



METHODS OF ASSESSING LEARNING NEEDS

Why is it important to know more about your target audience and their learning needs?

As the caterpillar in Alice in Wonderland alludes: If you don't know where you are going, anywhere will do. Although we often believe we know what other people need or want to learn and quite often we are right – more precision is needed to help fine tune our perceptions and also guide the process of program design. In order to design effective CPD, we need to understand the learning needs of our potential target audience. This Quick Tip will introduce you to four different kinds of learning needs and how you might go about identifying them. High quality CPD programs are built by understanding the true learning needs of a potential target audience and building clear learning outcomes with methods that are in alignment with achieving those outcomes.

What is a learning need?

Simply stated, a learning need is the gap that exists between current practices and desired practices. Learning needs can be unperceived, perceived, misperceived or emergent.

What is a gap analysis?

A gap analysis is a very thorough approach to determining that a gap does exist. It defines the subject, provides data confirming the need for change, the current practices of the target audience, specific desired outcomes, root causes of the gap and identifies barriers to change. (For more information on how to conduct a gap analysis see Quick Tip on Gap Analysis).

What is a learning needs assessment?

Learning need assessments then are the tools that are used to define the gap between current and desired practice for a specific audience. It can provide more specificity than the gap analysis would and asks:

- How big is the gap?
- Is it known or unknown to the target audience?
- What current practices issues are pressing on this issue for the target audience?
- Is there motivation to learn something new and if not what would provide it?

We recommend developers use more than one method of assessing need. Many developers will conduct a gap analysis and a learning needs assessment. In addition, developers will sometimes conduct more than one learning needs assessment, one in the planning phases and one with their actual participant group to ensure relevance to the learner. Identifying learning needs early can also help those with unperceived needs be directed to the appropriate CPD opportunity.

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There are different types of learning needs:

1. Self-recognized or Perceived needs: *“I know what I want and need to know”*
2. Unknown to the learner or Unperceived needs: *“I don’t know what I don’t know”*
3. Miscalculated or misperceived needs: *“I think I know something I don’t”*
4. Emergent needs: *“Now I have some new information, I realize I want or need to learn something else instead of, or in addition to, what I am learning now”*

The different types of needs (perceived, unperceived, misperceived and emergent) are all important when designing CPD activities. As a program planner you may be aware of the need for new knowledge or skills on behalf of your target audience but if they are not aware of that need, they will not be interested in attending your program. If they do attend but are still not aware of the learning need they will simply not pay attention or not be able to see the relevance to their own practices. The more you know about how your audience thinks and what their everyday problems in practice are in relation to the topic you wish to deliver, the more effective your program will be and the more likely a change in practice behaviour will occur.

Determining Perceived Needs – “I know what I want and need to know”

Different methods are used to determine the different types of learning needs. If you want to know what learners perceive as their learning needs, it is important to ask them directly. The most popular methods are as follows:

Survey	A questionnaire with any number of questions directed at determining what potential participants may want or need to know.
Interview	A one on one process in which representatives of the target audience are asked a series of questions pertaining to program preference or current level of knowledge.
Focus group interview	An interview conducted with several representatives of the target audience led by a trained and impartial facilitator. Participants are asked for their candid views and opinions.
Key informant	A delegate from the target audience is chosen to represent the views of their peers. They are asked to talk with their colleagues, gather information on perceived learning needs and then report this information to the CPD planner or organizing team.
Representative scientific planning committee:	The scientific planning committee is carefully constructed of members who represent the target audience. For instance, for a program that is targeted to specialists, family physicians, pharmacists or nurses- the scientific planning committee would have a member of each discipline/profession included. This is one of the easier methods of needs assessment as it does not require data

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	analysis or time consuming methods of data collection. However, it is also less scientific than some of the other methods and should be used in conjunction with a broader method.
Meetings with colleagues	A formal or informal activity aimed at identifying educational needs based on a meeting between two or more people, excluding focus groups and other group techniques. The information obtained is recorded in writing in order to avoid a subjective interpretation of the relative importance of each identified need.

