

Developing Learning Objectives

Presented by:
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Disclosures

- No financial relationships or other conflicts of interest to report

Webinar “Housekeeping”

- All muted
- Please ask Questions in the Chat (or Unmute)
- Chat - Everyone

Recommended: To get the most out of this workshop, please have available learning objectives that you have used or will use for an upcoming learning experience (e.g., didactic session).



Section - Introduction

- Learning Objectives
- Definitions
- Context



Learning Objectives

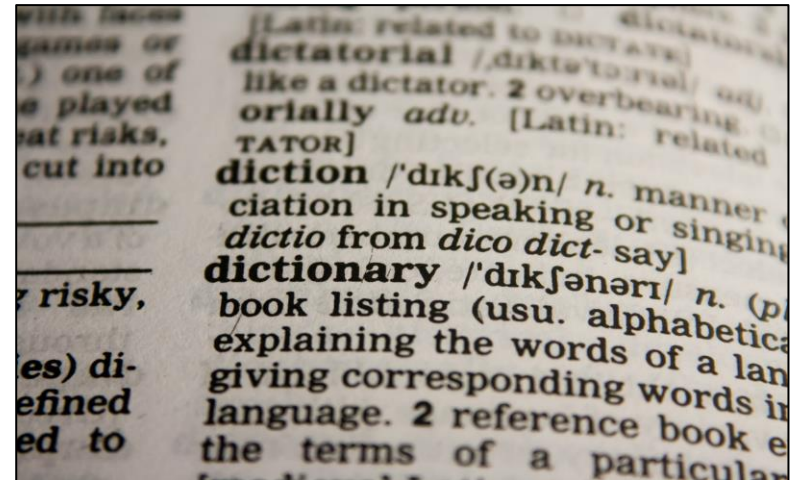
Upon completion of this workshop, attendees will be able to:

1. Recognize the educational value of writing meaningful learning objectives
2. Develop SMART learning objectives for a range of activities and audiences
3. Utilize frameworks such as Bloom's Taxonomy, the ABCD method, and Miller's Pyramid/Prism to align objectives with goals and assessments
4. Review instructional materials and approaches to ensure objectives are adequately addressed



(My) Definitions

- Purpose focus, e.g., Accreditors
 - ACGME, AOA (CME)
- Generally
 - Goals - Broad, Presenter focused
 - Objectives - Narrow, Participant focused



(My) Definitions - Examples

- **Goal**

- Get in Better Shape

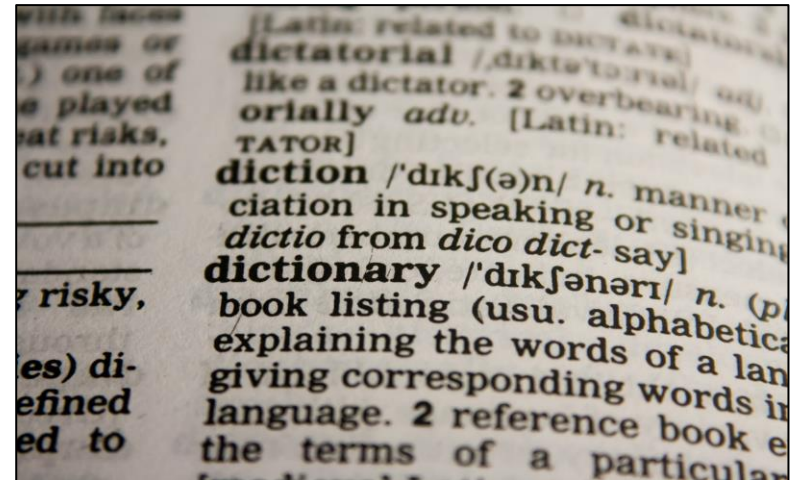
- **Objectives**

By 9/1/21, I'll:

