Reviewer's report

Title: The Influence of Objectives, Learning Experiences and Examination Blueprint on Medical Students' Examination Preparation

Version: 1 Date: 6 June 2005

Reviewer: Brian Mavis

Reviewer's report:

General

The question posed by the manuscript is an interesting one; the methods used in the study are appropriate. While the question is interesting, the data collected really only scratch the surface, and leaves more unanswered questions than it answers. This is related to the framing of the questions to the students: they were asked if they used each resource, but not how they used each one or the relative weighting students gave each resource in their exam preparation. More insight into these latter issues could help provide more insight into this issue, particularly for weaker students.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The first sentence of the Results indicates that 81 students completed the questionnaire. There is no indication of what this represents in terms of a response rate. To the extent that this is a moderate or low response rate, the issues of self-section or response bias are not addressed.

In four places on p. 6 the authors talk about comparing the students above/below the class average. The methods section indicates that a median-split was used in this study. This lack of consistency about median vs mean scores is confusing, and should be corrected throughout the manuscript.

In the Discussion section (p. 7), the authors introduce new data not previously described or presented. These data from the end-of-course questionnaire and the preceptor survey need to be incorporated into the Methods and Results section of the manuscript. What was the response rate of the data from these two sources?

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

In the Introduction, the authors make the statement on pp.3-4 that the relative influence of formal and informal curricular components on preparation for end-of-course examinations is unknown. A rationale/justification of why knowing this is important is not provided.

In the Introduction, the authors indicate that the first objective was to describe how students utilized components of the curriculum (p. 4). Several lines later, in the Methods section, they state that the questions presented to students asked the extent to which components were used. Taking the Method section at face value makes it appear that the study focuses on use/non-use rather than how they were used. The objective should be reworded for accuracy.

It would be helpful for the reader to have more information about the renal course curriculum, such as the amount of lecture time, small group time and the relationship between the lectures and small
In the Methods section, no rationale is given for dichotomizing the responses to the four questions, rather than using them as a five point scale in the analyses.

P. 4 second paragraph: Spelling error in the second sentence. The number of student failing should read number of students failing.

On p. 5 the authors state that two variable interaction terms were also considered. This is unclear: does it mean that only two interaction terms were included in the analysis or that only two-way interaction terms (five of them) were included in the analysis? If it is the former, then a rationale for this approach is needed.

There is no indication of whether or not IRB approval or student consent procedures were sought for this study.

The Methods section indicates that a median-split was used in this study: the authors should report the median score for the course examination in addition to the mean score.

It would be helpful to report the effect size (R-squared) as it relates to the regression analysis.

Discretionary Revisions (which the author can choose to ignore)

It is interesting that the proportion of preceptors (37%) using the learning objectives was virtually identical to the proportion of students (35%) using the learning objectives. Is modeling a possible explanation?

The discussion as written is thoughtful, but limited. The issue of how resources were used is never considered as a possible explanation for some of the findings or mentioned as a limitation that might lead to further study of this question. The authors rightfully conclude that these data do not suggest that objectives are unimportant. It is good to explicitly make this point in the conclusion.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests.