

● Congreso Mundial de Educación Médica ASCOFAME 60 años
XXI Conferencia Panamericana de Educación Médica
Transformando la Educación Médica para una Mejor Atención en Salud



ASCOFAME
Asociación Colombiana de
Facultades de Medicina



CURRENT CHALLENGES FOR THE MEDICAL EDUCATOR IN UNDERGRADUATE MEDICAL EDUCATION



IAMSE

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New medical school
42 students/class
6th class graduates
in 2019





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



Explosion of Medical Knowledge

- A 2004 study estimated it would take 29 hours per weekday or 351 hours per month for a physician to stay abreast of primary care literature.

- Alper et al. How Much Effort Is Needed to Keep Up with the Literature Relevant for Primary Care? *Journal of the Medical Library Association*. 2004 October; 92 (4): 429 – 37.

Long term Challenge

- Curricular design that integrates basic science and clinical sciences and skills, research and interprofessionalism

Where will we get the time?

“ten pounds of pennies in a nine pound sack”

By 2020, Medical Knowledge
will double every 23 days



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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%)



Medical Education Evolved

- 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 (when allowed) –Assessment drives learning- USMLE Step-1



Medical Education Research


- 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”

IS BASIC SCIENCE KNOWLEDGE NECESSARY for CLINICAL DIAGNOSIS?

Boshuizen, Schmidt, Rikers, Norman et al



SUBSUMED AND INTEGRATED
ENCAPSULATED
DEVELOPMENT OF “ILLNESS SCRIPTS”
CATEGORIZATION – categories/key clinical
features



Science is fundamental: the role of biomedical knowledge in clinical reasoning

NICOLE N WOODS

- Biomedical knowledge enhances clinical diagnosis skills
- Biomedical knowledge can help novices develop a coherent and stable mental representation of disease categories.
- Clinical teachers should attempt to make explicit connections between biomedical knowledge and clinical facts during training
- Physicians display meta-cognitive bias: do not recognize how their knowledge of biomedical sciences shapes the way they view, organize and interpret clinical information
- Students need to learn the links and mechanisms that will be of greatest value; the 2+2 model may not conducive to this type of learning
- A key goal throughout early medical training should be to integrate clinical information and supporting biomedical concepts into a coherent package

Medical Education 2017:41:1173-1177

PARADIGM SHIFT IN MEDICAL EDUCATION





CHALLENGE #1

Focus the emphasis of medical education 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

PBL

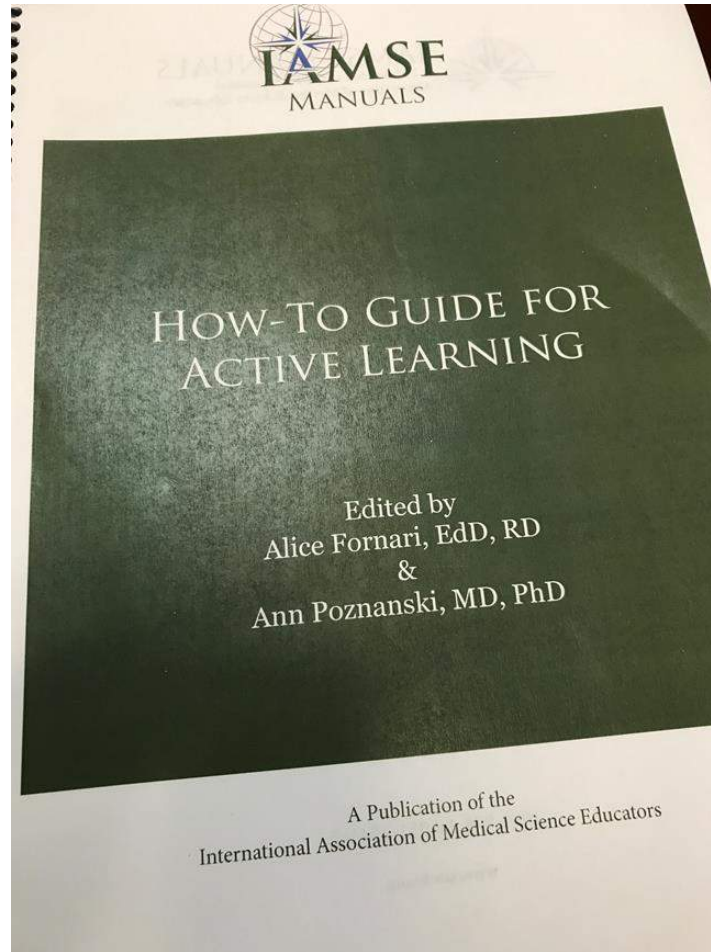
TBL



Active Learning Pushback

- 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) –ASSESSMENT
DISCONNECTION

