

Noise is an increasing problem in learning environments

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Noise is increasingly becoming a problem in schools and affects the audibility of speech. The effects of noise hamper learning opportunities for learners.

Dr Victor de Andrade, audiologist and lecturer in the Department of Speech Pathology and Audiology in the School of Human and Community Development at Wits enlightened the principals of some of the top performing schools in Gauteng on the impact of [noise](#) in [learning](#) environments.

He spoke at the annual Principals Function hosted by Wits' Schools Liaison and Marketing Division at the Wits Club on 28 July 2016.

According to De Andrade, noise in classrooms is a barrier to effective learning because of poor acoustics [audibility].

"These classrooms are not necessarily the quietest places. The learners need good acoustics to be able to learn. The message could be great, the teachers could be incredible, but if the acoustics are shocking, it puts the learners at a disadvantage [because they can't hear]," says De Andrade.

Additionally, the noise affects more complex cognitive and learning abilities, as a result of learners' poorer motivation and higher levels of annoyance.

"The audibility of speech is dramatically reduced in noise, especially for

children who do not have the context of certain words and are not able to make up the meaning, and who do not have a solid vocabulary at their disposal. In a classroom where they are learning new information, that word that the child has missed could be crucial to the rest of the conversation. "

De Andrade added that various noise sources, also known as background noise sources, also affect audibility.

"Background noise exceeds the level of the speech. It makes it difficult to hear even familiar words. Sometimes children miss out on certain frequencies of sound and they have difficulties following what is being said in the lesson."

De Andrade advised the principals and teachers to be aware of the context in which they work such as structures which are not necessarily good for acoustics which include pre-fabricated classrooms with very thin walls and brick buildings.

In addressing the problem of noise in learning environments, he urged teachers to protect their vocal outputs to overcome the effects of classroom noise and encouraged them to look at noise reduction strategies to assist them in reducing vocal strain.

"Unfavourable noise levels in classrooms due to excessive [background noise](#) and reverberation can lead to excessive vocal use during teaching, which can be potentially harmful to voices and throats," he cautioned.

To enhance audibility and improve learning in classes, De Andrade encouraged educators to attend speech and voice therapy and voice training; use voice amplification devices where feasible; use non-verbal sounds to cue attention; and increase daily water intake to hydrate the vocal mechanism.

Provided by Wits University

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