



FOSTERING SUCCESSFUL ACADEMIC TRANSITIONS

Jaykaye Pelletier, jkpelle@bu.edu
Sarah Garibova, sgaribov@bu.edu



ICEBREAKER

What was the biggest academic adjustment you experienced during your first semester of college?

Strategies

Bloom's Taxonomy

80/20 Principle

Distributed Practice

Retrieval Practice

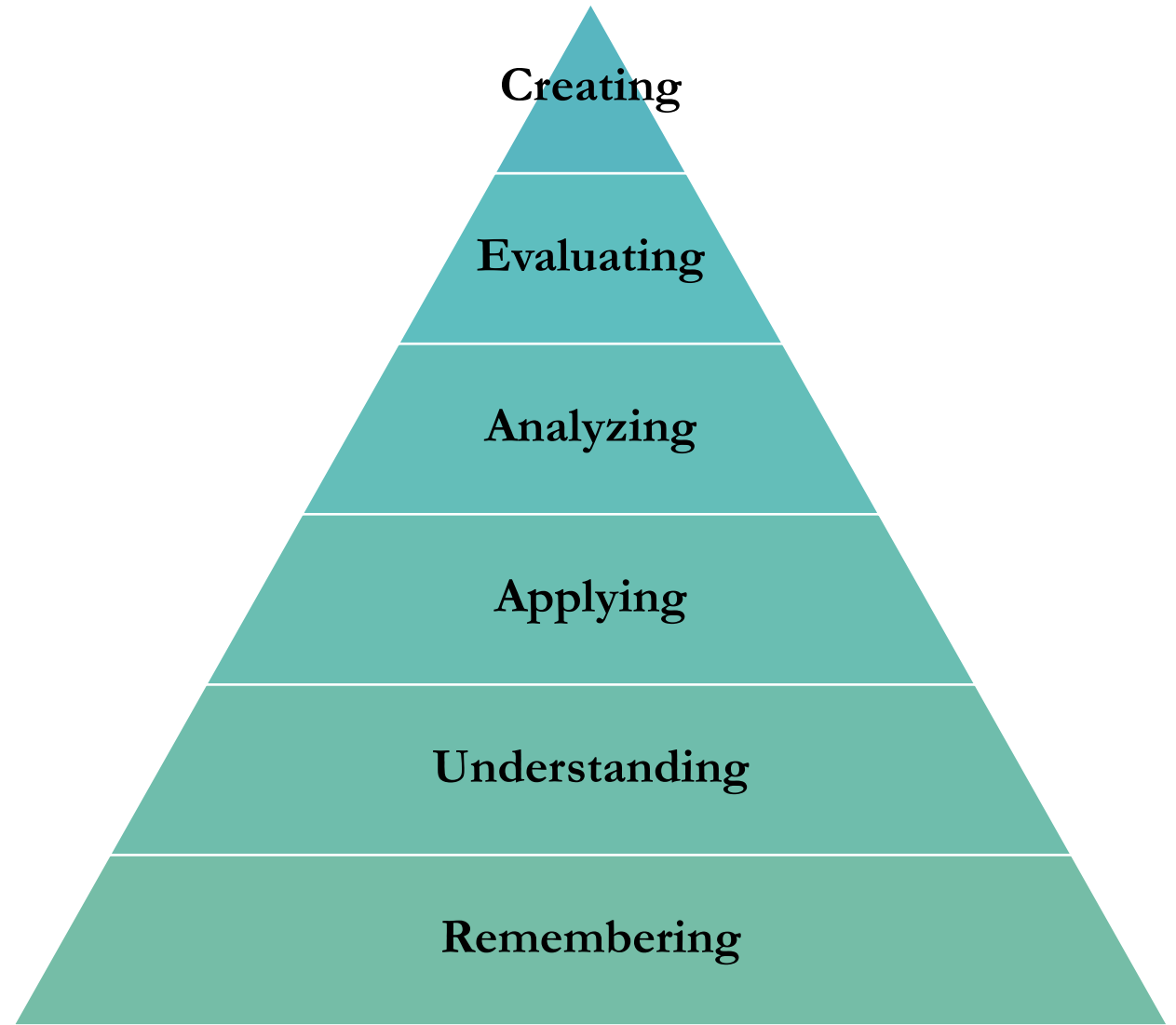
Metacognition & Mindset

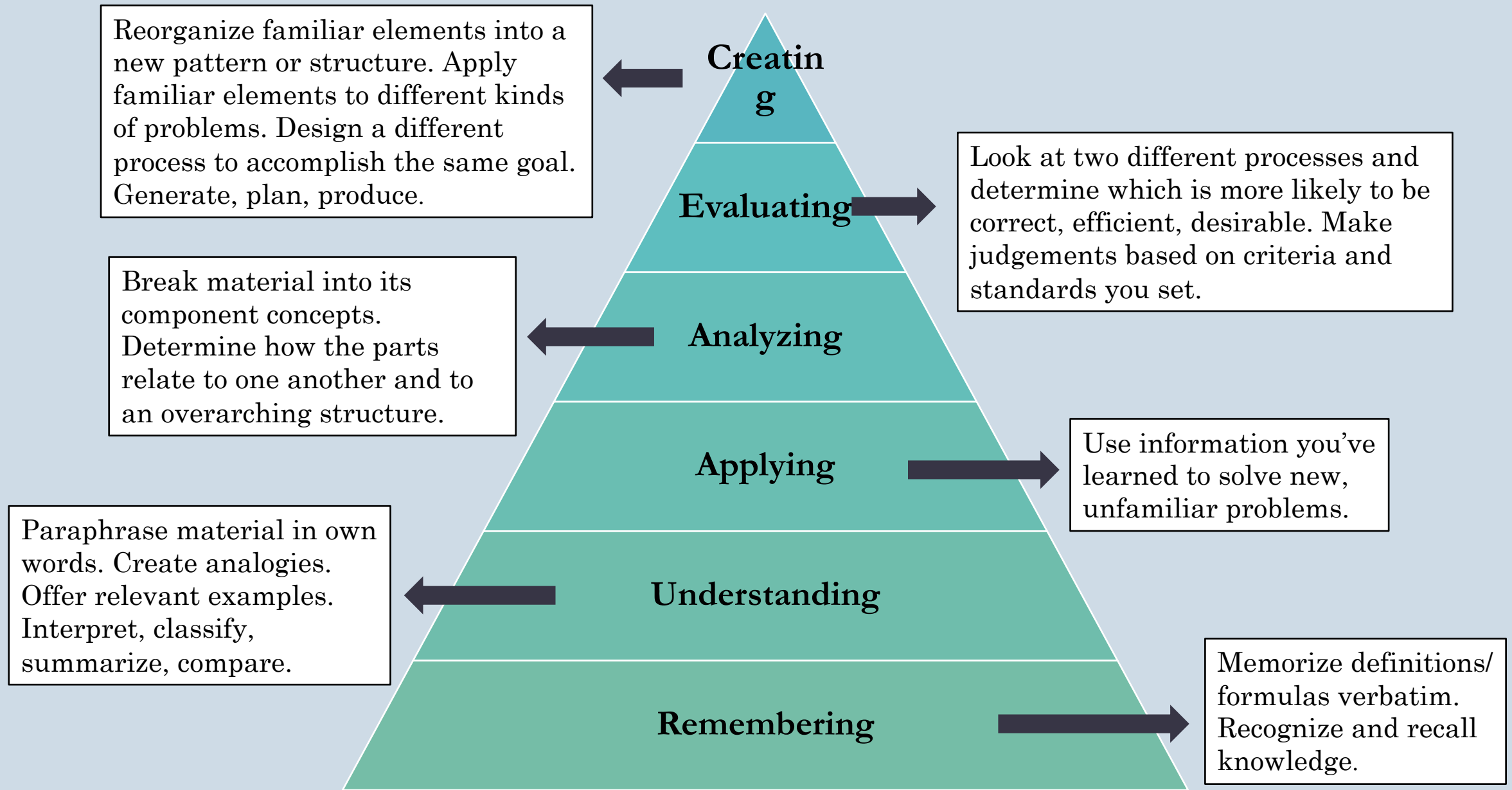
Learning Outcomes:

After this session, you will be able to:

- Initiate conversations with FY students about the transition to college
- Explain the 5 key strategies and engage students in applying them

Bloom's Taxonomy







STUDY METHODS FOR EACH LEVEL OF BLOOM'S TAXONOMY

Remember

Study methods

- Flashcards
- List/ timeline
- List main character of the book that you're reading

Questions to ask

- How would you define...
- List the _____ in order
- Who were...?



Remember

Understand

Study methods

- Discuss content with a partner
- Explain content to a partner
- Explain the main idea of a section
- Write a summary of a chapter in your own words

Questions to ask

- How would you differentiate between ____ and ____
- What is the main idea of ____?
- Why did...?



Understand

Apply

Study methods

- Seek concrete examples of abstract ideas
- Work practice problems & exercises
- Write a study guide on the chapter that a friend could use

Questions to ask

- How does _____ work?
- Where did I go wrong in the problem?
- How would you change _____?



Apply

Analyze

Study methods

- Generate a list of factors that contribute to...
- Determine the importance of different sections/ elements of the textbook
- Think about it from a different perspective

Questions to ask

- How does this element contribute to the whole?
- What is the significance of this section?
- How would ____ group see this?



Analyze

Evaluate

Study methods

- Decide if you disagree or agree with an author or decision
- Consider what you would do if you were asked to make a choice
- Determine which approach/argument is most effective

Questions to ask

- What is your opinion about_____? What evidence and reasons support your opinion?
- How would you improve this?
- Which argument or approach is stronger? Why?