- Decrease my body fat percentage to <20%
- Complete a 5K in <27 minutes

- **Are these objectives SMART?**

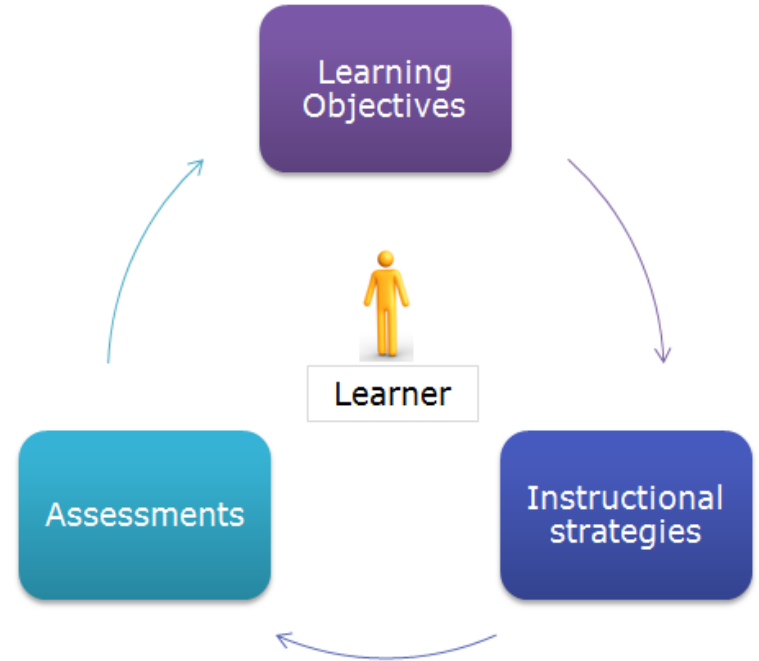
- Specific
- Measurable
- Achievable
- Results-focused/Relevant
- Time-focused



Context

- Begin with the end in mind*
- Prepare for what's next (short term)

- *Covey, S. R. (2004). *The 7 habits of highly effective people: Powerful lessons in personal change*. Simon and Schuster.
- *Wiggins, G. P., Wiggins, G., & McTighe, J. (2005). *Understanding by design*. ASCD.



Section/LO#1 - Value of Learning Objectives



Activity

Value of Learning Objectives

- What is the educational value of having meaningful learning objectives?

Please select “Everyone” in Chat and submit your response



Section/LO#1 - Value of Learning Objectives

- Indicate What's Important
- Provide a Destination
- Alignment of
 - Activities
 - Assessments
- Ensure Value of Resources
- Evaluation of Learning Activities
- Accreditor/Organizational Needs



Activity - Review your LOs

Value of Learning Objectives

- Do you use your learning objectives to indicate the educational value of your learning activity?
- Do you review LOs with your audience?
- Do you incorporate your LOs into your presentations and other learning activities?
- Do you go back and check if you've met objectives as you teach?

No need to answer these, but please consider



Section/LO#2 - Develop SMART Learning Objectives

SMART

- Specific
- Measurable
- Achievable
- Results-focused/Relevant
- Time-focused

Introductory Language

Upon completion of this XXX, XXX will be able to:



Verbs (Bloom's Taxonomy)

Active verbs developed based on Bloom's Taxonomy

Knowledge	Understand	Apply	Analyze	Evaluate	Create
define	explain	solve	analyze	reframe	design
identify	describe	apply	compare	criticize	compose
describe	interpret	illustrate	classify	evaluate	create
label	paraphrase	modify	contrast	order	plan
list	summarize	use	distinguish	appraise	combine
name	classify	calculate	infer	judge	formulate
state	compare	change	separate	support	invent
match	differentiate	choose	explain	compare	hypothesize
recognize	discuss	demonstrate	select	decide	substitute
select	distinguish	discover	categorize	discriminate	write
examine	extend	experiment	connect	recommend	compile
locate	predict	relate	differentiate	summarize	construct
memorize	associate	show	discriminate	assess	develop
quote	contrast	sketch	divide	choose	generalize
recall	convert	complete	order	convince	integrate
reproduce	demonstrate	construct	point out	defend	modify
tabulate	estimate	dramatize	prioritize	estimate	organize
tell	express	interpret	subdivide	find errors	prepare
copy	Identify	Manipulate	survey	grade	produce
discover	indicate	Paint	advertise	measure	rearrange
duplicate	Infer	Prepare	appraise	predict	rewrite
enumerate	relate	produce	Break down	rank	role-play

Activity - Improve these learning objectives

- 3 Examples
- Apply SMART as needed
- What determines verb?

