Psikologi Pendidikan

Runi Rulanggi-FHB UPJ

NEXT

Education is the most powerful weapon which you can use to change the world.

–Nelson Mandela–

NEXT

Selamat datang

Di Kelas Psikologi Pendidikan

NEXT

THE INFORMATION-PROCESSING APPROACH

NEXT

OUTLINE

- The Nature
- Attention
- Memory
- Expertise
- Metacognition

THE INFORMATION-PROCESSING APPROACH

- The informationprocessing approach emphasizes that children manipulate information, monitor it, and strategize about it.

COGNITIVE RESOURCES: CAPACITY AND SPEED OF PROCESSING INFORMATION

- cognitive resources –> important influence on memory and problem solving.

MECHANISMS OF CHANGE

- Encoding is the process by which information gets stored in memory. Changes in children's cognitive skills depend on increased skill at encoding relevant information and ignoring irrelevant information.
- Automaticity refers to the ability to process information with little or no effort. Practice allows children to encode increasing amounts of information automatically.
- Strategy construction is the creation of new procedures for processing information.
- metacognition, which means "knowing about knowing"

ATTENTION

- Attention is the focusing of mental resources. Attention improves cognitive processing for many tasks, from hitting a baseball to reading a book or adding numbers (Rothbart & Posner, 2015).

ATTENTION

- Psychologists have labeled these types of allocation as selective attention, divided attention, sustained attention, and execu- tive attention.
- Selective attention is focusing on a specific aspect of experience that is relevant while ignoring others that are irrelevant. Focusing on one voice among many in a crowded room or a noisy restaurant is an example of selective attention.
- Divided attention involves concentrating on more than one activity at the same time. If you are listening to music while you are reading this, you are engaging in divided attention.
- Sustained attention is the ability to maintain attention over an extended period of time. Sustained attention is also called vigilance. Staying focused on reading this chapter from start to finish without interruption is an example of sustained attention. A recent study found that sustained attention in preschool- ers was linked to a greater likelihood of completing college by 25 years of age (McClelland & others, 2013).
- Executive attention involves planning actions, allocating attention to goals, detecting and compensating for errors, monitoring progress on tasks, and deal- ing with novel or difficult circumstances. An example of executive attention is effectively deploying attention to carry out the aforementioned cognitive tasks while writing a 10-page paper for a history course.

DEVELOPMENTAL CHANGES

- Some important changes in attention occur during childhood (Ristic & Enns, 2015). The length of time children can pay attention increases as they get older. The toddler wanders around, shifts attention from one activity to another, and seems to spend little time focused on any one object or event. In contrast, the preschool child might watch television for half an hour at a time.

MEMORY

- Memory is the retention of information over time. Educational psychologists study how information is initially placed or encoded into memory, how it is retained or stored after being encoded, and how it is found or retrieved for a certain purpose later. Memory anchors the self in continuity.

MEMORY

Encoding

Getting information into memory

Storage

Retaining information over time

Retrieval

Taking information out of storage

ENCODING

- Rehearsal -> is the conscious repetition of information over time to increase the length of time information stays in memory.
- Deep Processing -> Their levels of processing theory states that the processing of memory occurs on a continuum from shallow to deep, with deeper processing producing better memory.
- Elaboration -> the extensiveness of information processing involved in encoding. Thus, when you present the concept of democracy to students, they likely will remember it better if they come up with good examples of it.
- Constructing Images -> When we construct an image of something, we are elaborating the information.
- Organization -> If students organize information when they are encoding it, their memory benefits (Schneider, 2015).

NEXT

STORAGE

- Sensory memory -> holds information from the world in its original sensory form for only an instant, not much longer than the brief time a student is exposed to the visual, auditory, and other sensations.
- Short-term memory -> limited-capacity memory system in which information is retained for as long as 30 seconds, unless the information is rehearsed or otherwise processed further, in which case it can be retained longer.

