

National Association of EMS Educators
2009 Symposium
Education Committee

National EMS Education Agenda

Depth and Breadth and other
fuzzy things

EDUCATION COMMITTEE

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- Doug Archer
- Robert Atripaldi
- Chris Battlo
- Craig Baughsmith
- Tom Bausman
- Brenda Beasley
- Lauri Beechler
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- Virginia Burke
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- Mike Touchstone
- Bob Waddell
- Kathleen Wallace
- Mike Watkins
- Ginger Worlds
- Joel Yonkman



HISTORY OF ED. COMM.

- Geriatric Care
- Death and Dying
- Administration
- Emotional Fitness
- Study skills and test taking
- Evaluation tools
- Resource list



Committee Survey

- 6 questions with 97 respondents
- Familiar with EMS Education Agenda
 - Very – 36.1%
 - Somewhat – 59.8%
 - No – 4.1%



Committee Survey

- Familiar with National Education Standards?
 - Very – 44.3%
 - Somewhat – 51.5%
 - No – 4.1%



Committee Survey

- Familiar with Core Content and Scope of Practice?
 - Very – 42.9%
 - Somewhat – 49.5%
 - No – 8.2%



Committee Survey

- Any questions/concerns regarding the documents?
 - Yes – 40.2%
 - No – 59.8%



Committee Survey

- Concerns in applying to your education practice?
 - Yes – 41.2%
 - No – 58.8%



Committee Survey

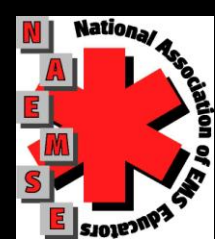
- What information would be helpful to you in understanding / applying these documents to your education practice?
 - 97 comments
 - Overview of comments



Education Agenda

- History
- Components
- Implementation issues





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Depth and Breadth

Discussion of the NES use of these
Terms

Four Levels

- Emergency Medical Responder (EMR)
- Emergency Medical Technician (EMT)
- Advanced Emergency Medical Technician (AEMT)
- Paramedic

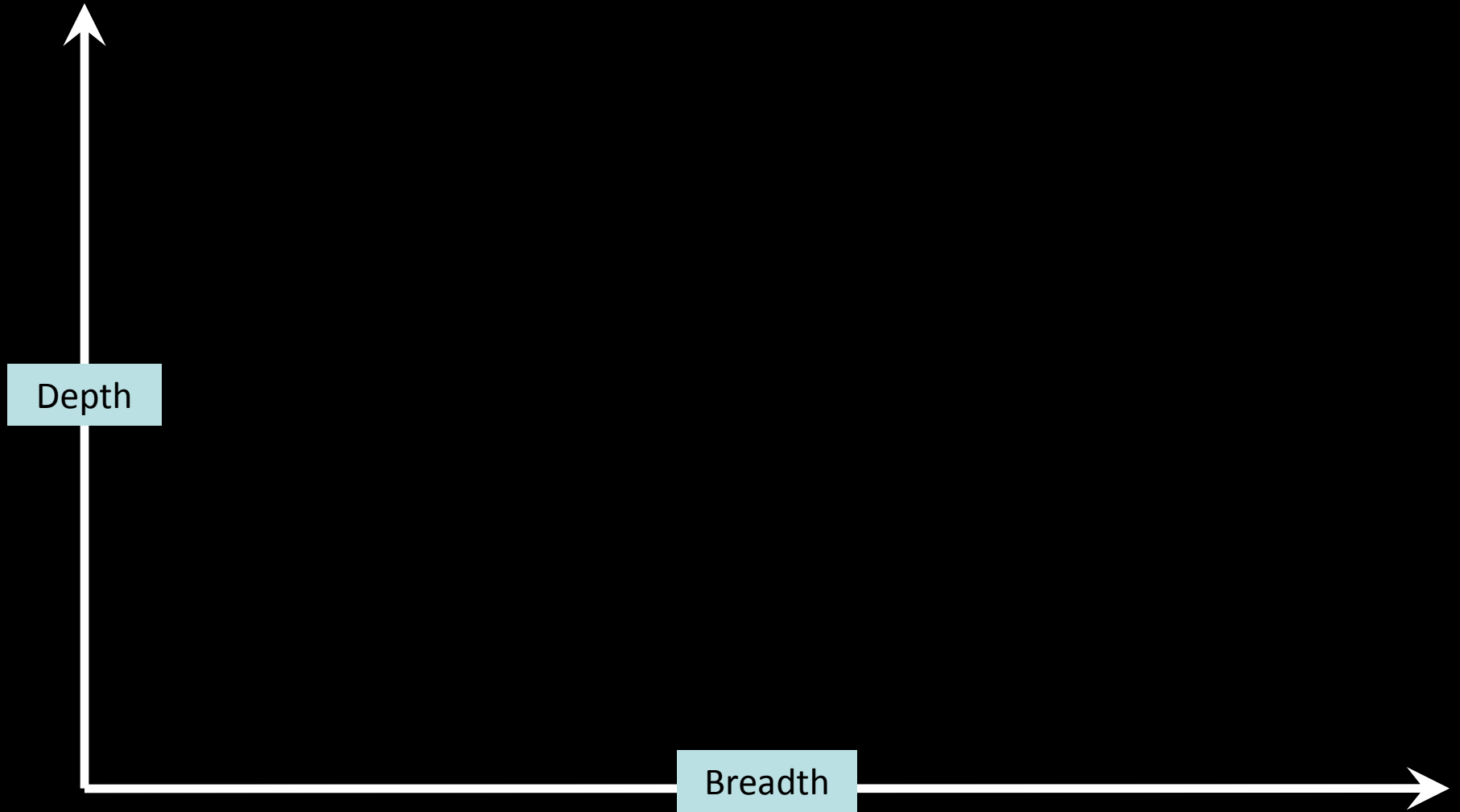


Four Levels

- Each level builds on previous levels
- Each level includes all information from previous levels plus additional information



