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The power of music: how music training in high school helps brain development

[Alex Giacomini](#) on July 27th, 2015 [No Comments](#)



It was my second year of high school and I was talking to a childhood friend. When I asked if she was taking any music classes she shrugged and told me, “They cut my choir this year.” I wish I could say I had never heard of such a thing, but I knew it was common in public schools.

When budgets are low, music programs are often some of the first things to get cut – and it might be because those classes don’t seem as important to the academic experience as other classes. But according to a recent [study](#) (subscription required) in the journal *PNAS*, they are.

In the study, researchers at Northwestern University showed that studying music promotes academic success and that brain development and language skills are especially strengthened. “Although learning to play music does not teach skills that seem directly relevant to most careers, the results suggest that music may engender what educators refer to as ‘learning to learn,’” [Nina Kraus](#), PhD, senior author of the study, said in a Northwestern [release](#).

The researchers observed two groups of high schoolers: those enrolled in band classes, which involved music and instrumental instruction, and those enrolled in Reserve Officers’ Training Corps, which focused on physical fitness. After three years in the same schools, the students in the music classes showed a stronger neural response to sound in comparison to the students in Reserve Officers’ Training Corps. In addition, the music students were also more sensitive to auditory details than their peers.

It appears that cutting music classes from schools might leave students at a disadvantage. At the very least, it denies students the opportunity to increase their brain development and language skills. “Our results support the notion that the adolescent brain remains receptive to training, underscoring the importance of enrichment during the teenage years,” the researchers said.

Alex Giacomini is an English literature major at UC Berkeley and a writing and social media intern in the medical school’s Office of Communication and Public Affairs.

Previously: [Excessive homework for high-performing high schoolers could be harmful, study finds](#), [Music in the brain: A report on rare auditory hallucinations](#) and [Stanford researchers gain new insights into how auditory neurons develop in animal study](#)
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