The use of amplification systems in the classroom has the potential to reduce the impact of poor classroom acoustics for typically developing pupils and those with special educational needs (SENs). The immediate benefits of amplified acoustic signals on the performance of 253 primary school children, including 24 children with special needs, were examined. All participants were familiar with the use of the amplification systems. Children’s performance was assessed on two verbal measures (spelling and oral comprehension) and one non-verbal measure, using a balanced repeated measures design. It was predicted that the effects of amplification would be evident for spelling and oral language comprehension, but that there would be no discernable effect on speed of processing. Children with SEN were expected to have an added advantage with amplification. The predictions were partially supported. Both gain score analysis and ANOVAs of performance scores with amplification, controlling for performance without amplification, revealed an effect on spelling only for the typically developing children, while children with SENs benefited in both the spelling and the oral comprehension tasks. When installed appropriately, amplification improves children’s ability to decode single words; SEN children also benefit in terms of their ability to process oral input.