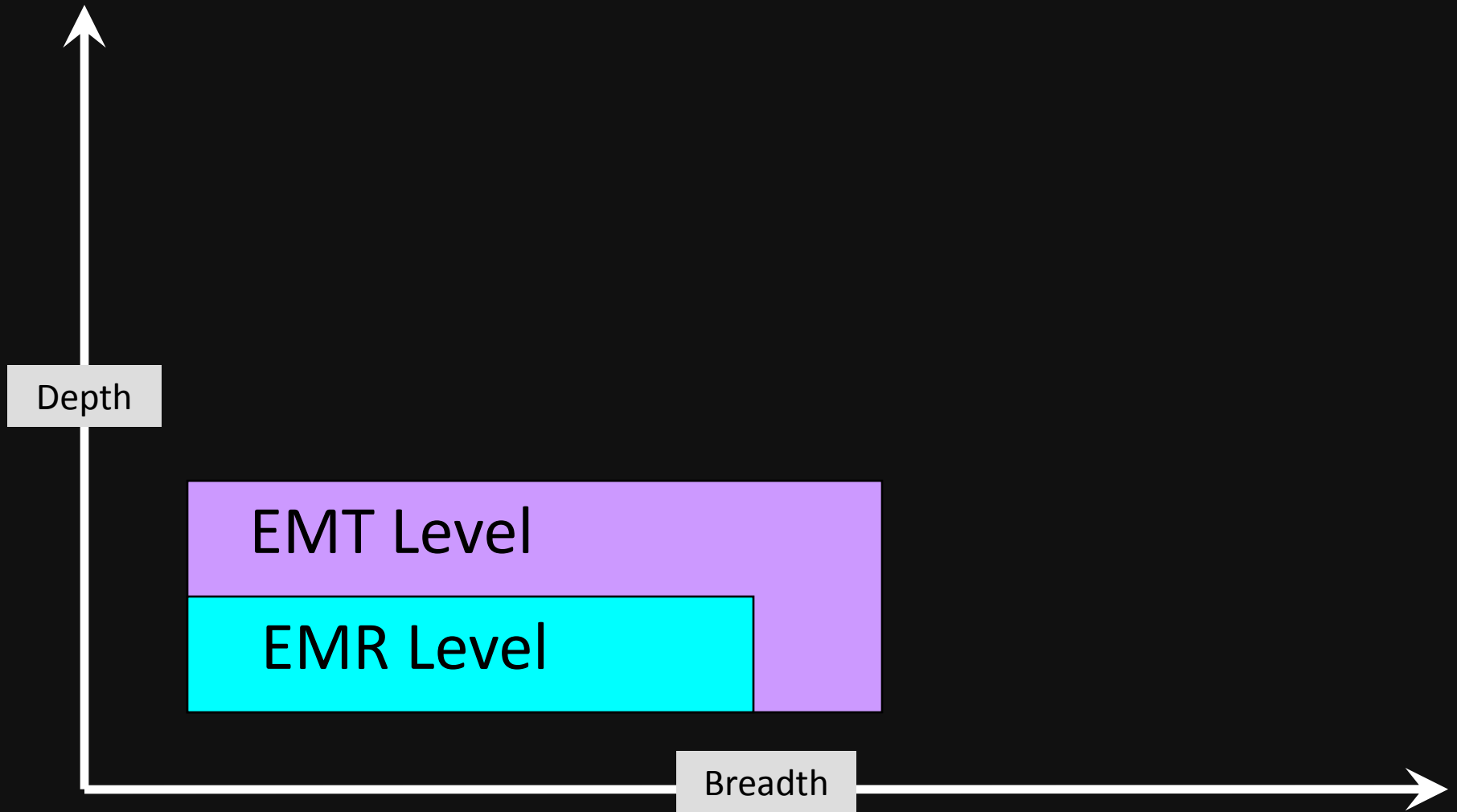
Increasing Depth and Breadth



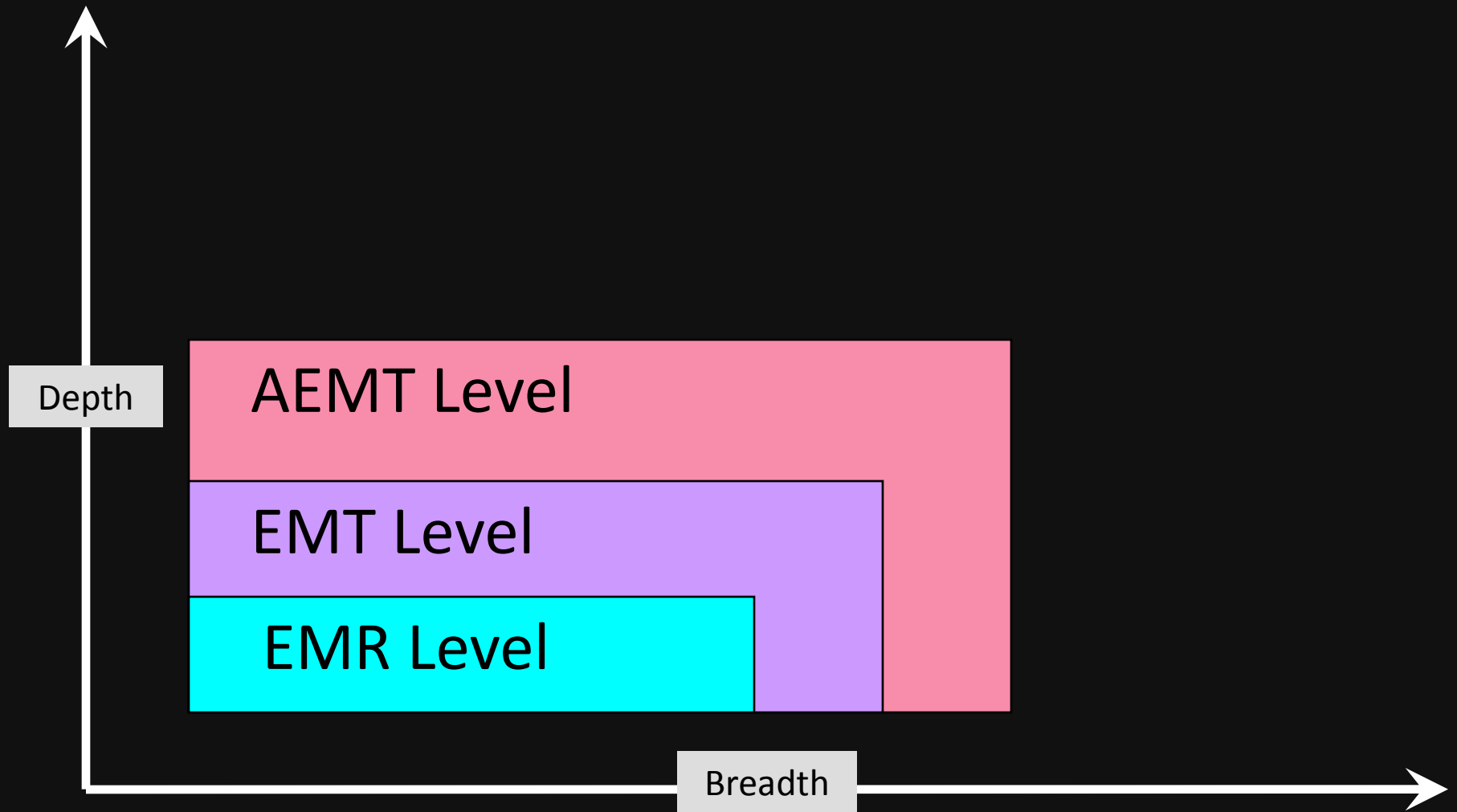
Increasing Depth and Breadth



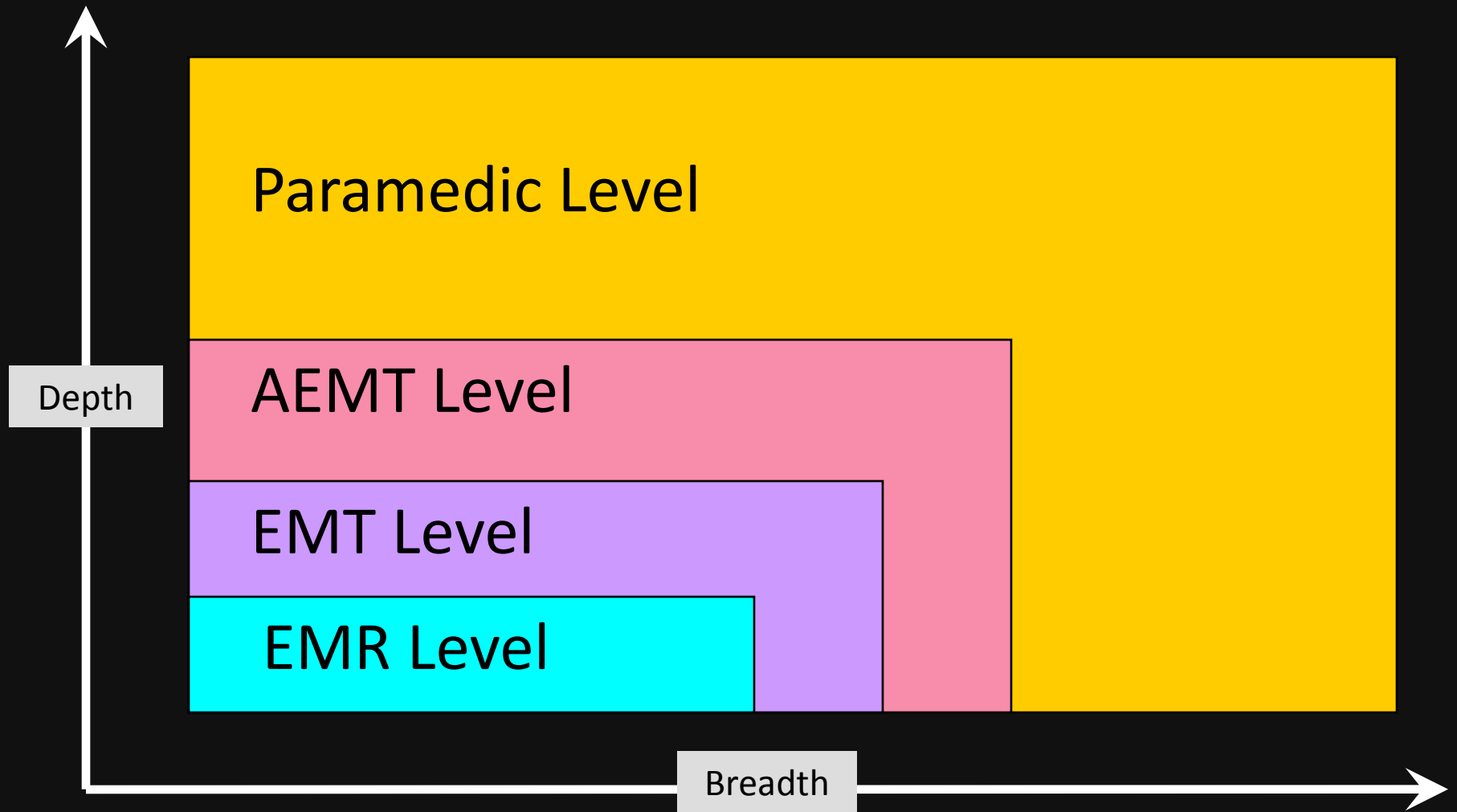
Increasing Depth and Breadth



Increasing Depth and Breadth



Increasing Depth and Breadth



Depth and Breadth

- “Depth of knowledge is the amount of detail a student needs to know about a particular topic.”
- “Breadth of knowledge refers to the number of topics or issues a student needs to learn in a particular competency.”

National EMS Education
Standards, page 9



Depth

- *Depth* increases as certification level increases
- More detail at higher levels

