Why are medical students ‘checking out’ of active learning

Course Offerings in the Fourth Year of Medical School

Promoting More Fluent Discussions in Small Group Sessions

OME Journal Club

September 15, 2015
OME Journal Club -- Intro

15 minute discussion for each article

■ Goal: To facilitate faculty member’s knowledge about current trends in medical education and literature analysis through group discussions with peers.

■ Learning Objectives

As a result of participation in the OME Journal Club discussions, the faculty will be able to:

■ Increase exposure to evolving concepts in teaching
■ Identify, develop, and teach critical appraisal skills
■ Promote medical education research
■ Consider applying new concepts in teaching to course delivery
Why are medical students ‘checking out’ of active learning in a new curriculum?


Key Points

- **Research Question:** Why so many University of Virginia School of Medicine students in its pre-clerkship curriculum (NxGen) to emphasize active learning prefer to learn outside of class (i.e., not attend class) or disengage in class (text, tweet, not engage with teammates)?

- **Method:** Qualitative investigation -- Email sent to MS2 in NxGen for 2011, 2012, & 2014. 4 focus groups of 8 each. The sessions recorded and the authors analyzed the results.

- **Results:** 3 sub themes identified -- 1) learning physical space, 2) interaction patterns among learners, and 3) quality of learning engagement in space

- **Discussion:** Focus groups revealed active involvement in collaborative classroom exercises enhanced their learning, yet they found reasons for the disengagement from NxGen
‘Checking out’ refers to being physically present but intellectually disengaged

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<thead>
<tr>
<th>For Active Learning</th>
<th>Against Active Learning</th>
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<tbody>
<tr>
<td>Interaction helps students to analyze, predict, present theories and engage in meaningful dialogue</td>
<td>Inconsistent classroom activities not well designed or executed</td>
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<td>Instructors need to build a pedagogical bridge to explain the benefits of active learning</td>
<td>Students felt a waste of time</td>
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<td>Assigned seating can assist a consistent learning environment that engages in higher-order learning and mature thinking</td>
<td>Student inability to participate due to inexperience with social learning</td>
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<td>Students prefer pre-digested lectures and not higher-order learning</td>
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<td>Collaborative learning is a barrier to time needed for step exam studying</td>
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Topics to discuss

- Do you believe that Van Menan’s phenomenological research method for qualitative research was the right approach?

- Were the four focus groups of 8 volunteer students each in NxGen (2010, 2011, & 2014) a big enough sample?

- What do you consider the biggest challenges to having flipped classrooms in medical school curriculums?

Key Points:

■ **Research question**: What is the goal and structure of the MS4 year?

■ **Method**: A committee from the Clerkship Directors in Internal Medicine and the Association of Program Directors in Internal Medicine examined published literature, web sites of 136 LCME-accredited medical schools for 4th year offerings and conducted interviews. (Does not include core clerkships that can be taken either 3/4th year)

■ **Discussion**:

  ■ MS4 curriculum varies, a transition year, lacks critical instruction, & needs more structure
  
  ■ Recommends internal medicine SubI, MS4’s future discipline SubI, critical care, ambulatory medicine and EM.
  
  ■ AAMC EPA’s provides a framework for traditional clinical skills and communication, capstone courses prepare for internship, student portfolios with reflection on elective choices
## Findings

<table>
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<th>MS4 Required</th>
<th>Current State</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Sub-internships (selected discipline)</td>
<td>122/136 (90%)</td>
<td>Core clinical skills and EPAs</td>
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<tr>
<td>Capstone Course “Boot Camps”</td>
<td>80/136 (59%)</td>
<td>Short term changes, gains in confidence</td>
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<tr>
<td>Research/Scholarly</td>
<td>51/136 schools (38%)</td>
<td>No info – may help speak about clinical questions</td>
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<tr>
<td>Basic Science</td>
<td>17/136 (15%)</td>
<td>Short term improvement in clinical diagnosis</td>
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<tr>
<td>EM</td>
<td>61/136 (45%)</td>
<td>Increased confidence in acute care and procedures</td>
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<tr>
<td>ICU</td>
<td>46/136 (34%)</td>
<td>Better performance with unstable patients</td>
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<tr>
<td>Neurology</td>
<td>15/136 (11%)</td>
<td>Students more enthusiastic in MS3 clerkship</td>
</tr>
<tr>
<td>Electives</td>
<td>Closer look at a focused area</td>
<td>Away or “audition” rotations valued</td>
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Entrustable Professional Activities for Entering Residency

1: Perform a history and physical examination.
2: Prioritize a differential diagnosis.
3: Recommend and interpret common tests.
4: Enter and discuss orders and prescriptions.
5: Document a clinical encounter.
6: Provide an oral presentation.
7: Form clinical questions and retrieve evidence. 8: Give or receive a patient handover.
9: Collaborate as a member of an interprofessional team.
10: Recognize a patient requiring urgent or emergent care and initiate evaluation and management.
11: Obtain informed consent.
12: Perform general procedures.
13: Identify system failures and contribute to a culture of safety and improvement.
Content Areas for MS4 Capstone Courses

- Common or serious medical situations
- Basic Science concepts
- Procedural and interpretive skills
- Hospital and team functioning
- Communication and professionalism
- Life Skills
Topics to discuss

- What one key point did you take away from reading this article?
- Do you agree with the study’s findings for MS4 content and structure?
- Can you identify anything missing in this study?
- Would you recommend this article to a colleague?
Promoting More Fluent Discussions in Small Group Sessions

Key Points --

1. **Research question:** Will restricting the use of personal electronic devices and resource material improve small group discussions?

2. **Method:** M2 Pharmacology course with 79 lectures & 8 small grps in 18 wks. Pre-session short clinical cases posted online with learning objectives and questions. Answers posted after facilitated small group sessions. After 4 sessions, 2 student volunteer cohorts answered 2 anonymous surveys.

3. **Discussion:**

   1. Facilitators and students agree the new policy encouraged better preparations and interpersonal interactions with more fluid discussions without the distractions of electronic devices, written notes, and resources.
   2. Students wanted to take notes during the sessions.
Topics to Discuss

- Do you agree with the idea of restricting electronic devices, notes, & resources during small group discussions?

- Was there anything missing in the article?

- Do you believe a survey was the best method to assess the results of the study?

- After reading this article, would you consider changing anything in your course?
Thank you for participating!

Save the date: OME Journal Club next meeting is **Wed, November 18, 2015**

In the meantime – if you find an interesting article, please send it to me so we can include it in our upcoming meetings