Resources



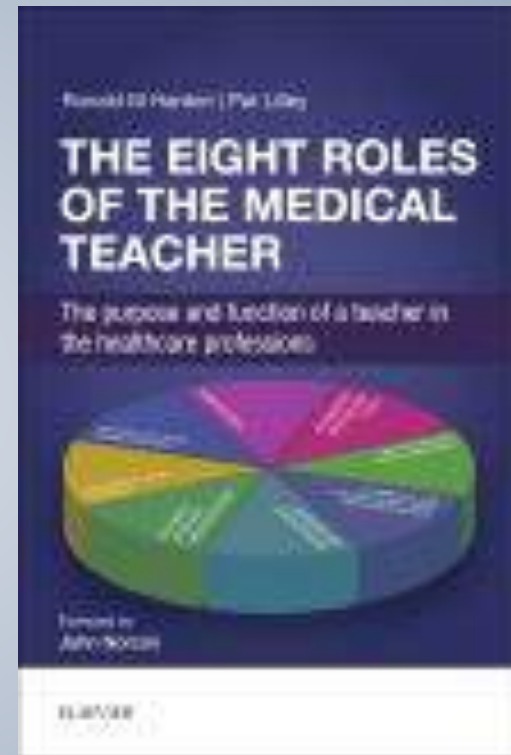


CHALLENGE #2

- Find your true strengths as a medical educator; enhance them
- Embrace new roles as a medical teacher
- Learn about and adapt to new generational learners

NEW ROLES FOR MEDICAL TEACHERS AND CURRICULUM INNOVATORS

- › Information Provider
- › Facilitator
- › Resource Developer
- › Role Model
- › Scholar
- › Curriculum Manager
- › Assessor
- › Planner





Challenge #3 – Assessment Disconnection

- 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
 - International Foreign Medical Graduates
 - Mean score for match 233; passing 192
- Students obsessed with preparing
 - Q-banks, First-Aid, review books



Assessment Disconnection Consequences

- Curricular innovations are deprioritized by students
 - Clinical skills, IPE, active learning activities
- Increased stress
- Negative impact on the learning environment

Catch 22

- › A *catch-22* is a paradoxical situation from which an individual cannot escape because of contradictory rules. The term was coined by Joseph Heller, who used it in his 1961 novel *Catch-22*.





“Wards vs. Boards”

“We must prepare students for clinical learning on the wards and residency but that takes time away from studying for the boards which they have to pass to go on to the wards and score increasingly high numbers to get a residency interview”

US Medical Education “Catch 22” - 2018



Long-term solutions – Assessment

- National discussion underway with ALL major stakeholders at the table (ACGME, AAMC, AMA, State Licensing Boards, NBME, Students InCUS – Philadelphia, March 2019)
- Apply strategies to include USMLE type questions in active learning experiences
- Incorporate wellness activities to address the stress of this exam
- Align assessment modalities to really emphasize student learning



Long-term solutions –Active learning and new educator roles

- Ron Harden and Pat Lilly's new book
- IAMSE resources (Web Seminar Series)
- Accept new roles
- Reflect on your strengths as a teacher
- Individualize your approach to expanding your effectiveness

2019 IAMSE Meeting in Roanoke VA



Adapting to the Changing Times in
Health Sciences Education

Hosted By:
VIRGINIA TECH
CARLION SCHOOL
OF MEDICINE

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Getting translational
research into class

How to Use Disruptive
Technology to Make
Education Better - Not
Just Different

Integrating difficult
topics into the
curriculum using
End of Life Care
and Hospice as
examples

Generation Z: the
new kids on the
block



CONFERENCE PROGRAM

The IAMSE meeting offers a lot of opportunities for faculty development and getting the best of the medical sciences and medical education across the continuum together. This year's main topic is Adapting to the Changing Times in Health Sciences Education. Confirmed keynote speakers are Don Cleveland (University of California, USA), Claudia Krebs (University of British Columbia, Canada), Craig Lenz (Alabama College of Osteopathic Medicine, USA), and Geoff Talmon (University of Nebraska Medical Center, USA). The meeting offers workshops, focus sessions, oral and poster presentations, and several networking opportunities. In addition to the program, the IAMSE Fellowship and AMEE-ESME course will be offered.

WHO SHOULD ATTEND?

The meeting is designed for all those who teach and lead curricula in the sciences of medicine and health. Participants include basic scientists and clinical medical faculty as well as members representing faculty from various other health care disciplines and educational disciplines. Also students are always represented and encouraged to attend. This international meeting typically hosts over 25 nationalities from around the world.

ABOUT ROANOKE

The Roanoke Valley is conveniently located off Interstate 81 and the Blue Ridge Parkway at the southern tip of the Shenandoah Valley. Surrounded by scenic beauty, the Roanoke region is a perfect destination for visitors wanting a little of everything in a Blue Ridge mountain getaway. Enjoy the railroad heritage, take in the arts and culture, shop, eat and enjoy the wealth of outdoor recreation in the heart of the breathtaking Blue Ridge mountains.

KEY DATES

September 15, 2018: Deadline for workshops and focus sessions
October 1, 2018: Deadline for posters and oral presentations
April 1, 2019: Early bird deadline for registration

FOR ADDITIONAL INFORMATION, PLEASE VISIT:
IAMSECONFERENCE.ORG