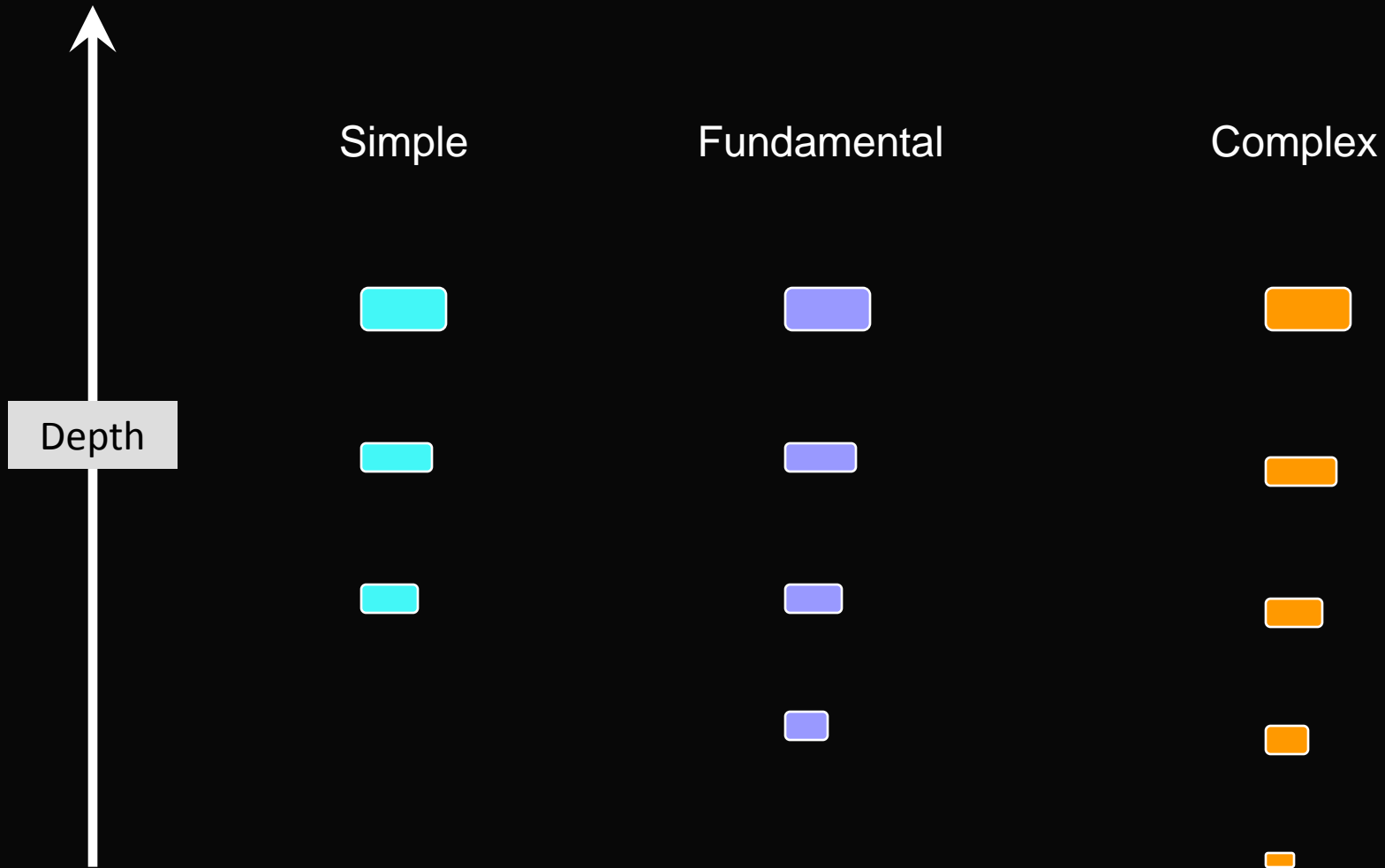


Depth Descriptors

- Simple
- Fundamental
- Complex



Increasing Depth = More Detail



Breadth

- *Breadth* increases as certification level increases
- More topics or issues



Breadth Descriptors

- Simple
- Foundational
- Comprehensive



Increasing Breadth = More topics or Issues

Simple

Foundational

Comprehensive



Breadth



Graphical Representation of Depth and Breadth

