JOSEPH S. GREEN, PHD

Past Professional Positions:

- Consultant to 300 CME clients in 30 years (CEO of ***prn*** Inc.—Chapel Hill, NC)
- Member of Review Committee (ACCME—Chicago, IL)
- Alliance for CE in the Health Professions (Fellow, Board Member and President)—Distinguished Service Award

Past Full-time Positions:

- American College of Cardiology: Chief Learning Officer (Washington DC)
- Duke School of Medicine: Associate Dean of CME (Durham, NC)
- Sharp HealthCare: VP for Educational Affairs (San Diego, CA)
- Association of American Medical Colleges (Washington DC)
- University of Southern California SOM (Los Angeles, CA)

1

CME HISTORY: IMPACT ON CURRENT PRACTICE AND IMPLICATIONS FOR THE FUTURE

Linking CME to Quality of Care

Joseph S. Green, Ph.D.

May, 2016

Massachusetts Medical Society

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I. EARLY CME --THE FIRST 64 YEARS (1906-1970'S)

3

PROGRESS THROUGH THE AGES

- 1906- '**weekly programs**' on therapy and basic science for county medical societies
- 1916- '**circuit courses**' for rural physicians in North Carolina
- 1935- rural physicians completing '**practice-based courses'** by Vanderbilt University School of Medicine
- 1955- **Vollan Report *on Postgraduate Education (AMA)*** reported most popular methods for CME included: **reading, conferences and communication with colleagues**

4

PROGRESS THROUGH THE AGES

- 1960's— **bedside teaching** combined **case-based Instruction** with some didactic
- Clem Brown and the **"Bi-cycle approach"** to CME—one wheel is quality assurance and one is CME
- Dryer Report recommended: **films, TV, self-assessment exams and treatment guidelines**
- Michael E. DeBakey, MD proposed: **bedside teaching** from regional medical program to physicians involved in caring for heart, stroke and cancer
- AMA expert panels on **treatment guidelines** for PCP's

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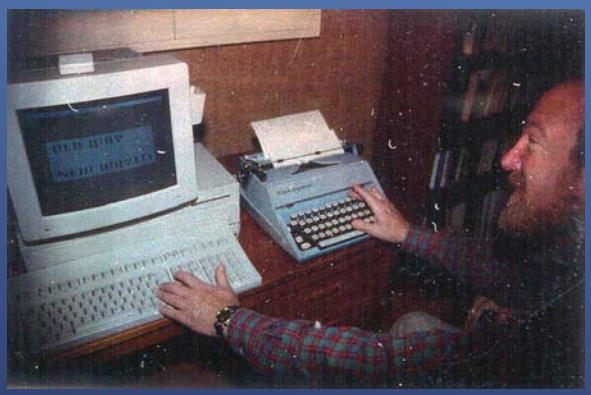

II. TRADITIONAL CME— ADULT LEARNING PRINCIPLES INTRODUCED (1970-2000)

6

PROGRESS THROUGH THE AGES

- 1970's- **Limitations of formal class-room education-** trying to develop ways of **learning from experience, including the AMA's Interactive Multi-medial Self-Instruction Program with Self-Assessment**
- **Video-disc technology** to simulate real world 'educational scenarios' for physician learning, along with **M&M conferences**
- Concepts of **adult education, problem-based, self-directed and practice integrated learning**
- AMA commissioned follow-up study of most popular CME: **reading of journals and books; consultations and hospital meetings**

7

PROGRESS THROUGH THE AGES

- 1980's- Value of **smaller group interactive techniques**
- **Reminder systems, simulated patients and chart-stimulated recall** integrated into medical education
- 1990's- **Linking CME activities to the Quality Improvement efforts** within hospitals and practices and **patient-driven CME, linking to P&T committees, licensure, credentialing and certification efforts**
- Creation and dissemination of **treatment algorithms**, **TQI process**, **QA methods, P&T committees**, **credentialing activities**, **JCAHO compliance, patient simulators**

8

TRADITIONAL CME

RETIRED PHYSICIANS'
BREAKFAST CLUB

9

TRADITIONAL CME:

- Lecture dominated format
- Little evidence of impact
- Minimal collaboration
- Lack of timely response
- Emphasis on credit
- Focus on course production

