

CURRENT CHALLENGES FOR THE MEDICAL EDUCATOR IN UNDERGRADUATE MEDICAL EDUCATION

Session Layout

- Rick Vari: Welcome and introductions
- Rick Vari: The role of the basic science educator changing from lecturer to coach
- Peter de Jong: Utilizing technology to support the changing teaching strategies
- Neil Osheroff: Tools to successfully integrate clinical and basic sciences
- Rick Vari: Moderated discussion: Reflections on the challenges presented and identifying and addressing future challenges (audience participation)



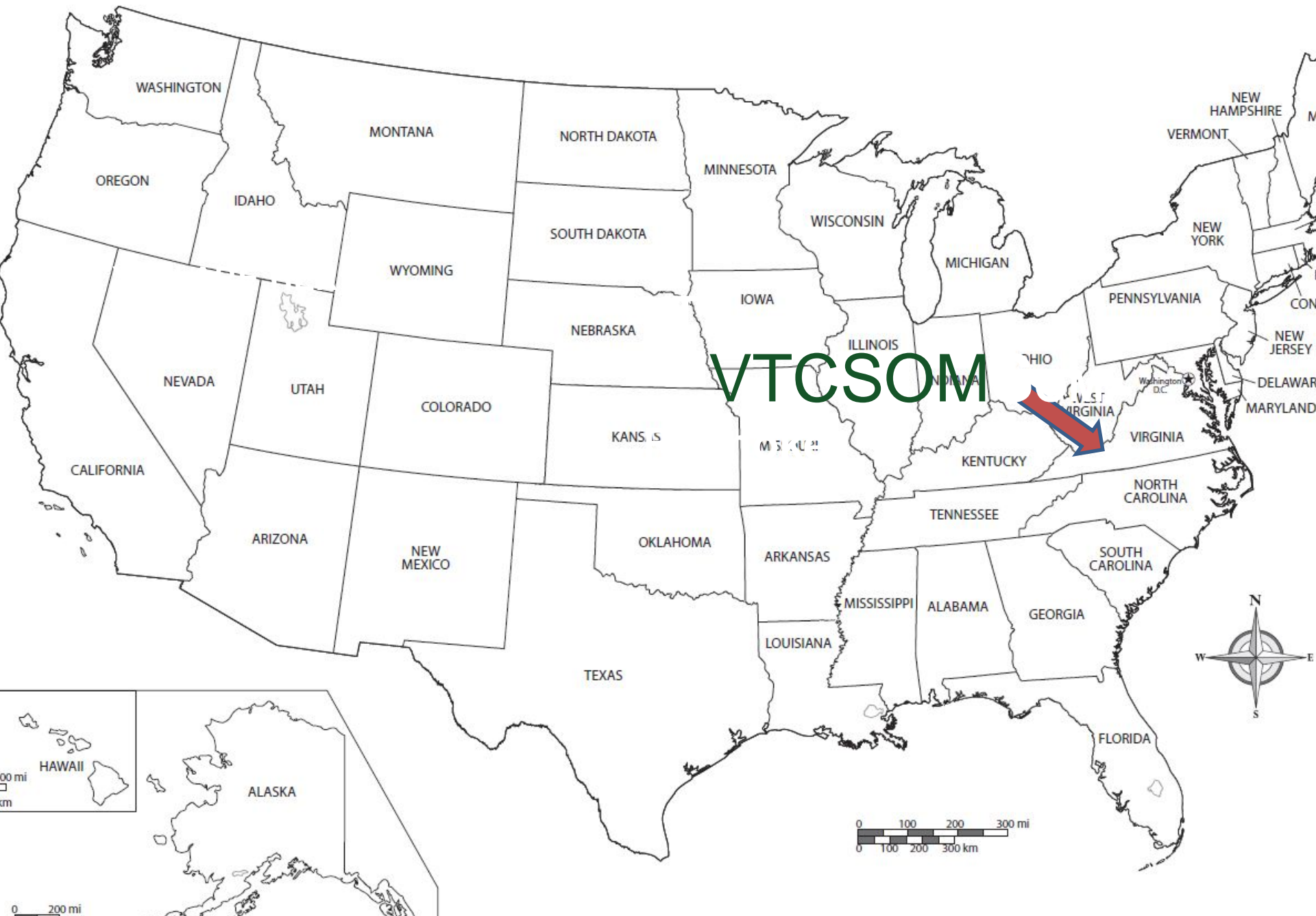
CURRENT CHALLENGES FOR THE MEDICAL EDUCATOR IN UNDERGRADUATE MEDICAL EDUCATION



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MEDICAL SCHOOL GRADUATE COMPETENCIES

