

Mastery Learning



**PRACTICES
THAT FOSTER
EFFECTIVE LEARNING**

DESCRIPTION

Mastery refers to the ability of a learner to demonstrate understanding in a domain as well as the process of incorporating corrective scaffolds such as feedback into the learning environment to help bring about that understanding in learners. By taking a mastery approach to learning, gauging and reporting of learner understanding can be done more regularly and to greater effect, as it can effectively be used as a way to improve cognitive and achievement outcomes, student self-efficacy, attendance, engagement, and participation with learners within adaptive learning systems (Guskey, 2007). Through alignment with specific learning objectives with assessment, instruction, and prescription (Gentile & Lalley, 2003), mastery may be utilized in a broad range of subjects to influence learner models to provide individualized learning environments (Baker & Siemens, 2014).

LEARNER IMPACTS

- Achievement

CAPABILITIES

- Adaptivity: Mastery + confidence based adaptivity
- Adaptivity: Adaptive study plan
- Management: Prerequisites

SAMPLE DESIGN IMPLEMENTATIONS

- Robust Technology: Mastery based adaptive learning algorithms
- Simple Technology: Spaced practice to prevent forgetting mastered concepts
- Content Support: Large content libraries of variety of material



Pearson

Mastery Learning

SELF-ASSESSMENT INSTRUMENT



Principle Criteria	Integration (4-5 points)	Exploration (2-3 points)	Consideration (1 point)	Not Applicable (0 Points)	Total Points
Purpose/Model	The product strategy is aligned to mastery learning as a core principle of a learner-centered product.	The product team is exploring mastery learning as a core LDP for creating a more learner-centered product. The product strategy is exploring integrating an evidence-based model of mastery learning.	The product team considers mastery learning to be an important LDP for creating a more learner-centered product. The product strategy considers mastery learning at a high level but does not currently align to an evidence-based model.	The mastery learning LDP does NOT align to the product strategy and is not necessary to explore further.	= ____
Mastery Learning Application	The product uses empirically-based recommendations concerning mastery learning.	Principle is applied only to a specific area of the product and more learner feedback is needed to improve principle application.	Product team thinks applying this principle would add value to their product strategy. Product team has applied similar principles to their product strategy.	This principle is NOT currently being applied to any area of the product and is NOT needed to improve the product.	= ____
Mastery Learning Delivery	The impact on a capability or service aligned to this principle has been gathered/reported on.	Product team is in early discussions about partnering with LD team to validate this principle with learners. Product team has specific capabilities they need to validate this principle with.	Product team needs more information about how this principle might be tested with learners using LD's validation services.	This principle does NOT need to be validated in order to inform product design & development.	= ____
Learner Characteristics	Design & development are currently using validation reports to further align the principle and the product strategy.	Product team is currently exploring how validation results and recommendations could be used in product design & development.	Product team feels there is time in the schedule to include validation data to inform product design & development. Product team needs a consultation to learn more about validation services and results reports.	Validation data will NOT be used to inform product design & development.	= ____
Formative/ Summative Applications	The formative and summative applications make proper use of mastery learning LDP recommendations for creating assessments.	Product team is currently exploring how recommendations for designing assessments for mastery learning could be used in product design & development.	Product team feels there is time in the schedule to include time spent on assessment application design & development. Product team needs a consultation to learn more about designing mastery learning assessments.	Formative/summative applications will NOT be used to inform product design & development.	= ____