10

ADULT LEARNING PRINCIPLES

- Link new knowledge to *previous experience*
- Need to understand what they don't know and have a *clear vision of what should be achieved*
- Desire *involvement in the learning process*
- Have moved self concept from dependence to *self-directedness* in the pursuit of knowledge
- Undertake mechanisms for obtaining *feedback on performance* and *reinforcement of learning*
- Address *practical problems* with useful and *immediate applications*

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ADULT LEARNING PRINCIPLES: KNOX, KNOWLES AND HOULE

Assumptions	Andragogy	Pedagogy
Self concept	**Learning is self-directed**	Learning is instructor-directed
Experience	**Accumulated experience is learning resource**	Experience is neither broad nor deep
Readiness to learn	**Relates to tasks in their real life social roles**	Relates to tasks that correspond to development stage
Orientation to learning	**Problem-centered**	Subject-centered
Motivation	**Internal**	External rewards

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TRADITIONAL PLANNING MODEL

- Decide on topic
- Location
- Select faculty
- Faculty select content
- Put content into lectures and panels
- Assess success
  - #'s, $$, happiness

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TRADITIONAL "CME":
PASSIVELY PROVIDING INFORMATION TO PHYSICIANS

- Linear planning models that start with content or faculty
- Exclusive use of passive formats & methods
- No required involvement of learners in improving performance in practice
- No commitment of planners/faculty to designing learning experiences to impact performance or studying outcomes of learning

14

TYPICAL EDUCATIONAL FORMATS

- Medical Schools
- Hospitals
- Specialty Societies
- Communication Co's
- Managed Care Org's

- ***Grand Rounds, Outreach, Symposia***
- ***Grand Rounds, Hands-on Workshops***
- ***Symposia, Annual Mtgs, Enduring Materials***
- ***Enduring Materials, Dinner Mtgs, Satellite Symposia, Teleconf***
- ***Problem-based Learning***

15

III. SHIFT HAPPENED—COMPLIANCE OVERSIGHT & MOVING FROM CME TO CE (2000-2010)

16

PEDICLE SCREW LITIGATION 1988-1993

- The law forbids presentations of false and misleading information at CME events
- Involved organizations sued 400 times in 42 states
- Defendants: Specialty Society and other CME providers and faculty
- Spent millions of dollars proving they should not have been sued

Presentation by Shawn Collins, Esq. at ACCME Workshop

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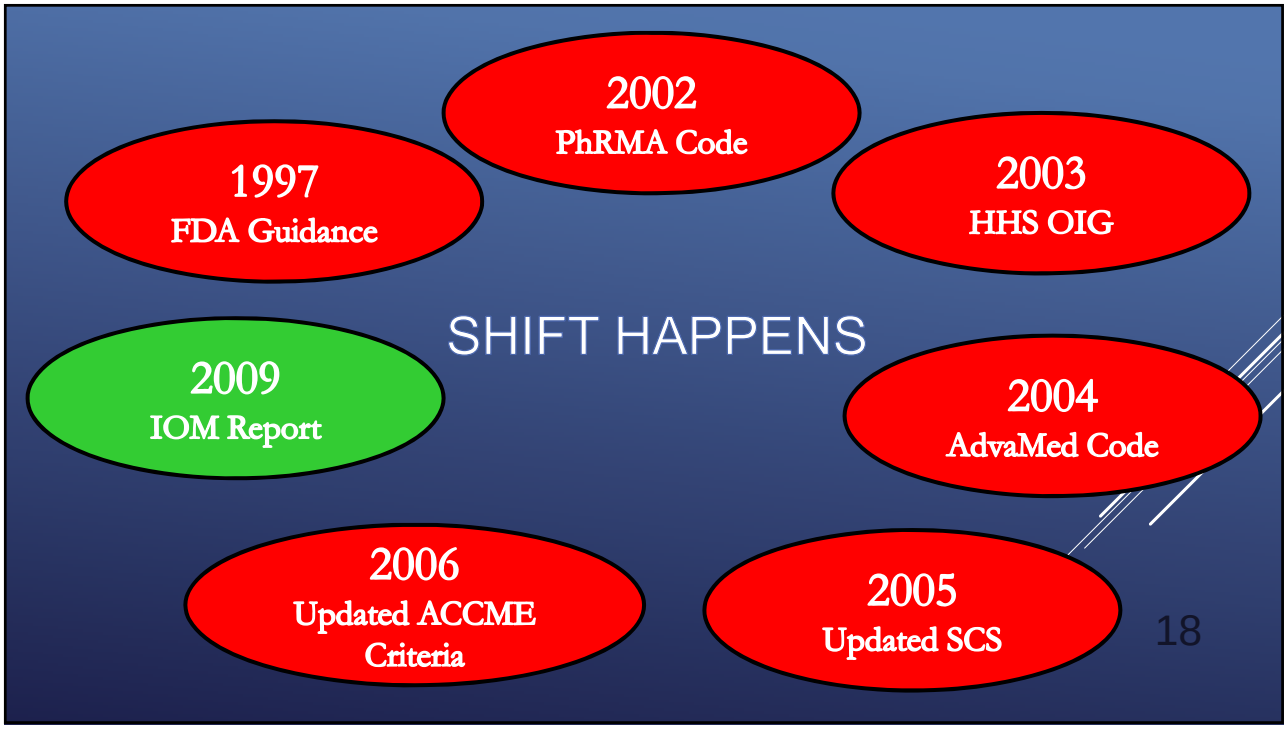

