

What do medical students really think about lectures?

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Medical College of Georgia Curriculum

	Phase 1	Phase 2
	Cellular & Systems Structures Gross Anatomy, Histology, & Development	Cellular & Systems Disease States- Systems Based Modules
	Cellular & Systems Processes Biochemistry, Genetics, & Physiology	↓ Fundamentals Hematology- Cardiology Pulmonary- Renal Endocrine- GI CNS- Musculoskeletal
	Brain & Behavior Neuroscience & Psychiatry	
	ECM 1	ECM 2
# Medical Students	180 (190)	180 (190)

What did we think they would say?

Adult learners prefer:

- Self directed learning
- Practical learning drawn from their own life experiences
- Task centered and experiential learning

(M. Knowles, 1970)

Studies show:

- PT students prefer lecture to group discussion in physio. course (D. Lake, 2001)
- Med students prefer lecture to SP interaction in surgery clerkship (M. Carter, 2004)
- Med students prefer lecture to computer instruction in physio. course (D. Richardson, 1997)

Methods

“Interests, Attitudes, and Approach to Learning Survey” was administered to Phase 1 (Freshmen) and Phase 2 (Sophomore) medical students in spring of 2004, 2005, and 2006.

100 question survey divided into 3 parts:

- Cognitive behavior ¹
- Attitudes toward social issues in medicine ²
- Learning environment ³

1. Mitchell, R. (1994) The development of the cognitive behavior survey to assess medical student learning. *Teaching and Learning in Medicine* 6: 161-167

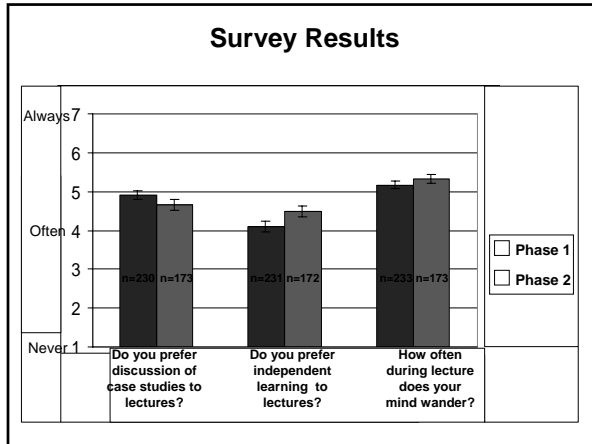
2. Parlow, J. & Rothman, A.I. (1974) A scale to measure attitudes toward psychosocial factors in healthcare. *Journal of Medical Education* 49: 385-387

3. Marshall, R.E. (1978) Measuring the medical school learning environment. *Journal of Medical Education* 53: 98-104

Cognitive Behavior Survey Questions

1=Never 2 3 4 5 6 7=Always

- Do you prefer discussion of case studies to basic science lectures?
- Do you prefer independent learning to class lectures in the basic sciences?
- How often during lecture does your mind wander?



Learning Environment Survey Question

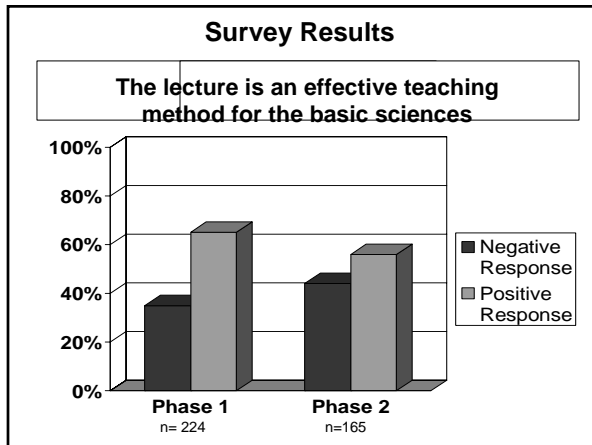
1=Seldom 2=Occasionally 3=Fairly Often 4=Very Often

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Negative Response Positive Response

- The lecture is an effective teaching method for the basic sciences.



