

# Critical Thinking



THE NATURE  
OF KNOWLEDGE

## DESCRIPTION

Critical thinking is “...purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of...the considerations upon which that judgment is based...” (Facione, 1990, p. 2). Critical thinking is of increasing importance to learner achievement and employability as it requires the cultivation and application of higher-order thinking skills (e.g., analysis, evaluation, and/or creation) and dispositions (e.g., open-mindedness, curiosity) across various contexts. This principle provides an overview of the critical thinking literature and focuses on research-based recommendations for course design that supports the development and application of generic and domain-specific critical thinking skills and dispositions. Recommendations include providing explicit instruction aligned to critical thinking objective statements, incorporating authentic or anchored instruction and opportunities for dialogue and mentoring, and providing content and assessment that appropriately model and scaffold critical thinking skills and dispositions (Abrami et al., 2014; Halpern, 1998; Lai, 2011; Liu, Frankel, & Roohr, 2014; Nilson, 2013).

## LEARNER IMPACTS

- Achievement
- Attitudes
- Behavior

## CAPABILITIES

- Adaptivity: Adaptive remediation
- Instruction: Multimedia active reading
- Management: Learner analytics

## SAMPLE DESIGN IMPLEMENTATIONS

- Robust Technology: Adaptive practice aligned to objectives
- Simple Technology: Objectives informing content design
- Content Support: Showing learners performance by objective



Pearson

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## SELF-ASSESSMENT INSTRUMENT



Principle Criteria	Integration (4-5 points)	Exploration (2-3 points)	Consideration (1 point)	Not Applicable (0 Points)	Total Points
<b>Purpose/ Model</b>	<p>  The product strategy is aligned to critical thinking as a core principle of a learner-centered product.</p> <p>  The product strategy currently integrates the use of knowledge creation tools as a means to engage learners in critical thinking.</p>	<p>  The product team is exploring critical thinking as a core LDP for creating a more learner-centered product.</p> <p>  The product team is exploring integrating an evidence-based critical-thinking model.</p>	<p>  The product team considers critical thinking to be an important LDP for creating a more learner-centered product.</p> <p>  The product strategy considers critical thinking at a high level but does not currently align to an evidence-based model.</p>	<p>  The critical thinking LDP does NOT align to the product strategy and is not necessary to explore further.</p>	= ____
<b>Critical Thinking Application</b>	<p>  The product uses a combination of domain specific and explicit critical thinking instruction.</p> <p>  Higher-order Bloom's Taxonomy skills are used to determine how to best apply this principle to improve product design.</p>	<p>  Principle is applied only to a specific area of the product and more focus on enhancing critical thinking skills is needed to improve principle application.</p>	<p>  Product team thinks applying this principle would add value to their product strategy.</p> <p>  Product team has applied similar principles to their product strategy.</p>	<p>  This principle is NOT currently being applied to any area of the product and is NOT needed to improve the product.</p>	= ____
<b>Critical Thinking Delivery</b>	<p>  Critical thinking on a capability or service aligned to this principle has been gathered/reported on.</p>	<p>  Product team is in early discussions about partnering with LD team to validate this principle with learners.</p> <p>  Product team has specific capabilities they need to validate this principle with.</p>	<p>  Product team needs more information about how this principle might be tested with learners using LD's validation services.</p>	<p>  This principle does NOT need to be validated in order to inform product design &amp; development.</p>	= ____
<b>Learner Characteristics</b>	<p>  Design &amp; development are currently using validation reports to further align the principle and the product strategy.</p>	<p>  Product team is currently exploring how validation results and recommendations could be used in product design &amp; development.</p>	<p>  Product team feels there is time in the schedule to include validation data to inform product design &amp; development.</p> <p>  Product team needs a consultation to learn more about validation services and results reports.</p>	<p>  Validation data will NOT be used to inform product design &amp; development.</p>	= ____