



How does music education benefit teens?

A study from German Institute for Economic Research found that adolescents with music training have better cognitive skills and school grades and **are more conscientious, open and ambitious**. Music improves cognitive and non-cognitive skills **more than twice as much as sports, theater or dance**. (Hille, A., and Schupp, J. (2014). How learning a musical instrument affects the development of skills. *Econ. Educ. Rev.* 44, 56–82. doi: 10.1016/j.econedurev.2014.10.007)

Researchers at the University of Kansas found that increased music participation was positively associated with **reduced discipline referrals and increased attendance**, grades, on-time graduation, and test scores for over 6,000 students. Students attributed academic behaviors such as **self-discipline, persistence, and leadership to their participation in music**, and reported that skills learned in music class transferred to other academic subjects including mathematics, literature, and foreign language, and that music class motivated them to attend more regularly and reduced stressed.

(<http://www.artsedsearch.org/study/prelude-music-makes-us-baseline-research-report/>)

A study published by the National Endowment for the Arts found a **positive impact on academic achievement and civic behavior**, especially among low socio-economic status students. The researchers found that low-SES teens who participated in the arts show better academic outcomes than their peers. High arts participation is positively connected with grades, test scores, and volunteering, as well as with higher rates of participation in extracurricular activities. Arts participation is related positively with aspirations for college attainment and professional careers. (<http://www.artsedsearch.org/study/the-arts-and-achievement-in-at-risk-youth-findings-from-four-longitudinal-studies>)

Adolescent-centered studies show that **even very basic rhythm abilities**, such as tapping to a beat, relate with reading skills, and we have provided initial evidence for how both abilities may rely on common underlying neural mechanisms of sound processing (Tierney, A.T. and N. Kraus, The ability to tap to a beat relates to cognitive, linguistic, and perceptual skills. *Brain and Language*, 2013. 124: p. 225-231).