Evaluate

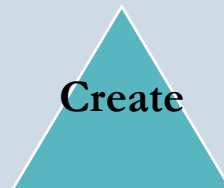
Create

Study methods

- Build a model and use it to teach the info to others
- Design an experiment
- Write a short story about the concept

Questions to ask

- How can you create a model and use it to teach this info to others?
- What experiment can you make to demonstrate or test this information?
- How can this info be told in the form of a story?



Conversation Starters

At what level of Bloom's did you have to operate at to earn A's or B's in high school?

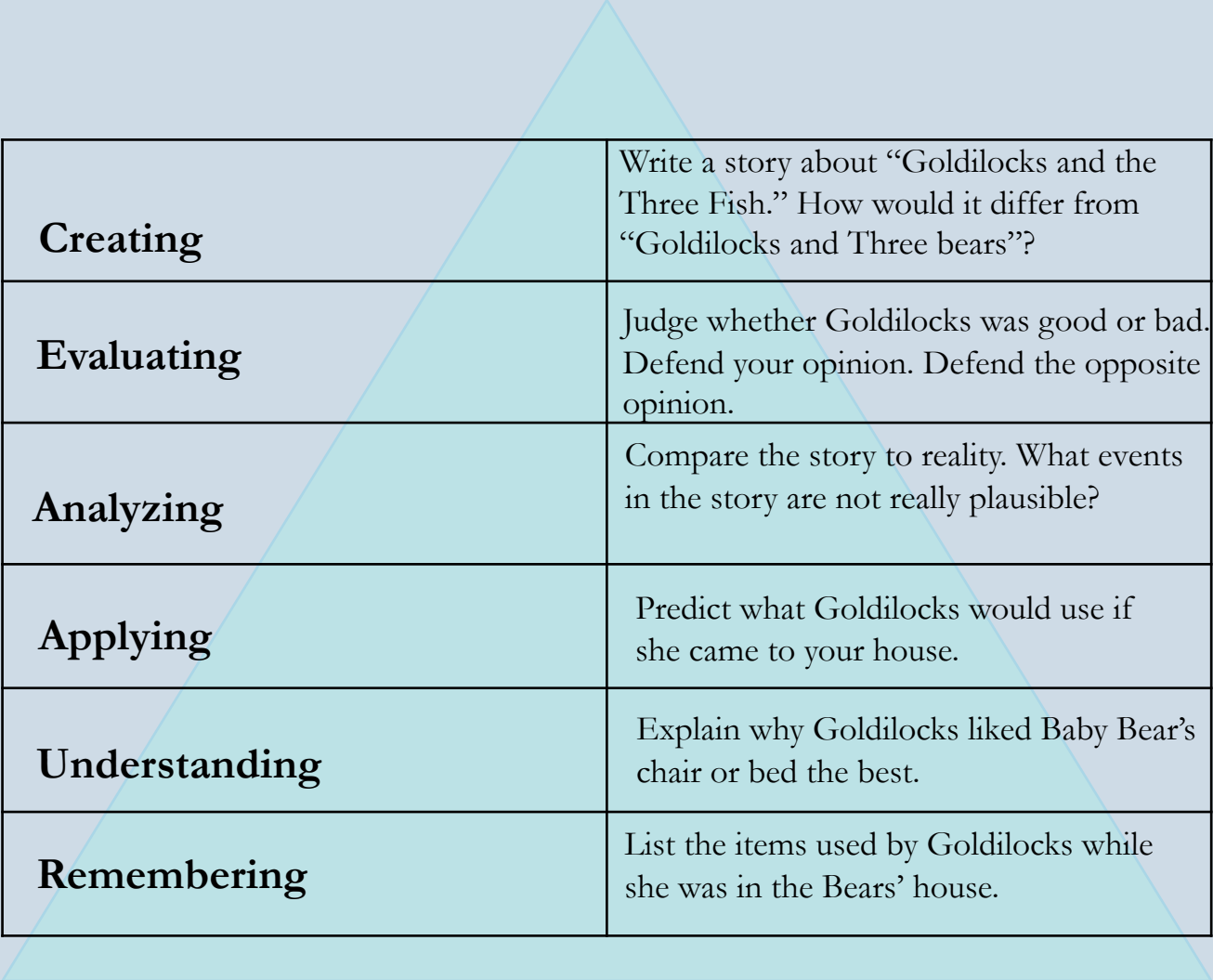


At what level of Bloom's do you think you'll need to operate at to earn an A in college?



List all the courses you're taking this semester. Next to each course, write down the level of Bloom's you think you need to reach in order to do well in that particular course.