- KNOWLEDGE OF AND ABILITY TO APPLY BASIC AND CLINICAL SCIENCE KNOWLEDGE TO PATIENT CASES
- CLINICAL SKILLS (COMMUNICATION AND PROCEDURES)
- LIFE-LONG LEARNING
- RESEARCH PRINCIPLES
- PROFESSIONAL IDENTITY
- INTERPROFESSIONAL APPRECIATION



MEDICAL SCHOOL PROGRAM CHALLENGES

- TIME BASED VS COMPETENCY BASED
- RIGID CURRICULAR STRUCTURES
 - 2X2 FLEXNERIAN MODELS
 - STAND ALONE CLERKSHIPS
- FACULTY RESPONSIBILITIES (OTHER THAN TEACHING)
 - RESEARCH FUNDING
 - CLINICAL PRACTICE
- CHANGING STUDENT CHARACTERISTICS
- UNHEALTHY LEARNING ENVIRONMENT
- INCREASED EMPHASIS ON USMLE STEP-1 BOARD EXAM



BASIC SCIENCE KNOWLEDGE

MEDICAL EDUCATOR ROLE

- FIRST TWO YEARS, DEPARTMENT COURSES
- INFORMATION PROVIDER OF DISCIPLINE-BASED CONTENT AT INDIVIDUAL SCHOOLS
- EVERY SCHOOL HAD EXPERTS IN EVERY DISCIPLINE
- LECTURE BASED (>75%)



WHAT HAPPENED?

- DEPARTMENTS COMBINED (BIOMEDICAL SCIENCES)
- PUSH FOR BASIC SCIENCE AND CLINICAL SKILLS INTEGRATION (ORGAN SYSTEMS BLOCKS)
- ACCESS TO INFORMATION BECAME INSTANTANEOUS AND ALMOST UNLIMITED (INTERNET)
- STUDENTS GREW-UP IN A TECHNOLOGICAL AGE FASTER THAN FACULTY
- STUDENTS STOPPED COMING TO LECTURES



WHAT HAPPENED?

- ADVANCES IN FACULTY UNDERSTANDING OF COGNITIVE LOAD, LONG-TERM LEARNING VS. MEMORIZATION
- DEVELOPMENT OF ACTIVE LEARNING MODALITIES TO FOCUS THE EMPHASIS ON “STUDENT LEARNING” RATHER THAN “FACULTY TEACHING”



SO MANY APPROACHES

Case-based Active
Self-directed **Interactive**
Communication Interdisciplinary/inter-professional
Teams/teamwork
Integration Collaborative
Team-based
Small group
Problem-based
Discussion

FLIPPED CLASSROOM

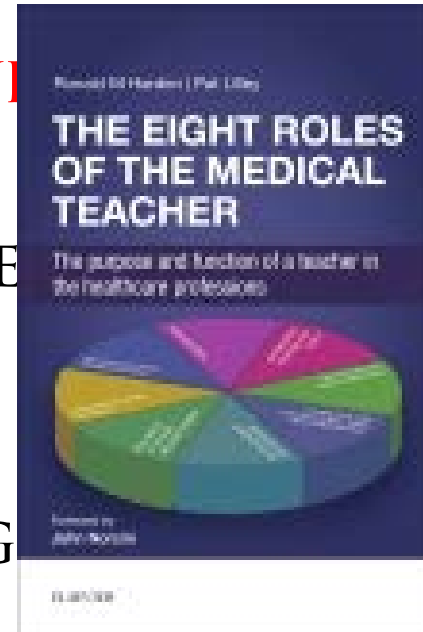
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CHANGING ROLES OF THE MEDICAL TEACHER

- INFORMATION PROVIDER
- FACILITATOR
- RESOURCE DEVELOPER
- ROLE MODEL
- SCHOLAR
- CURRICULAR MANAGER
- ASSESSOR
- PLANNER

