

# how to:



## Identify Learning Needs

Harish Thampy

### Introduction

The concept of learning needs stems from adult learning theory. Through a process of reflection, the learner identifies deficiencies in knowledge or skills with the aim of meeting these needs through the creation of an action plan (Knowles et al., 2011). It is the initial step in continuing professional development. Indeed, learning is more likely to change an individual's practice when it has stemmed from a learning needs assessment. It is suggested that the term 'learning needs' should only be applied on an individualistic basis whilst 'educational needs' refer to the perceived needs of a whole target audience (Norman, 2004).

### Perceived vs True Learning Needs

The literature distinguishes between 'perceived' learning needs and 'true' or 'real' learning needs (Laxdal, 1982). Integral to the identification of perceived learning needs is a process of self-assessment of the learner's current abilities (Eva & Regehr, 2008). This process may be facilitated as part of an "externally informed reflective assessment process" (Sargeant et al., 2010, p1212) whereby learners can identify deficiencies in their current performance as compared to documented competencies expected by external stakeholders such as Royal Colleges and the GMC. However when such external guidance does not exist or is not referred to, then the process of a learner identifying perceived needs becomes increasingly subjective. Indeed, there is a danger that learner-generated perceived needs may not necessarily reflect all that is required for competency.

True learning needs on the other hand are objectively determined by independent assessment of a learner's performance against an optimum. This involves triangulation of information from multiple sources, methods and collection strategies (Lockyer, 1998) and may be facilitated by the learner's educational supervisor (McKimm & Sanwick, 2009). Whilst this ensures that the learner is helped to identify needs that they may not have been aware of, it may also create a paternalistic situation whereby a learner is informed as to what it is they need to know without being given the rationale behind this. Knowles' (2011) work on adult learners suggests that feeling a necessity to learn is a key component of self-directed learning.

A useful way of thinking about perceived and true learning needs is in the context of the Johari window, as shown in Figure 1 (Luft & Ingham, 1950). The Johari window is a graphical representation of interpersonal awareness that was first devised by American psychologists Joseph Luft and Harry Ingham. It has since been adapted for use in a number of formats across multiple disciplines including medical education.

In the context of learning needs, panes one and three reflect the learner's ability to admit self-recognised deficiencies and therefore can be thought of as the perceived learning needs. In pane one, these are also observed by the tutor whereas in pane three, these needs are only known to the learner. Panes two and four reflect learning needs that the learner themselves do not recognise as such,

	Learning Needs Known to Learner	Learning Needs UnKnown to Learner
Learning Needs Known to Tutor	1 Open	2 Blind
Learning Needs Unknown to Tutor	3 Hidden	4 Unknown

Figure 1: A Visual Representation of Learning Needs  
Adapted from: the Johari Window (Luft & Ingham, 1950)

though in pane two these are noticed by their tutor. Pane four reflects a difficult situation wherein both learner and tutor are unable to identify learning needs, though these may still exist. The latter two panes are analogous to the true learning needs.

It is known that whilst perceived learning needs and true learning needs may overlap, they are also likely to differ considerably. Attempts have been made to further differentiate the different types learning needs. Gilliam and Murray (1996) divide learning needs into four groups: felt needs (akin to Laxdal's perceived needs), expressed needs (as demonstrated through the learner's actions), normative needs (as defined by experts) and comparative needs (derived from group comparison).

### Learning Needs Assessment

A learning needs assessment is a systematic process of obtaining information in order to determine learning goals to close the gap between what the student currently knows and what they need to know in order to achieve competency. Laxdal (1982) outlines five steps in conducting such an assessment. The first involves analysis of the learner characteristics, activities and environment to gain an understanding of current performance. Secondly, clear defined criteria are needed to compare standards of performance. This subsequently allows the learner to identify their perceived learning needs. This may be based on written curricula competencies or indeed may be benchmarked against an exemplary peer. This internal audit of performance should then be followed by an objective consideration of the learner's true learning needs. Finally, a process of prioritisation ensues whereby the most pressing areas are selected to be addressed. It is recognised that conducting such a needs assessment drives developing performance and as such, should be an integral part to professional life-long learning (Grant, 2002). Indeed, identifying and fulfilling learning needs is seen to be the core basis of continuing medical education (Crozier, 1996).

Grant (2002) offers an alternative practical guide to conducting a learning needs assessment based on learning activities viz:

- ▶ **Gap or discrepancy analysis** requires the learner to compare their performance against stated competencies through a process of self-assessment or objective testing.
- ▶ **Continual reflection of practice** allows identification of good performance and areas requiring development. This may be facilitated through using reflective journals, log books or weekly reviews.
- ▶ **Peer review** allows a 'critical friend' to offer feedback on the learner's current practice. This can take on a variety of formats including direct observation, multi-disciplinary assessment (such as multi-source feedback/ 360° feedback) or the use of rating forms.
- ▶ **Critical incident / significant event analysis:** this pillar of clinical governance is not only a powerful tool to identify learning needs but also a key motivator in addressing these.
- ▶ **Practice review:** review of clinical practice such as record keeping, referrals and prescribing can again generate additional areas for improvement.

