

## Continuous learning competency (A1)

<b>Competency</b>	During daily professional work, is able to identify a piece of information needed to improve professional performance, and to find a sufficient answer within 15 minutes
<b>Clarification</b>	<i>This is an essential professional competence, and it covers both clinical and non-clinical matters.</i>
<b>Behaviours.</b>	<p>The trainee:</p> <ul style="list-style-type: none"> <li>• Has insight into the limits of their own knowledge and skills</li> <li>• Identifies gaps in their knowledge/skills during daily professional work</li> <li>• Takes responsibility for learning, to reduce an identified gap in their knowledge or skills</li> <li>• Is familiar with common sources of further information such as medical data-bases, web-sites of specialist societies or condition-specific patient organisations etc</li> <li>• Can undertake a quick search to gain sufficient new information concerning the problem identified</li> <li>• Undertakes a search most working days, sharing findings with team members involved in the index case stimulating the search</li> <li>• Uses the information gained in the situation that revealed the need, if possible.</li> <li>• Approaches other people, within the team or elsewhere, to learn skills</li> </ul>
<b>Knowledge</b>	<p>The trainee has good knowledge of:</p> <ul style="list-style-type: none"> <li>• Medical data-bases (e.g. Medline) and how to access them</li> <li>• Sources for local, regional or national policies and guidelines</li> <li>• Sources for information on how NHS and other statutory bodies function</li> <li>• The search engines available, both general (e.g. Google) and specific (e.g. PubMed, Google Scholar)</li> <li>• Specific sources of information that exist – journals, voluntary societies, guidelines etc</li> <li>• Who to approach for help, e.g. a librarian</li> </ul>
<b>Skills</b>	<p>The trainee is able to:</p> <ul style="list-style-type: none"> <li>• Identify something that he or she needs to know or be able to do, usually as <b>part of their reflective practice</b>.</li> <li>• Set aside or find time to acquire the information or skill within a few days</li> <li>• Find appropriate source of information or learning quickly</li> <li>• Use key terms and refine a search quickly in the light of what is found</li> <li>• Recognise when has sufficient new information to reduce the gap in knowledge or skills</li> <li>• Able to store and organise any documents downloaded so that can access them easily (e.g. use of Zotero to store them)</li> </ul>
<b>Evidence</b>	<ul style="list-style-type: none"> <li>• Reflections on examples of learning and experience</li> </ul>
<b>Links</b>	<ul style="list-style-type: none"> <li>• CiPs: generic 5. GPC: domain 9;</li> </ul>

## References.

Roger Jones, Roger Higgs, Cathy de Angelis, David Prideaux,  
Changing face of medical curricula,  
The Lancet, 2001;357(9257):699-703,  
[https://doi.org/10.1016/S0140-6736\(00\)04134-9](https://doi.org/10.1016/S0140-6736(00)04134-9).

Nothnagle, Melissa MD, MSc; Anandarajah, Gowri MD; Goldman, Roberta E. PhD; Reis, Shmuel MD, MHPE.  
Struggling to Be Self-Directed: Residents' Paradoxical Beliefs About Learning.  
Academic Medicine: 2011;86(12):1539-1544  
<https://doi.org/10.1097/ACM.0b013e3182359476>

Sawatsky, A.P., Ratelle, J.T., Bonnes, S.L. *et al.*  
A model of self-directed learning in internal medicine residency: a qualitative study using grounded theory.  
BMC Med Educ 2017 **17**, 31 (2017).  
<https://doi.org/10.1186/s12909-017-0869-4>

Jeong D, Presseau J, ElChamaa R, Naumann DN, Mascaro C, Luconi F, Smith KM, Kitto S  
Barriers and Facilitators to Self-Directed Learning in Continuing Professional Development for Physicians in Canada: A Scoping Review.  
Acad Med. 2018;93(8):1245-1254.  
<https://doi.org/10.1097/ACM.0000000000002237>

Michie S, Johnston M, Abraham C, et al  
Making psychological theory useful for implementing evidence based practice: a consensus approach  
BMJ Quality & Safety 2005;14:26-33.  
<http://dx.doi.org/10.1136/qshc.2004.011155>

Berkhout JJ, Helmich E, Teunissen PW, van der Vleuten CPM, Jaarsma ADC.  
Context matters when striving to promote active and lifelong learning in medical education.  
Medical Education. 2018;52(1):34-44.  
<https://onlinelibrary.wiley.com/doi/abs/10.1111/medu.13463>

van Houten-Schat MA, Berkhout JJ, van Dijk N, Endedijk MD, Jaarsma ADC, Diemers AD.  
Self-regulated learning in the clinical context: a systematic review.  
Med Educ. 2018 Oct;52(10):1008-1015.  
<https://doi.org/10.1111/medu.13615>.

van der Keylen P, Tomandl J, Wollmann K, Möhler R, Sofroniou M, Maun A, Voigt-Radloff S, Frank L  
The Online Health Information Needs of Family Physicians: Systematic Review of Qualitative and Quantitative Studies  
J Med Internet Res 2020;22(12):e18816  
<https://doi.org/10.2196/18816>

Nicolette Harris, Cailee E. Welch Bacon

Developing Cognitive Skills Through Active Learning: A Systematic Review of Health Care Professions.

*Athletic Training Education Journal* 2019; 14 (2): 135-148.

<https://doi.org/10.4085/1402135>

Smits PBA, Verbeek JH a. M, Buisonjé CD de.

Problem based learning in continuing medical education: a review of controlled evaluation studies.

BMJ. 2002 Jan 19;324(7330):153-6.

<https://doi.org/10.1136/bmj.324.7330.153>

Hilal Al-Azri, Savithiri Ratnapalan

Problem-based learning in continuing medical education

Canadian Family Physician Feb 2014, 60 (2) 157-165;

<https://www.cfp.ca/content/60/2/157.long>

Trullàs, J.C., Blay, C., Sarri, E. *et al.*

Effectiveness of problem-based learning methodology in undergraduate medical education: a scoping review.

BMC Med Educ **22**, 104 (2022).

<https://doi.org/10.1186/s12909-022-03154-8>