

Position Statement: Practical science in times of off-campus learning

May 2020

The Australian Science Teachers Association (ASTA) encourages schools to continue to provide opportunities for safe, practical inquiry-based activities and recognises the role of laboratory technicians in facilitating these activities.

With the occurrence of the COVID-19 pandemic, teaching in schools around Australia has changed significantly, and this includes the teaching of science in both our primary and secondary schools. Although arrangements around the nation are varied, and will continue to change, in many areas there will be a continuation of off-campus learning for a large number of students.

ASTA believe the inquiry approach to teaching science which uses hands-on, practical experiences to facilitate learning, makes science more engaging and relevant for students and increases enthusiasm in science. As a practical subject, the remote teaching and learning of Science presents unique challenges. This potentially comes with significant risk to students, parents and carers outside of their traditional expertise and in a home environment which is not suited to many activities traditionally conducted in schools.

Safe procedures are required to support practical activities in science teaching in secondary and primary schools to mitigate any risks.¹ The Science ASSIST service delivered by ASTA supports science technicians and teachers to employ safe science teaching practices and state and territory Science Teacher Associations also provides professional support in this new science teaching landscape relevant to their jurisdiction.

The delivery of curriculum off-campus has meant that the roles of all those working in schools have changed. Members of school communities work together to adapt to changing circumstances as they adopt new platforms, methodologies and pedagogies.

ASTA acknowledges the integral and specialist role that laboratory technicians play in enabling effective teaching and learning of the Sciences across all year levels. Laboratory technicians in schools are working to support of off-campus learning. For example, they are:

- gathering, preparing and curating resources for science activities in the home environment
- preparing, conducting and recording demonstrations and experiments
- collecting data via controlled experiments for analysis by students in assessment tasks
- maintaining equipment and updating inventories, reforecasting budgets,
- conducting OH&S audits, maintaining chemical management systems, reviewing procedures, and preparing risk assessment registers.

ASTA believes that primary and secondary schools should continue to provide a safe, practical component to their science curriculum in these times of off-campus learning, informed by the best available risk and safety advice, and that our laboratory technicians are a vital part of the provision of these activities.

¹ ASTA. 2019. Safe Practical activities in school science. ASTA website. http://asta.edu.au/resources/policy/safe_practical_activities_in_school_science