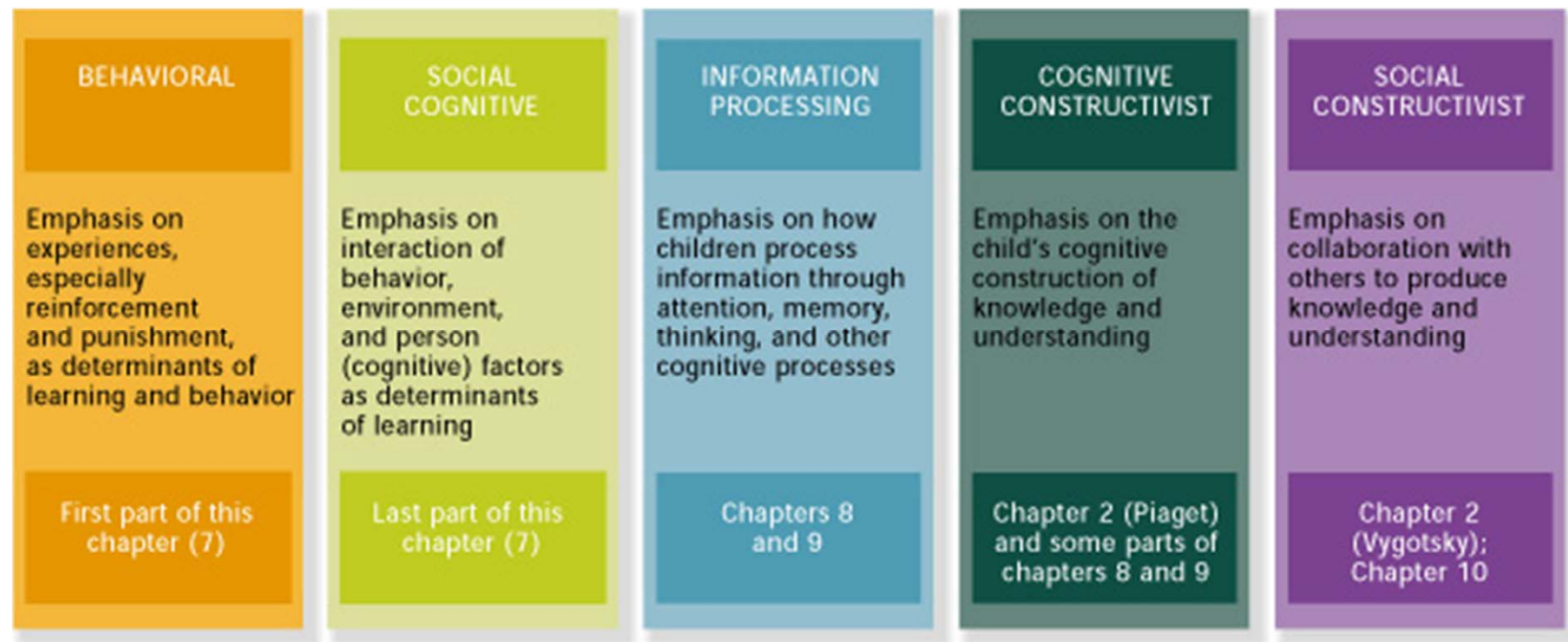
