

# “THEY REALLY SHOULD HAVE COVERED THAT IN HIGH SCHOOL”: A REPORT ON THE REALITIES OF CURRICULUM IMPLEMENTATION IN HIGH SCHOOL PHYSICS

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## ABSTRACT

Most tertiary courses require some form of explicit or embedded prerequisite knowledge. In physics courses at the University of Sydney, there is some evidence to show that students lack the basic prerequisite or assumed knowledge for study of the subject of thermodynamics, a subject which is taken as part of the first year physics course. The origin of this discrepancy is often cited as a student's experience at the high school level, and on the surface, it does appear that thermodynamics is less emphasised than other physics topics at this level. To gain a clearer understanding of what is actually taught in the average classroom, a survey was administered to junior science teachers. The survey addressed aspects of curriculum implementation which included time management, content delivery and substance, as well as personal opinions about thermodynamics and its role in the student's experience with physics. The survey was administered both online and physical forms in order to collect a large enough sample, and was approximately fifteen minutes in length. Teachers were from all the main types of schools in NSW. The results of this survey will be presented here as well as the implications for tertiary physics and science instruction.

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