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Inter-domain transfer between mathematical skill and musicianship.

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The development of generalizable learning and problem solving skills has been a popular theme in recent educational research. However, many programs have failed to demonstrate transfer from one domain to another. It appears that transfer is most likely to occur between domains which overlap at a deep structural level. This study examined the extent to which transfer could be demonstrated between two domains which are distinct at a surface level but overlap at a deep level. The domains were mathematics and music. Students who had studied music demonstrated superior performance on mathematical tasks which had structural overlap with music, than students who had not studied music. However, there was no difference between musicians and non-musicians on mathematical tasks which were not structurally similar. Thus, it appears that transfer may occur spontaneously between domains which are superficially very different but share deep structural similarity.

Classification: C30