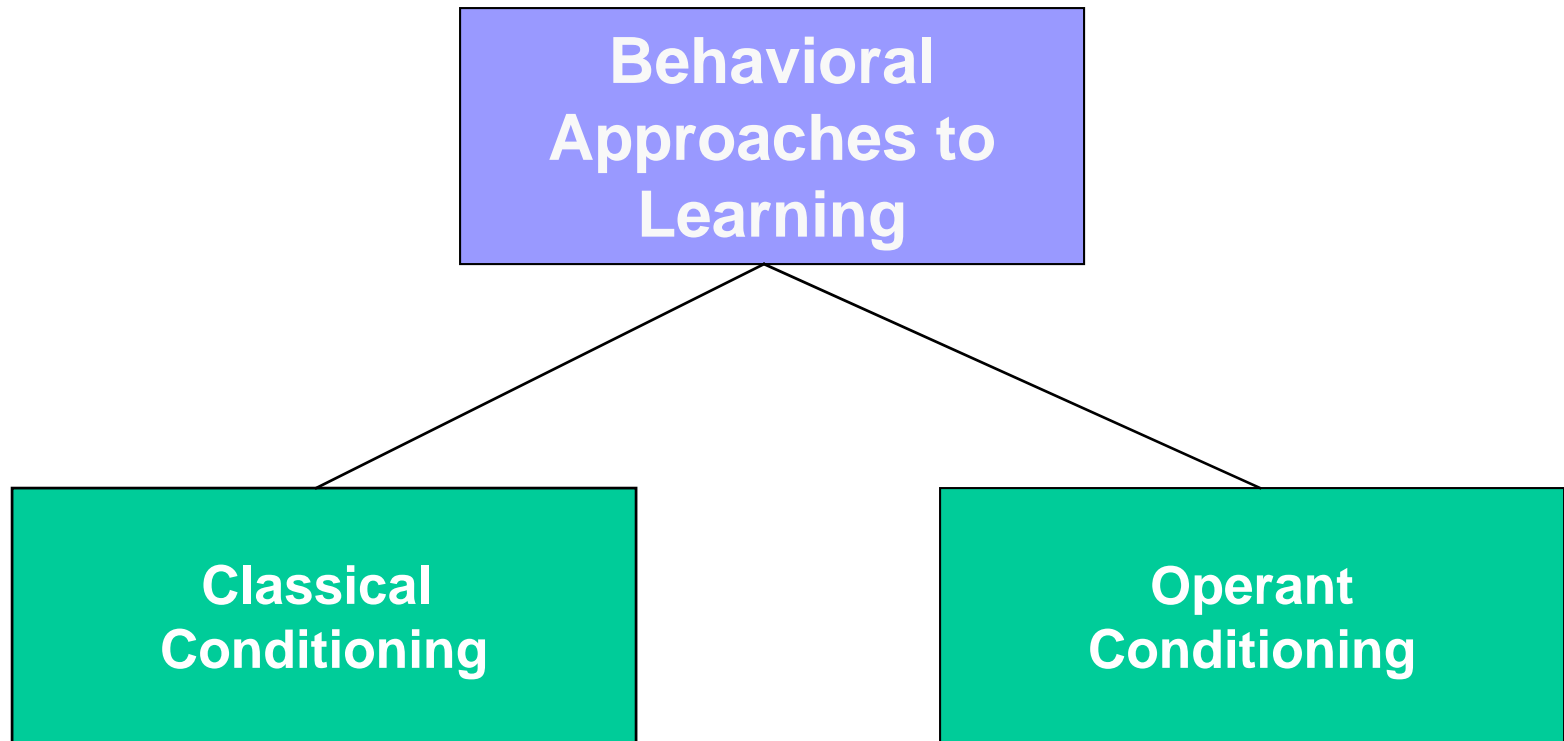


