Reviewer's report

Title: Differences in the Self-Assessment of Clinical and General Competencies Between Problem-based Learning and Conventional Curricula Among German Medical Graduates

Version: 3 Date: 30 September 2009

Reviewer: Diana H Dolmans

Reviewer's report:

The authors have adequately dealt with the comments of the reviewers, but the text of the paper still needs major improvement, since it is formulated not very precisely and another major concern is the discussion section which is much too long due to which the reader can not come to conclusions.

The abstract is not fully clear. What is meant with medical schoole ducation in the second sentence. I miss the research questions in the abstract. Sentence 4 in the results section of the abstract is unclear because it does not deal with difference between pbl and non-pbl. This sentence is difficult to read. Skipt this sentence.

The introduction section contains several undefined and unclear words, such as profession-relevant knowledge, such as social and cognitive dimensions. Explain these terms. It is unclear how the study of Colliver et al (12) is related to the topic of this paper. Skip this reference and sentence or better explain, but then the text probably becomes too long. It is written that, given the current controversy regarding PBL, .... This is however not true. The evidence so far is not contradictory with respect to the topic of this study. It is known from studies that there are no differences in theoretical knowledge acquired by pbl and non-pbl students and it is known that pbl alumni perceive themselves as better prepared for communication skills, team working skills, etc. The findings of this study are fully in line with what is already known.

The data were collected in 2004 and 2005 and are reported in 2009 (quite late). Are they still relevant or did the other medical schools in Germany change their curricula since then? Please explain and use one sentence in the discussion.

The sentence on page 6 at the bottom about self-assessment is unclear. Reword the sentence or skip it. Skip alpha coefficient, is not relevant here, since the data are reported at the item level.

Two questions were asked to the students: 1) required in daily job and 2) taught during medical education. The data with regard to question 1 are reported in Table 2. But this is not clear when reading the paper in which the authors use the word importance instead of required in daily job. Be more precise in the use of words, because it is difficult for the reader to understand the paper. In Table 3, the data are reported dealing with the question has it been taught. This is
referred to in the paper as acquired. But, taught and acquired are different things. Be more consistent in terminology and refer to it as competencies taught.

The scale used is very difficult to interpret, since 1= high and 6 is low, normally it is the reverse order. Could this be changed in the paper, to make the tables much more easier to interpret by recoding the scores (1=6), (6=1), etc.

Figure 1 presents the data of Table 2 minus Table 3, but I discovered this only later on. This should be explained better in the analysis section. Furthermore these data are not related to any of the two research questions. Add a third research question.

The subheading in the results section should be reformulated and should be more in line with the question asked, so they should be Required competencies in daily job and Competencies taught in medical school and Differences between required competencies and competencies taught in school.

Add a third research question dealing with the differences between competencies required and competencies taught.

The discussion section is too long and needs major shortening and restructuring. Skip the first paragraph on page 11. First formulate conclusions per research question and keep it short (what are the main findings and how do they relate to the literature). The subtitles are not in line with the research questions and can be skipped.

After the conclusions, discuss some issues, thereafter give a few limitations and suggestions for further research. Use this order and not a different order. Research suggestions are now given before the limitations.

A lot of information on page 13 can be skipped. Skip the conclusion at the end on page 17.

Not only report that their are statistically significant differences, but also comment about the actual difference scores which are very small for some competencies, such as research competencies. In other words, the findings can be statistically significant, but a difference of 0.1 or 0.2 on a six point scale is not very relevant from a practical point of view. Comment about this in the discussion section. Only discuss major issues that both statistically and practically relevant.

The text under the tables needs to be reworded (in line with question asked, Skip the word clinical competencies in Table 2 and general and clinical competencies in Table 3.

English needs to be checked by a native English speaker!

**Level of interest:** An article whose findings are important to those with closely related research interests
Quality of written English: Needs some language corrections before being published

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests