

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

**GOAL 2: Apply Core Concepts and Principles**

Academic Expectation 2.8: Students demonstrate understanding of concepts related to mathematical procedures.

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

Students will construct a globe that depicts the times zones of the earth and find at least one city, country, or island in each time zone. Students will then write equations to determine times at different locations, given the time in another location in another time zone. (7:00 p.m. + 3 hours = 10:00 p.m.)

**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 group of peers in creating a globe using heavy pliable wire to construct the globe and paper to create the spherical surface.
- (2) The student will operate a model clock to demonstrate that the large hand makes one revolution each hour.
- (3) With the assistance of a peer, the student will use the globe to count the zones between two cities and write an equation representing the calculation.
- (4) Measure and cut a piece of wire to a given length by measuring with a ruler or yardstick.
- (5) Use one to one correspondence to count out a specific number of pieces given a model or jig.
- (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) Given a rotary clock with time at the exact hour, the student will correctly state the time. [TARGETED SKILLS: functional academic skills] {COACH: SELECTED ACADEMICS: #53}
- (2) The student will use the IntelliKeys program to type a list of materials needed to construct and paint the globe. [TARGETED SKILLS: motor skills, functional academic skills] {COACH: SELECTED ACADEMICS #47, #53}
- (3) The student will complete all the steps in a teacher developed task analysis to find and purchase the items needed for the time zone project at Kmart with no more than verbal and gestural cues. [TARGETED SKILLS: communication skills, social skills, behavior skills, functional academic skills, critical community activity] {COACH: COMMUNICATION #2, #3, #6, #7, #8, #9, #10, #11; SOCIALIZATION: #13, #14, #17, #18, #19, #20, #22, 24; COMMUNITY #76}
- (4)
- (5)

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

**GOAL 2: Apply Core Concepts and Principles**

Academic Expectation 2.8: Students demonstrate understanding of concepts related to mathematical procedures.

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

Students will use box scores and sports page data and information provided in the Sporting News to keep individual and team statistics on individual players and teams in a minor league baseball league in the Appalachian, our Southern region.

**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 calculator to calculate the batting average on an individual ball player with the assistance of a peer who dictates numbers and processes.
- (2) The student will locate the number of "at bats" and hits of an individual player.
- (3) The student and a peer will determine which player has the highest batting average on the local team.
- (4) The student will compare the pitching results to determine which player has the lowest earned run average.
- (5) Given two numerals, the student will use a vertical number line to determine which number is greater.
- (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 locate the name of his favorite player in the box score by matching the names to the name written on a card. [TARGETED SKILLS: Communication skills, functional academic skills] {COACH: COMMUNICATION #2, #7; socialization #19; leisure recreation #38; selected academics #44, #46, #47, #48/}
- (2) The student will purchase a newspaper from a vending box. [TARGETED SKILLS: critical community activity] {COACH: COMMUNITY #77}.
- (3) The student will find the date on the heading of the newspaper. [TQRGETED SKILLS: functional academic skills] {COACH: COMMUNICATION #7: SELECTED ACADEMICS #42, #43, #47}.
- (4)
- (5)

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

**GOAL 2: Apply Core Concepts and Principles**

Academic Expectation 2.8: Students demonstrate understanding of concepts related to mathematical procedures.

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

Students will devise a survey/questionnaire to gather the data they need to determine the automobile make and model that is most economical to operate in their community. After gathering data from car owners they will calculate and compare mileage per gallon, operating and repair costs. They will contact insurance adjusters to fine out repair costs and accident damage. Students will reach conclusions base on their calculations and comparisons.

**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 calculator to add two three-digit numbers.
- (2) The student will write a subtraction problem in an appropriate manner to do a manual calculation, given an oral description of a subtraction process.
- (3) Given two numerals, the student will use a vertical number line to state which numeral is greater.
- (4) The student will do two digits by two digit subtraction problems without regrouping (borrowing).
- (5) The student will do a one digit by one digit multiplication by drawing the sets of objects and counting.

(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 demonstrate a change in behavior, activity level, or facial expression when visiting a new car dealership [TARGETED SKILLS: social skills, behavior skill] {COACH: SOCIALIZATION #13; SELECTED ACADEMICS #41}
- (2) The student will independently clean up her work station and return manipulative and calculator to their places [TARGETED SKILLS: critical school activity] [COACH: SCHOOL #67, #68, #69; VOCATIONAL #81}
- (3) The student identifies numeral zero through nine by pushing the right button on a calculator when he is given the numeral orally. [TARGED SKILLS: communication skills, functional academic skills] {COACH: COMMUNICATION #7; SELECTED ACADEMICS #42, #44, #47}.

(4)

(5)

**MORE IDEAS AND EXAMPLES:**

**GOAL 2: Apply Core Concepts and Principles**

Academic Expectation 2.8: Students demonstrate understanding of concepts related to mathematical procedures.

**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) Put one block in each of five cups.
- (2) Write the correct algorithm given a worksheet pictorially depicting five addition algorithms with totals less than ten.
- (3) A student will direct the actions of two to five individuals to act out and algorithm (equation) depicting an addition process with a total no more than five.
- (4) Create a model of an addition process when given an addition algorithm (equation) with a total 1 - 10.
- (5) Demonstrate the "next dollar strategy" up to a purchase price of \$9.99 in the classroom with flashcards depicting the purchase prices and representations of one dollar bills.
- (6) Use the next dollar strategy to purchase items costing no more than \$4.99 in the community with no more than verbal cues.
- (7) Manipulate two sets of objects, with differing numbers of objects in each set, to establish one to one correspondence, and then state which set has more objects.
- (8) Solve a subtraction problem in real life situation, beginning with no more than 5 objects present, by counting the objects as the adult provides the organization of the task with verbal cues.
- (9) Use a calculator to add a list of five prices from \$.50 to \$2.50.
- (10) Verbally express the result of taking on away from a set of five to ten objects or people.
- (11) Accurately use a calculator to complete a work sheet with 10 two-digit addition and subtraction problems with total of no more than fifty.
- (12) Use a single switch to activate software that asks the student to solve addition and subtraction problems with total no more than eight.
- (13) Construct a visual representation of a one digit by one digit multiplication problem using 3/4" adhesive dots.
- (14) Count out sets of ten dollar bills to correctly give a peer \$10 to \$100 as requested.
- (15) Count sets of pennies, nickels, dimes, and quarters that total 1 - 99 cents.
- (16)
- (17)
- (18)
- (19)

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

**APPLIED ACADEMICS:** #51, Counts with correspondence; #52, Calculates; #53, Uses clock; #54 Uses calendar.

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