Gap Analysis and 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 states: 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. Clarity on the true learning needs of a potential target audience combined with clear learning outcomes and methods that are in alignment with achieving those outcomes help ensure success. Accurately identifying those learning needs and ensuring relevance to practice also contributes to effective program marketing.

There are different levels and strategies involved in accurately determining learning needs but first some definitions:

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 subject, 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 learning needs assessment?

Learning need assessments then are the tools that are used to measure the gap between current and desired practice 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?

METHODS OF ASSESSING LEARNING NEEDS
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 and misperceived) are all important when designing continuing education activities. As a program planner you may be aware of the need for new knowledge or skill 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:

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<th>Method</th>
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<tr>
<td>Survey</td>
<td>A questionnaire with any number of questions directed at determining what potential participants may want or need to know.</td>
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<tr>
<td>Interview</td>
<td>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.</td>
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<tr>
<td>Focus group interview</td>
<td>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.</td>
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<tr>
<td>Key informant</td>
<td>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 CHE planner or organizing team.</td>
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### Methods of Assessing Learning Needs

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<td>Representative planning committee:</td>
<td>The planning committee is carefully constructed of members who represent the target audience. For instance, for a program that is targeted to specialists, FP's, pharmacists or RN's- the planning committee would have a member of each profession included. This is one of the easier methods of needs assessment as it does not require data 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.</td>
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<td>Meetings with colleagues:</td>
<td>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.</td>
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<td>Evaluation of previous CPD activities:</td>
<td>Questionnaires to evaluate previous CPD activities can be used to identify needs if the program is to be repeated. In particular, any comments can provide useful information for planners.</td>
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<td>Representative planning committee:</td>
<td>Members of the target audience are included in all phases of the planning process and represent the views of their colleagues.</td>
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Unperceived needs are outside the awareness of the learner. They are also referred to as “objective needs”.

If you want to find out more about what a learner does not know or their level of competence or what they actually can demonstrate they know or methods of needs assessment are implied such as the following:

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<td>Knowledge test:</td>
<td>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 I-Clickers can be used in large group settings.</td>
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<tr>
<td>Chart audit:</td>
<td>Chart audit is a method that systematically examines patient charts looking for patterns of care that can be appropriate or inappropriate (it is expensive and complex to perform properly).</td>
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<td>Critical incident:</td>
<td>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.</td>
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<td>Duplicate prescription/ health care diary:</td>
<td>Obviously this is a method that applies to physicians and is exactly as it implies. When a prescription is filled out, it is filled out in duplicate. In this way, over time, patterns in prescribing and their effectiveness can be determined. Health care professionals can also be asked to keep a practice diary for a few weeks before a program and after a program related to specific topics. For instance, family physicians registered for a course in Dermatology might be asked: “Keep a diary of every patient that comes in with a nail disorder over the next two months and record how you worked with this patient.”</td>
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<td>Expert advisory group:</td>
<td>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.</td>
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<tr>
<td>Patient feedback:</td>
<td>Patients are asked to fill in surveys or respond to interviews about specific aspects of their care.</td>
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### 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 such as I-clickers

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 OF ASSESSING LEARNING NEEDS

Methods for Determining Misperceived Learning Needs
(I think I know or can do something and I’m wrong)

- Referrals
- Prescribing data
- Observation
- Patient complaints

Methods for Determining Emergent Learning Needs

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

References


Moore DEJ. Needs assessment in the new health care environment: combining discrepancy analysis and outcomes to create more effective CME. Journal of Continuing Education in the Health Professions 1998;18:133-141. Abstract


Quick Tips: Examples of Needs Assessment Tools