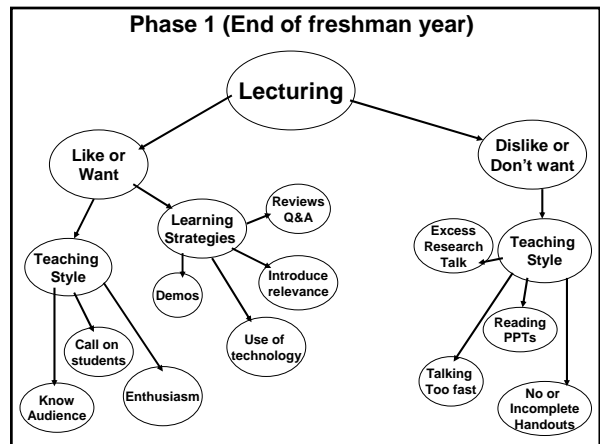
Methods

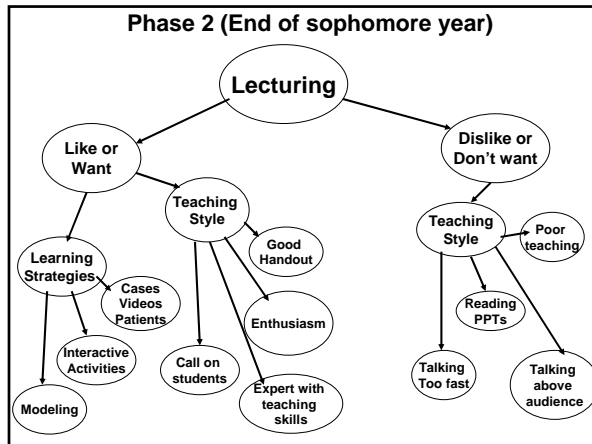
Conducted student led focus groups with Phase 1 and Phase 2 students during the summer of 2004-2006.

- Asked twelve trigger questions or statements to determine how students view the basic science years of their education.
- Four of those questions assessed student opinion of teaching techniques.

Focus Group Trigger Questions

- I am most engaged in class when...
- I am least engaged in class when...
- What techniques, other than lecture, have you seen used *effectively* to teach basic science topics?
- What techniques, other than lecture, have you seen used *ineffectively* to teach basic science topics?





Summary of Themes

	Like	Dislike
Phase 1	<ul style="list-style-type: none"> • Demonstrations • Reviews • Q&A sessions • Relevance 	<ul style="list-style-type: none"> • Excess research commentary
Phase 2	<ul style="list-style-type: none"> • Cases, Videos, Patients • Modeling • Educator with content expertise 	<ul style="list-style-type: none"> • Talking above audience • Poor teaching skills
Both groups	<ul style="list-style-type: none"> • Enthusiasm • Calling on students • Interactivity 	<ul style="list-style-type: none"> • Reading Power Point presentations • Talking too fast

Lecture Hours and Number of Lecturers

	Phase 1	Phase 2
	Cellular & Systems Structures	Cellular & Systems Disease States- Systems Based Modules
	Cellular & Systems Processes	
	Brain & Behavior	
	ECM 1	ECM 2
Total # Lecture hrs.	466	460
Total # Lecturers	97	160

- Summary**
- 65% of Phase 1 and 56% of Phase 2 medical students think lecturing is an effective teaching method for the basic sciences.
 - Students would like to see more discussion of case studies and more independent learning to complement lectures.
 - Students appreciate the use of interactive learning strategies during lectures.
 - By the end of Phase 2, our medical students want teaching expertise in addition to content expertise.

- What we are implementing at MCG**
- Introducing “Core Clinical Lecturers” for Phase 2
 - Offering faculty development workshops through Career Development and Education Center
 - Curriculum Review Process
 - Technology
 - Self directed learning
 - Alternatives to lecture
 - Audience Response System