

Getting to Know the CE Educator's Toolkit



Objectives

- Become familiar with the CE Educator's Toolkit.
- Craft active learning objectives.
- Incorporate best practice learning interventions into CME Education.

CE Educator's Toolkit

Evidence-based design and implementation strategies
for effective continuing education



<https://accme.org/publications/ce-educators-toolkit>

- Published in 2022
- Developed by the Society for the Academic Continuing Medical Education (SACME) through an ACCME research grant to fulfill an ACCME strategic goal.
- Goal: “To provide CE leaders, educators, and healthcare professionals with best practices and guidelines to assist in the design and delivery of CE in a manner that fosters a practical and active learning approach.”
- Focuses on 3 educational interventions:
 - Small group learning
 - Case-based learning
 - Reflective Learning



CE Educator's Toolkit Contents

- Needs Assessments
- Learning Objectives
- IDEA Principles
- Virtual Delivery Considerations
- Small Group Learning
- Case-based Learning
- Reflective Learning
- Evaluating CE
- Additional Resources

Ground Rules for Small Group Work

1. One voice at a time
2. Respect everyone's ideas and opinions
3. Critique the idea, not the person
4. Be involved in the discussion
5. Share the floor



Let's Start at the Very Beginning...

Identifying Learner Needs



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**How often does your organization
conduct a needs assessment?**

① Start presenting to display the poll results on this slide.

Understand your audience and their educational needs by conducting a needs assessment



An important first step when designing content for a CE session is to determine who the target audience is and what their educational needs are. Identifying these needs can be achieved through conducting a needs assessment. Needs assessments help define the gap between current and desired professional practices and/or care outcomes for health professional learners and their patients [12-13]. Data derived from the needs assessment can be used to develop educational objectives and inform methods of delivery [12-13].

The following are different types of learning needs that can be addressed through a needs assessment:

INITIAL PLANNING

Self-recognized or perceived needs	Unknown or unperceived needs	Miscalculated or misperceived needs	Emergent needs
I know what I want and need to know	I don't know what I don't know	I think I know something that I don't	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

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Small Group

What kinds of needs assessments could you conduct to uncover each of the different types of needs?

**Self-recognized or
perceived
needs**

I know what I want
and need to know

**Unknown or
unperceived
needs**

I don't know what I
don't know

**Miscalculated or
misperceived
needs**

I think I know something
that I don't

**Emergent
needs**

Now I have some new
information, I realize I want or
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Methods for conducting a needs assessment



The best way to know what learners perceive as their learning needs it is to ask them directly [13]. However, learners are not always aware of their learning needs. Unperceived needs can be identified through experts in the field, patients and clinical data. The following are common methods of conducting needs assessments:

Determining perceived needs- "I know what I want and need to know"

Survey

A questionnaire is delivered to the target audience to determine what potential participants may want or need to know [13].

Focus groups

An interview conducted with several representatives of the target audience led by a facilitator to gain insight into participants' views and opinions [13].

Key informant

A delegate from the target audience talks with their colleagues, gathers information on perceived learning needs and then reports to the CE planner [13].

Additional methods

- Interviews
- Meetings with colleagues (formal or informal)
- Evaluations of previous CE activity

Determining unperceived needs- "I don't know what I don't know"

Expert advisory group

Process where experts in CE or clinical practice are asked questions about their program and content preferences [13].

Chart audit

A method that systematically examines patient charts and EMR/EHR data looking for patterns of care that can be appropriate or inappropriate [14].

Input from patients

Data on patient satisfaction and experience can be captured to identify learning needs. This information can be gathered through interviews, surveys, and including patients on planning committees [14].

Additional methods

- Knowledge tests
- Critical incident reports
- Direct observations of practice performance

Small Group Discussion

What is one method you already use to identify learner needs?

What is one method you think it would be beneficial to try?

