</tr>
<tr>
<td>The Fiction of Relationship</td>
<td>June 2013</td>
<td>10 weeks</td>
</tr>
<tr>
<td>Introduction to Systems Biology</td>
<td>To be announced</td>
<td>5 weeks</td>
</tr>
</tbody>
</table>
## Paradigm of CBLA

| Typical context for assessment is Proxy and Removed | Authentic/ “in the trenches” Direct Observation |
| Assessment tools singles or few, often MCQs | Multiple, subjective as well as objective Portfolios |
| Emphasis on summative assessment | Emphasis on formative assessment |
| Norm-referenced evaluation | Criterion-referenced evaluation |

The Good Doctor: PUTTING IT ALL TOGETHER
Surgeon 2020+?

Advanced placement college
Portfolio of pre-med competencies
Quantitative competencies by MOOC + assessment
Learning collective for surgery
Deliberate practice of skills early
Adds global health experience
More time needed for QI skills
Met transition requirements early
Tracks milestones in eFolio
Mastery in communication early
Context competencies Yr 4
Competencies Create a True Continuum of Medical Education

Learning

Premedical  Medical School  Residency and Fellowships  Practice

Assessment

2012 AAMC Annual Meeting
Competency-based Learning

IT’S HERE
Competency-based Learning

IT’S NOW
Competency-based Learning

IT’S TIME