Supplemental Digital Appendix 1

We included the following keywords or their combinations: open book exam, open book examination, open book test, closed book exam, closed book examination, closed book test, computer aided test, web based examination.

Example search strategy:

MEDLINE (Ovid)

MEDLINE (OVID) Search Strategy (June 7, 2013):
Notes: 1,340 retrieved – 73 duplicate records = 1,267 total

Search Strategy 1:
((computer or web or paper or internet) adj (aided or based) adj3 (assess$ or test$ or exam$ or curriculum or learning or evaluat$ or teaching)).ti,ab.
AND
(exp education, professional/ or ("professional education" or "medical education" or "nursing education" or "graduate education" or clerkship$ or resident& or student$).mp.)

Search Strategy 2:
((open or closed) adj1 (book or web) adj4 (assess$ or test$ or exam$)).ti,ab.

Searches OR together and limited to English Language

ERIC Datatabase

ERIC Search (June 7, 2013):

Search Strategy 1: 46 records
All Fields: ("open book" OR "closed book" OR "open web") AND (assess* OR test* OR exam*)
Limits: Peer Review

Search Strategy 2: 557 records
Thesaurus Descriptors:"Tests"
AND
Keywords:computer OR web OR paper OR internet
AND
(Keywords:assess* OR test* OR exam* OR curriculum OR learning OR evaluat* OR teaching
AND Limits: Peer Review

Duplicates removed: 34
EMBASE

July 1 2013 (2,619 articles)

**Search 1:**
'computer aided':ab,ti OR 'computer based':ab,ti OR 'web based':ab,ti OR 'paper based':ab,ti OR 'internet based':ab,ti
AND
assess*:ab,ti OR test*:ab,ti OR exam*:ab,ti OR curriculum:ab,ti OR learning:ab,ti OR
evaluat*:ab,ti OR teaching:ab,ti
AND
'medical student'/exp OR 'resident'/exp OR residency:ab,ti OR resident*:ab,ti OR 'clinical education'/exp OR clerkship* OR 'nursing student'/exp OR student*:ab,ti

**Search 2:**
'open book' OR 'open web' OR 'closed book' AND (assess* OR test* OR exam*)

Limited to English AND EMBASE

**Duplicates removed: 8**
Supplemental Digital Appendix 2


Reviewer Name: ____________________________  
Date: ____________________________
1st reviewer □  2nd reviewer □  3rd reviewer □

Section A. Basic information
Reference Number: ____________________________  
Authors (First, second, third author, et al):
______________________________________________________________________________

Title: ______________________________________

Publication: ___________________________________________________________________  
Year_____ Vol_____ Issue_____ Pages____  

Search Method:
☐ Electronic search  
☐ Hand search (e.g. bibliography of electronic search, recommended paper)

1. Citation type
☐ Original research paper/peer reviewed empirical study  
☐ Review paper  
☐ Commentary/opinion  
☐ Conf. paper/proceedings  
☐ Book  
☐ Thesis  
☐ Other (List_________________________)

2. Description of OBE

3. Description of CBE

4. Research question
☐ Stated (list________________________________________________________)  
☐ Implied (list_______________________________________________________)

5. Stated hypothesis
☐ Stated (list________________________________________________________)
6. Hypothesis justification
   - Implied (list________________________)  
   - Not clear

7. Conceptual framework
   - Stated (list________________________)  
   - Not clear

Section B. Outcomes considered
- Exam performance
- Exam preparation
- Logistics
- Public perception
- Other (list___________)
- Anxiety or enjoyment
- Psychometrics
- Testing effects
- Judgment of learning

Section C. Study context
1. Country ____________

2. Student level
   - College students
   - High school students
   - Medical students
   - Other post-college settings
   - Others (list________________________)

3. Test stakes
   - High
   - Medium
   - Low

4. Type of material tested (list________________________)

5. Test format (list________________________)

6. Number of questions ______

7. Delay between learning and test
   - Yes
   - No
8. Prior experience with OBE
   ☐ Yes  ☐ No

9. Incentive provided
   ☐ Yes  ☐ No

Section D. Study design
1. Description ___________________________

2. Within vs. Between subjects design
   ☐ Within  ☐ Between

3. Condition 1 ___________________________

4. Condition 2 ___________________________

5. Condition 3 ___________________________

6. Condition 4 ___________________________

7. Comparability of exam context
   ☐ Comparable  ☐ Not comparable

8. Comparability of exam format
   ☐ Comparable  ☐ Not comparable

9. Outcome 1 ___________________________

10. Outcome 2 ___________________________

11. Outcome 3 ___________________________

12. Outcome 4 ___________________________

13. Outcome 5 ___________________________

14. Scoring
   ☐ Objective  ☐ Subjective

Section E. Sample characteristics
1. Total N ______

2. OBE N ______

3. CBE N ______
4. Age ________
5. Other demographics noted ___________________

Section F. Findings (include statistics)
1. Outcome 1

2. Outcome 2

3. Outcome 3

4. Outcome 4

5. Outcome 5

6. Main conclusion ______________________________

Section G. Evaluation
1. Trustworthiness
   - 5     4     3      2     1

2. Rigour
   - 5     4     3      2     1

3. Implementation
   - 5     4     3      2     1

4. Analysis
   - 5     4     3      2     1

5. Include in the review   Exclude from the review

6. Limitations ______________________________

7. Additional references to check __________________________

Notes ______________________________