

ONE ACTIVITY/PROJECT THAT COULD BE SHARED WITH ELEMENTARY LEARNERS:

GOAL 2: Apply Core Concepts and Principles

Academic Expectation 2.9: Students demonstrate understanding of concepts related to space and dimensionality.

A. One Sample Instructional Activity/Project for Elementary Learners that Incorporates this Academic Expectation Could Be:

Create a series of posters for the preschool classroom that denote the meanings of prepositions and adjectives that relate to size and spatial relationships – in, on, under, above, around, behind, in front of, small, smaller, smallest, etc.

B. Ways Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Could Demonstrate this Academic Expectation within this Sample Class Activity:

- (1) The student will sequence five pre-cut circles in ascending order based upon size.
- (2) The student will place pictures of animals, implements, and people on a schematic drawing of a farm on a green piece of poster board according to the verbal direction of the teacher (e.g., "Put the cow inside the fence," "Put the boy behind the house.")
- (3) The student will follow two-step directions that include a spatial concept word in each step.
- (4) The student will calculate the length of ribbon needed to create a border around a poster using a ruler and a calculator.
- (5) Upon request, the student will draw a right triangle, a rhombus, trapezoid, and a parallelogram
- (6)
- (7)
- (8)
- (9)
- (10)

C. Ideas for Providing Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Opportunities to Practice Basic Skills and Critical Activities Found on their IEPs While Participating in this Class Activity:

- (1) The student will use a scissors to cut construction paper into shapes drawn with 1/4" markers. [TARGETED SKILLS: communication skill, motor skill, critical school activity] {COACH: COMMUNICATION #7; SOCIALIZATION #19; SELECTED ACADEMICS #42, #44, #45, #46; SCHOOL #67}
- (2) The student will create captions for her poster by copying a hand-written model of the caption using a computer word processing program. [TARGETED SKILLS: communication skills, functional academic skills, motor skills, critical school activity] {COACH: COMMUNICATION #7; SOCIALIZATION #19, #22; SELECTED ACADEMICS #42, #44, #46, #47, #48, #49, #55; SCHOOL #67}
- (3) The student will follow written directions to create a three-dimensional representation of a cube. [TARGETED SKILLS: communication skills, functional academic skills, critical school activity] {COACH: SELECTED ACADEMICS #42, #46, 48}
- (4)
- (5)

ONE ACTIVITY/PROJECT THAT COULD BE SHARED WITH MIDDLE SCHOOL LEARNERS:

GOAL 2: Apply Core Concepts and Principles

Academic Expectation 2.9: Students demonstrate understanding of concepts related to space and dimensionality.

A. One Sample Instructional Activity/Project for Middle School Learners that Incorporates this Academic Expectation Could Be:

Create a model of a soccer field on a piece of poster board and, then, lay out stakes and twine to construct a soccer field on school grounds.

B. Ways Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Could Demonstrate this Academic Expectation within this Sample Class Activity:

- (1) The student will create a rectangle with square corners using a right angle, pins, ruler, and a ball of twine.
- (2) The student will use a ruler to measure ribbon to the nearest quarter inch from one inch to 36 inches.
- (3) The student will sort a set of shapes into squares, rectangles, and other four-sided shapes.
- (4) The student will construct and compare a one yard rod and a one meter rod and compare the two measuring instruments.
- (5) The student will place two stakes 100 meters apart and two stakes 100yards apart using a metric measuring tape.
- (6)
- (7)
- (8)
- (9)
- (10)

C. Ideas for Providing Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Opportunities to Practice Basic Skills and Critical Activities Found on their IEPs While Participating in this Class Activity:

- (1) The student will participate as a contributing member of a small group of peers who are constructing a model of a soccer field on a piece of poster board. [TARGETED SKILLS: communication skills, social skills, behavior skills, functional academic skills, critical school activity] {COACH: COMMUNICATION #3, #7, #8; SOCIALIZATION #13, #14, #17, #18, #19, #20 #23; #24; SELECTED ACADEMICS #42; #45, #46, #47; SCHOOL #65}
- (2) The student will walk three laps of the soccer field with a peer. [TARGETED SKILLS: motor skills, social skills, critical recreation/leisure activity] {COACH: LEISURE/RECREATION # 40}
- (3) The student will kick a soccer ball with a small group of peers. [TARGETED SKILLS: motor skills, social skills, critical recreation/leisure activity] {COACH: LEISURE/RECREATION # 40}
- (4)
- (5)

ONE ACTIVITY/PROJECT THAT COULD BE SHARED WITH HIGH SCHOOL LEARNERS:

GOAL 2: Apply Core Concepts and Principles

Academic Expectation 2.9: Students demonstrate understanding of concepts related to space and dimensionality.