Activity: Bloom's in Practice



Creating	Write a story about “Goldilocks and the Three Fish.” How would it differ from “Goldilocks and Three bears”?
Evaluating	Judge whether Goldilocks was good or bad. Defend your opinion. Defend the opposite opinion.
Analyzing	Compare the story to reality. What events in the story are not really plausible?
Applying	Predict what Goldilocks would use if she came to your house.
Understanding	Explain why Goldilocks liked Baby Bear’s chair or bed the best.
Remembering	List the items used by Goldilocks while she was in the Bears’ house.



Time in College

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
6:00AM		Travel Time	Travel Time	Travel Time	Travel Time	Travel Time	
7:00AM		Arrive at school	Arrive at school	Arrive at school	Arrive at school	Arrive at school	
8:00AM		Elective	Math	Elective	Math	Elective	
9:00AM		Math	English	Math	English	Math	
10:00AM		English	Science	English	Science	English	Work
11:00AM		Lunch	Lunch	Lunch	Lunch	Lunch	
NOON							
1:00PM		Elective	Study hall	Elective	Study hall	Elective	
2:00PM		Science	Elective	Science	Elective	Science	
3:00PM		Dismissal	Dismissal	Dismissal	Dismissal	Dismissal	
4:00PM		Sport	Sport	Sport	Jazz Band	Sport	
5:00PM							
6:00PM							
7:00PM					Sport		
8:00PM							
9:00PM							
10:00PM							
11:00PM							
MIDNIGHT							
1:00AM							
2:00AM							
3:00AM							
4:00AM							
5:00AM							

High School Schedule

Time in College & the 80/20 Rule



FEWER IN-CLASS
HOURS



MORE
INDEPENDENT
LEARNING



MORE CONTROL
OVER OWN
LEARNING



MORE REAL-
WORLD LEARNING

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
6:00AM							
7:00AM							
8:00AM		LS111	LS111	LS111		LS111	
9:00AM			WR100		WR100		
10:00AM							
11:00AM			EC101		EC101		
NOON		MA121	Lecture	MA121	Lecture	MA121	
1:00PM						EC101 Discussion	
2:00PM				WORK	WORK		WORK
3:00PM			MA121				
4:00PM							
5:00PM		WORK					
6:00PM							
7:00PM							
8:00PM							
9:00PM							
10:00PM							
11:00PM							
MIDNIGHT							

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
6:00AM							
7:00AM		Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	
8:00AM		LS111	LS111	LS111	Study Time	LS111	
9:00AM		Study Time	WR100	Study Time	WR100	Study Time	
10:00AM	Breakfast		EC101		EC101	Exercise	Breakfast
11:00AM	Study Time					MA121	Free Time
NOON			MA121		Lecture	MA121	Lecture
1:00PM	Lunch	Lunch	Lunch	Lunch	Lunch	EC101 Discussion	Lunch
2:00PM	Study Time	Free Time	Free Time	WORK	WORK	Lunch	WORK
3:00PM	Free Time	Exercise	MA121			Study Time	
4:00PM	Exercise	Free Time	Study Time				
5:00PM	Free Time	WORK		Exercise	Study Time	Free Time	Study Time
6:00PM				Free Time		Study Time	
7:00PM	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner	Dinner
8:00PM	Study Time	Study Time	Study Time	Study Time	Study Time	Free Time	Free Time
9:00PM							
10:00PM		Free Time	Free Time	Free Time	Free Time		
11:00PM	SLEEP						
MIDNIGHT							

Conversation Starters

What did your weekly schedule look like in high school?

What are some differences that you've found between your schedule in high school vs. college?

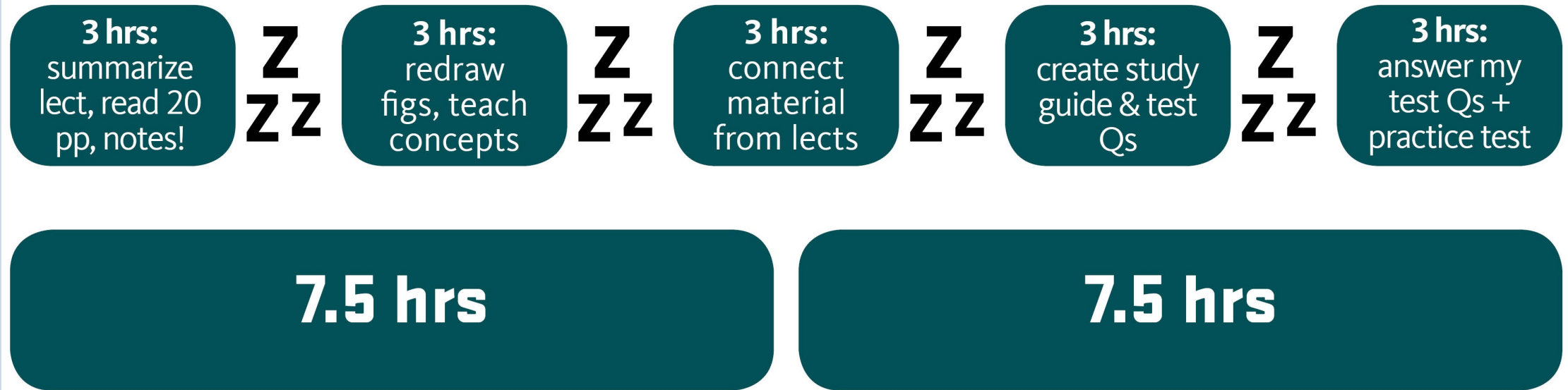
How are you structuring your time outside of class and other obligations?



