

Unit Conversion in Mathematics for Allied Health Science

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Overview

The course "Mathematics for Allied Health Science" is one of the courses in general mathematics for first-year Allied Health Science students. Unit conversion is one of the topics that students must face in science and health science subjects. In the past, I used lecture-based and direct instruction approaches and then tried to get students to do worksheets. However, some students were unable to complete worksheets in class. I applied Fruit Salad activity in this class.

Fruit Salad activity helped students understand a procedure, used class time efficiently, and increased the variety of learning experiences [1].

Aims and objectives

- 1. To improve students' understanding of unit conversion.
- 2. To increase a variety of learning experiences.
- 3. To encourage learning in class and promote group work.

Activity

The class size is 40 students. After finished the lecture-based and direct instruction methods on this topic, I showed six different types of exercises in the worksheet. Then,

- 1. I separated students into six groups.
- 2. Students draw lots, which is the question number that the group will have to do.
- 3. Each group had 20 min to solve the exercise while I act as a coach.
- 4. I applied fruit salad activity for 50 min. Students collaborated with other classmates to finish the entire worksheet in class.



Students with the same exercise completed it together.

Students collaborated with other classmates to finish the entire worksheet in class.



Outcome

At the end of the activity, I asked the students to do a satisfaction assessment.

- 1. Students understand the content more and can identify their problems.
- 2. Students enjoy learning more.
- 3. Students see a variety of solving problems.
- 4. Students get to know more friends in the section.

NOTE: With limited room size, it makes students' sound in each group hitting each other.

Future development of project

- 1. Give more time and space for activity.
- 2. Apply fruit salad activity to other courses.

References:

[1] Perkins, D. V. and Saris, R. N. (2001). A "jigsaw classroom" technique for undergraduate statistics courses. *Teaching of Psychology*. **28**(2), 111–113.