Behavioral & Cognitive Approaches to Learning

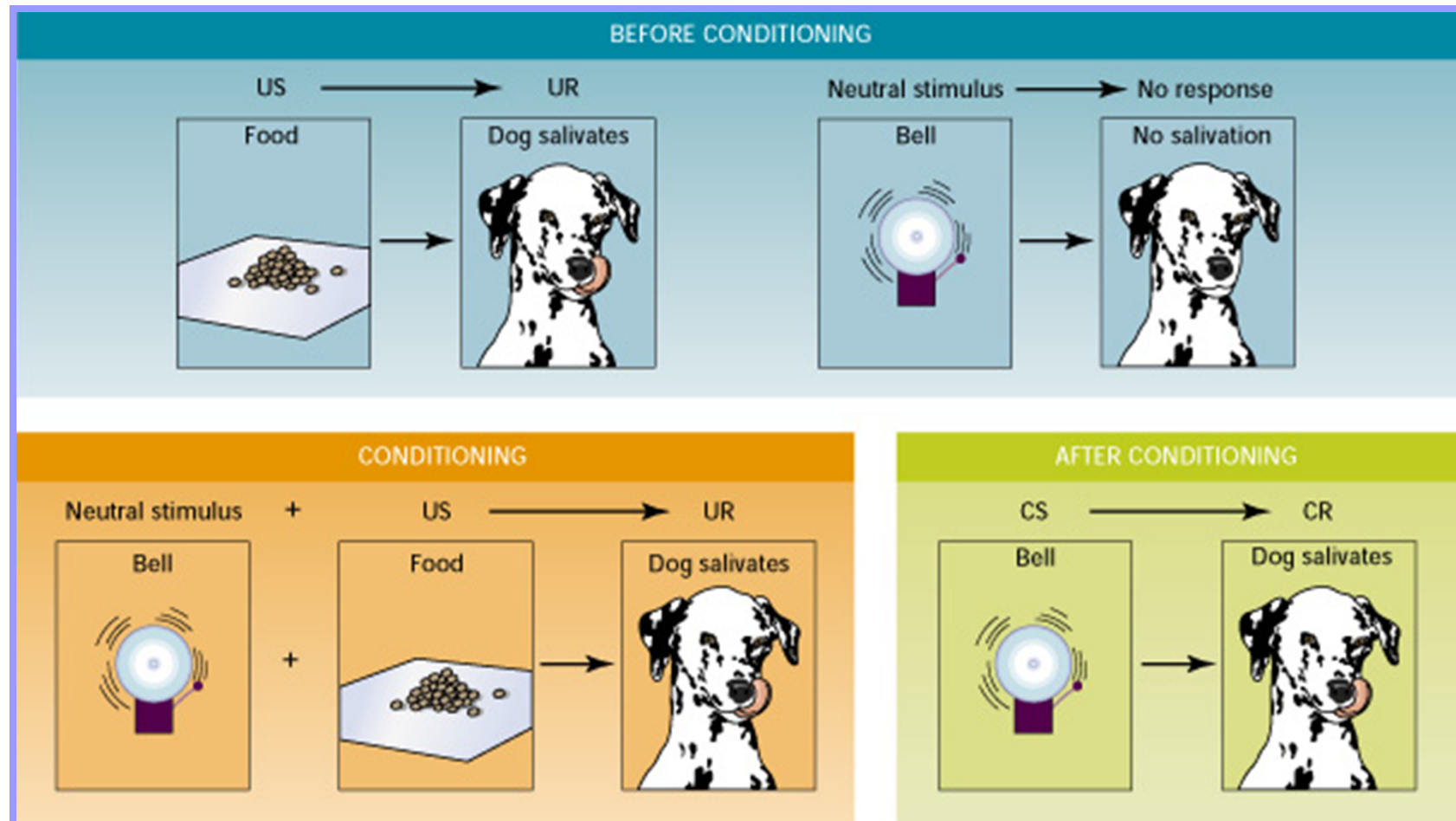
Learning is a relatively permanent influence on behavior, knowledge, and thinking skills, which comes about through experience.



Behavioral and Cognitive Approaches to Learning



Classical Conditioning



Classical Conditioning Principles

Generalization



The tendency of a new stimulus similar to the original conditioned stimulus to produce a similar response.

Discrimination



The organism responds to certain stimuli but not others.

Extinction



The weakening of the conditioned response (CR) in the absence of the unconditioned stimulus (UCS).

Pavlov's Classical Conditioning

Theory into Practice

Patty does poorly on a math test. This makes her feel anxious. From that point on, she always becomes anxious when taking a math test. As the school year progresses, she begins experiencing anxiety when she has tests in other subject areas as well.

Q.1: *Identify the US in the example above.*

Q.2: *Identify the UR in the example above.*

Q.3: *Identify the CS in the example above.*

Q.4: *Identify the CR in the example above.*

Pavlov's Classical Conditioning

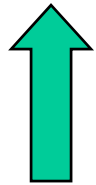
Theory into Practice

Patty does poorly on a math test. This makes her feel anxious. From that point on, she always becomes anxious when taking a math test. As the school year progresses, she begins experiencing anxiety when she has tests in other subject areas as well.

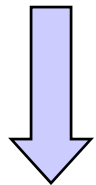
Q: *Why would Patty begin to experience anxiety in response to tests in content areas other than math?*

Skinner's Operant Conditioning

Consequences are contingent on the organism's behavior.



Reinforcement increases the probability that a behavior will occur.



Punishment decreases the probability that a behavior will occur.



