
Literature, websites, videos

AAMC Institute for Improving Medical Education. Effective Use of Educational Technology in Medical Education Colloquium on Educational Technology: Recommendations and Guidelines for Medical Educators. 2007. Available from

<https://members.aamc.org/eweb/upload/Effective%20Use%20of%20Educational.pdf>

Adler M. Entwicklung einer differentialdiagnostischen Netzwerk-Komponente für die medizinische multimediale Datenbank CASUS. Dissertation 1996. Technische Universität München.

Bateman J, Allen M, Samani D, Kidd J, Davies D. Virtual patient design: exploring what works and why. A grounded theory study. *Med Educ* 2013;47: 595–606.

Botezatu M, Hult H, Fors UG. Virtual patient simulation: what do students make of it? A focus group study. *BMC Medical Education* 2010; 10:91

Bryce DA, King NJ, Graebner CF, Myers JH. Evaluation of a Diagnostic Reasoning Program (DxR): Exploring Student Perceptions and Addressing Faculty Concerns. *Journal of Interactive Media in Education*, 1998;98 (1):1-35. Available from <http://www-jime.open.ac.uk/articles/10.5334/1998-1/>

Cook DA, Erwin PJ, Triola MM. Computerized Virtual Patients in Health Professions Education: A Systematic Review and Meta-Analysis. *Acad Med* 2010;85:1589–1602.

Cook DA, Triola MM. Virtual patients: a critical literature review and proposed next steps. *Med Educ* 2009;43: 303-11.

Deladisma AM. Cohen, Stevens A, Wagner P, Lok B, Bernard T, Oxendine C, Schumacher L, Johnsen K, Dickerson R, Raji A, Wells R, Duerson M, Harper G, Lind S. Do medical students respond empathetically to a virtual patient? *The American Journal of Surgery* 2007;193: 756–60.

Fall LH, Berman NB, Smith S, Whit CB, Woodhead JC, Olson AL. Multi-institutional Development and Utilization of a Computer-Assisted Learning Program for the Pediatrics Clerkship: The CLIPP Project. *Acad Med* 2005; 80(9): 847-54.

Forsberg E, Ziegert K, Hult H, Fors U. Clinical reasoning in nursing, a think-aloud study using virtual patients - A base for an innovative assessment. *Nurse Educ Today* 2014;34(4):538-42.

Friedman CP, France CL, Drossman DD. A Randomized Comparison of Alternative Formats for Clinical Simulations. *Med Decis Making* 1991;11: 265.

Goal-based Scenarios. 2012. http://teorije-ucenja.zesoi.fer.hr/doku.php?id=instructional_design:goal_based_scenarios

Gunning WT, Fors UG. Virtual Patients for assessment of medical student ability to integrate clinical and laboratory data to develop differential diagnoses: Comparison of results of exams with/without time constraints. *Med Teach* 2012;34: e222–e228.

Helyen D, Nijholt A, op den Akker R. Affect in tutoring dialogues. *Applied Artificial Intelligence* 2005;19:287–311.

Huwendiek S, Duncker C, Reichert F, De Leng BA, Dolmans D, van der Vleuten CP, Haag M, Hoffmann GF, Tönshoff B. Learner preferences regarding integrating, sequencing and aligning virtual patients with other activities in the undergraduate medical curriculum: A focus group study. *Med Teach* 2013; 35: 920–929

Huwendiek S, Reichert F, Bosse HM, de Leng BA, van der Vleuten CP, Haag M, Hoffmann GF, Tönshoff B. Design principles for virtual patients: a focus group study among students *Med Educ* 2009;43(6):580-8.

Issenberg SB, McGaghie WC, Petrusa ER, Lee Gordon D, Scalese RJ. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. *Med Teach* 2005; 27(1):10–28.

Kernt M, Holzer M, Bauer D, Fischer MR. Concept mapping for supporting the differential diagnostic generation of hypotheses in the case-based online learning system CASUS: Qualitative improvement of diagnostic performance through ICD-10 coding. *GMS Zeitschrift für Medizinische Ausbildung* 2008, Vol. 25(3).

Kim S, Phillips WR, Pinsky L, Brock D, Phillips K, Keary J. A conceptual framework for developing teaching cases: a review and synthesis of the literature across disciplines. *Med Educ* 2006; 40(9):867-76

MedBiquitous Virtual Patient Standard. http://www.medbiq.org/working_groups/virtual_patient/index.html

Nirenburg S, McShane M, Beale S. Aspects of Metacognitive Self-Awareness in Maryland Virtual Patient. *Cognitive and Metacognitive Educational Systems: Papers from the AAAI Fall Symposium (FS-10-01)*, 2010; 69-74.