Examples from introductory level Feedback Workshop

Please select “Everyone” in Chat and submit your response

- Why not SMART?
- How would you improve it?



Activity - Improve these learning objectives #1

Upon completion of this workshop, attendees will be able to:

- Understand the Ask-Tell-Ask and One Minute Preceptor methods of providing feedback

SMART

- Specific
- Measurable
- Achievable
- Results-focused/Relevant
- Time-focused

Please select “Everyone” in Chat and submit your response

- Why not SMART?
- How would you improve it?

Activity - Improve these learning objectives #2

Upon completion of this workshop, attendees will be able to:

- Demonstrate expertise at delivering feedback to all levels and types of learners

SMART

- Specific
- Measurable
- Achievable
- Results-focused/Relevant
- Time-focused

Please select “Everyone” in Chat and submit your response

- Why not SMART?
- How would you improve it?

Activity - Improve these learning objectives #3

Upon completion of this workshop, attendees will be able to:

- Summarize qualities of effective feedback, describe practices for delivering feedback for growth and learning, and identify frameworks/models for providing feedback

SMART

- **S**pecific
- **M**easurable
- **A**chievable
- **R**esults-focused/**R**elevant
- **T**ime-focused

Please select “Everyone” in Chat and submit your response

- Why not SMART?
- How would you improve it?

Activity - Review your learning objectives

- Are your objectives SMART?
- What's needed to improve them?

SMART

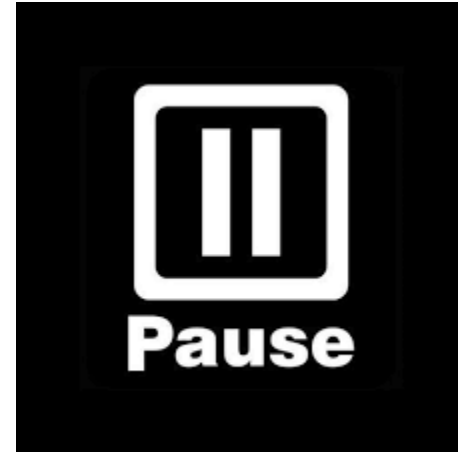
- Specific
- Measurable
- Achievable
- Results-focused/Relevant
- Time-focused

Please select "Everyone" in Chat and submit your response

- What aspect of SMART do you most need to work on?



Pause for Questions/Comments



Section/LO#3 - Bloom's Taxonomy, the ABCD Method, and Miller's Pyramid Frameworks

- Bloom's Taxonomy
- ABCD Method
- Miller's Pyramid

Alignment

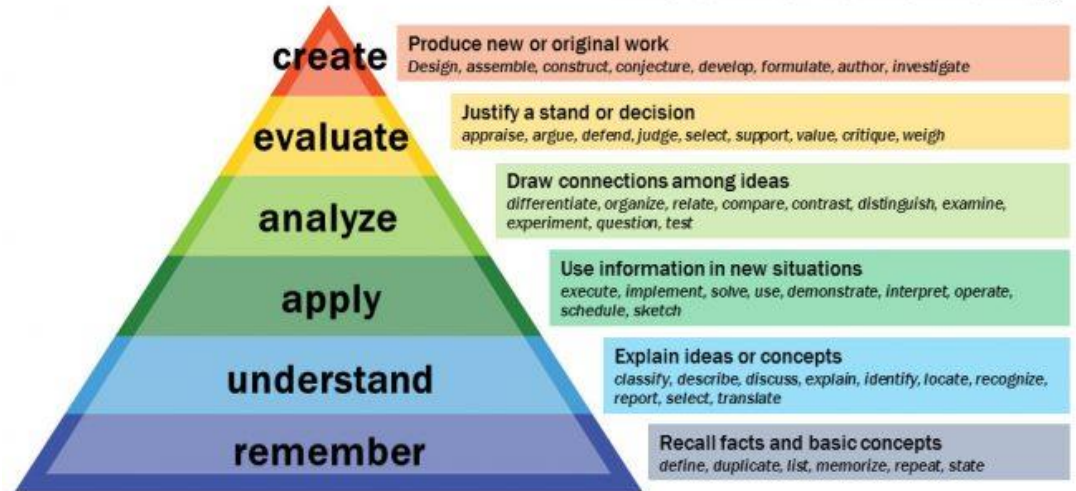
- Connection between Objectives, Assessments, and Instructional Methods
 - Consider Levels