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FOUR LANDMARK IOM REPORTS

- *To Err is Human: Building a Safer Health System--1999*
- *Crossing the Quality Chasm: A New Health System for the 21st Century--2001*
- *Health Professions Education: A Bridge to Quality—2002*
- *Redesigning Continuing Education in the Health Professions--2009*

19

VISION FOR CE/CPD

- Focus on learning and *health care outcomes.*
- Planning based on practice data.
- Help physicians apply "new" knowledge in practice.

Bennett, Green, et. al., Acad Med, December 2000

20

DESIGNING LEARNING FOR IMPACT

Traditional Concepts

- Use our typical format
- Include panels with lectures
- Add small groups

Newer Concepts

- *Start with outcomes-based objectives*
- *Develop and use criteria for most appropriate methods*
- *Focus on barriers and strategies for application of learning*
- *Consider reinforcements for learning*
- *Provide levels of evidence for patient care recommendations*

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INNOVATIVE FORMATS AND METHODS FOR CME ACTIVITIES

- Distance Learning
- Quality/physician performance
- Academic detailing
- Patient simulators
- Simulated patients
- Web-based, e-learning
- Blended learning
- ARS and case studies
- Hands-on skill building
- Just-in-time training
- Practice-based learning
- Point-of-care learning
- Chart stimulated recall

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INNOVATIVE FORMATS AND METHODS FOR CME ACTIVITIES

- Distance Learning
- Quality/physician performance
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IV. CHANGES IN HEALTHCARE—TRANSFORMING FROM CE TO CPD (2008-PRESENT)

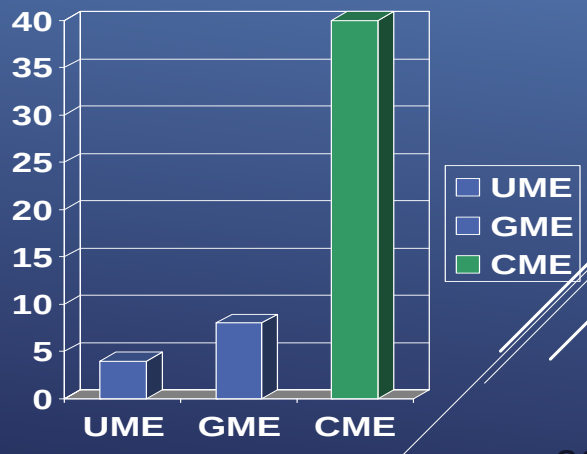
24

Why is 'life-long learning' important to physicians and other clinicians?

25

PHYSICIAN EDUCATION

- Medical School (*UME*)
- Residency (*GME*)
- ***Life-long (CME-CE-CPD)***



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NEW DRIVERS FOR TRANSFORMING HEALTHCARE AND EDUCATION

- Maintenance of certification (national)
- Maintenance of licensure (states)
- Credentialing (local)
- Economy (world-wide)
- US Healthcare reform (Affordable Care Act)
- New funding sources
- Additional regulatory oversight and COI
- *Learner-centered* process for developing curriculum, rather than *subject-centered* (Dewey, early 20th century)

27

Health Care in the US is changing-- we are now in the midst of a radical healthcare and now, political 'revolution'—

The Affordable Care Act! Will it survive?