- Based upon material included in the Instructor Guides (IGs) for each certification level
- Airway Management portion of “Airway Management, Respiration and Artificial Ventilation” section

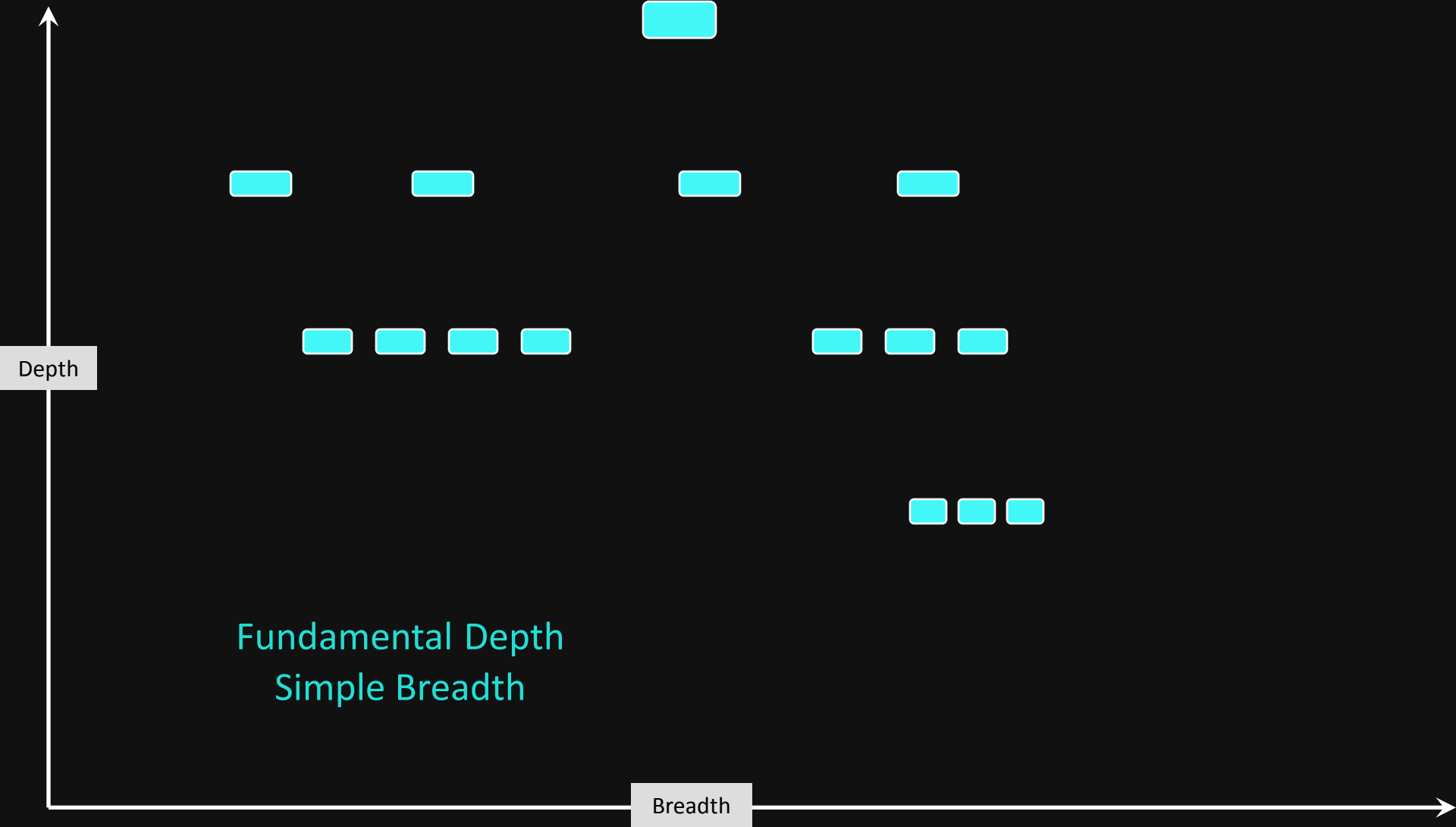


Graphical Representation of Depth and Breadth

- Specifically the Airway Anatomy, Upper Airway Tract sections for each certification level
- Each box indicates a topic from the IG
- The Depth and Breadth descriptors at each level are taken directly from the NES section