HOW TO STUDY IN COLLEGE

Distributed Practice & Retrieval Practice

Distributed Practice



Retrieval Practice



Read-Recite-
Review



Treat
homework like
a test/ quiz



Flashcards

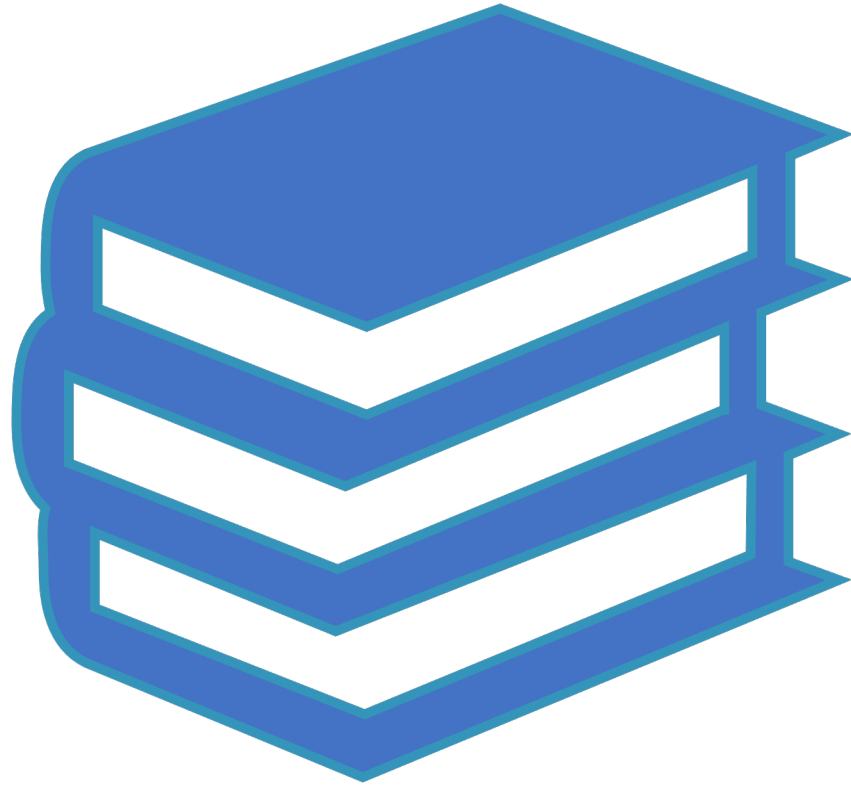


Create & take
your own
practice test



Prepare as if
you will teach
someone else

Sources: Dunlosky, Rawson, Marsh, Nathan & Willingham (2013); Roediger & Karpicke (2006); McDaniel, Howard & Einstein (2009); Roediger, Putnam & Smith (2011); Karpicke & Roediger (2008), Kornell & Bjork (2008); Nestojko, Bui, Kornell & Bjork (2014).



Maximize Performance on Assignments & Tests

- Study early and often
- Sleep
- Do the assigned readings and homework—even if they're not graded
- Monitor your grades
- Review previous quizzes and tests

Conversation Starters

Which study strategies have you used in the past? How did they work for you?

Which study strategies would you like to use at BU?