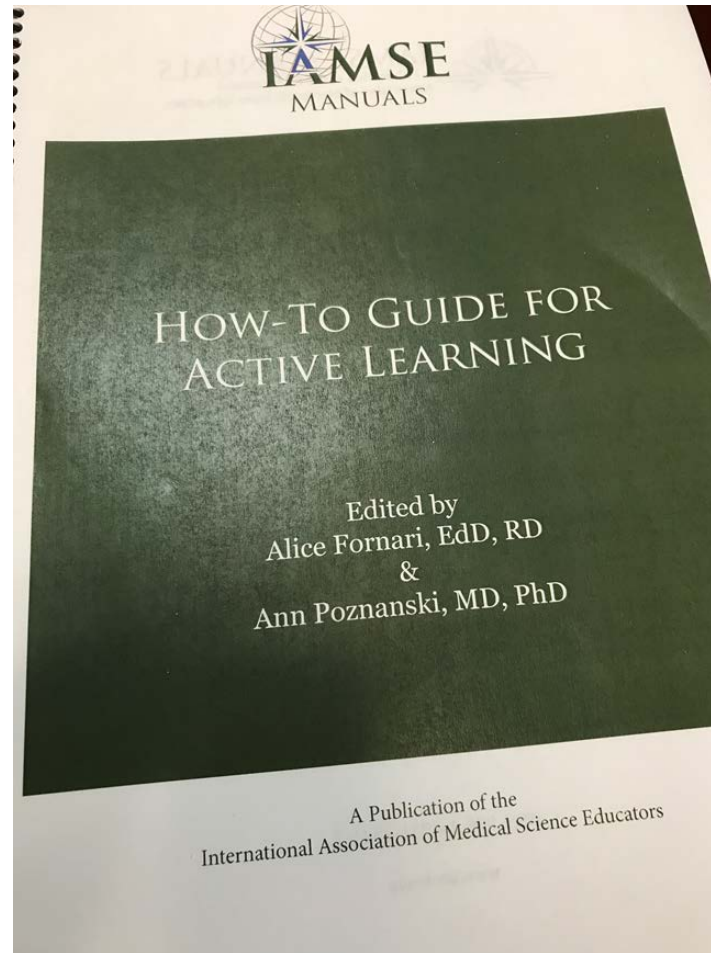


CHALLENGES TO ACTIVE LEARNING

- FACULTY RESISTANCE
 - SUCCESSFUL AND ENGAGING LECTURER
 - TIME INVESTMENT
 - NO ROLE MODELS TO HELP
 - ACTIVE LEARNING ZEALOT SYNDROME
- STUDENT APPREHENSION
 - LIKE TO GO TO LECTURE (LEARNING STYLE)
 - DON'T HAVE TIME TO PREPARE
 - USMLE STEP-1 (PASSIVE)



RESOURCES



SUGGESTIONS

- HARDEN AND LILLY'S NEW BOOK
- IAMSE RESOURCES
- ACCEPT NEW ROLES
- REFLECT ON YOUR STRENGTHS AS A TEACHER
- INDIVIDUALIZE YOUR APPROACH TO EXPANDING YOUR EFFECTIVENESS



CHALLENGE: USMLE STEP-1

- COMPREHENSIVE BASIC SCIENCE EXAM AT END OF YEAR 2
- USED AS SCREENING TOOL FOR RESIDENCY INTERVIEWS (NOT PASS/FAIL); THE ACTUAL NUMBER
 - 44,000 APPLICANTS; 30,000 POSITIONS
 - MEAN SCORE FOR MATCH 233; PASSING 192
- STUDENTS OBSESSED WITH PREPARING
 - Q-BANKS, FIRST-AID, REVIEW BOOKS



USMLE STEP 1 CONSEQUENCES

- CURRICULAR INNOVATIONS ARE DEPRIORITIZED BY STUDENTS
 - CLINICAL SKILLS, IPE, ACTIVE LEARNING ACTIVITIES
- INCREASED STRESS
- NEGATIVE IMPACT ON THE LEARNING ENVIRONMENT



SUGGESTIONS

- DIALOG WITH ACGME AND AAMC TO MOVE THE EXAM TILL LATER IN TRAINING
- APPLY STRATEGIES TO INCLUDE USMLE TYPE QUESTIONS IN ACTIVE LEARNING EXPERIENCES
- INCORPORATE WELLNESS ACTIVITIES TO ADDRESS THE STRESS OF THIS EXAM





Gracias por su atención