Reinforcement and Punishment

	Behavior	Consequence	Future Behavior
Positive Reinforcement	Student asks a good question	Teacher praises student	Student asks more good questions
Negative Reinforcement	Student turns homework in on time	Teacher stops criticizing student	Student increasingly turns homework in on time
Punishment	Student interrupts teacher	Teacher verbally reprimands student	Student stops interrupting teacher

Skinner's Operant Conditioning

Theory into Practice

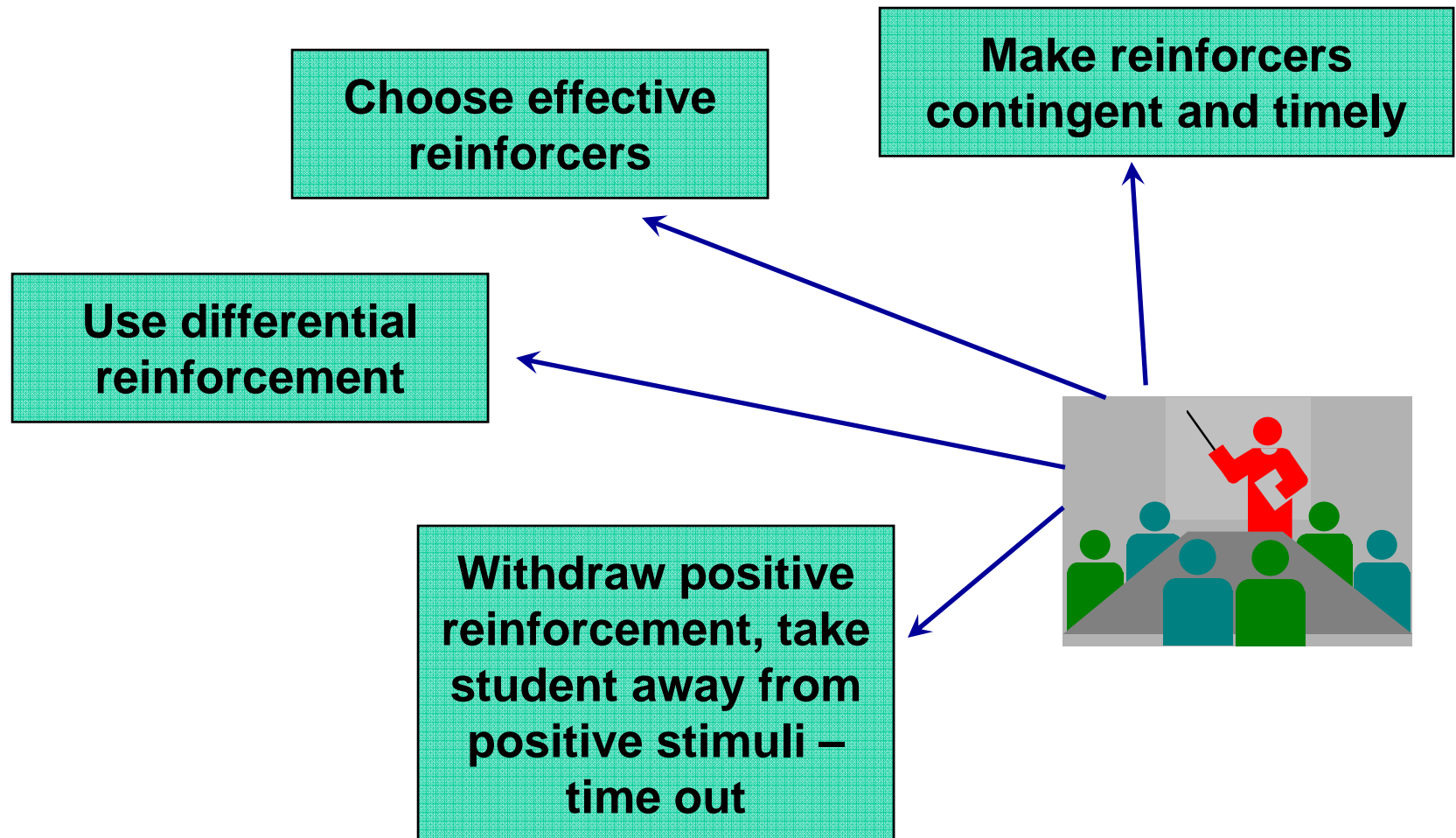
Nick frequently gets out of his seat and entertains his classmates with humorous remarks. Mr. Lincoln often scolds Nick for his behavior. However, Nick's classmates laugh when Nick makes remarks. The scolding rarely has any impact. Nick continues with his antics.