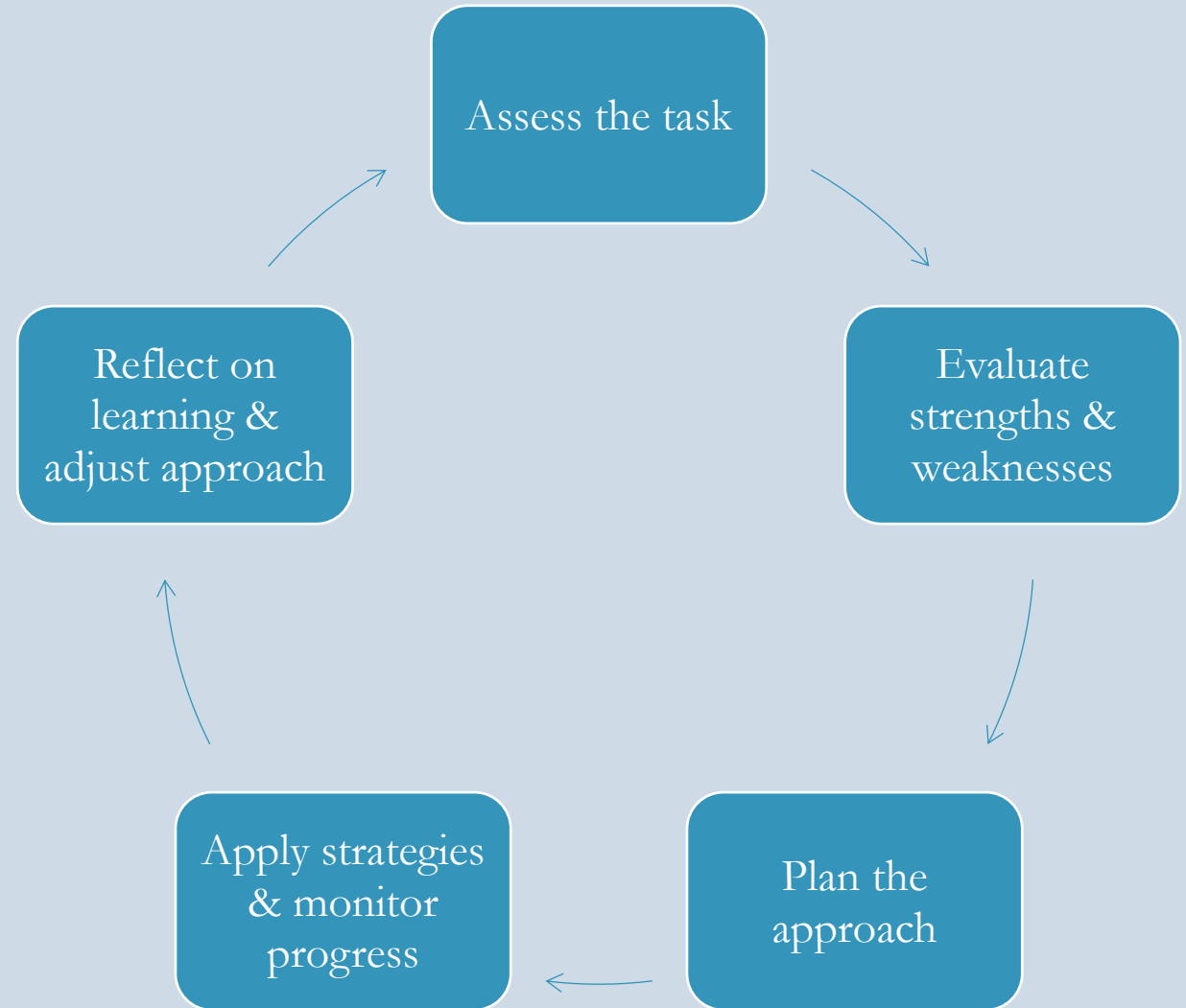


Metacognition

Allows you to:

- Think about your thinking
- Monitor, plan, and control your problem solving
- Accurately judge your level of learning

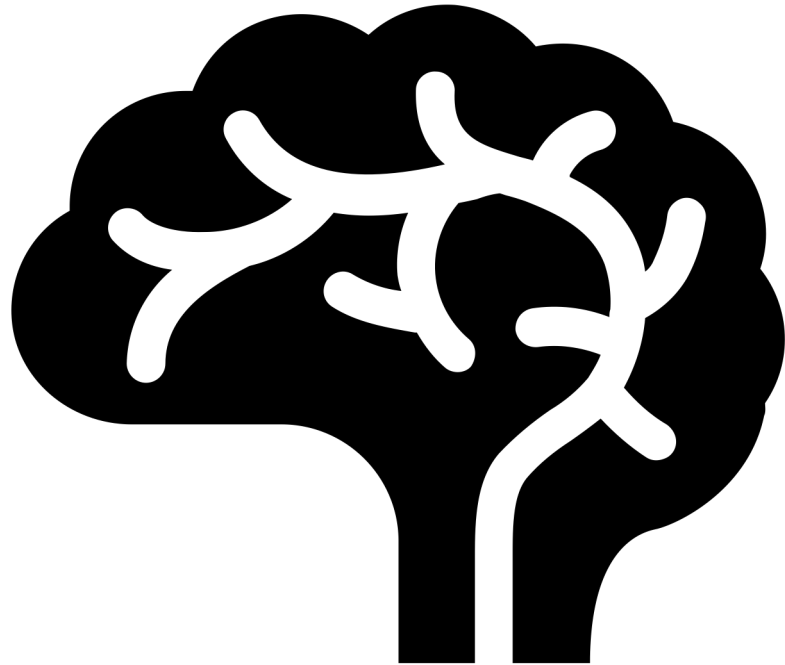
Metacognition Cycle



Mindset



[Video: "Growth Mindset Introduction: What it is, How it Works, and Why it Matters"](#)



