

Multimedia Appendix 1: Medline (Ovid) search strategy

1. exp education, professional or not education, veterinary or
2. Education, Predental or
3. Education, Premedical or
4. exp Students, Health Occupations or
5. ((medic* or premedic* or dent* or laborat or* or predent* or midwi?e* or nurs* or nutrition* or orthop* or podiat* or pharmac* or psycholog* or psychiatr* or health or healthcare or occupational therap* or physiotherap* or physical therap* or clinical or surg* or radiolog* or obstetric* or gyn?ecolog* or orthodont* or An?esthesi* or Dermatolog* or Oncolog* or Rheumatolog* or Neurolog* or Patholog* or P?ediatric* or Cardiolog* or Urolog*) adj3 (student* or graduate* or undergraduate* or staff or personnel or practitioner* or clerk* or fellow* or internship* or residen* or educat* or train* or novice* or tutor*)).tw,kf.
6. oror1-5
7. Computer-Assisted Instruction or
8. exp Internet or
9. Computer Simulation or
10. Patient Simulation or
11. software or
12. Mobile Applications or
13. User-Computer Interface or
14. Video Games or
15. Web Browser or
16. Education, Distance or
17. Computers or
18. exp Microcomputers or
19. exp Cell Phones or
20. Games, Experimental or
21. exp Models, Anatomic or
22. Audiovisual Aids or
23. Educational Technology or
24. Electronic Mail or
25. exp Telemedicine or
26. Telenursing or
27. Telecommunications or
28. Webcasts or
29. exp Videoconferencing or
30. ((computer* or digital* or hybrid or blended or mixed mode or distance or remote* or electronic or mobile or online* or interactiv* or multimedia or internet or web* or virtual* or game* or gaming or Videogame* or Videogaming) adj3 (classroom* or course* or educat* or instruct* or learn* or lecture* or simulat* or train* or teach* or tutor* or platform*)).tw,kf.
31. (Simulat* adj3 (course* or educat* or instruct* or learn* or train* or teach* or platform* or high-fidelity)).tw,kf.
32. e-learn*.tw,kf.

33. elearn*.tw,kf.
34. m-learn*.tw,kf.
35. mlearn*.tw,kf.
36. smartphone*.tw,kf.
37. smart-phone*.tw,kf.
38. ((mobile or cell) adj2 phone*).tw,kf.
39. iphone*.tw,kf.
40. android*.tw,kf.
41. ipad*.tw,kf.
42. Personal digital assistant*.tw,kf.
43. handheld computer*.tw,kf.
44. Mobile App?.tw,kf.
45. Mobile Application?.tw,kf.
46. webcast*.tw,kf.
47. webinar*.tw,kf.
48. flipped classroom*.tw,kf.
49. Serious game*.tw,kf.
50. Serious gaming.tw,kf.
51. Patient Simulat*.tw,kf.
52. Virtual patient*.tw,kf.
53. ((educat* or instruct* or learn* or simulat* or train* or teach* or interactiv*) adj2 technolog*).tw,kf.
54. Massive Open Online Course?.tw,kf.
55. Mooc?.tw,kf.
56. (Canvas network or Coursera or Coursesites or edx or Futurelearn or iversity or miriada x or moodle or novoed or openlearning or open2study or plato or spoc or udacity or pingpong).tw,kf.
57. oror7-56
58. 6 and 57
59. Education.fs.
60. Education or
61. Teaching or
62. Learning or
63. exp Inservice Trainingor
64. Curriculum or
65. educat*.tw,kf.
66. learn*.tw,kf.
67. train*.tw,kf.
68. instruct*.tw,kf.
69. teach*.tw,kf.
70. oror59-69
71. Health Personnel or
72. exp Allied Health Personnel or
73. Anatomistsor
74. "Coroners and Medical Examiners"or
75. exp Dental Staff or

76. exp Dentists or
 77. Health Educators or
 78. Infection Control Practitioners or
 79. Medical Laboratory Personnel or
 80. exp Medical Staff or
 81. exp Nurses or
 82. exp Nursing Staff or
 83. Personnel, Hospital or
 84. Pharmacists or
 85. exp Physicians or
 86. Physician*.tw,kf.
 87. Doctor*.tw,kf.
 88. Nurs*.tw,kf.
 89. Surg*.tw,kf.
 90. Health Personnel.tw,kf.
 91. healthcare professional*.tw,kf.
 92. radiolog*.tw,kf.
 93. dentist*.tw,kf.
 94. Pharmacist*.tw,kf.
 95. Hospital Administrator*.tw,kf.
 96. Podiatr*.tw,kf.
 97. Psycholog*.tw,kf.
 98. Psychiatr*.tw,kf.
 99. Anesthesi*.tw,kf.
 100. Clinician*.tw,kf.
 101. Dermatolog*.tw,kf.
 102. General practitioner*.tw,kf.
 103. Cardiolog*.tw,kf.
 104. Oncolog*.tw,kf.
 105. Rheumatolog*.tw,kf.
 106. Neurolog*.tw,kf.
 107. Patholog*.tw,kf.
 108. Pediatric*.tw,kf.
 109. Physiotherap*.tw,kf.
 110. Physical therap*.tw,kf.
 111. Occupational therap*.tw,kf.
 112. dietitian*.tw,kf.
 113. Dietetic*.tw,kf.
 114. midwife*.tw,kf.
 115. nutrition*.tw,kf.
 116. orthopti*.tw,kf.
 117. obstetric*.tw,kf.
 118. gynecolog*.tw,kf.
 119. orthodont*.tw,kf.
 120. Urolog*.tw,kf.
 121. or71-120

122. Health Occupations or
 123. exp Allied Health Occupations or
 124. Biomedical Engineering or
 125. Chiropractic or
 126. exp Dentistry or
 127. exp Evidence-Based Practice or
 128. exp Medicine or
 129. exp Nursing or
 130. Dietetics or
 131. Optometry or
 132. Orthoptics or
 133. exp Pharmacology or
 134. exp Pharmacy or
 135. Podiatry or
 136. Psychology, Medical or
 137. Serology or
 138. Specialization or
 139. exp Surgical Procedures, Operative or
 140. exp Radiography or
 141. or 122-140
 142. 121 or 141
 143. 57 and 70 and 142
 144. Psychomotor Performance or
 145. motor skills or
 146. ((psychomotor or procedural or technical) adj3 skill*).tw,kf.
 147. (psychomotor adj3 performance).tw,kf.
 148. or 144-147
 149. 6 and 148
 150. 58 or 143 or 149
 151. limit 150 to yr="1990 -Current"