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Integration of Health Education into Mathematics

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Integrating Health Education into Mathematics

Abstract

The purpose of this study was to explore the integration of health education into the mathematics curriculum in a fourth grade classroom. I developed and taught math lessons that involved making graphs which focused on diet and exercise. The unit was designed to incorporate two Illinois State Learning standards in which students should be taught the basic principles of health in order to maintain physical fitness and be aware of how to prevent and treat illness and injury. I generated my own post unit assessment of student learning and provided students with a journal in which to record their written reflection on healthy diet, exercise, and sleeping habits. I examined their journals and test results to determine if they had learned the math skills while also looking for meaningful responses in their journals. I concluded that health education can be successfully integrated into mathematics when it is connected to student's lives and there is ample time to teach the unit.

Cameron Barnish Educational Studies

Goal

- To successfully integrate Health education into Mathematics



Methodology

I planned and taught an eight day math graphing unit that focused on incorporating Illinois State Learning Standards for health. Students kept a daily journal that they responded in. Each day they were asked to respond to specific health topics or questions. The students were given daily assessments worksheets to see if they were understanding the basic math concepts I was teaching them. Many of the lessons had health related themes. The lessons focused on sleeping habits, diet, exercise, and wellness.

At the end of the eight days I gave the students a self generated quiz so I could properly assess if they were understanding what I was teaching them. I also collected their journals to see if they had learned any new lessons or interesting facts that they had not previously known about health and wellness. I used the assessments, reflections and their journals to help me find out if I was successful in integrating Health Education into mathematics.



Participants

- Sixty-nine fourth grade students in a Midwest urban town of about 50,000-75,000:
- 43 females and 26 males
 - ranging from ages nine to ten
 - differing abilities and ethnicities



Acknowledgements

I would like to thank my cooperating teacher who gave me the time and the freedom to perform my study. Also I would like to thank my professor Robin Leavitt who has guided me throughout this whole process.

Results/ Findings

- Health Education can be successfully integrated if enough time is given to teach the unit.
- There is better chance of success if the subject material is connected to the students lives.
- Students learned that they can eat foods that contain sugars and fats but it needs to be in moderation.
- Students can identify portions of the food pyramid, and provide examples of what belongs in those portions.