28

CHANGES IN HEALTHCARE

- Specialty dominated to primary care driven
- Incentives for prevention
- Reimbursement based on meeting quality standards
- Physicians and groups involved in tracking performance in registries
- More team-based care

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CHANGES IN HEALTHCARE

- Use of accountable care organizations
- More physicians joining hospitals—private practice of medicine on life-support
- Increasing demand for ‘appropriate use criteria’ (especially in imaging)
- More use of outcome measures
- Starting to look at data related to reducing racial, ethnic and gender disparities in care

30

"DEFENSIVE ROUTINES ARE COMMON TO HIGH PERFORMING , INTELLIGENT PEOPLE…TO QUESTION EVEN ONE STEP IN THE DECISION-MAKING PROCESS WOULD BE TO FALTER…PHYSICIANS ARE UNCOMFORTABLE IN ABANDONING BEHAVIOR THAT HAS SERVED THEM WELL…"

Argyris-1995

Harvard Business School

31

Where is CME/CPD going?

32

THE LEARNING EXPERIENCES FOR WHICH YOU HAVE RESPONSIBILITY ARE BEING PLANNED TO BRING ABOUT WHAT LEVEL OF OUTCOMES?

1. Participant satisfaction
2. Learning
3. Competence
4. Performance
5. Patient care outcomes
6. Community health
7. Unsure, don't know, can't tell, won't tell, never thought of it

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WHAT IS THE MOST IMPORTANT PART OF THE PROCESS FOR BEGINNING THE PLANNING OF LEARNING ACTIVITIES FOR PHYSICIANS?

1. Selecting the best faculty
2. Making sure the venue and meeting rooms meet the expectations of participants
3. Picking the latest breaking changes in the scientific content
4. Understanding the current competence and/or performance of participating learners
5. Making sure that all faculty have an opportunity to share their knowledge and experience with the learners

35

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CME 'VISION' STATEMENTS

- AAMC Academic Medicine Article
- CMSS 'Repositioning' Document
- Congress 2000 Deliberations
- 'New Paradigm' JCEHP Article

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CME 'VISION' STATEMENTS

- Davis Articles on CME Outcomes
- ACCME in the 21st Century Presentation
- IOM 'Bridge to Quality' Paper on Health Professions Education
- AMA Book--*The Continuing Professional Development of Physicians*

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COMMON ELEMENTS--THE BIG ***FOUR***

1. Linking to physician practices and competencies
2. Enhanced learning opportunities
3. Learning outcomes measurement and research
4. Funding sources and content validity

39

V. TRANSFORMATIONAL STRATEGIES—MOVING TO THE FUTURE--CPD

40

IMPLEMENTING TRANSFORMATIONAL CHANGE

Our iceberg is melting!

41

CME IS NOW ***SERIOUS*** BUSINESS-- THE NATURE OF THE DIALOGUE HAS CHANGED

- Fines levied against Pharma companies
- Threats to Academic Health Centers without adequate firewalls
- CME Colleagues having to testify before Justice Dept and FBI
- CME Faculty being taken off the podium to jail and indicted

42

DEEP CHANGE OR SLOW DEATH??

- "*Deep Change* assumes that one person can change the larger system or organization in which he or she exists."
- " We live in a tumultuous time. Change is everywhere, and we are surrounded by circumstances that seem to demand more than we can deliver."
- "We must continually choose between deep change or slow death."

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CME-CPD: A CONTINUUM OF STRENGTHENING

CME		CPD
Lecture dominated format that is episodic and non-reinforcing.		Increased emphasis on learning.
Little evidence of impact on clinician practice or patient outcomes.		Data-based planning.
Minimal collaboration between learners and CME providers.		Blending of quality management and CME.
Lack of timely response to clinician learner needs.		Collaborative learning system.
Emphasis on credit.		Focus on improving patient outcomes.
Focus on course production driven by an enrollment economy.		CME as integral part of healthcare system.

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PURPOSES HAVE SHIFTED!

