

Lexical access, knowledge transfer and meaningful learning of scientific terminology via an etymological approach.

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In the terminology rich fields of Science, undergraduate students are challenged by the learning of specialized vocabulary. Therefore, a common approach towards teaching and learning the terminology is via rote memorization, often with little success. Studies in language learning have shown that learning scaffolds that involve a morphological breakdown of new words into their morpheme units allows for improved lexical access, as well as greater knowledge retention and transfer abilities to other words in the same morpheme families. The present study explores the effectiveness of learning scientific terminology via an etymological analysis by performing before-and-after surveys testing lexical access to scientific root terms by 2<sup>nd</sup>-year university Biology students in a zoology class. Our findings show that participants did improve their lexical access to root terminology as well as their knowledge transfer in the context of their independent learning abilities after having been taught the learning technique throughout a semester. Implications to science teacher education programs are also discussed.