Section/LO#3 - Bloom's Taxonomy

- Industry Standard
- Classification of LOs
- Lower-Higher Order
 - Knowledge/Remember
 - Understand
 - Apply
 - Analyze
 - Evaluate
 - Create
- Align verbs to assessment level

Bloom's Taxonomy



 Vanderbilt University Center for Teaching

Retrieved from: <https://cft.vanderbilt.edu/guides-sub-pages/blooms-taxonomy/>

Verbs (Bloom's Taxonomy)

Active verbs developed based on Bloom's Taxonomy

Knowledge	Understand	Apply	Analyze	Evaluate	Create
define	explain	solve	analyze	reframe	design
identify	describe	apply	compare	criticize	compose
describe	interpret	illustrate	classify	evaluate	create
label	paraphrase	modify	contrast	order	plan
list	summarize	use	distinguish	appraise	combine
name	classify	calculate	infer	judge	formulate
state	compare	change	separate	support	invent
match	differentiate	choose	explain	compare	hypothesize
recognize	discuss	demonstrate	select	decide	substitute
select	distinguish	discover	categorize	discriminate	write
examine	extend	experiment	connect	recommend	compile
locate	predict	relate	differentiate	summarize	construct
memorize	associate	show	discriminate	assess	develop
quote	contrast	sketch	divide	choose	generalize
recall	convert	complete	order	convince	integrate
reproduce	demonstrate	construct	point out	defend	modify
tabulate	estimate	dramatize	prioritize	estimate	organize
tell	express	interpret	subdivide	find errors	prepare
copy	Identify	Manipulate	survey	grade	produce
discover	indicate	Paint	advertise	measure	rearrange
duplicate	Infer	Prepare	appraise	predict	rewrite
enumerate	relate	produce	Break down	rank	role-play

Section/LO#3 - The ABCD Method

- Structure for Learning Objectives
- ABCD
 - Audience, Behavior, Condition, Degree
- Example
 - Condition
 - Upon completion of Lecture/Clerkship/...
 - Audience
 - Participants/Students/PGY1s
 - (will be able to)
 - Behavior
 - Describe/Critique/Create a () SOAP Note
()
 - Degree
 - Concise
 - In less than XX minutes

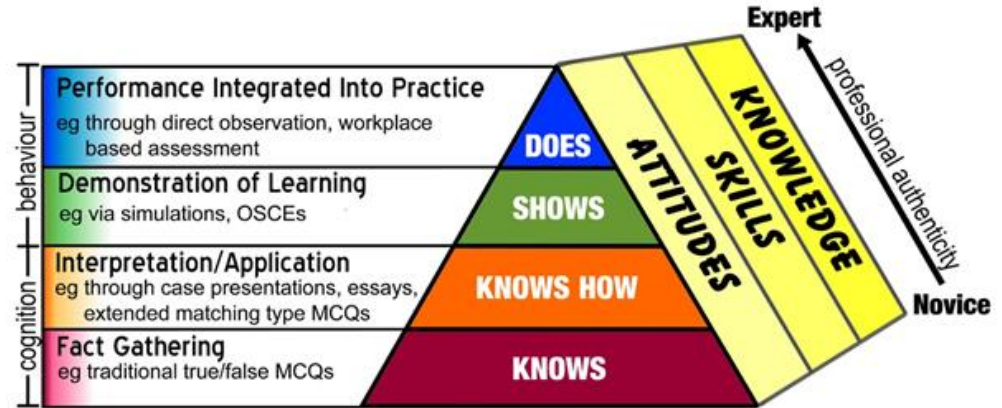


Retrieved from:

<https://www.pinterest.com/pin/697002479822804689/>

Section/LO#3 - Miller's Pyramid/Prism

- Framework for assessing clinical competence
- Provides Clinical focus
- Cognition - Behavior
 - Knows
 - Knows How
 - Shows
 - Does



Retrieved from: <https://icenetblog.royalcollege.ca/2020/03/03/education-theory-made-practical-volume-4-part-5-millers-pyramid/>

Activity- Utilizing Frameworks

- How can you utilize Bloom's, Miller's, or the ABCD method to align your objectives with assessments?.

Please select "Everyone" in Chat and submit your response



Section/LO#4 - Review instructional materials and approaches

Options/Ideas:

- Review
 - Learning Objectives
 - Assessments
 - Activities
 - Resources - Readings, Visuals

Coverage, Connection, and Cohesion

1. Do all items have a purpose?
2. Do LOs, Assessments, and Activities connect and align?
3. How will you evaluate during and after the learning experience?



Activity- Coverage, Connection, and Cohesion

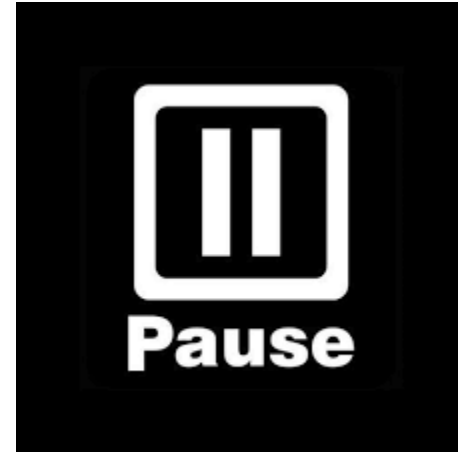
Were these covered, connected, cohesive?

- Recognize the educational value of writing meaningful learning objectives
- Develop SMART learning objectives for a range of activities and audiences
- Utilize frameworks such as Bloom's Taxonomy, the ABCD method, and Miller's Pyramid to align objectives with goals and assessments
- Review instructional materials and approaches to ensure objectives are adequately addressed

Please select "Everyone" in Chat and submit your responses to the questions I pose



Pause for Questions/Comments



Review & Thank You!

Learning Objectives:

Upon completion of this webinar, attendees will be able to:

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 4. Review instructional materials and approaches to ensure objectives are adequately addressed
- Thank you!
 - Be Kind and Embrace the Times...



References

1. Association of American Medical Colleges. (1998). Learning objectives for medical student education: guidelines for medical schools.
<https://www.aamc.org/system/files/c/2/492708-learningobjectivesformedicalstudenteducation.pdf>
2. Journal of graduate medical education, 3(4), 574-576
Communicating your program's goals and objectives.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3244330/>
3. Weill Cornell Medicine - Medical College
Importance of Learning Objectives.
<https://medicaleducation.weill.cornell.edu/medical-education/instructional-design-services/importance-learning-objectives>



Notes

Images from:

- Product websites
- Slide Images: <https://www.pexels.com/>

References and Resources available from:

- Handout - <http://bit.ly/SOMGME-LearningObjectivesh>



END

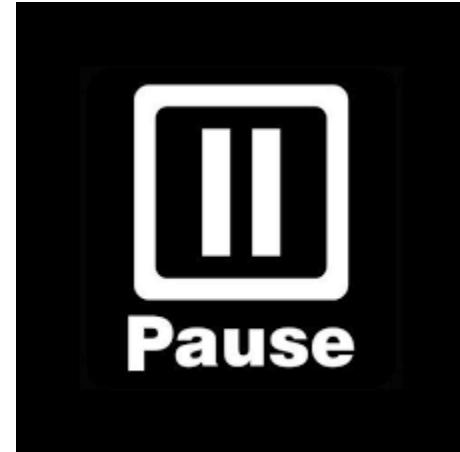
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Header

- Content
- Content



Questions/Comments



Activity

Activity Title

- Do you ...?

Please select "Everyone" in Chat and submit your response