A. One Sample Instructional Activity/Project for High School Learners that Incorporates this Academic Expectation Could Be:

Using computer graphics, surveying and mapping techniques, the student will create a graphic model of a community park and make various calculations regarding the care and maintenance of various surfaces within the park (e.g. How much paving material is needed to resurface all roads. How much fertilizer is needed to fertilize all grass areas two times per year? How much shredded tire material is needed to resurface all playground surfaces? How many man-hours will it take to move the entire park with given mowing capabilities?

B. Ways Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Could Demonstrate this Academic Expectation within this Sample Class Activity:

- (1) The student and peer will use a surveyor's wheel to measure how much grass area one specific riding mower covers in 5 minutes.
- (2) The student will hold a surveyor's rod to assist in the measurement of distances and topography of the park.
- (3) The student will use a measuring tape to measure the width of a park road.
- (4) The student and a peer will use a yardstick to measure the width of the bike trail.
- (5) The student and a peer will fill a 1-yard square with shredded tire material to a depth of 2" and then gather and weigh the material.
- (6)
- (7)
- (8)
- (9)
- (10)

C. Ideas for Providing Students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS Opportunities to Practice Basic Skills and Critical Activities Found on their IEPs While Participating in this Class Activity:

- (1) The student will read and write numerals found on a yardstick. [TARGETED SKILLS: functional academic skills, motor skills] {COACH: SELECTED ACADEMICS #42, #44, #46, #47, #49, #51}
- (2) The student will operate a riding lawn mower and mow a prescribed grassy area. [critical vocational activity] {COACH: VOCATIONAL #86, #87}
- (3) The student will operate his motorized wheel chair along the parks bicycle path. [TARGETED SKILLS: critical community activity, critical recreation/leisure activity] {COACH: LEISURE/RECREATION #38, #40; COMMUNITY #73}
- (4)
- (5)

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General Demonstrators of this Academic Expectation which May Appropriate for students with DIVERSE EDUCATIONAL ABILITIES AND INSTRUCTIONAL NEEDS and Might be Adapted to a Variety of Age-Appropriate Activities or Projects:

The student will:

- (1) Use a computer drawing program to rotate lines, shapes and angles to create an illustration or complex design.
- (2) Paste precut shapes of various forms of paper on a plain background to create a collage.
- (3) Create a mobile by tying and balancing a variety of objects onto a pre-made system of rods and strings.
- (4) Nail various shapes of wood-cubes, strips, and triangles onto a piece of 2 X 4 wood to construct a stabile.
- (5) Use ceramic tiles to create a geometric pattern for his square in a large ceramic/mosaic quilt created as a class project for the school.
- (6) Upon peer request the student will draw a square, circle and triangle.
- (7) Upon peer request, which define a special relationship, the student will place an object in, on, under, in front of, or behind the classroom dollhouse.
- (8) On the football field the student will follow the pattern of a pre-determined play.
- (9) The student will make a two dimensional drawing that represents the 3 dimensions of an object (house, toy, and piece of furniture).
- (10) Name photo of an object when the photograph is taken from a variety of perspectives.
- (11) The student uses vocabulary of special relationship to verbally describe the positional relationship between two objects or individuals. "Jerry is behind Helen." The book is under the paper.
- (12) Using a sequence of 3 picture symbols on a specially structured communication board, the student will point to a sequence of three symbols to define the special interrelationship of t3wo individuals or an object and an individual (e.g. "Sally in Wagon." Billy is behind Elvira)
- (13) Sort silverware into the drawer from the dishwasher.
- (14) Follow verbal directions including left and right and to navigate to new area of school.
- (15) Cut a sandwich so that the two pieces are triangles.

If You Are Using COACH-2,* The following COACH Activities Might Fall within this Academic Expectation:

* Giangreco, M.F., Cloninger, C.J., & Iverson, V.S. (1998). Choosing options and accommodations for children: A guide to planning inclusive education, 2nd Edition. Paul H. Brookes: Baltimore.