

## 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 <sup>1</sup>
- Attitudes toward social issues in medicine <sup>2</sup>
- Learning environment <sup>3</sup>

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

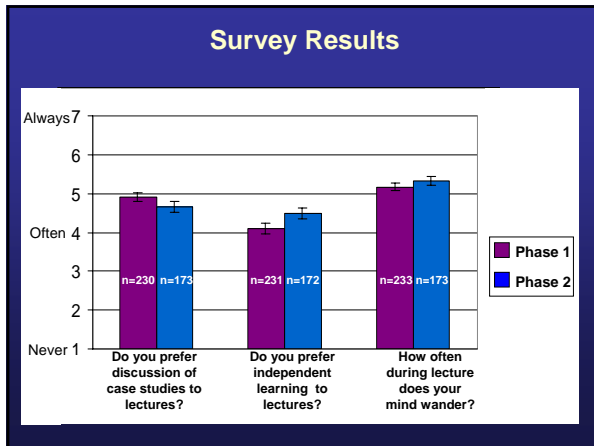
2. Parlow, J. & Rothman, A.J. (1974) A scale to measure attitudes toward psychosocial factors in healthcare. *Journal of Medical Education* 49: 385-387

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?



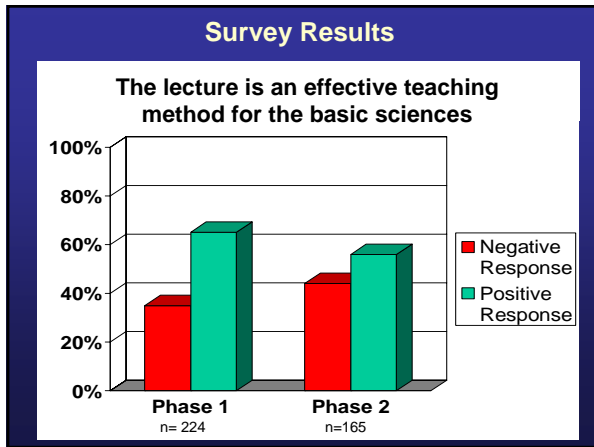
### Learning Environment Survey Question

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

Negative Response

Positive Response

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



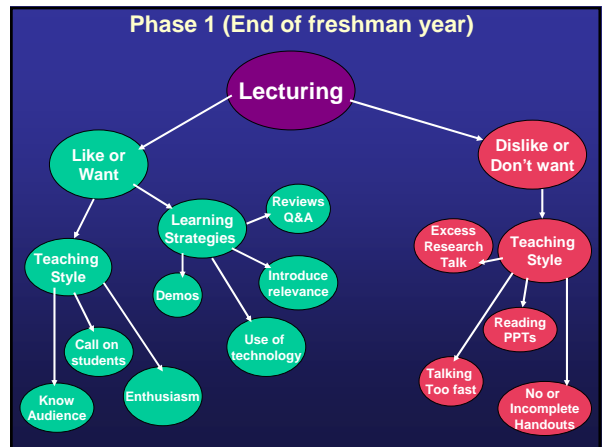
### Methods

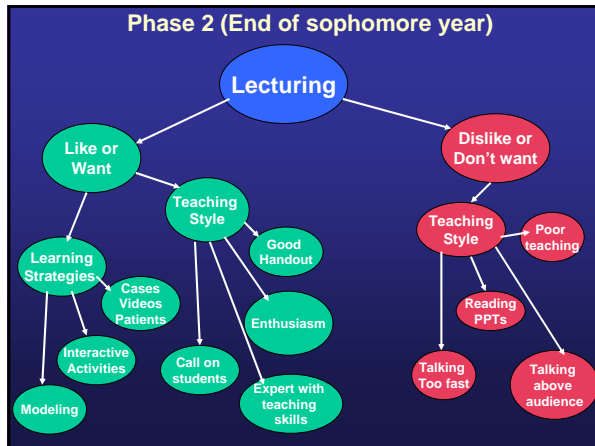
Conducted student led focus groups with Phase 1 and Phase 2 students during the summer of 2004-2006.

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

**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
<b>Total # Lecture hrs.</b>	<b>466</b>	<b>460</b>
<b>Total # Lecturers</b>	<b>97</b>	<b>160</b>

- 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