



DIMENSIONS OF LEARNING



A Definition

Dimensions of learning is a comprehensive model that uses what researchers and theorists know about learning to define the learning process. Its premise is that five types of thinking – what we call the five dimensions of learning -- are essential to successful learning.



The Dimensions Framework helps to:

- ◆ Maintain a focus on learning
- ◆ Study the learning process
- ◆ Plan curriculum, instruction and assessment that takes into account the five critical aspects of learning.



The Five Dimensions Of Learning

- ◆ Attitudes and Perceptions
- ◆ Acquiring and Integrating Knowledge
- ◆ Extending and Refining Knowledge
- ◆ Using Knowledge Meaningfully
- ◆ Productive Habits of Mind



Attitudes and Perceptions

- ◆ Attitudes and perceptions affect students' ability to learn. A key element of effective instruction then is helping students to establish positive attitudes and perceptions about the classroom and about learning.



Acquiring and Integrating Knowledge

- ◆ Students must be guided in relating new knowledge to what they already know, organizing that information and then making it a part of their long term memory.
- ◆ Students must learn a set of steps, then shape the skill or process to make it efficient and effective for them and finally, internalize or practice the skill so they can perform it easily.



Extending and Refining Knowledge

Students must rigorously analyze what they have learned by applying the following reasoning processes:

- **Comparing**
- **Classifying**
- **Abstracting**
- **Inductive reasoning**
- **Deductive reasoning**
- **Analyzing errors and perspectives**
- **Constructing support for an assertion**



Using Knowledge Meaningfully

Students must apply the following six reasoning processes to use acquired knowledge meaningfully:

- ◆ Decision making
- ◆ Problem solving
- ◆ Invention
- ◆ Investigation
- ◆ Experimental inquiry
- ◆ Systems analysis



Productive Habits of mind

In order to become effective learners students must develop the following habits of mind:

- ◆ Critical thinking
- ◆ Creative thinking
- ◆ Self regulated thinking



Critical Thinking

- ◆ Be accurate and seek accuracy.
- ◆ Be clear and seek clarity.
- ◆ Maintain an open mind.
- ◆ Restrain impulsivity.
- ◆ Take a position when the situation warrants it.
- ◆ Respond appropriately to others' feelings and level of knowledge.



Creative Thinking

- ◆ Persevere.
- ◆ Push the limits of your knowledge and abilities.
- ◆ Generate, trust, and maintain your own standards of evaluation.
- ◆ Generate new ways of viewing a situation that are outside the boundaries of standard conventions.



Self-Regulated Thinking

- ◆ Monitor your own thinking.
- ◆ Plan appropriately.
- ◆ Identify and use necessary resources.
- ◆ Respond appropriately to feed back.
- ◆ Evaluate the effectiveness of your actions.