Dimensions of Depth and Complexity

Dimensions of Depth

Dimension	Descriptors	Examples in Curriculum
Language of the Disciplines	specialized vocabulary; names of skills or tasks particular to people working within the discipline; tools used by the disciplinarians	-Compare two graphs defining the results of a public opinion survey using the language of a statistician. (Math) -Describe the cause and effects of a historical event using the language of a sociologist, such as group organization, group interaction, and group socioeconomic factors. (Social Studies)
Details	parts; attributes; factors; variables	-Provide (more) evidence to substantiate an idea about future technology and its effect on space exploration. (Science) -State details affecting the operations needed to solve this problem. (Math)
Patterns	repetitions; predictions	-Provide evidence to substantiate the pattern(s) of the characters' behaviors. (Language Arts) -Describe the patterns of erosion. (Science)
Trends	influences; forces; directions; courses of action	-Summarize the trends affecting the rise and fall of an ancient civilization. (Social Studies) -Relate contemporary trends to the events in the most recent Newbery and Caldecott award winners. (Language Arts)
Unanswered Questions	discrepancies; missing parts; unclear ideas; incomplete ideas	-Identify the relationship of unanswered to answered questions in applying the axioms of geometry. (Math) -Define the unanswered questions about the solar system's planets (Science)
Rules	structures; orders; hierarchies; explanations	-Explain the overt and covert rules affection the socialization of people in ancient Greece. (Social Studies) -Describe the implicit and explicit rules of the water cycle. (Science)
Ethics	points of view; different opinions; judging	-Identify the ethical considerations affecting the protagonist and antagonist in the story. (Language Arts) -Prove with evidence that there are ethical considerations surrounding revolutions and their resolutions. (Social Studies)
Big Ideas	generalizations; principlse; theories	-Define the meaning of the statement "change is inevitable" by studying changes in the environment, government, and portrayal of a character in a story.

Dimensions of Complexity

Dimension	Descriptors	Examples in Curriculum
Make Relationships Over Time	relationship between past, present, and future; relationships within a time period	-Compare the understanding of DNA over a period of time. (Science) -Judge with criteria the effectiveness of democracy in a country within a special)time period. (Social Studies)
Make Relationships from Different Points Of View	multiple perspectives; opposing viewpoints; differing roles and knowledge	-Prove with evidence the veracity of a scientific theory from different points of view. (Science) -Compare the rise and fall of an ancient culture from the perspectives of a historian, anthropologist, sociologist, and psychologist. (Social Studies)
Interdisciplinary Relationships	relationships within the discipline; relationships between disciplines; relationships across the disciplines	Compare the effects of technology on industry (Social Studies), environment (Science), and communications (Language Arts) of our society.

Source: Karnes, F. A. & Bean, S. M. (Eds.) (2005). *Methods and materials for teaching the gifted*. Waco, TX: Prufrock Press.

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