Q.1: *What is Mr. Lincoln attempting to do when he scolds Nick?*

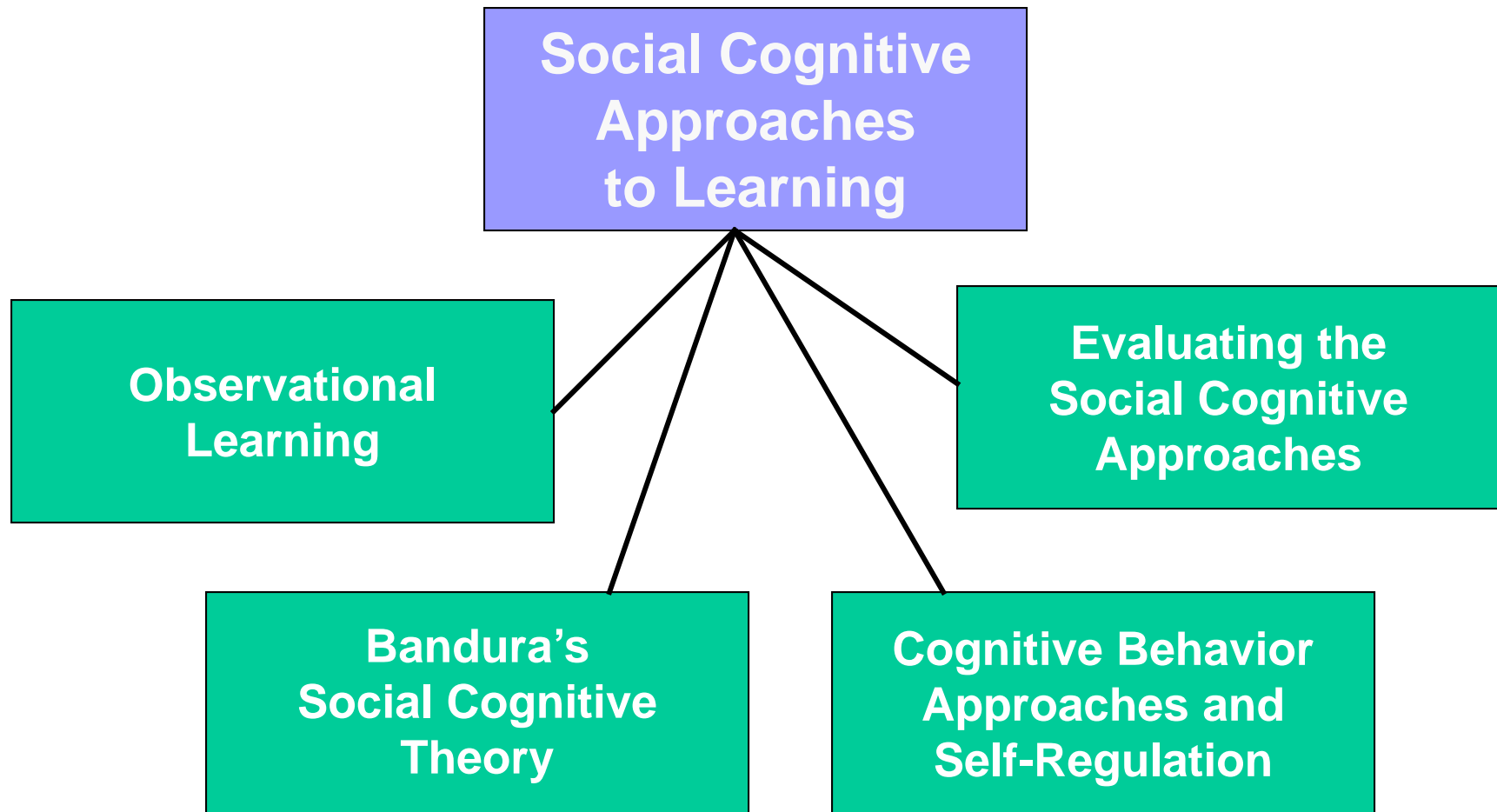
Q.2: *Why does Nick continue his antics in spite of being scolded?*

Q.3: *What are three strategies Mr. Lincoln could try to keep Nick more on task?*

Increasing Desirable Behaviors and Decreasing Undesirable Ones



Behavioral and Social Cognitive Approaches



Observational Learning

You can learn by observing others

Attention

Students must attend to what a model is doing or saying.

Retention

Students must code information and keep it in memory so that they can retrieve it.