## Reflective Cycles and Action Plans

Integral to the process of conducting a learning needs assessment is the ability to adopt reflective practice. Repeated cycles allow for continued professional development of professional knowledge, skills and attitudes. Reflective practice not only helps identify learning needs but also encourages development of critical thinking (Mamede & Schmidt, 2005). Kolb (1984) described a four-stage cyclical model of reflective practice based on experiential learning as shown in Figure 2. The model suggests that having an experience alone is not sufficient to promote learning. Instead, the learner must reflect on their experiences and formulate links between theory and action in order to truly promote learning.

Thus, reflective practice facilitates the multi-step process of the learning needs assessment described above. However, in order to close the 'learning gap' between the learner's current performance and expected competency, an action plan must subsequently be created to address this. This may be formalised through a personal development plan (PDP) whereby the learner and their supervisor set out the required outcomes

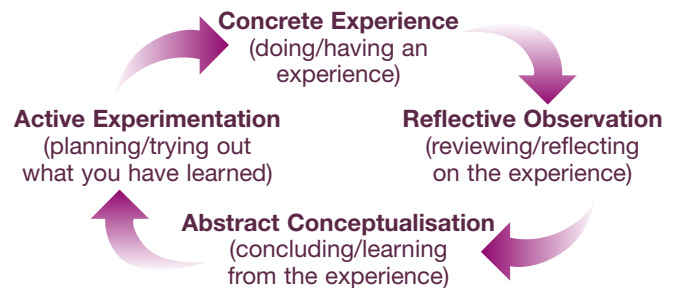


Figure 2: The Reflective Cycle (Kolb 1984)

and strategies to achieve these. A widely used method of creating a well-structured plan is to adopt a SMART approach.

- ▶ **Specific:** Learning goals should be clearly defined and easily communicated
- ▶ **Measurable:** End results must have a clear outcome that can be measured in order to judge completion
- ▶ **Achievable:** It is important to set out realistic goals
- ▶ **Relevant:** Learning needs must be guided by a thorough assessment not just of perceived need but should also be informed by the supervisor's highlighting true learning needs
- ▶ **Timely:** A defined time scale for achievement of the action plan should be set. Creating interim milestones can help assessment of progress.

## Conclusions

Identifying learning needs is not a straight-forward task and involves incorporating both learner-generated perceived needs with more objective true learning needs as opined by external sources such as the learner's tutor. A number of models of learning needs assessment have been described. Ultimately however, identifying learning needs is only the first step in continuing professional development and this process should initiate the creation and realisation of action plans designed to meet these needs.

## Further Information

Crozier A. (1996). *GP Learning Needs*. Australian Family Physician. 25:124-5

Eva K & Regehr G. (2008). "I'll never play professional football" and other fallacies of self-assessment. *Journal of Continuing Education in the Health Professions*. 28(1):14-19.

Gilliam SJ, Murray SA. (1996). *Needs Assessment in General Practice*. Royal College of General Practitioners. London.

Grant J. (2002). *Learning needs assessment: assessing the need*. *British Medical Journal*. 324:156-159

Knowles M, Swanson R, Holton E. (2011). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (7th ed.): Elsevier.

Kolb DA. (1984). *Experiential Learning experience as a source of learning and development*. New Jersey: Prentice Hall

Laxdal O. (1982). *Needs assessment in continuing medical education: a practical guide*. *Journal of Medical Education*. 57:827-834

Lockyer J. (1998). *Needs Assessment: Lesson Learned*. *Journal of Continuing Education in the Health Professions*. 18:190-192

Luft J, Ingham H. (1950). *The Johari window, a graphic model of interpersonal awareness*. Proceedings of the western training laboratory in group development. Los Angeles: UCLA

Mamede S, Schmidt HG. (2005). *Correlates of reflective practice in medicine*. *Advances in Health Science Education: Theory and Practice*. 10:327-37

McKimm J, Sandwick T. (2009). *Assessing learning needs*. *British Journal of Hospital Medicine*. 70:348-351

Norman G, Shannon S, Marrin, M. (2004). *The need for needs assessment in continuing medical education*. *British Medical Journal*. 328:999-1001

Sargeant J, Armson H, Chesluk B, Dornan T, Eva K, Holmboe E, Lockyer J, Loney E, Mann K, van der Vleuten, C. (2010). *The processes and dimensions of informed self-assessment: a conceptual model*. *Academic Medicine*. 85(7):1212-1220

**Dr Harish Thampy** is a Manchester-based ST4 GP Trainee currently completing an Academic Clinical Fellowship in Medical Education and Primary Care. He has recently been awarded an MSc in Medical Education from Cardiff University.

**Interested in learning more about this and other educational topics?** Why not professionalise your role with an academic qualification at PG Cert, Dip or MSc in Medical Education via e-learning or attendance courses.

Contact: [medicaleducation@cardiff.ac.uk](mailto:medicaleducation@cardiff.ac.uk)

**Series Editor:** Dr Lesley Pugsley, Medical Education, School of Postgraduate Medical and Dental Education, Cardiff University.

### Wales Deanery

Cardiff University, 9th Floor, Neuadd Meirionydd,  
Heath Park, Cardiff CF14 4YS  
Tel: +44 (0)29 2068 7451 Fax: +44 (0)29 2068 7455  
E-mail: [medicaleducation@cardiff.ac.uk](mailto:medicaleducation@cardiff.ac.uk)

Wales  
Deanery  
Deoniaeth  
Cymru