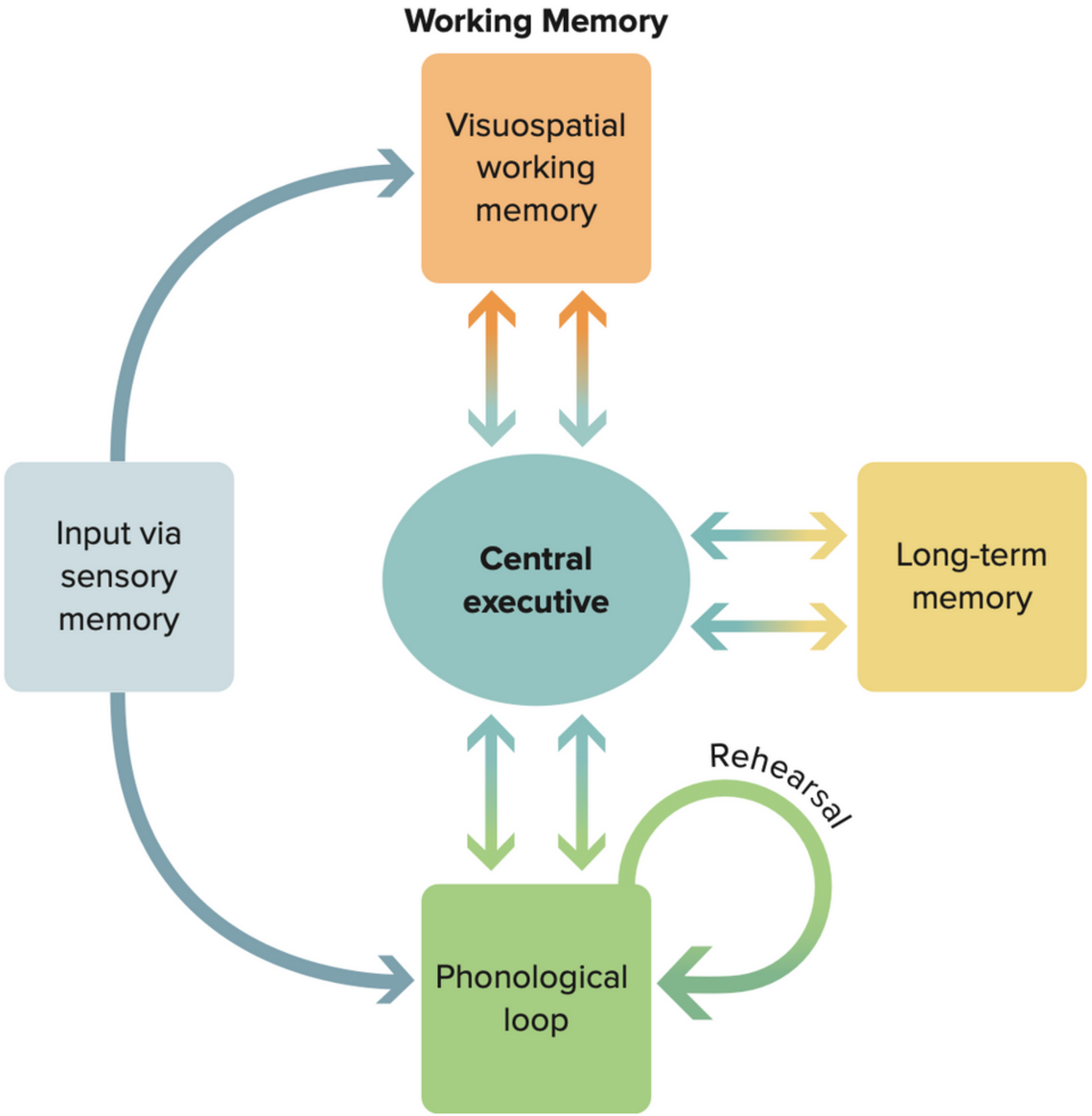

FIGURE 3 BADDELEY'S WORKING MEMORY MODEL

NEXT

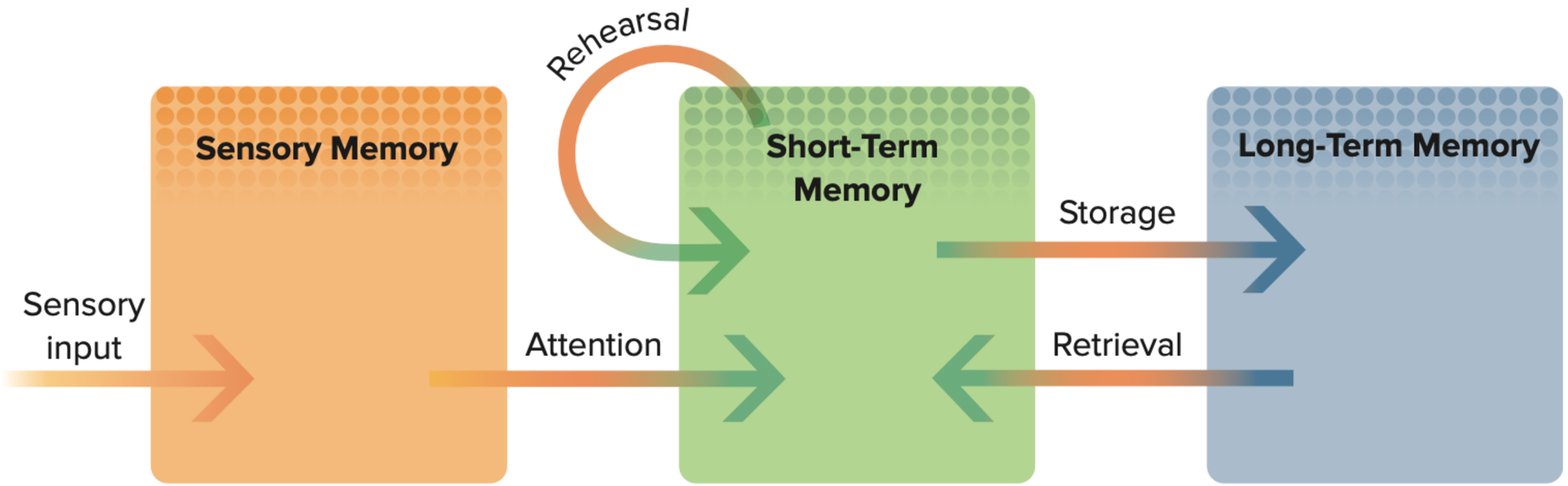

FIGURE 4 ATKINSON AND SHIFFRIN'S MODEL OF MEMORY

rief instant. However, some information,
transferred to short-term memory, where

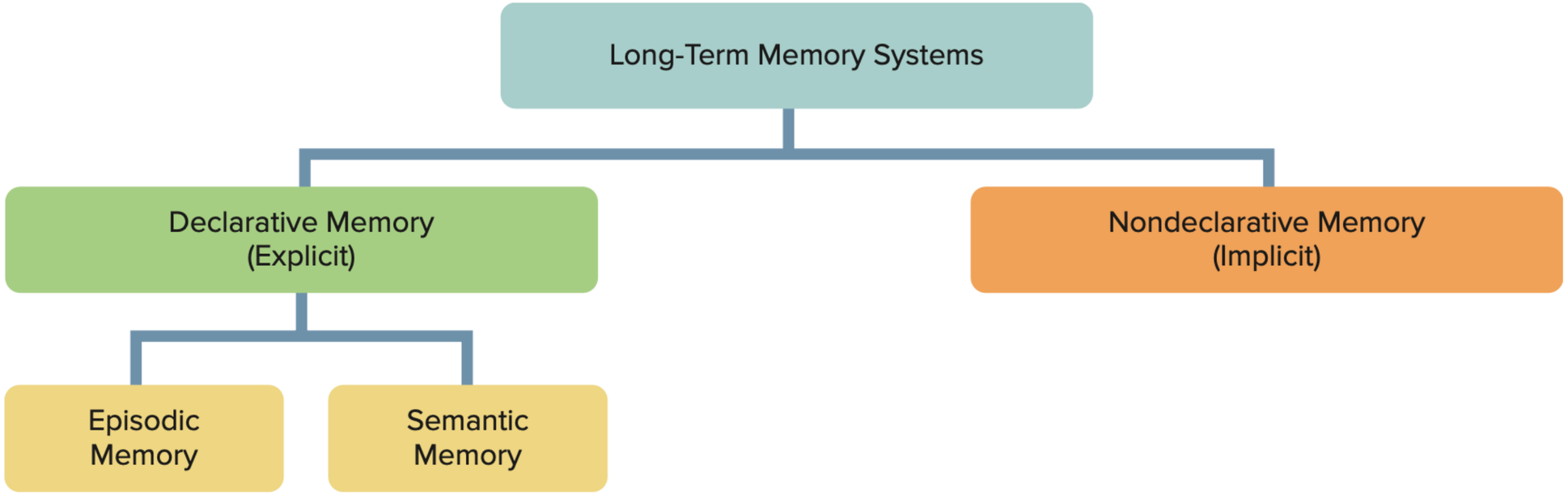

FIGURE 5 CLASSIFICATION OF LONG-TERM MEMORY'S CONTENTS

include recounting an event they have witnessed or descr
However, students do not need to be talking in order

Schema Theories

Schema theories state that when we reconstruct information, we fit it into information that already exists in our mind. A schema is information—concepts, knowledge, information about events—that already exists in a person's mind. Unlike network theories, which assume that retrieval involves specific facts, schema theory claims that long-term memory searches are not very exact.

RETRIEVAL AND FORGETTING

- Retrieval-> When we retrieve something from our mental “data bank,” we search our store of memory to find the relevant information.

EXPERTISE AND LEARNING

- According to the National Research Council (1999), experts are better than novices at the following:
- Detecting features and meaningful patterns of information
- Accumulating more content knowledge and organizing it in a manner that shows an understanding of the topic
- Retrieving important aspects of knowledge with little effort
- Adapting an approach to new situations
- Using effective strategies

ACQUIRING EXPERTISE

- Practice and Motivation
- Talent

EXPERTISE AND TEACHING

- Pedagogical Content Knowledge

METACOGNITION

- DEVELOPMENTAL CHANGES
- THE GOOD INFORMATION-PROCESSING MODEL
- STRATEGIES AND METACOGNITIVE REGULATION

NEXT

Referensi :

Santrock, J. W. (2018). Educational Psychology 6th Edition. New York: McGraw-Hill.