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UMMS Student Perspectives on Course Structure

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Et al.

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Executive Summary

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Principles

= values every course should acknowledge and consider adhering to.

Clarity, consistency, and an ethic of timely follow-up and follow-through on student feedback are essential to the success of a course.

Strategies

= ways our current course directors and block leaders have put the principles into practice.

1) Timely review sessions

   i. For large courses with many lecturers and course components, students will benefit from time set aside for careful synthesis and review of material to date.
   ii. Course directors can use this as a way to evaluate and push comprehension, helping fill in gaps left by lecturers on course topics and reemphasizing the most important concepts covered. Methodical, thoughtful reviews can be a powerful educational tool.

2) Periodic evaluation

   i. Careful evaluation – practice exams or course quizzes – help students focus on the important material throughout a course, giving them a better sense of what they are learning, and guiding the course directors on what faculty have taught successfully, and which topics need more work or clarification.
   ii. Course directors can use this to reinforce valuable material and help students synthesize lecture concepts with application to clinical medicine, keeping their work in a course moving consistently forward, and compartmentalizing that material into appropriately bite-sized, digestable pieces.

3) Coordination of lecturers

   i. Lecturers must be able to blend into a course and its objectives, teaching at the right level, integrating their topics into the material that has come before and will come after, answering the WHO? WHAT? HOW? WHEN? WHERE? WHY? of teaching a group of medical students.
   ii. The courses that succeed in this monumental task are always more successful in teaching the comprehensive science of medicine, and with fewer of the distractions that come from content overlap, over- or under-estimation of student problem-solving ability, and other grave miscalculations of our learning needs.
   iii. Course directors must tailor this information each specific course in the LInC… but then share their strategies for preparing their lecturers to teach medical students across the curriculum.

Conclusions

= what we hope you'll take from this perspective

In our view, the strategies outlined here are a simple, tried and trusted means of keeping a course focused – keeping the material clear and consistent, and making sure the course directorship follows up on gaps, holes and discrepancies in the course curriculum, and follows through on correcting them in a timely, metered way. Often, that is all a course needs to meet – or exceed - student expectations. Thank you for reading - we welcome your suggestions.

UMMS Student Perspectives on Best Practices for Course Structure

DRAFT

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*Based on discussion with 20 members of the class of 2012 on March 24, 2010, and made possible only through the encouragement and support of the OME.

Overall Course Principles

(the abstract part)

- **Clarity.**
- **Consistency.**
- **Follow-up & follow-through.**

= accountability for faculty, accountability for students

Practical Strategies for Course Management

(in keeping with the abstract part)

I. Timely review sessions.

II. Periodic evaluation.

III. Strategies for coordinating lecturers.

I. Timely review sessions

Questions in common:

- Who should be present? What should the format be?
- What is the preferred balance between questions and lecturing?
- Two types:

    1) The curiously less-often-done **periodic review**

    This includes:

        a. Speedy summary of lectures to date.
        b. Due emphasis of salient points & tricky concepts.
        c. Lassoing it all together: the big picture synthesis

    2) The conventional-but-necessary **end-of-course review**

Timely review sessions:

- examples of **periodic** review -

- MBBII Neurology (Dr. Fontneau) - **pre-scheduled sessions.**
  - Fill in lecture gaps
  - Clarify and reiterate difficult concepts
  - Stress what was not adequately stressed

- MBBI (Dr. Gagliardi Debamboozlement) – **added sessions.**
  - Provide practice opportunities for interested students
  - Increase number of different perspectives on the material
  - Check on knowledge of struggling students; infer class progress
  - Get perspective on what has been learned, and what needs work

Implications for LInC course planning?

➔➔➔REVIEW – added <u>OR</u> formally scheduled - will NEVER hurt.

Timely review sessions:

- examples of **end-of-course** review -

- Biology of Disease Renal Pathology (Dr. Vanguri)
  - Succinctly reviewed each disease
  - Reiterated major points:
    - For CLINIC
    - For the COURSE EXAM
    - For BOARDS
  - Did not omit very much detail
  - Material well structured, planned and thought-out
  - Took questions & elaborated where necessary (it usually wasn't necessary)

Review sessions

- general qualities -

- Given by the block leader/course director
  - Reassures students that the highlighted information will be relevant to the test (and to clinic).
- Students want to be Guided:*
  - What topics will be tested?
  - Major focus, concepts, details for each topic
  - The high-yield approach is necessary

- THIS IS A VALUABLE LEARNING OPPORTUNITY
  - » ESTABLISHES CLARITY OF EXPECTATIONS

*"Any Questions?" is not a reliable format, and represents a missed opportunity for the course directorship to tie together key themes and difficult conceptual material for students, while fortifying the most essential pieces of the course one last time.

Review Sessions

WHY "Any Questions?" is not the ideal format

- Students are seeking assistance with syntheses of the material: at the time of the review, they may be just beginning the study process. Have a realistic approach!

- Help students get to where you are asking them to get: being helpful helps us learn; antagonism detracts from learning.

- Avoid the outcome of "what questions do you have for me?"
  - Blank stares & silence.
  - Students walking out to go study & review on their own.
  - Annoyed professors; whiny students: "what do we need to know about diabetes…?"

THE POINT: PLEASE ASSURE REVIEWS ARE THOUGHTFULLY AND THOROUGHLY **STRUCTURED**.

