Piloting Standardized Immediate Student Evaluation of Lectures in Pre-Clinical Years

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Comments
Medical student Meghan E. Shea participated in this study as part of the Senior Scholars research program.

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Piloting Standardized Immediate Student Evaluation of Lectures in Pre-Clinical Years

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BACKGROUND

- At UMSMS, pre-clinical students evaluate faculty every 2 weeks to months after delivery which may impact recall and evaluation
- Delays in faculty receiving feedback may impact their ability to institute change
- Sampling can reduce evaluation demands on students yet preserve reliability and validity
- Literature shows students are motivated for intrinsic reasons when: courses are well planned, materials’ relevance clear and their teachers are enthusiastic and engaged

METHODS

- 34 second year students (goal of 25-30) self-identified to participate after email solicitation to 146 (24.2%)
- Questionnaire developed based on educational literature and reviewed by student focus group and faculty curriculum committee
- Focus group assessed time to complete questionnaire, clarity of questions, & new topics
- Questionnaire consisted of 20 items using 4-point likert scale plus 3 open-ended response questions
- Questions based on 5 elements of an effective lecture – clarity, interaction, task orientation, enthusiasm, and organization
- Students completed questionnaire after each lecture in 2 weeks (21 unique faculty, 33 lectures)
- 397 total questionnaires submitted, range 2-23 per lecture, mean 12 questionnaires per lecture
- Completed questionnaires sent to faculty daily
- 26 of 34 (73.5%) students and 15 of 21 (71.4%) faculty completed brief online survey regarding their experience (5 point likert and overall)

RESULTS & CONCLUSIONS

- Lecture Evaluation: Likert Data
  - No statistical difference between Overall mean (3.15) & Calculated mean (3.19), P=0.121
  - Lecturers given “overall” poor or fair (N=97) received range of scores on individual questions (poor - excellent)
    - Students able to pinpoint ways to improve, but also report strengths
  - Most questions calculated/overall mean: 3 range 2.79-3.34
    - “Used a variety of teaching methods” mean 2.79; Possible confusion of definition – students interpreted as variety of media
  - Per question responses left blank ranged 1-28 (mean 9)
    - Demonstrates students could complete survey
    - 26 blanks for “Responded appropriately” likely due to students needing NA/Column
    - 18.51 blanks for questions about “objectives” possibly due to student confusion of definition or ambiguity in faculty’s presentation of objectives

- Lecture Evaluation: Open-Ended Responses
  - 5 Major Themes: Clarity, Interaction, Task Orientation, Organization, Overall
    - 3-4 minor themes per major theme
  - Response Rate for open-ended questions: 60% for specific questions regarding organization and interaction for Overall question
  - Range of examples:
    - Clarity: Craving for Clinical Correlations
      - “Comments about your clinical practice would improve our attention and interest”
      - “She questioned the class on a clinical problem, which forced me to think through the material.”
      - “Good use of clinical vignettes”
    - Interaction: Engaged & Enthusiastic
      - “Excellent infectious enthusiasm”
      - “Great enthusiasm! Makes me want to continue attending this class.”
      - “Seemed excited to see us and lecture to us. Seemed like he wanted to be here.”
    - Interaction: Delivery suggestions for improvement
      - “Lecture was extremely dry – like listening to a textbook.”
      - “Please don’t talk to the source.”
      - “Lecturer seemed disinterested in being here himself”
  - Sample of Faculty comments
    - “It was very helpful and will certainly impact my lecture next year”
    - “From experience I know it is hard to please all learners, so the more input we have across the time, the better we can judge how to present our lectures. Also this is VERY helpful for establishing a teaching portfolio”
  - Sample of Student comments
    - “the post-exam feedback is too distant to be very useful and couldn’t be used to improve the course in real time”
    - “Some professors really responded to the comments, which made me feel that they really did care about our learning.”
  - Conclusion: Students need to see value in evaluating each lecturer; in other words, they need to see changes implemented due to feedback

- Faculty Perception of Evaluation Method
  - An abbreviated version of this survey would be better

- NEXT STEPS

  - Revised questionnaire, specifically adding NA option and removing overall questions
  - Adapting questionnaire to be online
  - Planning implementation of questionnaire in pre-clinical years, determining:
    - Number of students needed
    - How to divide students into groups
    - Frequency in which students complete questionnaire
    - Frequency & format in which faculty & students receive feedback
  - Considering a system where faculty could provide a personal response to an anonymous evaluator
  - Evaluating possibility of providing faculty ability to color questions for their lecture
  - Investigating pilot this method of feedback for clinical years’ lectures

LIMITATIONS

- Recruited 34 students though lecture attendance and thus response rate varied, some lectures had as few as 2 to 3 responses
- Students who volunteered may have more interest in giving feedback
- NA was not included as an option for the likert scale portion of the questionnaire
- Faculty received data in raw format, no summary statistics
- Few faculty had repeat lectures thus unable to track how faculty use the information and students’ reactions to implementing
- Few faculty repeated lectures thus unable to accurately gauge the usefulness of giving feedback after every lecture taught

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