Brain plasticity

- Constantly evolving and changing
- Like a muscle
- Neurons have the capacity to:
 - Grow new connections
 - Strengthen connections we already have
- Myelin

Metacognition & Mindset

Fixed mindset= learning is fast and easy

Growth mindset= learning is slow and difficult

Links between mindset, study strategies and learning behaviors

Mindset impacts metacognition

Activities to Promote Metacognition

Jumpstart
Journal

Index Card
Takeaways

“Wrapper”

Muddiest
point

Retrospective
post
assessments

Letter to
future
students



Conversation Starter: Mindset

- What are some ways you can maintain a growth mindset when you encounter difficulties in school, at work, and in life?

Activity: Mindset

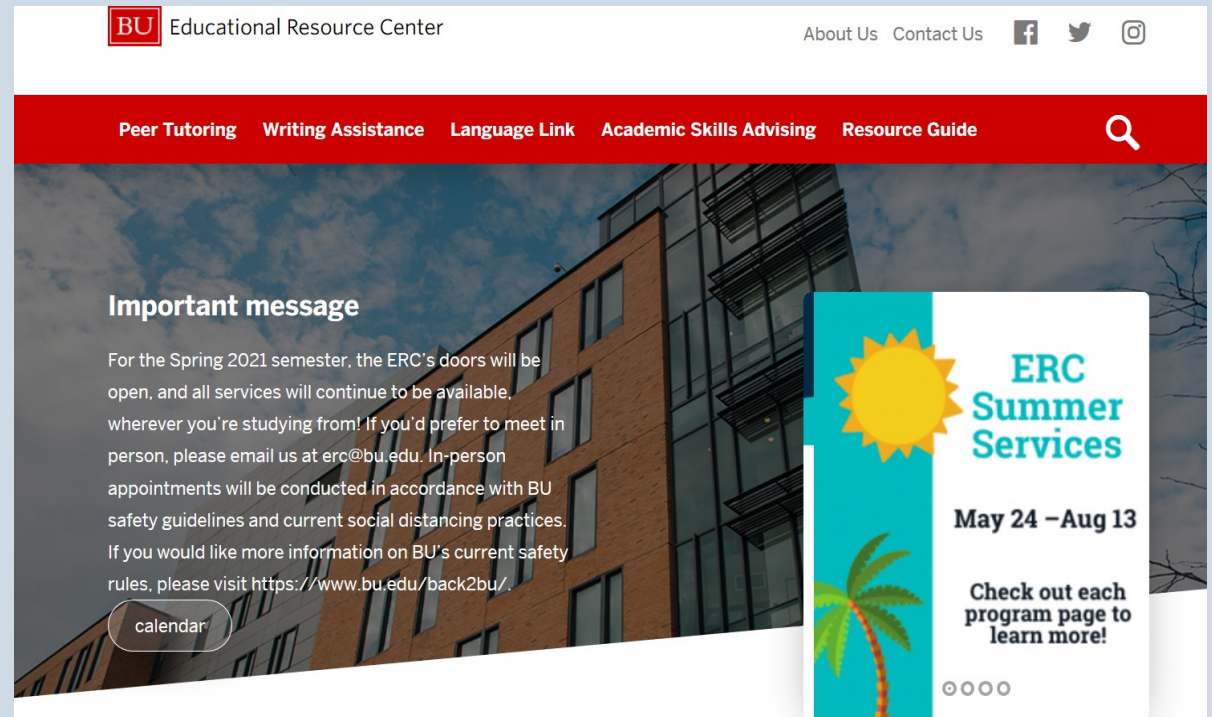
Read these statements and consider how much you agree or disagree with each:

1. Your intelligence is something very basic about you that you can't change very much
2. You can learn new things, but you can't really change how intelligent you are
3. No matter how much intelligence you have, you can always change it quite a bit
4. You can always substantially change how intelligent you are

- Statements 1 & 2 = Fixed mindset
- Statements 3 & 4 = Growth mindset

ERC Services

- Workshops
- Academic Skills Advising
- Peer Tutoring
- Writing Assistance
- Language Link





Where to Find Us

Visit Us!

100 Bay State Road, 6th Floor

Website: bu.edu/erc

Contact Us!

(617) 353-7077

erc@bu.edu

Follow Us!

 BU_ERC

 BUERC

 BUERC



Q&A

Recommended Reading

- Why Good Students Do “Bad” in College: Why We Should Care and What We Should Do
- Unequal Competence: The Gap Between Passing and Learning
- Ambrose, S.A., Bridges, M. W., DiPietro, M., Lovett, M.C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. Jossey-Bass.