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INITIAL PLANNING

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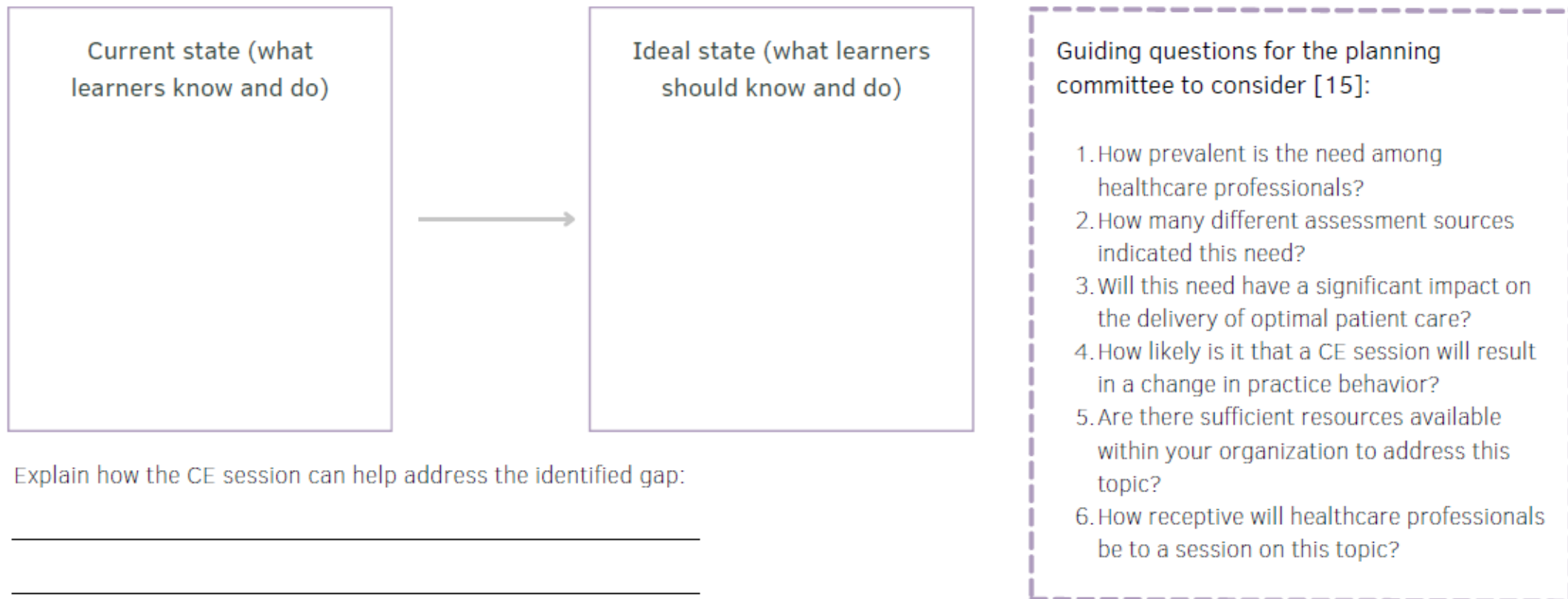
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Practice: Identify the gap

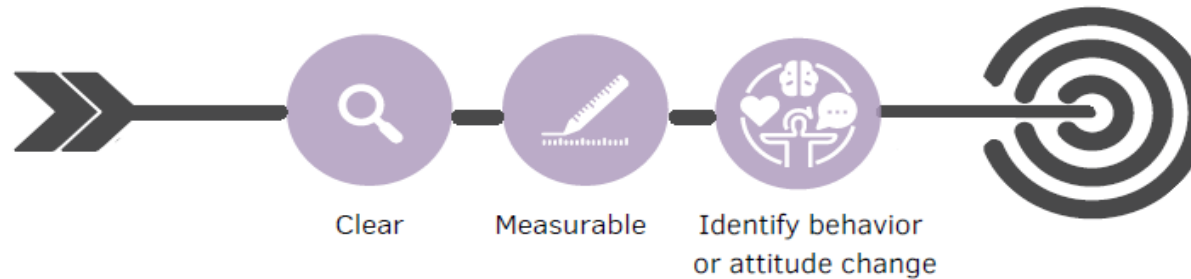


Needs assessments help define the gap between current and desired education practices for your target audience [12-13]. Identification and analysis of educational needs can provide the foundation for developing educational objectives. In this exercise, identify the educational or professional gap that the CE session will address.



Why are learning objectives important?

2.2 Develop targeted learning objectives



Learning objectives should clearly state, in measurable terms, the behavior or attitude the learner is expected to adopt on completion of the activity.

- ✓ Use verbs based on [Blooms' Taxonomy](#) to structure clear learning objectives ([See page 34](#)) [16].
- ✓ Employ the TACT ([target, action, context, and time](#)) principles to articulate the expected behavior or attitude change in clinical practice and how it can be measured ([See page 36](#)) [16].

The Taxonomy Table [17a]

The Knowledge Dimension	The Procedural Dimension					
	Remember	Understand	Apply	Analyze	Evaluate	Create
Factual Knowledge	The learner will list symptoms of juvenile diabetes	The learner will summarize the functions and features of a new medical device	The learner will complete a surgical safety checklist	The learner will be able to differentiate the clinical presentations of acute rhinosinusitis vs acute bacterial rhinosinusitis to develop treatment plans	The learner will rank risk factors in terms of severity for COVID-19	The learner will create a personal quick guide for identifying patients with a higher risk for stroke
Conceptual Knowledge	The learner will recall the differences between Crohn's Disease and Ulcerative Colitis	The learner will explain why they would recommend a particular anti-depressant drug for a patient	The learner will apply the four pillars of medical ethics to a patient situation	The learner will distinguish which patients to prioritize in a triage situation	The learner will critique the effectiveness of different managerial styles	The learner will design a treatment plan for a person living with cancer
Procedural Knowledge	The learner will list the key factors in effective team management	The learner will explain how to complete a successful kidney transplant	The learner will perform a tracheal intubation	The learner will attribute a successful surgical operation to the specific methods used	The learner will check their implementation of a vascular stent	The learner will create step by step plan onboarding new team members

Commonly used verbs [17b]

The following are commonly used verbs for each level of Bloom's Taxonomy. While there are many others, this chart is a helpful jumping-off point [17b].