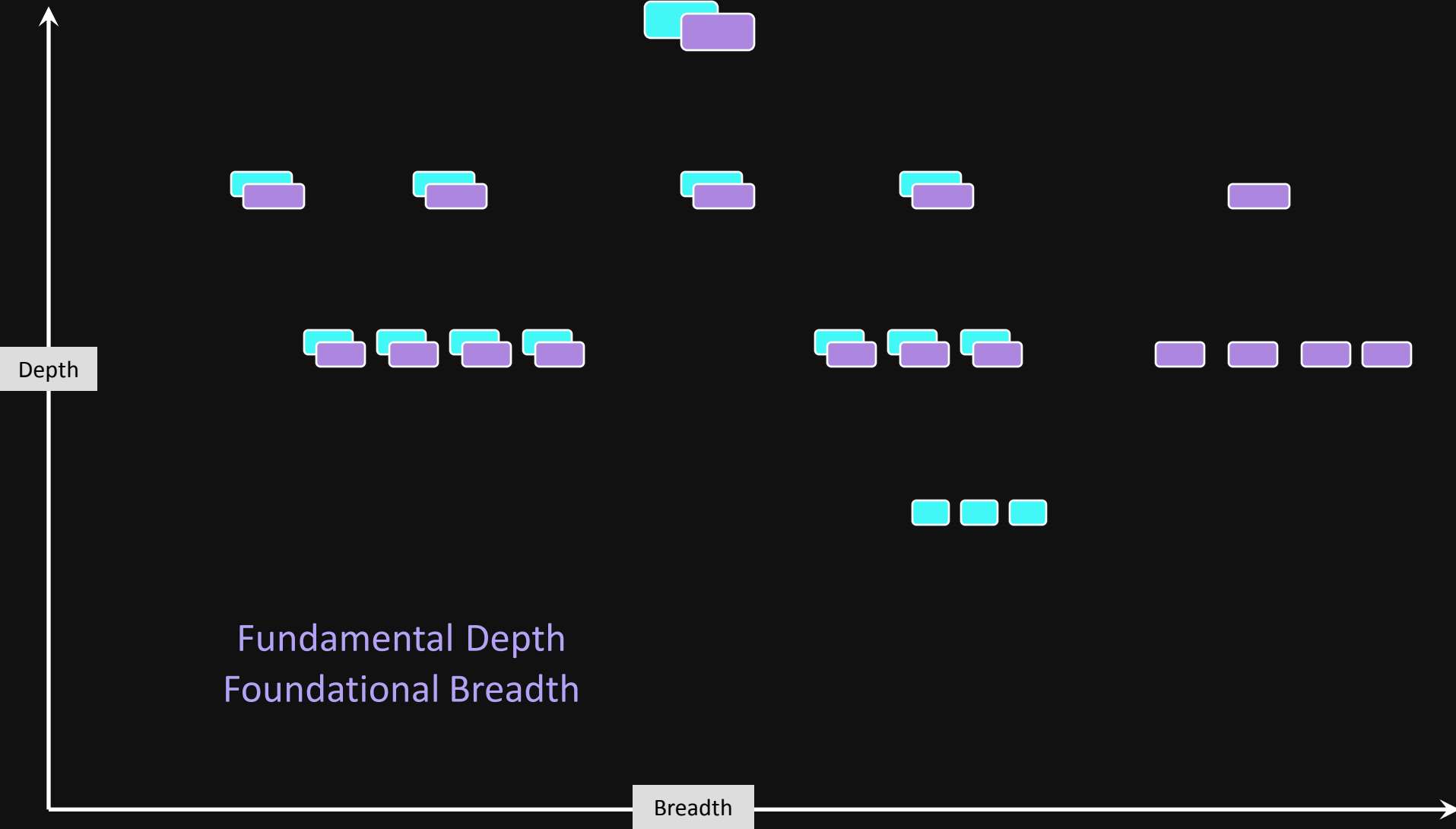
Airway Management, Airway Anatomy

Emergency Medical Responder



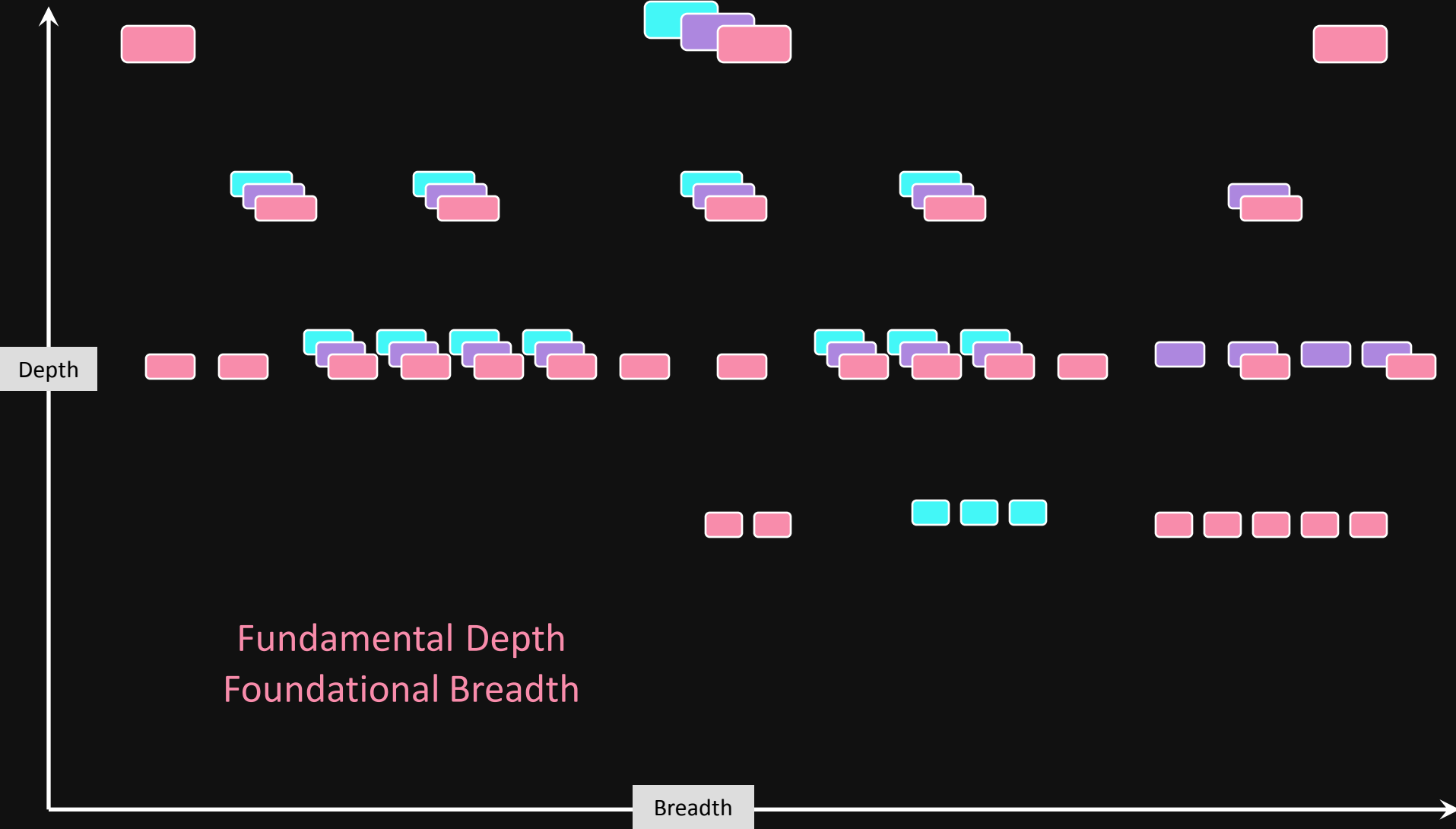
Airway Management, Airway Anatomy

Emergency Medical Technician



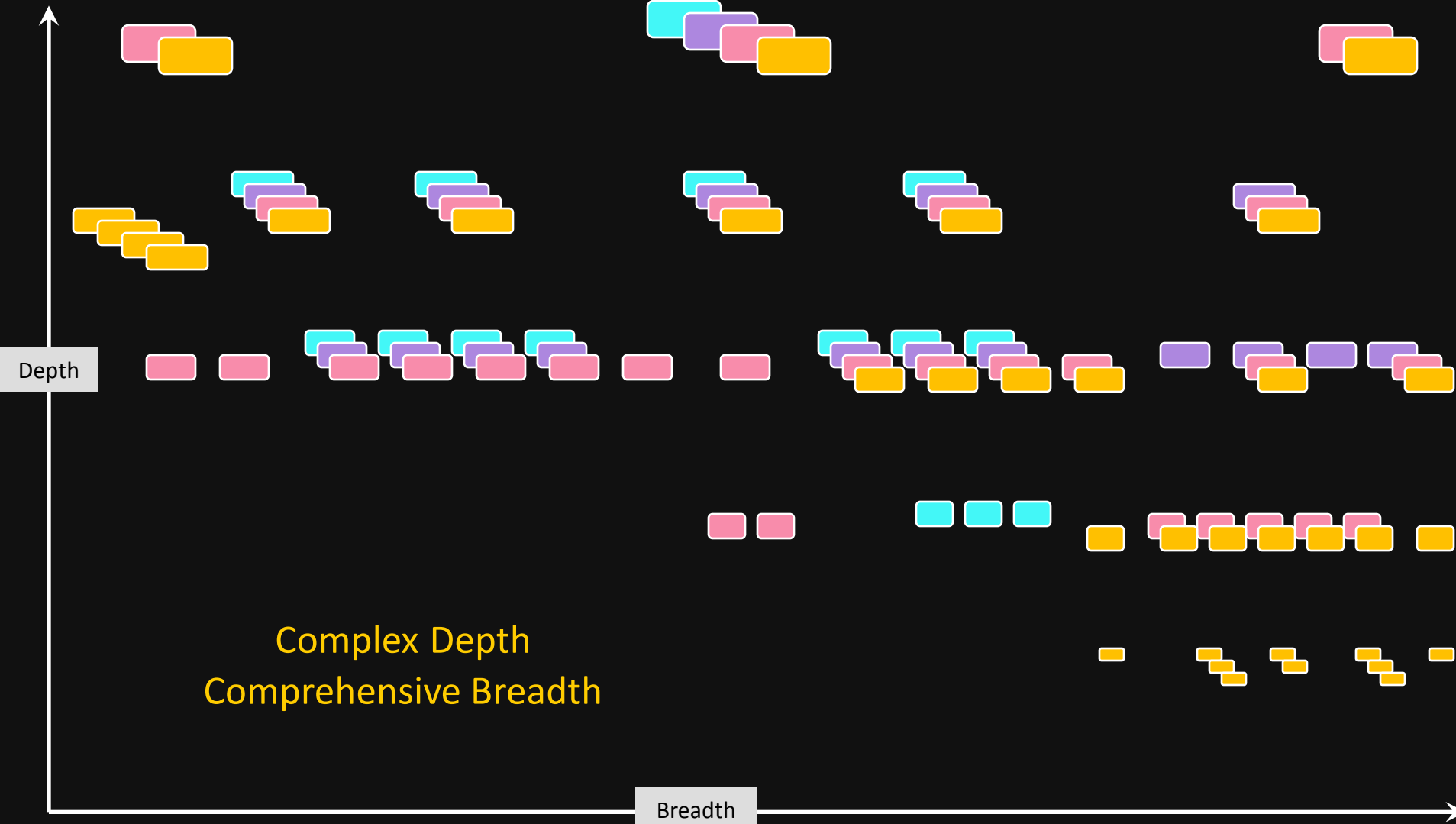
Airway Management, Airway Anatomy

Advanced Emergency Medical Technician



Airway Management, Airway Anatomy

Paramedic





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Goals and Objectives

Domains of Learning

Bloom's taxonomy of the domains of learning. Places learning into three categories and then there are 5 levels within each category except for cognitive which has 6 levels. The levels help further break down the depth and breadth of each domain (Cason, 2006, pg 78)



Bloom's Taxonomy

Category	Description
Knowledge	Ability to recall previously learned material
Comprehension	Ability to grasp meaning, explain, restate ideas
Application	Ability to use learned material in new situations
Analysis	Ability to separate material into component parts and show relationships between parts
Synthesis	Ability to put together the separate ideas to form new whole, establish new relationships.
Evaluation	Ability to judge the worth of material against stated criteria

Types of Learning

Cognitive

Cognitive domain is the learning that takes place through the process of thinking

Affective

Affective domain is learning in terms of emotions, attitudes and values

