Understanding is:

1. a core concept in the relevant domain

“Expert knowledge is organized… Their knowledge is not simply a list of facts and formulas that are relevant to the domain; instead, their knowledge is organized around core concepts or ‘big ideas’ that guide their thinking about the domain.”

-- Bransford, et. al. *How People Learn*, p. 24

1. the capacity to transfer/apply what has been learned to solve new problems

“Learning with understanding is more likely to promote transfer than simply

memorizing information from a text or a lecture.”

-- Bransford, et. al. *How People Learn*, p. 224

“Students develop flexible understanding of when, where, why, and

how to use their knowledge to solve new problems if they learn how to extract underlying principles and themes [understandings] from their learning exercises.”

-- Bransford, et. al. *How People Learn*, p. 224)

**Simply put, a working definition of understanding has two parts**:

**–Insight into key ideas, as reflected in wise inferences about the**

**knowledge and skill to be learned**

**–Effective use of knowledge and skill in varied, important, realistic,**

**and novel situations.**

*Examples*

|  |  |
| --- | --- |
| *Knowing* | *Understanding* |
| *The causes of the War of 1812*  *African drums are used to communicate*  *Ellsworth Kelly was influenced by the work of Cezanne* | *The causes of human conflict*  *The best way to use a drum is determined by the purpose, audience and nature of the instrument*  *The arts are influenced by the culture in which they are created and in turn influence that culture.* |