Grade 9 Review game - Praxis paper

Making High School Math Fun and Exciting

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Some math educators believe that standing at the front of the class and teaching for extended periods of time is the best way of communicating the knowledge to students. However they fail to realize that it is important to make a lesson interesting and exciting. They also fail to understand that there is a variety of learners in class, including kinesthetic and visual learners, that can gain much knowledge from each other by working in the right group size. They overlook the importance of collaborative learning, the ability of students to actually apply what they know and creating a positive environment where students are not afraid to ask questions. The grade nine math review game addresses all these issues.

Firstly, incorporating a variety of learning tools into a lesson not only make it exciting but it also encourages student involvement and learning. Many high school students, find math to be a boring and rigid topic. This is because the hands-on, fun and interactive aspect of math is missing from high schools today. Anyone that has taught for a long time will realize that “*an assign-and-tell instruction strategy, more often than not, squelches active involvement in learning and denies students ownership of and responsibility for the development of core concepts and processes”* (Vacca, Vacca, 2014, p. 11). This board game brings math concepts to life and makes students realize that it’s not just enough to memorize formulas, students have to learn to apply them as well. As this is a review game, it allows students to assess themselves based on how well they are progressing on the board game and makes them realize their readiness for an exam. It enforces the idea of ownership and responsibility of strengthening main concepts.

Secondly, in a class full of different people, it is essential to teach a lesson and incorporate activities that caters to the different ways of student learning. Focusing only on audio learners by extensive lecturing does not engage an entire class. This games tries to engage a variety of learners including kinesthetic and visual learners. It’s a manipulative that gives students a platform to do math problems while moving the game pieces and using visual cues for the questions. Similar to the concept of flash cards, the colorful question cards in the game prove useful for visual learners. The theory of least group size works well with this game as it holds an ideal group number of four individuals. It increases student learning, participation and engagement while decreasing conflict (Vacca, Vacca, 2014, p. 163).

Lastly, just as in any other field, one can learn a lot through collaborative learning. A student struggling with a concept can easily feel incompetent if they observe others progressing just fine. It reduces their level of self-efficacy and they lose confidence in their ability to achieve success in math (Vacca, Vacca, 2014, p. 174). The student is afraid to ask questions and it impacts their self-esteem and motivation to learn math. In this board game students are authentically involved in the process of solving math problems. Each student must solve problems and the others are given a chance to provide helping hints. This game allows students to work in a fun environment where they learn to work as a team. *“The goals of cooperative learning, therefore, are to foster collaboration in a classroom context, to develop students’ self-esteem in the process of learning, to encourage the development of positive group relationships, and to enhance academic achievement”* (Vacca, Vacca, 2014, p. 155)*.* This game works well to enrich students in all of these areas and makes the students motivated to learn. This game takes the boring out of math and replaces it with fun learning.

Work Cited

Vacca, R., Vacca, J., & Mraz, M. (2014). Content Area Reading: Literacy and Learning Across the

Curriculum (11th ed.). Upper Saddle River, Pearson Education.