References

- Ambrose, S.A., Bridges, M. W., DiPietro, M., Lovett, M.C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. Jossey-Bass.
- Bielaczyc, K., Pirolli, P.L., Brown, A. L. (1995). Training in self-explanation and self-regulation strategies: Investigating the effects of knowledge acquisition activities on problem solving. *Cognition and Instruction*, 13(2), 221-252.
- Chew, S. (2010, April). Improving Classroom Performance by challenging student misconceptions about learning. *Association for Psychological Science*. Retrieved from <https://www.psychologicalscience.org/observer/improving-classroom-performance-by-challenging-student-misconceptions-about-learning>
- Chi, M.T.H., Bassok, M., Lewis, M. W., Reimann, P., & Glaser, R. (1989). Self-explanations: How students study and use examples in learning to solve problems. *Cognitive Science*, 13, 145-182
- Chi, M.T.H., DeLeeuw, N. Chiu, M.-H., & LaVancher, C. (1994). Eliciting self-explanations improves understanding. *Cognitive Science*, 18, 439-477.
- Chick, N. (2013). Metacognition. Vanderbilt University Center for Teaching. Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/metacognition/>
- Carpenter, S., Cepeda, N., Rohrer, D., Kang, S., & Pashler, H. (2012). Using spacing to enhance diverse forms of learning: Review of recent research and implications for instruction. *Educational Psychology Review*, 24, 369-378.
- DePaul University. (2021). Activities for metacognition. Retrieved from <https://resources.depaul.edu/teaching-commons/teaching-guides/learning-activities/Pages/activities-for-metacognition.aspx>
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner
- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving Students' Learning With Effective Learning Techniques: Promising Directions From Cognitive and Educational Psychology. *Psychological Science in the Public Interest*, 14(1), 4–58. <https://doi.org/10.1177/1529100612453266>
- Dweck, C. (2008). *Mindset: the new psychology of success. How we can learn to fulfill our potential*. Ballantine Books
- Henderson, V. L., & Dweck, C.S. (1990). Motivation and achievement. In S.S. Feldman & G. R. Elliott (Eds.), *At the threshold: the developing adolescent* (pp.308-329). Cambridge, MA: Harvard University Press.
- Johnson, D. T., & Price, J. E. (2019). *Will This Be on the Test? : What Your Professors Really Want You to Know about Succeeding in College*. Princeton University Press.
- Karpicke, J. D., & Roediger, H. L. (2008, February 15). The critical importance of retrieval for learning. *Science*, 319, 966–968. doi:10.1126/science.1152408
- Kornell, N., & Bjork, R. A. (2007). The promise and perils of self-regulated study. *Psychonomic Bulletin & Review*, 14, 219–224. doi:10.3758/BF03194055

References cont.

- McDaniel, M. A., Howard, D. C., & Einstein, G. O. (2009). The Read-Recite-Review Study Strategy: Effective and Portable. *Psychological Science*, 20(4), 516–522. <https://doi.org/10.1111/j.1467-9280.2009.02325.x>
- McGuire, S. Y., & McGuire, S. (2018). *Teach Yourself How to Learn : Strategies You Can Use to Ace Any Course at Any Level*. Stylus Publishing.
- Nestojko, J. F., Bui, D. C., Kornell, N., & Bjork, E. L. (2014). Expecting to teach enhances learning and organization of knowledge in free recall of text passages. *Memory & cognition*, 42(7), 1038–1048. <https://doi.org/10.3758/s13421-014-0416-z>
- Price-Mitchell, M. (2015, April 7). Metacognition: Nurturing self-awareness in the classroom. Edutopia. Retrieved from <https://www.edutopia.org/blog/8-pathways-metacognition-in-classroom-marilyn-price-mitchell>
- Roediger, H. L. III, Putnam, A. L., & Smith, M. A. (2011). *Ten benefits of testing and their applications to educational practice*. In J. P. Mestre & B. H. Ross (Eds.), *The psychology of learning and motivation: Vol. 55. The psychology of learning and motivation: Cognition in education* (p. 1–36). Elsevier Academic Press. <https://doi.org/10.1016/B978-0-12-387691-1.00001-6>
- University of North Carolina at Chapel Hill. (2021). Higher order thinking: Bloom's taxonomy. Retrieved from <https://learningcenter.unc.edu/tips-and-tools/higher-order-thinking/>
- Sousa, D. A. (2016). *How the brain learns* (5th ed.). Corwin
- Spencer, J. (2018, Aug. 10). *What is metacognition. (Exploring the metacognition cycle)* [Video]. YouTube. <https://www.youtube.com/watch?v=HZrUWvfU6VU>
- Yue, C. [khanacademymedicine]. (2013, Oct. 24). *Information processing model: Sensory, working, and long term memory |MCAT| Khan Academy* [Video]. YouTube. <https://www.youtube.com/watch?v=pMMRE4Q2FGk>