

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

GOAL 2. Apply Core Concepts and Principles

Academic Expectation 2.11: Students demonstrate understanding of change concepts on patterns and functions.

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

Students will create a graph on a bulletin board and graph day length each day in hours and minutes (Central Standard Time) from August – May (sunrise to sunset). Students will discover the progression toward the shortest day of the year and then predict the longest day of the year.

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

- (1) Using a 24" strip of paper marked at 1" intervals, each Monday the student will color daylight hours yellow and night hours black with the assistance of a peer.
- (2) Using 1" = 1 hour, the student and a small group of peers will work with manipulatives and ratios to determine how many minutes in 1", 1/2", 1/4", 1/8", 1/16".
- (3) Using a 24" strip of paper marked in 1" intervals, the student and a peer will create a timeline of the student's day from 12:00 a.m. – 11:59 p.m.
- (4) The student will compare two strips from the first Monday in two consecutive months and determine/state which one had the longer day.
- (5) The student will keep a chart of "light" yellow, "dark" black or "changing" gray at 6:00 on Monday of each week evening with the assistance of his parents,
- (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 answer the question "Is it dark outside?" when asked by a family member at the dinner table. [TARGETED SKILLS: communication skills] {COACH: COMMUNICATION #10}
- (2) The student will assist peers in using drawings of sunrise, daylight, sunset, and nighttime scenes to decorate the bulletin board with the sunrise sunset data. [TARGETED SKILLS: social skills, motor skills, critical school activity] {COACH: SOCIALIZATION #13, #19, #20; SELECTED ACADEMICS #42, #44, #46; SCHOOL #65}
- (3) The student will telephone a peer to accompany the student and his father on a trip to an open area where they can view a sunset. [TARGETED SKILLS: communication skills, social skills, functional academic skills, critical recreation/leisure activity] {COACH: COMMUNICATION #6, #7, #8, #12; LEISURE/RECREATION #39; HOME #63}
- (4)
- (5)

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

GOAL 1: Use Basic Communication and Mathematics Skills

Academic Expectation 2.11: Students demonstrate understanding of change concepts on patterns and functions.

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

Students will create a musical scale using eight crystal glasses with water and relate the tones to a scale on the piano. They will then add 1/8 cup of water to each glass and explore the nature of the new scale.

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

- (1) The student will use a drumstick to play the musical scale before and after the water was added.
- (2) When two notes are played on the water scale, the student will state which one was "higher."
- (3) The student will reproduce a three-note pattern he has watched another child produce.
- (4) The student will play a glass, add 1/8 cup of water, play the glass again and describe the change in the sound (pitch).
- (5) The student will place three marbles in each glass and describe the change in sound.
- (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 pour 1/2 cup of water from a measuring cup into a glass. [TARGETED SKILLS: communication skills, motor skills, critical domestic activity] {COACH: COMMUNICATION #7; SELECTED ACADEMICS #45, #46}
- (2) Waits for his turn to play the water scales and then states that it is his turn now. [TARGETED SKILLS: communication skills, social skills] {COACH: COMMUNICATION #11; SOCIALIZATION #23, #24}
- (3) The student accurately counts the number of glasses. [TARGETED SKILLS: communication skills, functional academic skills] {COACH: COMMUNICATION #7; SELECTED ACADEMICS #51}
- (4)
- (5)

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

GOAL 1: Use Basic Communication and Mathematics Skills

Academic Expectation 2.11: Students demonstrate understanding of change concepts on patterns and functions.

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

Students will research reports by the Center for Disease Control and reports in medical journals to learn of the patterns that have emerged in the transmission of the AIDS virus and the impact of AIDS education and AIDS medication on transmission patterns on gays, teens, men, women and children throughout the world.

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

- (1) The student will assist a peer in preparing a graph using computer software to documents the percent of the total AIDS population that occurred in men, women, teens, and children in the United States in 1985 and 1995.
- (2) The student and a peer will research and report on the difference between the presence of HIV and the occurrence of AIDS.
- (3) Groups of students, including the student with a disability, will visit community agencies and gather brochures available that address the spread of AIDS in teens and create a graphic representations of the content.
- (4) The student and a group of peers will survey peers in three different communities (rural, suburban, urban) to assess their level of knowledge about AIDS and represent their findings graphically.
- (5) The student and a group of peers will research and create a graphic representation of the changes in the content of print media addressing the spread of HIV and AIDS over the last 15 years
- (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 and small group of peers will created informational posters that define behaviors at risk for spreading AIDS in the teen community. [TARGETED SKILLS: social skills, functional academic skills] {COACH: SELECTED ACADEMICS: #42, #43, #44, #45; SCHOOL #65}
- (2) The student an peers will visit the health department, Planned Parenthood, drug treatment programs the local hospital to collect brochures on AIDS and the transmission of HIV. [TARGETED SKILLS: communication skills, social skills, critical community activity] {COACH: COMMUNICATION #12, COMMUNITY #73}
- (3) The student will interview an individual with HIV to determine what "inclusion and segregation" mean to him/her. [TARGETED SKILLS: communication skills, social skills] {COACH COMMUNICATION #6, #8, #11, #12; SOCIALIZATION #15}
- (4)

MORE IDEAS AND EXAMPLES:

GOAL 2: Apply Core Concepts and Principles

Academic Expectation.2.11: Students demonstrate understanding of change concepts on patterns and functions.

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

The student will:

- (1) Point to today, tomorrow and yesterday on a calendar.
- (2) Draw a picture of the moon each evening for one month.
- (3) Create a pattern using four sets of different colored construction paper one inch "tiles."
- (4) State who is "first" in line and who is "last" in line.
- (5) Use a geo-board to create a pattern by stretching rubber bands between points.
- (6) Place 12 strips from 1" to 12" in 1" segments into ascending order by length.
- (7) Play the card game "War" and determine which person wins each hand.
- (8) Draw illustrations of the progress of metamorphosis as a tadpole changes to a frog.
- (9) Use pH paper to record the acidity of different concentrations of lemonade.
- (10) Break a code in which an alphabet is encoded by starting the coded alphabet at "e" (i.e., a=e; b=f; c=g, etc.).
- (11) The student will order misarranged five containers by intensity of color when the first container has one drop of food coloring, the second has two drips, the third three drops, etc.
- (12) Record temperature at recess time and document what type of clothing would provide for comfortable play.
- (13) Given a bead pattern, determine which bead does not fit into the pattern.
- (14) Given the ordinate and abscissa of a sequence of five (positive-positive) points on the x, y axis – the student will recreate a drawing of a house.
- (14) Use a number line to calculate a series of five subtraction problems.
- (15) Create a pie graph of data using computer software
- (16)
- (17)
- (18)
- (19)
- (20)

If you are using COACH-2,* the following COACH Activities might fall within this Academic Expectation:

SELECTED ACADEMICS: #43, Explore surroundings; #44, Differentiate/discriminate between various things.

* 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.