



UMMC's medical education transformation: assessing the past, present, future

By Dr. Patrick Smith



Smith

The Past

Following Mississippi's 1817 entry into the Union, the state's health care needs were abundantly clear as evidenced by widespread disease, lack of medical professionals and the dissolution of the Board of Medical Censors.

Following 33 years of discussion, a "Department of Medicine" was established at the University of Mississippi in 1903. The department was designed to provide the first two years of a recommended curriculum for schools of medicine.

During this era of medical education, "medical teachers" were expected to impart knowledge focused on the scientific basis of medicine. The paradigm of medical education was fundamentally "pedagogical teaching" through formal instruction with the focus on the teacher.

The Present

Jump-starting in 1955 to a four-year curriculum of study, our current School of Medicine has a history of students doing the same thing at the same time, with a predominate core structure of two years of basic science followed by two years of clinical work, referred to as a two-plus-two time-fixed curriculum model.

Housed in a new structure, the school has 23 departments with approximately 860 faculty members and was most recently accredited in 2011 by the Liaison Committee on Medical Education with an exceptional review.

We are now at an inflection point for the continuum of medical education where the balance of "teaching" and "learning" is shifting. More contemporary medical educational methods encourage the active participation of medical students as curriculum design is evolving. With urging and oversight from accrediting bodies, medical schools are helping medical students and faculty shift from teacher-centric to learner-centric curricula in which inculcating the process of continuous learning is the cornerstone of professional development.

Now, medical education's archetype is the "andragogy of lifelong learning" using learner-centric models in which the educator focuses on improving student learning more than delivering facts.

The Future

With an emphasis on learner-centric and lifelong-learning models, the vanguard of medical education for the future medical school will revolve around longitudinal and integrated competency-based curricula. Such curricula will be time-variable and outcomes-fixed.

Pioneering schools of medicine will define competencies and the variable will be the amount of time it takes to get there. Instead of once-a-year graduations, there may be numerous graduations per year. The shift from predominately teaching to learning will focus on inter-professional team-based experiences, including systems management and the social and behavioral sciences as represented in the new Medical College Admission Test.

Students will immerse themselves in learning opportunities at their own pace using a wide array of artificial intelligence, robotic, virtual reality, digital and online tools and

resources. Faculty will be challenged to learn to design the competency assessments that interface with these technological resources.

These extraordinary forms and sources of learning will plunge the learner into the tasks and actually do them. In upcoming frameworks of medical education, faculty coaches will oversee learner-centric, team-based, inter-professional, real, virtual and digital learning structures.

As medical education evolves from the groundbreaking Flexner report of 1910, the spirit of our time is to continuously readjust toward revolutionizing a medical school curriculum that is outcomes-focused while taking full advantage of technological advances to accommodate learner variation.

Education tip: What is LearnTrax?

By Wendell Douglas

The Office of Medical Education provides an instructional design resource website to support instructional best practices, including teaching and learning goals and objectives, curriculum mapping, active engagement strategies, formative and summative assessments and the utilization of feedback skills, among others.



Welcome to **LearnTrax**, an instructional design resource site for the School of Medicine's Office of Medical Education. We are here to partner with teaching faculty to support best practice teaching and learning experiences of our medical students as they develop into self-directed, lifelong learners. This partnership provides for individual or departmental faculty development support for very important elements of the curriculum, such as:

- Development of course, session, and learner objectives that best articulate the desired outcomes of the courses;

To access LearnTrax, visit the UMC Intranet homepage, open the Education tab, navigate to the "School of" links and select "Medicine-LearnTrax."

We welcome comments, responses and ideas for resource inclusion. For more information, to ask a question or to make a comment, call 4-1212 or email wdouglas@umc.edu.

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Curriculum corner: Reflections on the School of Medicine curriculum

By Loretta Jackson-Williams



Jackson-Williams

Since 2008 I have had the opportunity to lead the SOM Curriculum Committee as its chair. The committee's charge is to oversee the design, management and evaluation of the educational program of the School of Medicine through participation by faculty, students and administration.

The committee works to develop and implement a coherent and coordinated curriculum that includes a logical sequencing of various segments of the curriculum, coordination within and across the academic periods of study, and appropriate methods of pedagogy and evaluation to meet the overall educational objectives of the School of Medicine. This is an enormous task that a number of individuals have diligently worked to make happen.

Since 2008 there have been a number of deliberate changes to the curriculum. These changes were thoughtful and intended to enhance and improve the educational outcomes for students. The committee chose to implement many consistent small changes instead of a few massive changes to ensure School of Medicine faculty and students were ready for the transformation.

The committee recognizes there are many stakeholders for this educational program, including patients, students, families, faculty, the medical school itself, local communities, the state of Mississippi and undergraduate institutions

During the last 10 years the committee has managed to accomplish a number of objectives. Among them are:

- Increasing the School of Medicine's class size from 100 to 155, which is critical for a state with the lowest number of physicians per capita,
- Redesigning the M3 curriculum year to include electives,

- Incorporating simulation and clinical skills assessment into the preclinical curriculum,
- Providing a longitudinal focus on professionalism and population health within the curriculum,
- Developing consistent evaluation tools for the preclinical and clinical curricula,
- Establishing an education dashboard that is used to make data-driven curricula decisions,
- Integrating inter-professional education and service-learning education into the curriculum,
- Expanding the educational program objectives,
- Conducting a number of faculty development sessions with retreats and workshops, particularly item-writing workshops,
- Developing a course directors' guide that is updated annually,
- Implementing integrated neuroscience courses, and
- Aligning the curriculum within the curriculum years.

During the next five years, the committee plans to continue this constant refinement of the curriculum by implementing the following, among other, objectives:

- Aligning the curriculum across each curriculum year,
- Redesigning the M4 curriculum year,
- Providing a longitudinal focus on ultrasound skills within the curriculum,
- Expanding the inter-professional educational focus within the curriculum, and
- Ensuring specific societal issues are addressed within the curriculum, such as pain management.

The committee welcomes committed faculty and staff to continue this work.

Employee spotlight: longtime education supporter shares her experiences

By Angela Bates



Bates

As I reflect on my time at UMMC as an education administrator in the Department of Pediatrics, it is hard for me to believe my journey began more than 30 years ago.

When my daughter was 16 months old, she was diagnosed with an illness that required her to spend several weeks at a time in the Children's Hospital.

I was impressed with the staff, the atmosphere and the professionalism at UMMC.

The care and compassion the doctors and nurses showed to her and to our family was beyond our expectations. When I decided to return to work, I knew that working at UMMC was a great opportunity, so I was thrilled when a position became available.

As my time here comes to an end and my retirement fast approaches, I have a variety of emotions. I am amazed at how much has changed with the implementation of technology. During my early years here, I typed student evaluations on an actual typewriter. Now, evaluations are generated through a web-based program called E-Value/MedHub.

I feel grateful to have been able to give back to UMMC after all it has done for my family throughout my daughter's illness and during my employment here.

One of the most rewarding parts of my job has been working with students and helping them prepare to become future physicians. I have enjoyed working with some of the best faculty and administrators around, and I will miss them all as they have been such a blessing to me, both personally and professionally.

Lastly, I am excited. My family of four has grown into a family of nine. My children are now married adults and my husband and I have three precious grandchildren. I am looking forward to spending quality time with each of them!

My life has been a journey, and although the circumstances that first brought me to UMMC were difficult, I am truly thankful. I look forward to discovering where the next path may lead. Hopefully it won't involve a one-mile walk or a bus ride to a large building . . . unless that building is a shopping mall!