Production

Students must be able to reproduce the model's behavior.

Motivation

Students must be motivated to imitate the modeled behavior.

Observational Learning

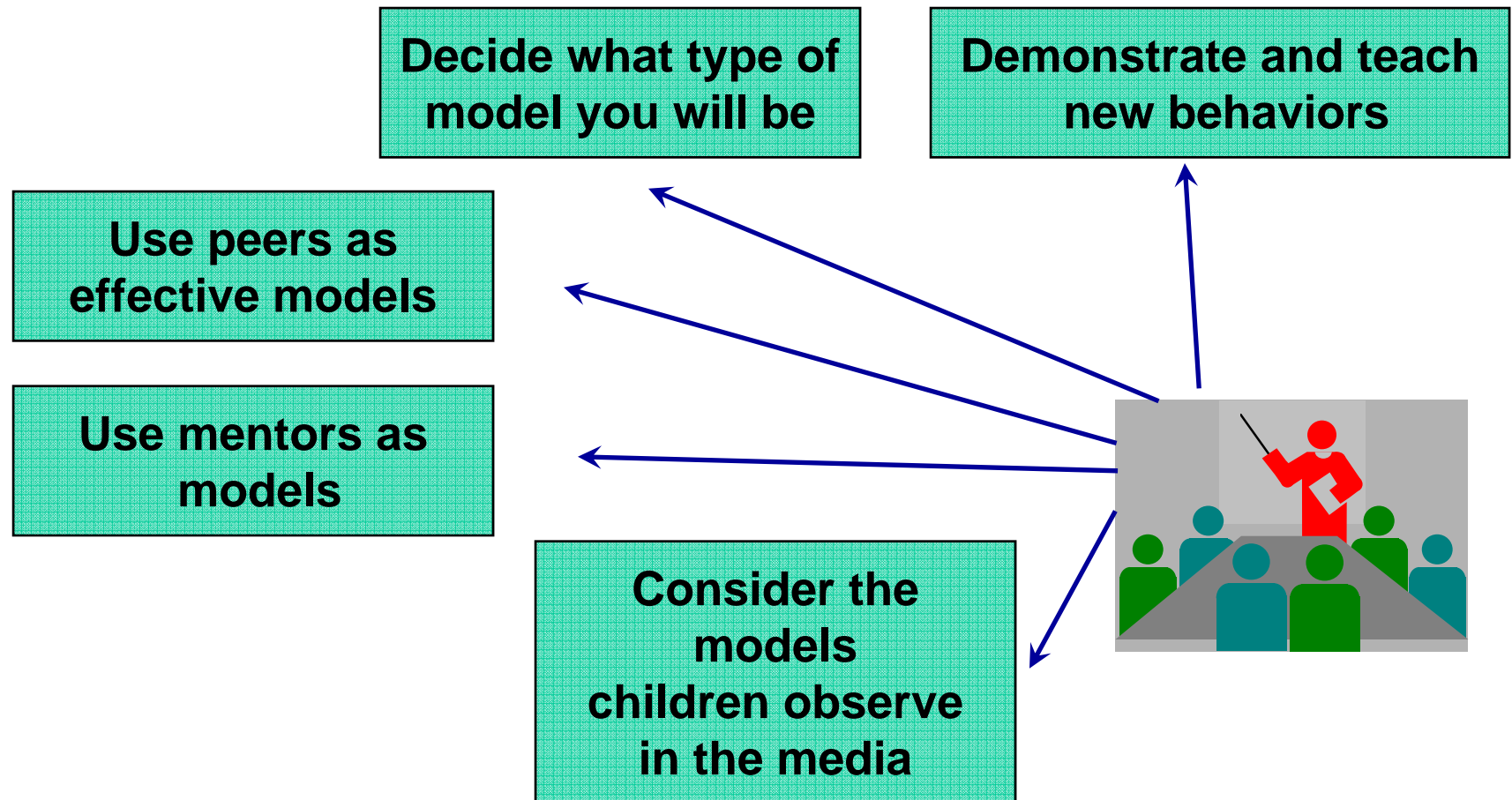
Theory into Practice

Nick frequently gets out of his seat and entertains his classmates with humorous remarks. Mr. Lincoln often scolds Nick for his behavior. However, Nick's classmates laugh when Nick makes remarks. The scolding rarely has any impact. Nick continues with his antics. After several days of this, other boys in the class begin to get out of their seats and make humorous remarks as well.