I. Timely Review Sessions

- SUMMARY -

- Structured, high-yield summaries are valued by students for reasons beyond immediate exam preparation.
- Two birds, one pebble: opportunity for faculty to better achieve course objectives while supporting students in their learning.
- Excellent way for course directorship to check in on educational progress.
- “Any questions” approach is far less valuable (unrealistic?) and leads to mutual dissatisfaction.

II. Periodic Evaluation

- Available in several flavors:
  1) The familiar but neglected **formative evaluation**
     *Biochemistry; MBBI
  2) The forlorn and forgotten ***small* quiz**
     *Microbiology
  3) The innovative and **novel _____?**

     (Creativity encouraged).

- The key inquiries:
  - How many? How often? How much do they count? How much material should they cover?

Quizzes and formative assessment

- an example of each -

- Biochemistry (Dr. Royer)

FORMATIVE evaluation

  - 25 exam-style MC questions to test the waters
  - Not required

- Microbiology: Path. Organisms (Dr. Sassetti)

***SMALL* QUIZ** (required)

  - **Intro/Review Quiz** on prior Bacteriology block
  - Lectures 1-12
  - **Interactive Exercise: Cases**
  - **Helpful "organizational" review (15 min)**
  - **Quiz** on lectures 1-12
    - *Design was **repeated** for Lectures 13-21
    - *Course was 28 Lectures

Quizzes and formative assessment

- the microbiology example -

- Quizzes were **NOT** detail oriented – **"Big Picture"**
  - Which organisms are intracellular?
  - Which are gram negative/positive?
  - Which cause diarrhea?

- Counted Substantially: the **"time spent = value" principle**
  - ~15% of total grade
  - Students felt rewarded for studying/reviewing
  - Difficult for a student to "ruin their grade"

- **Course is neatly divided & organized** prior to final
  - Each subsection of the course had a review
  - Cases to practice applying material
  - Each helps put subsection into context with overall course
  - Answers were provided to all cases/questions afterward

II. Periodic Evaluation SUMMARY

- Advantages
  - Better insight on educational progress (especially useful in a new and untested curriculum).
  - Closer observation, review and adjustment: keep an eye out for lecturer mischief, gaps in content.
  - Assess students while they assess themselves.
  - Improved fluidity of learning: an opportunity to assure that things actually connect for your learners.
- Disadvantages
  - The "everything in moderation" principle: too many evaluations creates busy work and reckless amounts of studying.

    (busy work = ↓ value within a course and the overall curriculum).
  - Especially true if quizzes are not carefully-constructed to gauge comprehension and challenge us to rethink and organize important themes in a course.

III. Strategies for Coordinating Lecturers

- 1) Background
- 2) Specific Considerations
- 3) Lecturer Support

III. Strategies for Coordinating Lecturers

- 1. Background
  - What is the requisite knowledge of a good teacher?

  WHEN in the course am I teaching? WHERE, in what setting, with what technology? WHO am I teaching to, and WHAT? HOW will I approach it? WHY am I teaching what I'm teaching?

    - » Perspective on where we are as learners: are you teaching to the right people?
    - » Appropriateness of the material: is what you're teaching what we need to know?
    - » Recovery and salvage: if and when the train wrecks, who is going to get the course back on track?

Strategies for Coordinating Lecturers

- 2. Specific Considerations
  - World expert vs. common schoolteacher: our take
  - Microscope **vs.** clinical presentation: the pathology-pathophysiology paradox.
  - The “LESS IS MORE” principle: variety isn’t necessarily the spice of medical school

The Key Consideration we have going forward:

As course directors, BEWARE loss of focus on learning priorities: we must pick teachers we know are capable of answering these questions:

– **the WHEN? WHERE? WHO? WHAT? HOW? and WHY? of teaching** –

AND get them prepared to answer them…

…to be clear, consistent, and to follow up and follow-through on their most important lessons for young physicians trying (in vain) to learn hundreds of full-time professions in four years.

The Key Question
that logically follows:

HOW?

Strategies for Coordinating Lecturers

- 3) Lecturer Support – THE UNANSWERED QUESTION for LInC:
  - How do courses currently tackle the monumental task of coordinating their lecturers? Is there an example of where this works?
  - How can we build procedural support structures for lecturers?
  - How do we help them answer the WHEN? WHERE? WHO? WHAT? HOW? and WHY? of teaching medical students?
  - How do we get them the information and perspective they will need before entering the classroom?

III. Strategies for Coordinating Lecturers

- SUMMARY -

- Help the lecturers in your course:
  - Anticipate their audience.
  - Avoid pitfalls.
  - Match teaching to overall course objectives.

- Create a system for correcting errors and omissions in the lecture schedule, and for discrepancies in small group experiences.

- **Be clear and consistent; follow-up, and follow-through.**

In Conclusion

- **Timely review**, **periodic evaluation**, and a **coordination-support structure for lecturers** should be **built into every course** in some way.
- Courses are bound to be idiosyncratic, and this **will require tailoring** to the particular rhythm of each new part of LInC (a process demanding immense diligence next year and beyond)
- Students always perceive when you don't know or haven't planned…but can be a valuable and productive part of the exchange. **Use us as a resource**: we are the only ones who experience all parts of the curriculum every day.