Is single-sex education more effective in improving students' academic achievemen...

Psychology, Success



If the research shows that single-sex education is more effective in improving the academic achievement of students in middle school, such a program should be taken in consideration in order to maximise the academic performance for this level of school.

The purpose of the study is to use the "One Group Pretest-Posttest Design" method to address the research question, which is, "Is single-sex education more effective in improving students' academic achievement in middle school?" Specifically, the study – which will follow a quantitative research approach – will examine the achievement of three different sections, as follows:

Section 1: The more traditional, mixed-gender class composition;

Section 2: A section of female-only students;

Section 3: A section of male-only students.

Having chosen this research design, I will be using it to test students' scores in reading and mathematics as a measure of the effectiveness of single-sex education.

The respondents of the study will comprise 50 students (eighth graders) in the age range of 12 to 13 years old, from different middle schools in the public sector. The respondents' gender will be evenly distributed between both female and male (25 males and 25 females). To increase the validity of the research, random sampling will be used to select the participants. Also, as far as possible all the students within their respective group will be taught for the entire school year by the same teachers or – if that is not possible for any reason – by different teachers but having similar levels of experience and training. Moreover, when students in those groups start single-sex education, communication between boys and girls will not be permitted. They will be kept separate in every class and even during lunch breaks. The first questionnaires will be given to students and teachers in the first semester. Students should be given an opportunity to give an opinion of their relationship with their peers of the opposite sex and how they think about the subjects that they study. On the other hand, teachers will be asked about students' perception of the classroom environment, levels of selfesteem, and behaviors. The same questionnaires will be given to the participants in the second semester, but an open-ended question will be added for teachers and students to each evaluate the experience of singlesex education.

The questionnaires will make comparisons not only on the academic performances but also on classroom behavior between the students in the coeducational and single-sex environments. In addition, looking at standardized tests scores will enhance the result and give more validity for the study, especially if we can find a correlation between students' standardized test scores and the pre- and posttest results.

The main sections of the questionnaires will include the participant's point of view about the experience before and after they live it. Other questionnaires will be given to teachers to evaluate students' self-esteem and behaviors in the different environments.

This study is going to rely heavily on the results of the research in place, without fabricated data to support a particular conclusion. Moreover, research results will be reported in a complete and honest fashion. The role of the researcher will be to identify the research population, select the most appropriate sample to analyze, and collect data from the sample. In addition, the researcher will design the questionnaires to be used in the study, secure accurate and meaningful math and reading testing results, and analyze the collected data to provide the wanted information. Finally, the researcher will write a report that contains the results of the study and the conclusions arising from those results.