Lesson: Classifying Rocks

Goals and Objectives
Create movement sequences by selecting and using principles to communicate the three different rock types and formations using the Earth Science textbook, interactive science journal, and elements of dance with an accuracy of 80% or higher.

Opening
What is the definition of dance?
List responses on the board.

Instructional Chunk
Explicit Instruction: Discuss the definition of dance using the Elements of Dance chart reference. Show students how they can use their bodies to portray each element of dance - relationship, body, energy, space, and time. Guided Practice: After identifying the space that each student can use in the classroom, allow each student to practice each dance element. The teacher will give examples of different types of movements that incorporate the elements (i.e. move like a pebble crossing a pond (skip), move like an earthquake (shake), move like a tornado (twist), move like a liquid (flow), etc.). Assign students to groups and rock type (igneous, sedimentary, metamorphic) and each group will brainstorm key words on a piece of paper that describe the type of rock assigned using notes and textbook for references. Teacher monitors and guides groups progress.

CFU: What are other examples of different types of movement that incorporate nature? Describe the formation of igneous rock, sedimentary rock, and metamorphic rock. What key words can we use for each rock type?

Guided Practice: After identifying the space that each student can use in the classroom, allow each student to practice each dance element. The teacher will give examples of different types of movements that incorporate the elements (i.e. move like a pebble crossing a pond (skip), move like an earthquake (shake), move like a tornado (twist), move like a liquid (flow), etc.). Assign students to groups and rock type (igneous, sedimentary, metamorphic) and each group will brainstorm key words on a piece of paper that describe the type of rock assigned using notes and textbook for references. Teacher monitors and guides groups progress.

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Independent Practice: Groups will show four or more movements in a memorized sequence to represent their assigned rock formations and present the dance compositions to the class.

CFU: Class participation to identify the type of rock that each group portrays and identify the movements that represented the characteristics of the rock followed by positive feedback and constructive criticism.

Centers
Groups
Independent practice

Adaptations/Modification/ Tiering:
Provide dictations, verbal cues, and plenty of wait time for Q & A.
Allow extra time for completion.
Encourage peer support in groups.
Repeat and modify instructions as needed.

Resources and Materials
Earth Science textbook
Interactive Science Journals
Dance Elements chart

Technology Integration
Promethean

Closing
Exit, How did this activity help you to understand the three rock types?

Assessments
Informal reflection assessment during constructive criticism and positive feedback
Plan 4.1 + 4.2 Vocab quiz
Formative written assessment of dance examples

Standards
1. 5.C. Grade 8 CPI 01
- Monitor one's own thinking as understandings of scientific concepts are refined.
2. 5.C Grade 8 CPI 02
- Revise predictions or explanations on the basis of discovering new evidence, learning new information, or using models.
3. 5.10 Grade 8 CPI 01
- Engage in multiple forms of discussion in order to process, make sense of, and learn from others ideas, observations, and experiences.
4. 5.A. Grade 8 CPI 02
- Explain how chemical and physical mechanisms (changes) are responsible for creating a variety of landforms.