

High School Students Enrolled in the Music Program at the International School of Curacao Exhibit Higher Academic Performance

By:

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It has been known since ancient times that music affects people in positive ways. This is one of the reasons that music has always been an integral part of religious practice. In our modern world we listen to pipe music in the elevator or at the dentist. Music has made movies so much more powerful: one cannot imagine “Harry Potter” or “Pirates of the Caribbean” without music!

More recently, namely within the past 15 years, music related psychological and neurophysiologic phenomena have undergone more specialized study and research in the USA, Canada and Europe. How does learning to play a musical instrument and participating actively in learning varied aspects of music affect the development of the brain and academic performance? While the positive impact of music and of active participation in music programs on the social and emotional development of young learners has been common knowledge for a long time, recent research also indicates an increase in academic performance related to active participation in music.

Administrators and music faculty at the International School of Curacao, Netherlands Antilles, wanted to verify, if the same results would be evidenced in the school’s own student population, with the existing music programs (elective curricular voice and instrumental music/band programs in high school), by evaluating statistical data of students who are enrolled in the programs versus students who are not. An independent and unbiased external researcher (Jules Nolan, School Psychology Doctoral Student at Minnesota State University, Mankato) collected the data for high school students and conducted a statistical analysis. The results are explained below.

1. An analysis of student GPA was conducted and the GPAs of music students were found to be significantly higher than those of students not enrolled in the music program.
2. An independent samples t-test was conducted on PSAT test scores for those students who had been enrolled in a music program (either vocal or band) and those who had not. On average, students enrolled in a music program earned higher math scores ($M = 46.96$, $SD = 8.11$) than those not enrolled in a music program ($M = 42.07$, $SD = 9.75$) on PSAT. This difference was highly significant $t(106) = -2.83$, $p < .01$

3. Further, on average, students enrolled in a music program earned higher *overall PSAT scores* ($M = 135.13$, $SD = 21.05$) than those not enrolled in a music program ($M = 124.55$, $SD = 29.00$). This difference was significant $t(106) = -2.18$, $p < .05$

4. In addition, students enrolled in a music program earned slightly higher reading scores ($M = 42.96$, $SD = 7.58$) than those not enrolled in a music program ($M = 41.16$, $SD = 10.55$). However, this difference was not significant $t(106) = -1.02$, $p > .05$.

In conclusion, music programs remain an integral part of schools that aim to deliver high quality education through a holistic approach. Research points to the multiple benefits of active participation in music for learning, brain development, academic achievement, and for fostering the growth of social and emotional competencies. The degree of impact and success of music programs is further dependant on the quality of the program offered. A focused and outcome-based curriculum, well qualified faculty, the number of students enrolled in the program, the length of enrollment in the program, allotment of sufficient resources and teaching time within the academic schedule, and high positive expectations all around contribute to the quality and consequently, success of the program. Other intended outcomes of the program, such as displaying quality performances and providing a foundation for music as a career choice after graduation from high school, are equally important quality indicators in a music program.