

Learning Goal: Create instructional strategies to enhance student motivation through value, self-efficacy, and environment.

Motivational Factor #1: Value

From “How Learning Works” by Ambrose et al., 2010.

Value is the perceived importance of a task. Whether or not students’ see value in a task will impact whether or not they are motivated to complete that task. People are motivated to work to attain goals that they place a high value on, and contrastingly they are unmotivated to work to attain goals that they place a low value or do not place value on. If students are confronted with multiple goals at once (e.g., attending a study session, completing an assignment, and going to sleep early to fight off a cold), they will pursue the goal that has the highest value to them.

Three broad determinants of value are suggested by Wingfield and Eccles (1992; 2000): attainment value, intrinsic value, and instrumental value. Attainment value is the satisfaction that someone gains if they master and accomplish the goal or task. For example, a student may receive great satisfaction in solving complex mathematical problems and spends hours working to demonstrate their ability to solve them. Intrinsic value is the satisfaction that someone gains from simply doing the task, regardless of its particular outcome. For example, a student may work tirelessly to create costumes for a play or writing a complex computer program simply because they love it. Instrumental value is the degree to which accomplishing a goal or completing a task helps someone to accomplish other important goals. Examples include a task that will help someone achieve the important goal of getting an interesting job or one that pays a high salary, or receiving public recognition.

Some examples of instructional strategies for promoting value are:

- Use real-world contexts and problems as much as possible.
- Find out what students’ goals are; let them express those goals and why they are important to them.
- Have students reflect on connections between what they are learning and their own goals and development as a scientist.

In your group, come up with two or more additional instructional strategies to promote value.

Jigsaw!

You are now each an expert of a motivational factor. In your new groups, share your motivational factor. Next, go through each of the instructional strategies that you and your base group created (not the examples included on the worksheet) and explain to your group members how the instructional strategy will help increase a student's motivation.

Repeat for each of your group members.

Instructional strategies to promote a positive classroom environment

Instructional strategy	How it promotes a positive classroom environment

Instructional strategies to promote self-efficacy

Instructional strategy	How it promotes self-efficacy

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Motivational Factor #2: Self-Efficacy

From “How Learning Works” by Ambrose et al., 2010.

Self-efficacy is someone’s belief that they are capable of completing a task. Even if all other motivational factors are in place, a student may be unmotivated to complete a task if they don’t believe that they will be able to successfully accomplish it. Prior experience in similar contexts can influence a student’s expectancies for success. If a student has had success with a similar task in the past, they are more likely to expect success from the task in the future.

Contrastingly, if they have experienced failure with a similar task in the past, they are more likely to expect failure from the task in the future.

The reasons that the student believes this particular success or failure has occurred may be most important in determining their future self-efficacy. If they attribute their success to internal causes (e.g., their own talent or ability) or controllable causes (e.g., their own effort or persistence), they are more likely to expect future success. However, if they attribute their success to external causes (e.g., an easy task) or uncontrollable causes (e.g., luck), they are less likely to expect future success.

The effects of failure on self-efficacy are slightly different. If a student fails at a task and attributes that failure to their lack of ability, they see their ability as unchangeable and will have low motivation to complete a similar task in the future. If a student fails at a task and attributes that failure to controllable factors, such as inadequate preparation or lack of relevant information, they can maintain the belief that they are capable of changing their behaviours to promote success and will still have motivation to complete a similar task in the future.

Some examples of instructional strategies for promoting self-efficacy are:

- Give opportunities for early successes.
- Encourage students to view intelligence as a malleable rather than fixed trait.
- Acknowledge existence of, and reduce conditions for, stereotype threat / identity threat.

In your group, come up with two or more additional instructional strategies to promote self-efficacy.

Jigsaw!

You are now each an expert of a motivational factor. In your new groups, share your motivational factor. Next, go through each of the instructional strategies that you and your base group created (not the examples included on the worksheet) and explain to your group members how the instructional strategy will help increase a student's motivation.

Repeat for each of your group members.

Instructional strategies to promote value

Instructional strategy	How it promotes value

Instructional strategies to promote a positive classroom environment

Instructional strategy	How it promotes a positive classroom environment

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Motivational Factor #3: Environment

From “How Learning Works” by Ambrose et al., 2010.

Students can perceive the classroom environment on a continuum from supportive to unsupportive. The complex dynamics of a classroom including the tone, interpersonal forces at play, and the nature and structure of communication patterns all combine to support or inhibit a student’s motivation to complete a task. Motivation is likely to be enhanced if the student sees the classroom environment as supportive. For example, they may believe that the instructor is approachable and that many of their classmates seem willing to help them. Contrastingly, motivation is likely to be eroded if the student sees the classroom environment as unsupportive. For example, they may believe that the instructor is hostile towards certain demographics within the classroom and that they do not have anyone to ask for help should they require it.

Some examples of instructional strategies for promoting a positive classroom environment are:

- Have students choose their own topic for a project or assignment.
- Find out what students’ goals are; let them express those goals and why they are important to them.
- Acknowledge existence of, and reduce conditions for, stereotype threat / identity threat.

In your group, come up with two or more additional instructional strategies to promote a positive classroom environment.

Jigsaw!

You are now each an expert of a motivational factor. In your new groups, share your motivational factor. Next, go through each of the instructional strategies that you and your base group created (not the examples included on the worksheet) and explain to your group members how the instructional strategy will help increase a student's motivation.

Repeat for each of your group members.

Instructional strategies to promote value

Instructional strategy	How it promotes value

Instructional strategies to promote self-efficacy

Instructional strategy	How it promotes self-efficacy