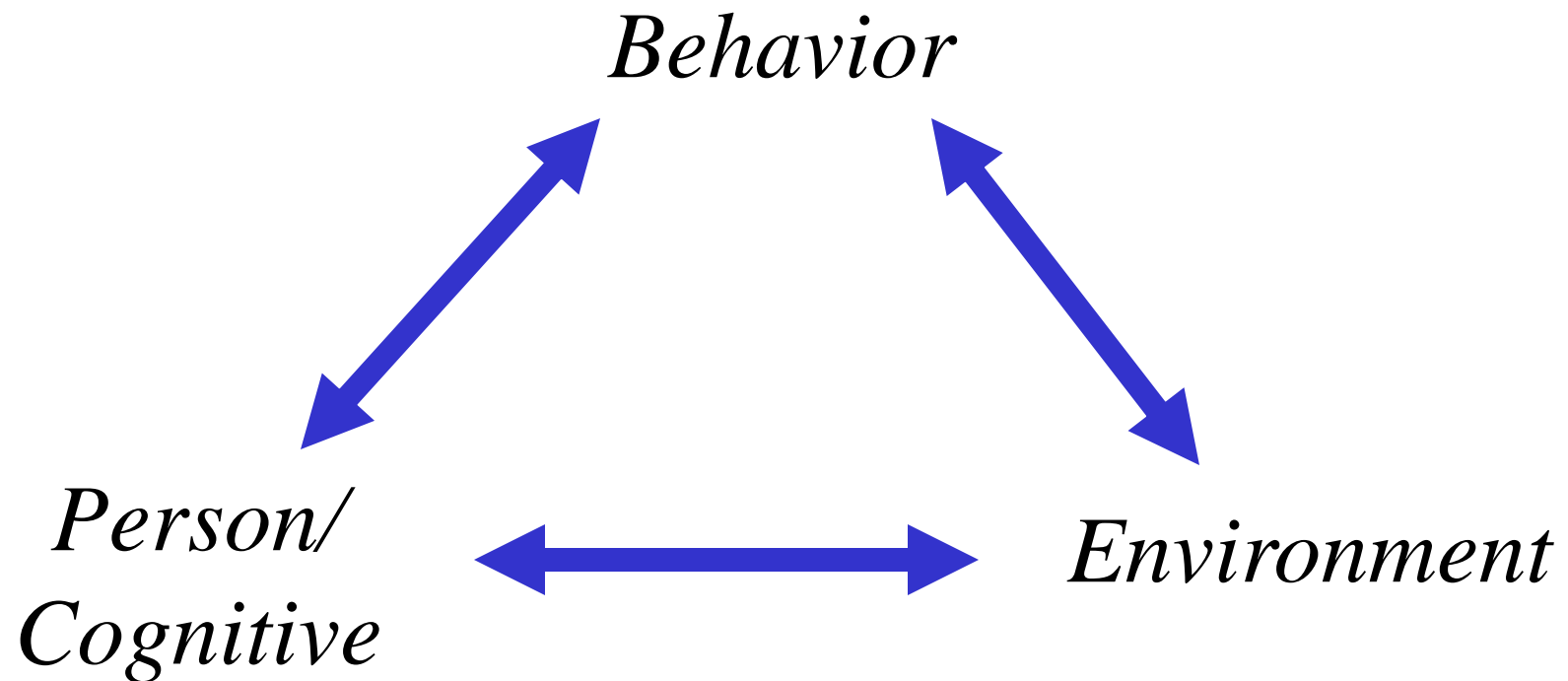
Q.1: *Why do the other boys begin to misbehave? Explain.*

Q.2: *What can Mr. Lincoln do get these behaviors under control?*

Classroom Use of Observational Learning



Bandura's Social Cognitive Theory



Bandura's Social Cognitive Theory

The case of achievement motivation

Cognition influences behavior

Student develops effective cognitive strategies that improve his/her performance

Behavior influences cognition

Better study strategies produce better grades, better grades produce positive expectations

Environment influences behavior

A study-skills program provides the tools for effective achievement behavior

Behavior influences environment

Improving student performance prompts the school to expand the study-skills program