Knowledge	Understand	Apply	Analyze	Evaluate	Create
List	Explain	Use	Analyze	Judge	Construct
Recall	Describe	Apply	Compare	Appraise	Design
State	Paraphrase	Demonstrate	Distinguish	Rearrange	Arrange
Name	Discuss	Act	Differentiate	Compare	Organize
Label	Translate	Solve	Categorize	Assess	Plan
Define	Summarize	Illustrate	Contrast	Evaluate	Compare
Repeat	Classify	Operate	Examine	Synthesize	Create
Identify	Express	Sketch	Relate	Defend	Develop
Cite	Interpret	Dramatize	Infer	Estimate	Formulate
Select	Infer	Employ	Test	Manage	Write

How to make a learning objective actionable

TACT (target, action, context, and time) is a mnemonic that refers to principles that can be used to structure your learning objective so that it clearly articulates the expected clinical behavior or attitude change [16]. Creating an actionable learning objective is important to direct learners through the CE intervention and for facilitators to stay focused on the goals of the CE intervention [16].

Please refer to the following example on the right when you are creating your learning objectives.

As part a CE session on colorectal cancer screening awareness ...

1

TARGET

Whom is the learning objective directed toward?

Primary care physicians

2

ACTION

What is the behavior or attitude change required?

To implement recommendations on screening for colorectal cancer among the average-risk population aged 50 to 74 years

3

CONTEXT

Where is the behavior or attitude change taking place?

In their clinical practice

4

TIME

What is the time frame to demonstrate behavior or attitude change?

Within the next three months

Example Learning Objective: Implement recommendations on colorectal cancer screening among the population between the ages of 50 to 74 years in family physician's clinical practice within the next three months.

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Let's Do Some Planning...



Case Scenario

Dr. T is a conference planner for the Annual Updates in Internal Medicine conference, which will be held in-person for one day. Dr. T comes to you with the following learning objectives for one of the sessions:

Case Scenario

- Review the major causes of Upper GI (gastrointestinal) bleeding and important elements of the history.
- Know the important elements of the physical exam and diagnostic evaluation.
- Understand acute management of upper GI bleeding.

How could you modify these learning objectives to make them actionable?

In Your Group

- Modify the Learning Objectives presented by Dr. T to be actionable.
- Use the TACT Sheet to help you rewrite each objective.
- Be prepared to share out your revised learning objectives.

Practice: Write a learning objective



TACT Principle	Learning Objective
TARGET Whom is the learning objective targeted toward?	
ACTION What is the behavior or attitude change required?	
CONTEXT Where is the behavior or attitude change taking place?	
TIME What is the time frame to demonstrate behavior or attitude change?	

Write your learning objective based on the TACT principles.

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Educational Interventions



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Which of the following are included in the activities offered by your organization on a fairly regular basis? (check all that apply)

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Active Learning



Improves exam scores
(Freeman, 2014)



Increases learning retention
(University of Toronto, 2020)



Reduces the achievement gap
between learners
(Lorenzo, 2016; Haak 2011)



Improves physician practice and
patient outcomes
(Bucklin et al., 2021; Cervero,
2015)

Choose and integrate education interventions into your CE session

TOOLKIT INTRODUCTION

The selected strategies presented in this toolkit can be used in combination when designing a CE session. However, your CE session design is not limited to these education interventions. You can use them together or other learning approaches to deliver educational content.

The following diagram outlines unique features of each intervention discussed in this toolkit that can be incorporated within your CE session:

Small group learning

- Promote self-esteem and participation
- Introduce learner to a range of perspectives and gain feedback from peers
- Assist in the development of social, communication, and leadership skills

CE Session

Case-based learning

- Foster critical thinking through the use of real-world scenarios
- Promote collaboration and interprofessional learning through inquiry-based approaches

Reflective learning

- Foster the development of self-awareness
- Facilitate lifelong learning
- Identify individual gaps and needs

Case Scenario

Dr. T is a conference planner for the Annual Updates in Internal Medicine conference, which will be held in-person for one day. In past years, this conference has included primarily didactic sessions. Dr. T is reaching out to you for your advice and help on how to best plan the conference to optimize learning.

- Using the CE Educator's Toolkit, how would you advise Dr. T on how to implement your assigned educational intervention?

In Your Group

Given Your Educational Intervention:

1. Review the pages in the CE Educator's Toolkit that pertain to your assigned educational intervention.
2. Determine how Dr. T could incorporate your educational intervention into this activity.
3. What additional things should Dr. T consider to incorporate this type of learning?
4. Record your group's ideas on the chart paper.



Share Out

Share Your Group's:

- Ideas you would incorporate based on your group's assigned area
- Additional things to consider



Reflection

Take a moment to reflect on the ideas and techniques discussed today.

- Which of these will you implement in your work or teach to others?
- What would you like to learn more about?
- What are some challenges you anticipate?
- What steps can you take to eliminate or alleviate those challenges?

Thank you

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