Determining Unperceived Needs - “I don’t know what I don’t know”

Unperceived needs are outside the awareness of the learner. Some refer to these as “objective needs”. Suggested methods of determining unperceived needs are as follows:

Knowledge test	Learners are asked to respond to questions that test their knowledge. These can be multiple choice quizzes, a true/false quiz, a presentation of cases with questions attached or any variation thereof. An audience response system, such as iClickers or web-based technologies can be used in large group settings.
Chart audit	Chart audit is a method that systematically examines patient charts looking for patterns of care that can be appropriate or inappropriate .
Critical incident	Information using this technique can be gathered by using a hypothetical case situation e.g. “What would you do if a patient presented with ...?” Or it can take place as a review of clinical records after an important event such as a missed diagnosis has occurred.
Expert advisory group	Experts often know a great deal about the unperceived needs of other health professionals because they receive patients as a result of referrals. The referrals can give a lot of information on unperceived learning needs of the target audience. In addition, experts are asked a lot of questions by other health care professionals and these questions can point to learning needs quite effectively. It is recommended that this method be used in conjunction with other methods that are more objective.
Input from Patients	Patient perspectives are also useful in identifying learning needs. Gathering patient perspectives can take place through interviews, surveys and through inclusion of patients on the scientific planning committee.

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Health outcome data sources

- Canada Health Infoway - <https://infoway-inforoute.ca/en/component/edocman/resources/reports/>
- Canadian Institute for Health Information (CIHI) - <https://www.cihi.ca/en>
- Canadian Medical Protective Association (CMPA) - <https://www.cmpa-acpm.ca/en/research-policy/data-request>
- Canadian Physician Survey (2018) - <https://infoway-inforoute.ca/en/component/edocman/resources/reports/benefits-evaluation/3643-2018-canadian-physician-survey>
- Canadian Primary Care Sentinel Surveillance Network - <http://cpcssn.ca/>
- Cancer Care Ontario, Ontario Cancer Registry - <https://www.cancercareontario.ca/en/cancer-care-ontario/programs/data-research/ontario-cancer-registry>
- Choosing Wisely Canada - <https://choosingwiselycanada.org/recommendations/>
- City of Toronto Open Data - <https://www.toronto.ca/city-government/data-research-maps/open-data/>
- Health Quality Ontario Standards - <https://www.hqontario.ca/Evidence-to-Improve-Care/Quality-Standards/View-all-Quality-Standards>
- Hospital specific patient records and EMRs
- Institute for Clinical Evaluative Sciences (ICES) - <https://www.ices.on.ca/>
- Matchmaker Exchange (US-based genomic research, rare diseases) - <https://www.matchmakerexchange.org/>
- Ontario Government (including Vital Statistics and Registered Persons Database) - <https://www.ontario.ca/search/data-catalogue>
- Ontario Health Insurance Plan claims
- Public Health Ontario - <https://www.publichealthontario.ca/en/About/Pages/Data.aspx>
- University of Toronto map and data library - <https://mdl.library.utoronto.ca/>
- UTOPIAN data safe haven (primary care) - <https://www.dfc.utoronto.ca/utopian-data-safe-haven>

How can unperceived learning needs be translated to perceived needs?

As stated earlier, if someone is not aware of a need to learn something new it is unlikely that they will. Most professionals want to be the best they can be and so providing information or feedback on gaps in knowledge, skills or practice is an invaluable tool for motivation to change or learn.

Non-threatening techniques such as anonymous quizzes at the beginning of a presentation is an easy method that can be used using an Audience Response System.

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Or

Presenting a case with lots of opportunities for participants to reflect on their own practice vs. what is recommended.

Or

Presenting a “disorienting dilemma” to the audience in which something that is commonly believed to be true is proven to be false (or vice a versa). For instance – did you know that studies have proven that homework is detrimental to children’s learning?

Methods for Determining Misperceived Learning Needs – “I think I know something I don’t”

Misperceived learning needs can be uncovered through the same methods employed for unperceived learning needs. Sometimes they reveal the necessity for remedial work which is beyond the purview of this QT series. Sources of data that can help identify misperceived learning needs include:

Referrals	
Prescribing data	
Observation	
Input from patients	See above

Methods for Determining Emergent Learning Needs

Poll	Poll the audience after a session and ask directly
Intentionality	Use “commitment to change documents” to track intended changes
Future planning	Ask for ideas that have arisen for “personal learning projects”.

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Acknowledgements:

Jane Tipping, MAEd PCC (ICF)
Education Consultant, Post MD Education – Continuing Professional Development

Morag Paton, MEd
Education Research Coordinator, Post MD Education – Continuing Professional Development

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