

Appendix 1: Scoring system for evaluation of study quality	
Study quality indicator	Points*
<b>Random assignment into study groups</b>	
No	0
Yes	15
<b>Total sample size</b>	
< 100	0
100-200	5
200-500	10
500-1000	15
> 1000	20
<b>Source of study groups</b>	
Problem-based learning and control groups from different universities	0
Problem-based learning and control groups from same university	5
<b>Timing of problem-based learning and traditional (control group) curricula</b>	
Sequential	0
Concurrent	5
<b>Extent of problem-based learning in curriculum</b>	
• 2 yr	0
> 2 yr	5
<b>Number of competencies assessed</b>	
< 10	0
10-20	5
> 20	10
<b>Type of assessment</b>	
Self-assessment	0
Observed assessment (e.g., by supervisors, nursing colleagues or objective measures)†	10
<b>Overall response rate</b>	
< 60%	0
60-80%	5
> 80%	10
<b>Adjustment for covariables</b>	
No	0
Yes	10
<b>Methodological inconsistencies</b>	
No	10
Yes	0

\*Minimum score = 0, maximum score = 100.

†Studies may include both observed and self-assessment.