- Previous CME Office Purposes:
  - Put on educational activities
  - Raise $$ with grants and tuition
  - Provide CME Credit
- New CPD Office Purposes:
  - Create learning experiences that assist physicians in adapting to new realities
  - Link learning to physician performance
  - Contribute to enhancing quality of healthcare, reducing costs and increasing patient safety

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EXAMPLES

- Hospital: Working with clinical departments to enhance communication, increase organizational efficiencies and improve quality of care
- Medical School: Working with Administration to create a physician executive leadership program to allow MD's to participate in organizational decision-making
- Specialty Society: Use learning experiences to link guidelines and registry data on physician performance to MOC Part 4 requirements
- Medical Education and Communication Companies: Interviewing physicians in multiple practice settings to better understand barriers as a needs assessment process for formal learning activities

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HOW CAN THIS TRANSFORMATION HAPPEN?

- Move from an independent Office of CME to an interdependent Office of Physician Learning and Change within your parent organization
- Become an integral and invaluable part of your hospital, specialty society or medical school
- Become a LEARNING ORGANIZATION !

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STRATEGIES

49

1. Start with the *'Fundamental Linkage'*—CPD, Quality of Care and Context

50

TRANSFORMATIONAL LEARNING MODEL

- Working collaboratively with QI efforts within parent organizations and/or regional consortia
- Assessment driven, competency-based curricula
- Linking learning to QI and payment reform efforts and other aspects of what's coming in healthcare reform
- Point-of-care learning: using sophisticated search technologies and web-based learning platforms

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POSITIONING AND STAKEHOLDERS

- Fundamental Linkage
  - Education and health care system
  - CME-CPD must be part of that linkage

52

2. Use *Backward Planning* and the *Learning Sciences to Enhance Delivery and Assessment of CPD*

53

NEW PLANNING MODEL

- Identify gaps in physician performance
- Measure self-perceived gaps in learner competence
- Delineate desirable outcomes for learning intervention (objectives) based on gaps
- Create content needed to satisfy objectives
- Pick most effective methods to meet objectives
- Select best expert faculty to provide content
- Determine the success of the activity in relation to desirable outcomes

54

HOW TO…GET YOUR PLANNING COMMITTEES OUT OF THEIR RUT!

- Provide alternatives to planners
- Show examples of unique approaches
- Find ‘risk taking’ faculty
- Show data about impact of new approaches
- Use outside design experts

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GUIDING PRINCIPLES – LEARNING SCIENCES

Stages of learning	Recognizes opportunity for learning	Searches for resources for learning	Engages in learning	Tries out what was learned	Incorporates what was learned into practice
Instructional Design	Predisposing	Enabling: Presentation	Enabling: Example	Enabling: Practice	Enabling: Feedback / Reinforcing
Outcomes Framework	Enroll in Continuing Education Activity	Satisfaction with Continuing Education Activity	Learning *Declarative Knowledge*: Knows what	Learning *Procedural Knowledge*: Knows how and when	Competence: Shows how / Performance: Does	Patient Health Status	Community Health
	Level 1	Level 2	Level 3a	Level 3b	Level 4	Level 5	Level 6	Level 7
Assessment	Needs Assessment	Formative Assessment					Summative Assessment	

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Summary

Timing	Program Planning Process	Adult Learning Principles
Before Activity	A. Assess gaps and needs	1.Address gaps in competence and performance and assess learning needs
	A. Define Outcomes, Goals and Objectives	2.Provide motivation for learning
	A. Develop measurement strategies	3.Lead to verifiable outcomes through constructive alignment
During Activity	A. Identify teaching methods	4. Promote learner engagement
	A. Define delivery formats	
	A. Develop content	5.Create relevance and enable translation to real world settings
	A. Establish M & E tools	6.Provide and seek feedback
	A. Implement formative assessments	3.Lead to verifiable outcomes through constructive alignment
After Activity	A. Implement measurement and evaluation tools	3.Lead to verifiable outcomes through constructive alignment
	A. Allow for reflection	7.Promote reflection
	A. Provide summative feedback	6. Provide and seek feedback

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3. Provide Faculty Development

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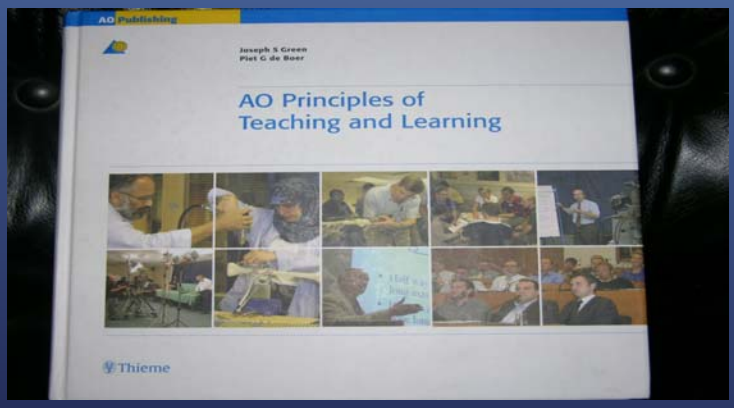
TEACHING OUR CLINICAL FACULTY ABOUT LEARNING AND CHANGE



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CLINICAL FACULTY —NEW *ROLES* AND RESPONSIBILITIES

60

FACULTY AS CLINICAL EDUCATOR/LEARNER

- Course Chair
- Education Committee/Commission member
- Speaker
- Small group facilitator
- Faculty Mentor
- Moderator
- Panelist
- Learning planning committee member
- Evaluator

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FACULTY ROLE IN CME

- **Faculty**: cornerstones of Continuing Professional Development
- **Faculty role:** assure validity of content (along with clinicians on the planning committee) and share content expertise with colleagues

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FACULTY ROLE IN CME (CON'T)

- Because of new federal government oversight of CME…
- To prevent healthcare fraud and abuse…

Faculty must understand regulatory environment

63

CHALLENGE ASSUMPTIONS IN YOUR FACULTYS' ROLE!

- **Don't use same formats and methods just because they have always done it that way**
- Expand their comfort with new formats and methods
- **Learn about new educational methods: *"From Curricular Goals to Instruction: Choosing Methods of Instruction"* Patricia Thomas, MD and David Kern, MD, MPH (in Methods for Teaching Medicine)**
- Use methods that:
  - Tied to competencies and key learning outcomes
  - Most effective to accomplish goals
  - Promotes interaction of learner with content, faculty and other learners
  - Authentic—closest to reality of practice setting

64

4. Initiate Internal and External *Partnerships: Collaborate*: On Local, Regional, National, or International Basis

65

COLLABORATION AND PARTNERSHIPS

- Complimentary organizations
- Joint or co-sponsors
- Division of labor—who does what
- Partnership agreements
- Delegating responsibilities
- Grants

66

IDEAL ORGANIZATIONAL CHARACTERISTICS

- Administrative competence
- Content validity
- Regulatory sensitivity
- Educational sophistication

67

CONTEXT

- What contextual factors might be important in the success or failure of a project designed to strengthen CME-CPD.
- Several levels of context:
  - Administrative unit for CME-CPD.
  - The organization that it lives in.
  - The community that surrounds it.
  - The regional healthcare system.
  - The national healthcare system.
  - The developmental level of the country.

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POTENTIAL PARTNERS IN CME VENTURES

- **Communication/Education Companies**
  - Some accredited, some not
  - Full service educational organizations
  - Dependent on Pharmaceutical resources
  - Very responsive to time demands
- **Academic Medical Centers/Schools**
  - Access to Key Opinion Leader's and other faculty
  - Not dependent on Pharmaceutical grants
  - Can be bureaucratic and slow
  - Some leaders understand regulations, some do not

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POTENTIAL PARTNERS FOR GRANTORS IN CME VENTURE

- **Specialty Societies**
  - Dedicated to education of its members
  - Bring resources to the table
  - Are not necessarily tied to Pharmaceutical support
  - Have access to KOL's and other faculty
- **Hospitals and Health Systems**
  - Closest to actual patient care
  - Minimal resources brought to partnership
  - Opportunity to measure outcomes
- **Payers and/or FEDS**

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INTERNATIONAL CPD LITERATURE

- WHO (World Health Organization) World Health Statistics, 2014, Geneva, Switzerland
- Frenk, Julio, et al, Health Professionals for a new century; transforming education to strengthen health systems in an interdependent world. Lancet 2010: 376:1923-1958 (Harvard School of Public Health)

71

International Environment:

Problem Analysis

- Health Care is changing around the world and needs to improve
- CE for Health Professionals is not typically designed to improve the quality of health care provided by health systems or clinicians
- Significant amounts of money are spent annually on CE for Health Professionals that do not result in any demonstrable improvements in clinician competence, performance or patient outcomes

72

2013 WHO PUBLICATION

1. Continuous development programs for faculty
2. Adapting curricula to the evolving health-care needs of their communities
3. Implementing inter-professional education (IPE)
4. CPD of health professionals relevant to evolving health-care needs

6. Expand *funding* sources

74

POSSIBLE FUNDING FOR CPD

- Members (increasing dues)
- Physician Learners (philanthropy)
- Physician Learners (increasing registration revenues)
- Pharma and Device Companies IME Grants
- Philanthropic Foundations
- Government Agencies
- Payors
- Other Commercial Interests (e.g. car dealers, computer companies, etc.)

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5. Improve Strategic Leadership of CPD Offices

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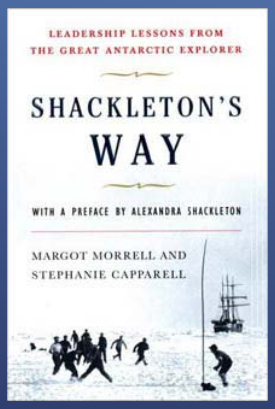

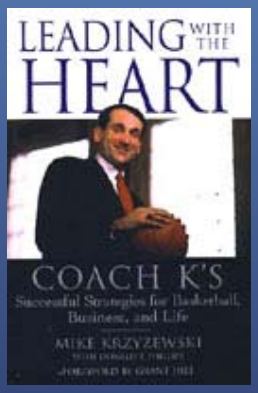

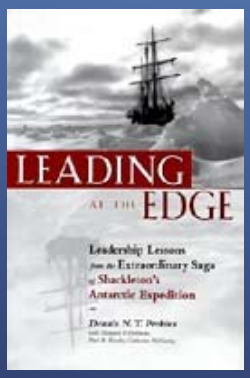

LEADERSHIP BOOKS

77

NEVER LOSE SIGHT OF THE ULTIMATE GOAL, AND FOCUS ENERGY ON SHORT-TERM OBJECTIVES.

- Make sure objectives are concrete
- Make sure participants understand why the objective is important
- Ensure stakeholders have had input into objectives

78

MASTER CONFLICT -- DEAL WITH ANGER IN SMALL DOSES, ENGAGE DISSIDENTS, AND AVOID NEEDLESS POWER STRUGGLES.

- Is this the 'hill to die on'?
- Life is too short to spend your time hitting your head against brick walls
- Where can you compromise?? Start there with those who disagree

79

INSTILL OPTIMISM AND SELF-CONFIDENCE, BUT STAY GROUNDED IN REALITY.

- Combine optimism and realism—rubber band analogy
- Obliged to constantly point to the vision, but also be honest about current status
- Realism and pessimism—there is a difference

80

FIND SOMETHING TO CELEBRATE AND SOMETHING TO LAUGH ABOUT.

- If you can't laugh about a situation, you have lost perspective
- You can have a sense of humor and still be serious
- Laughing and celebrating can sometimes do more than intense negotiation

81

BE WILLING TO TAKE THE BIG RISK.

- Sometimes you can get there with a lot of little steps, sometimes you have to leap
- Since we are doing CME every day, wouldn't it be nice to make a difference
- What is the 'risk'—no one is dying here

82

NEVER GIVE UP -- THERE'S ALWAYS ANOTHER MOVE.

- Seek advice form others with totally different perspectives
- Contemplate changing the goal
- Sometimes it is ‘time for you to go’

83

CONCLUSIONS

84

TRANSFORMATIONAL QUESTION

- Can the CE Community fit into this new model?
- Is there a logical bridge to get to CPD?

85

The following represent eight PATHWAYS TO ORGANIZATIONAL TRANSFORMATION for Offices of CE in the health professions in academic settings:

86

TRANSFORMATIONAL PATHWAYS

1.Getting accredited, staying accredited and obtaining ***accreditation with commendation***

2. Creating a ***strategic planning process*** to determine priorities for transformation

3. Establishing an ***assessment and evaluation strategy*** to measure gaps and impacts on learner competence, performance and quality patient-care outcomes

4. Developing a ***competency based curriculum*** for the organization and the target learners

5. Designing a ***faculty development program*** to insure physician involvement in organizational transformation and enhance learning activities through a ***backwards planning*** process

6. Using the ***new technologies to enhance learning*** formats, with methods and media

7. Improving ***organizational effectiveness and revenue*** by dealing with politics, internal stakeholders and external collaborators, consultants, contractors, industry groups and foundations

8. Publishing outcomes of transformation and ***contributing to the profession***

87

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