Pataki C, Pato MT, Sugar J, Rizzo AS, Parsons TD, St. George C, Kenny P. Virtual Patients as Novel Teaching Tools in Psychiatry. *Acad Psych* 2012;36(5): 398-400.

Pinnock R, Spence F, Chung A, Booth R. evPaeds: undergraduate clinical reasoning. *Clin Teach* 2012;9(3):152-7.

Posel N, McGee JB, Fleischer D. Twelve tips to support the development of clinical reasoning skills using virtual patient cases. *Med Teach* 2015;37(9):813-8

Rivera-Gutierrez DJ, Kopper R, Kleinsmith A, Cendan J, Finney G, Lok B. Exploring Gender Biases with Virtual Patients for High Stakes Interpersonal Skills Training. *Lecture Notes in Computer Science* 2014;8637:385–396.

Round J, Conradi E, Poulton T. Improving assessment with virtual patients. *Med Teach* 2009;31: 759–763.

Salminen H, Zary N, Björklund K, Toth-Pal E, Leanderson C. Virtual Patients in Primary Care: Developing a Reusable Model That Fosters Reflective Practice and Clinical Reasoning. *J Med Internet Res* 16(1): e3

Sanders C, Kleinert HL, Boyd SE, Herren C, Theiss L, Mink J. Virtual patient instruction for dental students: can it improve dental care access for persons with special needs? *Spec Care Dentist* 2008;28(5):205-13

Schladen MM. Formative Research on Instructional Design Theory for Virtual Patients in Clinical Education: A Pressure Ulcer Prevention Clinical Reasoning case. Doctoral Dissertation 2015. Nova Southeastern University. http://nsuworks.nova.edu/gscis_etd/35/

Smith S, Cookson J, McKendree J, Harden RM. Patient-centred learning-back to the future. *Med Teach* 2007; 29: 33–37.

Smith S, Kogan JR, Berman NB, Dell MS, Brock DM, Robins LS. The Development and Preliminary Validation of a Rubric to Assess Medical Students' Written Summary Statements in Virtual Patient Case. Acad Med 2016; 91(1):94-100

Talbot TB, Sagae K, John B, Rizzo AA. Sorting out the virtual patient: How to exploit artificial intelligence, game technology and sound educational practices to create engaging role-playing simulations. International Journal of Gaming and Computer-Mediated Simulations. 2012;4(3):1-19. doi: 10.4018/jgcms.2012070101

Tworek J, Coderre S, Wright B, McLaughlin K. Virtual Patients: ED-2 Band-Aid or Valuable Asset in the Learning Portfolio? Acad Med 2010;85(1): 155-8.

Voelker R. Virtual Patients Help Medical Students Link Basic Science With Clinical Care. JAMA, 290(13):1700-1.

Waldman Z, Ottolini M. Differential Diagnosis: Approaches and Pitfalls - A Pediatric Case-Based Session for 3rd Year Medical Students. MedEdPORTAL Publications; 2013. Available from: <https://www.mededportal.org/publication/9640>

Wilson J. Evaluating the Effectiveness of Virtual Patients to Promote Clinical Reasoning. Dissertation Northcentral University 2011. <http://gradworks.umi.com/34/62/3462968.html>

Virtual patients, authoring guidelines and systems

Overview of virtual patient systems. http://vpsystems.virtualpatients.net
--

Campus. http://www.medizinische-fakultaet-hd.uni-heidelberg.de/CAMPUS-Software.109992.0.html , https://virtuellepatienten.de/eviphd/index.html?guest=true&vp=hp_lumbalpunktion

CaseManager. https://vetmedcases.osu.edu/ , http://odee.osu.edu/sites/default/files/2012b_vetmed_finalreport_final.pdf
--

CaseTrain. https://casetrain.uni-wuerzburg.de/index.shtml
--

CASUS. http://player.casus.net
--

DecisionSim and VPSim. https://www.kynectiv.com/experience , http://vpsim.pitt.edu/shell/CaseList_Assignments.aspx
--

DxR. http://www.dxrgroup.com/products/clinician/
--

evPaeds. https://flexiblelearning.auckland.ac.nz/evpaeds_example/1.html
--

i-Human. http://www.i-human.com/media-room/videos-b-roll/
--

Inmedea Simulator. http://www.inmedea-simulator.net
--

OpenLabyrinth. http://openlabyrinth.ca/ , http://openlabyrinth.ca/user-guide/
--

SBL Interactive. http://scenarios.sblinteractive.org/Scenario/List
--

ShadowHealth http://shadowhealth.com/health-assessment.html
--

Vic. http://pie.med.utoronto.ca/vic/VIC_content/VIC_familyMedicine.html
--

Virtual Surgical Patient. https://www.discoursellc.com/ , https://www.youtube.com/watch?v=RK0kiD9EMVI&feature=youtu.be
