

1. Definition: Differentiated Instruction is instruction which tries to teach the student using his or her preferred learning styles, interests and/or talents. When we differentiate instruction we use different methods to bring necessary information to the students. These include the traditional methods of lecture, reading, and videos, as well as newer methods, such as allowing students to work in small groups to read material from textbooks, magazines, the Internet, and so on, and then having the group use what they have learned in order to do one or more of the following:
 - (1) produce a product which demonstrates their understanding of the most important ideas contained in the lesson- the product may be a written report, a working model (model airplane, pulley system...), a detailed drawing (of a cell, an automobile engine...),
 - (2) give an oral presentation which demonstrates their knowledge of the most important ideas. These may include a spoken report, a PowerPoint presentation, a video, or a dramatic presentation created by the student,
 - (3) keep a journal (individual project). The journal should include all of the student's observations, notes, definitions, and so on.

Whichever of the above are done should be shared with the entire class.

Differentiation is a critical element of Dr. Renzulli's Schoolwide Enrichment Model. Differentiation is the method used to bring the techniques and strategies used with gifted students to the entire student population.

2. The research done by Dr. Renzulli and many others has shown that this method greatly increases the amount and depth of student understanding.
3. Teachers who are beginning to use this method should begin slowly, perhaps with one small group of students, using only one small part of a lesson. As they become more comfortable they will use the method more frequently with more students, in more areas of the curriculum. We strongly advise teachers to begin in areas of strength. Start with the area of the curriculum with which you have the most comfort and expertise.

Example: If you are teaching a unit on the harmful effects of the introduction of the American bass into Korean waterways you might:

Begin by either presenting the information or having students do research to find out (1) How (and why?) American bass were introduced into the waterways. (2) What harmful effects have occurred due to the introduction... Then:

One group might do research about what steps have been taken to lessen the harmful effects. They will then share their findings with the class.

Another group might draw an accurate model of the bass, labeling all parts, and share this drawing with the class.

Another group might write and perform a short play about this topic.

Other groups might do any number of other things related to the topic.

After all of this has been done, the class might be given the assignment of forming into groups of three or four students to try to discover new ideas to lessen the harmful influence of the bass. Each group would share their findings with the entire class.

Sources:

The Multiple Menu Model..., Joseph Renzulli, Jann Leppien, Thomas Hays, Creative Learning Press, Mansfield Center, 2000.

The Differentiated Classroom, Carol Ann Tomlinson, ASCD, Virginia, 1999.

How to Differentiate Instruction in Mixed-Ability Classrooms, Carol Ann Tomlinson, ASCD, Virginia, 1995.

A good practice exercise is to take each of the three prompts below, and use it as the prompt for a differentiated lesson in your subject area, at your grade level.



Fog

By [Carl Sandburg](#)

THE fog comes
on little cat feet.

It sits looking
over harbor and city
on silent haunches
and then moves on.

"The area of the square built upon the hypotenuse of a right triangle is equal to the sum of the areas of the squares upon the remaining sides."

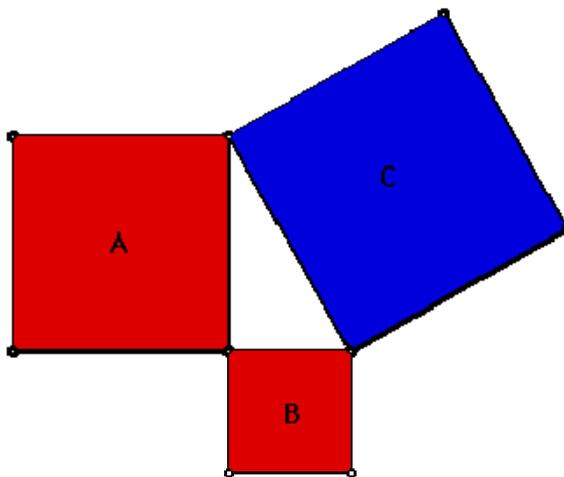


Figure 1

According to the Pythagorean Theorem, the sum of the areas of the two red squares, squares A and B, is equal to the area of the blue square, square C.

$$\text{Area Square A} = a^2$$

$$\text{Area Square B} = b^2$$

$$\text{Area Square C} = c^2$$

Thus, the Pythagorean Theorem stated algebraically is:

$$a^2 + b^2 = c^2$$

for a right triangle with sides of lengths a, b, and c, where c is the length of the hypotenuse.

The following is mine (WNT):

The most common example is, in the figure above: A = 4, B = 3, C = 5. $4 \times 4 = 16$, $3 \times 3 = 9$. $16 + 9 = 25$. Since $5 \times 5 = 25$, the example works.

Another is A = 24, B = 10, C = 26. $24 \times 24 = 576$. $10 \times 10 = 100$. $576 + 100 = 676$. $26 \times 26 = 676$.