SELF-EFFICACY

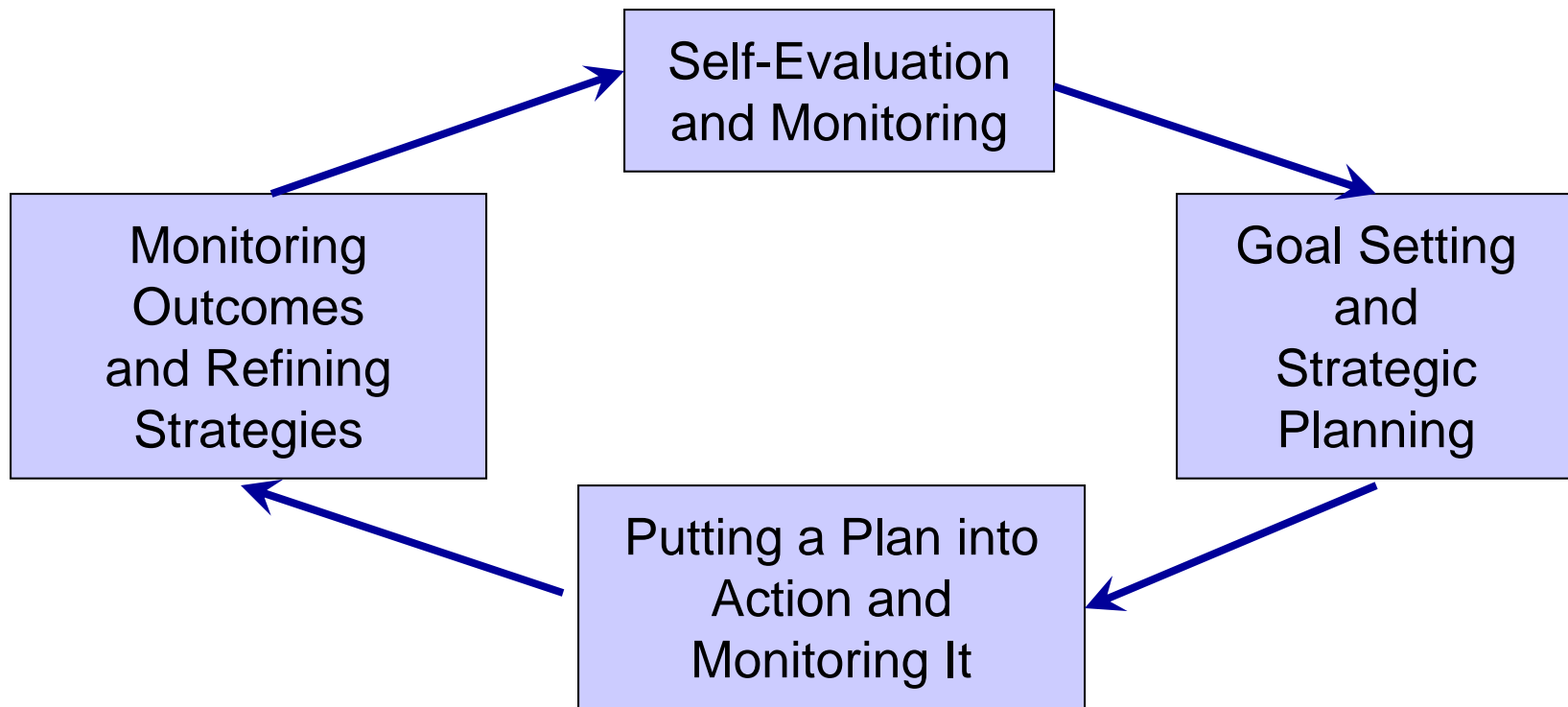
Self-efficacy is a personal expectation about one's capability to accomplish some task. It is a specific view of one's capabilities in a given domain.

“I am a smart person.”
(self-concept)

“I am confident I can get an A in
my educational psych course.”
(self-efficacy)

Four sources of self-efficacy: your own assessment of your performance (“Hey, I can do this!”), other's assessment of your performance (“You can do this!”), your assessment of other learners (“They can do it, so can I!”), your physiological state (I'm calm, no more anxiety)

A Model of Self-Regulatory Learning



Strategies for Encouraging Students to be Self-Regulated Learners

- Gradually guide students to become self-regulated
- Make classroom learning challenging & interesting
- Provide tips that will help students engage in self-regulation
- Pay special attention to low-achieving students
- Model self-regulated learning