Psychomotor

Psychomotor describes learning that takes place through the attainment of skills and bodily, or kinesthetic movements

(Cason, 2006, pg 77)



Defining the Terms

- Goal

an intention or end point or the purpose

(Webster, 2003).

Broad and difficult to measure at times

- Objective

“observable”, expressed statements of expected learning outcomes, which include products or behaviors that students are required to exhibit.

(Cason, 2006, pg 85).

Goal Writing

- Goals are:
 - general and nonspecific
 - broad, generalized statements about what learning is intended to produce.

Example:

The paramedic will be able to care for the obstetrical patient.

Objective Writing

- Objectives are:
 - specific, observable and measureable learning outcomes
 - foundations to build your lesson plans
 - assessments utilized to validate the overall course goals were met
- Objectives should be detailed and include who, what, when, where and how of behaviors



Objective Writing

- One Method: ABCD method
 - A -target audience
 - B -expected behavior
 - C -condition under which the behavior will be performed
 - D -how this will be measured or evaluated



Objective Components

Objective:

The paramedic will state indications of an imminent delivery

The student will be able to list the risk factors and behaviors that indicate a patient is at risk for suicide 100% of the time

Pitfalls

- Is it manageable?
- Is it realistic?
- Does it have the ABCD components?

- If not correct.....
 - Alter it
 - Add to it
 - Scrap it



Problems	Error Types	Solutions
Too Vast/complex	The objective is too broad in scope or is actually more than one objective	Use the ABCD method to identify each desired behavior or skill in order to break objectives apart
No behavior to evaluate	No true overt, observable performance listed. Many objectives using verbs like “comprehend” or “understand” may not include behaviors to observe.	Determine what actions a student should demonstrate in order for you to know that the material has been learned.
Only topics are listed	Describes instruction, not conditions. That is, the instructor may list the topic but not how he or she expects the students to use the information .	Determine how students should use the information presented. Should it be memorized? Used as background knowledge? Applied in a later project? What skills will students need?
Vague Assignment Outcomes	The objective does not list the correct behavior, condition, and /or degree, or they are missing. Students may not be sure of how to complete assignments because they are lacking specifics.	Determine parameters for your assignments and specify them for your students.

Try One....

Example:

State the steps to deliver a baby



References

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