

# Motivation Design



## LEARNING ENVIRONMENTS

### LEARNER IMPACTS

- Achievement
- Attitudes
- Behavior
- Self-regulation

## DESCRIPTION

Learner motivation can impact multiple dimensions of a learning experience, including the quality of learning, academic performance, involvement in activities, task choices, and persistence (Eccles, 1983; Pintrich, 2003). Thus, leveraging empirical research on motivation and learning stands to foster positive, productive learning environments. A vast body of research suggests the following best practices:

- Fostering intrinsic motivation for a task is more advantageous for learning than extrinsic motivation (Deci & Ryan, 2000)
- Giving learners autonomy and choice in their learning paths/tasks is more motivating than forcing them to follow one learning path/task (Deci & Ryan, 2000; Pintrich, 2003; Zuckerman, Porac, Lathin, Smith, & Deci, 1978)
- Positive feedback that is based on a learner's competency or mastery is more motivating than negative feedback (Boggiano & Ruble, 1979; Deci, 1971; Deci & Cascio, 1972; Fisher, 1978; Ryan, 1982)
- Learning environments that help learners increase their self-efficacy in a certain domain, skill, or task are more advantageous than those that do not (Bandura, 1977)
- Illustrating to learners that they are able to change and improve their skills and abilities—called “incremental self-theory”—yields more positive results than environments that emphasize unchangeable inborn/natural abilities (Dweck, 1999)
- Learning environments that attribute learner success to their own efforts and persistence have more positive learning impacts than environments attributing success to unchangeable or external factors such as the learner's intelligence, luck, or ease/difficulty of tasks (Weiner, 1974)
- Focusing learners on pursuing both mastery and performance goals is more likely to have a positive impact than focusing on only one or neither (Pintrich, 2003; Plante, O'Keefe, Théorêt, 2012; Senko, Hulleman, & Harackiewicz, 2011)
- When learners view a task as important, interesting, or useful, positive outcomes are more likely than when learners view a task as unimportant, uninteresting, or useless (Eccles, 1983; Pintrich, 2003)

## CAPABILITIES

- Adaptivity: Mastery + confidence based adaptivity
- Instruction: Active learning experience
- Management: Badging
- Management: Learner analytics

## SAMPLE DESIGN IMPLEMENTATIONS

- Robust Technology: Adaptive engines tracking mastery and performance
- Simple Technology: Feedback attributing a high score to student skill/persistence
- Content Support: Personally relevant/interesting content



Pearson

# Motivation Design

## SELF-ASSESSMENT INSTRUMENT



Principle Criteria	Integration (4-5 points)	Exploration (2-3 points)	Consideration (1 point)	Not Applicable (0 Points)	Total Points
<b>Definition</b>	<p>Strong application of motivation as a process, rather than a product</p> <p>Strong use of goal-driven actions in activities that are physical or mental</p> <p>Strong applications of techniques that both instigate and sustain motivation</p>	<p>Some application of motivation as a process, rather than a product</p> <p>Some use of goal-driven actions in activities that are physical or mental</p> <p>Some applications of techniques that both instigate and sustain motivation</p>	<p>Poor application of motivation as a process, rather than a product</p> <p>Poor use of goal-driven actions in activities that are physical or mental</p> <p>Poor applications of techniques that both instigate and sustain motivation</p>	<p>Does NOT use effectively or is not a related activity</p>	= ____
<b>Expectancy-Value</b>	<p>Strong emphasis on fostering intrinsic motivation in activities, but not at the exclusion of extrinsic motivation</p> <p>Strong emphasis on fostering realistic expectations for success</p> <p>Strong use of methods that foster intrinsic motivation and realistic expectations, such as:</p> <ul style="list-style-type: none"> <li>• Choices</li> <li>• Suitable difficulty</li> <li>• Informational constraints</li> <li>• Transparent evaluation</li> <li>• Self-regulated learning (SRL) strategies</li> </ul>	<p>Some emphasis on fostering intrinsic motivation in activities, but not at the exclusion of extrinsic motivation</p> <p>Some emphasis on fostering realistic expectations for success</p> <p>Some use of methods that foster intrinsic motivation and realistic expectations, such as:</p> <ul style="list-style-type: none"> <li>• Choices</li> <li>• Suitable difficulty</li> <li>• Informational constraints</li> <li>• Transparent evaluation</li> <li>• SRL strategies</li> </ul>	<p>Poor emphasis on fostering intrinsic motivation in activities, but not at the exclusion of extrinsic motivation</p> <p>Poor emphasis on fostering realistic expectations for success</p> <p>Poor use of methods that foster intrinsic motivation and realistic expectations, such as:</p> <ul style="list-style-type: none"> <li>• Choices</li> <li>• Suitable difficulty</li> <li>• Informational constraints</li> <li>• Transparent evaluation</li> <li>• SRL strategies</li> </ul>	<p>Does NOT use effectively or is not a related activity</p>	= ____
<b>Goal Orientations</b>	<p>Strong emphasis on fostering incremental views of intelligence</p> <p>Strong emphasis on fostering mastery goals in activities, but not at the exclusion of performance goals</p> <p>Strong application of learning environment to allow learners with different goals to succeed</p>	<p>Some emphasis on fostering incremental views of intelligence</p> <p>Some emphasis on fostering mastery goals in activities, but not at the exclusion of performance goals</p> <p>Some application of learning environment to allow learners with different goals to succeed</p>	<p>Poor emphasis on fostering incremental views of intelligence</p> <p>Poor emphasis on fostering mastery goals in activities, but not at the exclusion of performance goals</p> <p>Poor application of learning environment to allow learners with different goals to succeed</p>	<p>Does NOT use effectively or is not a related activity</p>	= ____
<b>Assessment</b>	<p>Strong application of multiple methods for measuring and assessing motivation to triangulate data</p> <p>Strong use of transparent, positive feedback that matches student achievement</p> <p>Strong application of one or more of the following measurement techniques:</p> <ul style="list-style-type: none"> <li>• Task choice</li> <li>• Involvement</li> <li>• Persistence</li> <li>• Achievement</li> </ul>	<p>Some application of multiple methods for measuring and assessing motivation to triangulate data</p> <p>Some use of transparent, positive feedback that matches student achievement</p> <p>Some application of one or more of the following measurement techniques:</p> <ul style="list-style-type: none"> <li>• Task choice</li> <li>• Involvement</li> <li>• Persistence</li> <li>• Achievement</li> </ul>	<p>Poor application of multiple methods for measuring and assessing motivation to triangulate data</p> <p>Poor use of transparent, positive feedback that matches student achievement</p> <p>Poor application of one or more of the following measurement techniques:</p> <ul style="list-style-type: none"> <li>• Task choice</li> <li>• Involvement</li> <li>• Persistence</li> <li>• Achievement</li> </ul>	<p>Does NOT use effectively or is not a related activity</p>	= ____