

Unit 6: Cognitive Theories of Learning 1

EDUC 525 – Challenges in Urban Education: Learning

Spring 2019

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Agenda

Housekeeping

Theoretical comparison

Discussion and videos

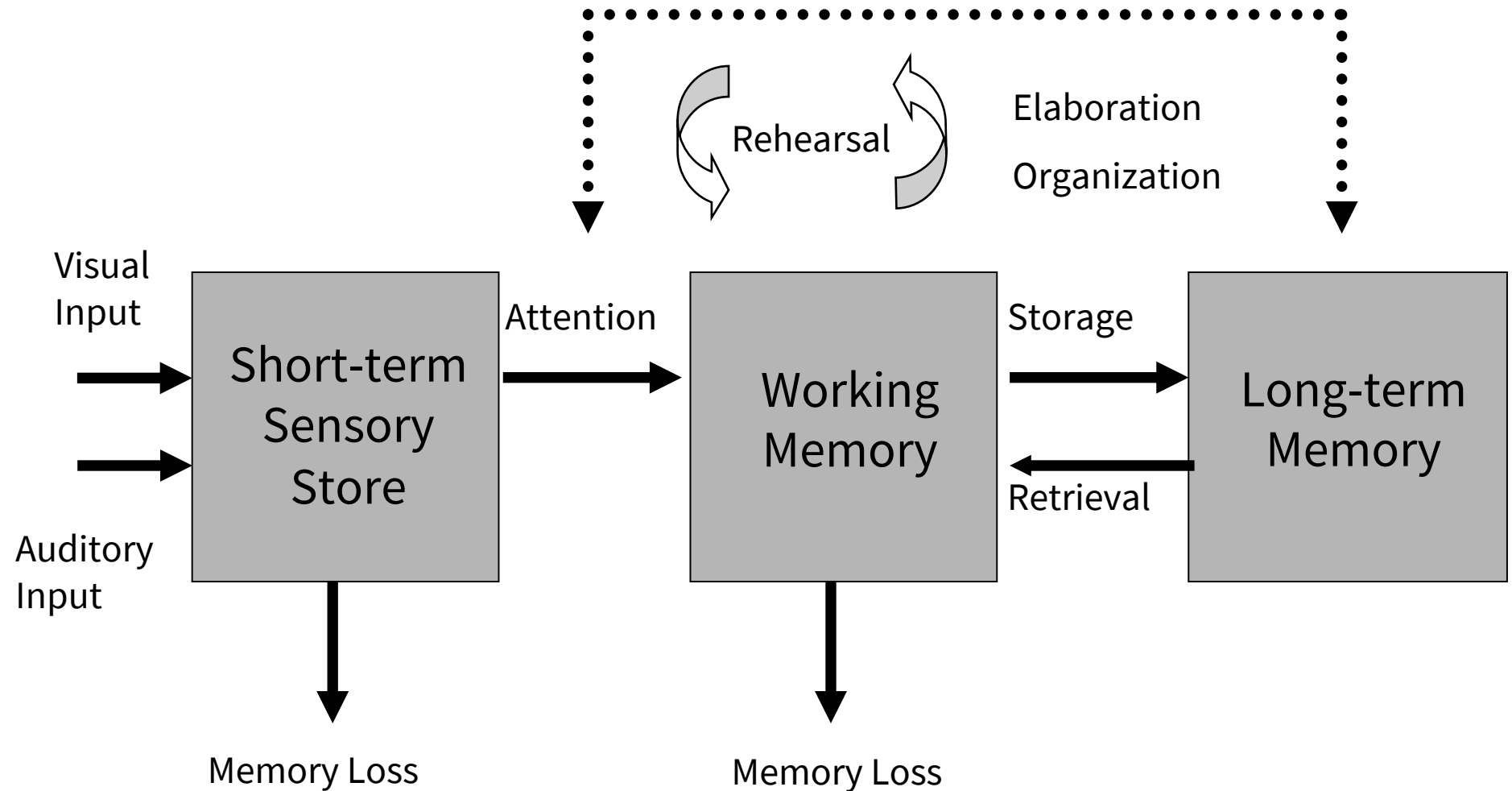
Mid-semester evaluation

For next week

Theoretical Comparison

In three sentences or less, describe how cognitive theories of learning are similar and different than behaviorism and social cognitive theory.

A Model of the Information Processing System (IPS)



Principles of Information Processing

1. Information learned meaningfully and connected with prior knowledge is stored more quickly and remembered more accurately because it is elaborated with prior learning.
2. Frequent practice for short periods of time helps cognitive integration of learning.
3. How learners organize knowledge influences how they learn and apply what they know.
4. Students prior knowledge can help or hinder learning.
5. To develop mastery, students must acquire component skills, practice integrating them, and know when to apply what they have learned.
6. Integrate auditory and visual information to maximize working memory capacity.
7. Continued practice promotes automaticity and takes less capacity in working memory.
8. The use of metacognitive strategies assists students in becoming self-regulated learners.

Principles of CLT

1. Segmenting complex material into manageable parts and pre-training, among other strategies, enables for the intrinsic load to be managed and learning to be enhanced
2. Decreasing extraneous cognitive load by effective instruction (particularly when intrinsic load is high) enables more effective learning
3. Increasing germane cognitive load by engaging the learner in meaningful learning and schema construction facilitates effective learning.

Discussion 1

1. What concepts or ideas from the reading resonated with you this week? Why?
2. How did your understanding of cognitive theories of learning (IPS and/or CLT) explain a problem you have experienced in your personal or professional life?
 - Identify the corresponding IPS or CLT principle(s) that you think apply to the problem.

Let's Watch

- As you watch each video, think about how the two concepts of implicit bias and stereotype threat relate to your understanding of cognitive learning theories.
- After each video, independently jot down notes related to how the concepts relate to your understanding of cognitive learning theories.
- <https://youtu.be/rbe5D3Yh43o>
- <https://youtu.be/failylROnrY>

Discussion 2

1. Discuss how the concepts of implicit bias and stereotype threat are related to your understanding of cognitive learning theories.
2. Did the two videos change or expand your understanding of cognitive theories of learning? How so?
3. Based on what you know about cognitive theories of learning, what strategies would you hypothesize could be used to address unconscious bias?

Quiz Review

Mid-semester Evaluation

https://usceducation.az1.qualtrics.com/jfe/form/SV_9mcJbJsmXKUnKhn

For Next Week

Statement of the Problem Paper

- Due Sunday, 2/17 by midnight

Unit 7 – Cognitive Theories 2

- Download recorded lecture slides
- Watch recorded lecture on VoiceThread
- Complete readings
- Take quiz
 - Open book, open note
 - May only take once
 - Individual scores (no collaboration on quiz)