Published on ASSIST (https://assist.asta.edu.au)

Home > Legalities of practical work

Legalities of practical work

Posted by Anonymous on Mon, 2018-08-27 14:08

Legalities of practical work: While I know it is not ideal, is it **illegal** for a science class to undertake a practical if the regular classroom science teacher is absent? Or should this simply be decided on a case by case basis?

Voting:

ជាជាជាជា No votes yet

Year Level:

7

8

9

10

Senior Secondary

Laboratory Technicians:

Laboratory Technicians

Showing 1-1 of 1 Responses

Legalities of practical work

Submitted by sat on 27 August 2018

Answer reviewed 27 February 2023

Science ASSIST recommends that practical science activities involving chemicals, biological materials, specialist equipment or procedures should only be conducted by science trained teachers who have been trained in and have ongoing access to professional learning opportunities in the safe delivery of practical lessons. Any non-trained science teachers using a science laboratory for a theory or non-science lesson should have induction training on the hazards and the required health and safety procedures in the science area.

Requirement to manage health and safety risks

Australian law is not prescriptive to this level of detail but focuses on general duties of care to provide safe workplaces. The Model Workplace Health and Safety (WHS) Act sets out the health and safety duties and the Model WHS Regulations set out more detail "to support the duties set out in the Model WHS Act"1. " Model Codes of Practice are practical guides to achieving the standards of health and safety required under the model WHS Act and Regulations"1. Whilst these have more detail, they are still not prescriptive to an individual workplace.

However, all schools must manage health and safety risks, as required under workplace health and safety legislation. Schools have a duty of care to their workers as well as to their students.

The management of risk is usually set out in school policy documentation. This includes managing risk in all curriculum activities which includes safe practice in the delivery of science activities. Schools need to determine their own policy to determine the staff requirements for delivering safe practical science lessons and the Head of the Science department should monitor that these policies are adhered to.

Legal obligations

The Queensland Government articulate the legal obligations well by saying:

"Those responsible for any school curriculum activity have legal obligations and a common law duty of care to ensure the safety of all those involved in the activity through risk management. This requires that reasonably foreseeable risks are identified, assessed and effectively controlled."2

The Association of Independent Schools of New South Wales states:

"While schools foster learning through practical activities, they must also meet work health and safety (WHS) obligations as a business." (p3)3

"People: The poor behaviour of students can present a hazard. The nature of students, such as their maturity, age and skill, as well as medical conditions, such as allergies and disabilities, should be considered. The competency, knowledge and experience of the teacher who is supervising the practical should be acknowledged. A science practical with hazardous chemicals should only be undertaken by teachers if they understand the risks involved." (p25)3

Schools should have a policy in place to state whether a practical science lesson should proceed in the event of the regular classroom science teacher being absent. A substitute teacher should be competent in the management of science specific risks if they are to conduct a practical science lesson. There are many safety aspects to consider:

•

The awareness of the teacher regarding the hazards and the required health and safety procedures in the science area. (e.g., laboratory rules and security due to additional hazards in the science laboratories: gas taps, equipment, chemicals).

- The suitability of the science facilities and knowledge of the teacher regarding the correct use of Personal Protective Equipment (PPE) and the operation of emergency shut offs and first-aid facilities.
- The hazards of the actual practical activity and knowledge and application of strategies to control the risks (e.g., use of specialised equipment such as the Van de Graaff generator)
- Some practical activities may require specific training (e.g., microbiology skills)
- The skills, abilities and behaviour of the students.
- The allergies or medical conditions of the students may determine the non-use of certain resources due to allergies e.g., peanuts, latex, specific plants or additional precautions due to disabilities or medical conditions e.g., risks associated with static electricity, strobe lights, or the use of microorganisms.

Managing health and safety risks

The Model Code of Practice for How to manage work health and safety risks sets out the Workplace Health and Safety requirements in detail and notes one of the requirements for controlling risk as:

"Up-to-date training and competency

Most control measures depend on workers and supervisors having the appropriate competencies to do the job safely. Training must be provided to maintain competencies and to ensure new workers are capable of working safely." (p23)

Where hazardous chemicals are used there are additional requirements. These are set out in the Model Code of Practice for managing the risks of hazardous chemicals. In particular, see section 4.4. Providing information, training, instruction and supervision.

In brief:

- "Workers must be trained and have the appropriate skills to carry out a particular task safely." P47
- "Information, training, instruction and supervision must be provided not only to workers but to other persons at the workplace such as visitors." P48
- "Records of training provided to workers should be kept, documenting who was trained, when and on what." P48

We provide some further links that provide helpful information on this topic.

References and further reading

- 1 Safe Work Australia. (n.d.). *Model WHS laws*. Retrieved from Safe Work Australia website: https://www.safeworkaustralia.gov.au/law-and-regulation/model-whs-laws
- 2 Queensland Government, Department of Education. (2021, October 28). *Managing risks in school curriculum activities procedure. Version 6.2.* Retrieved from Queensland Government, Department of Education Policy and Procedures register: https://ppr.qed.qld.gov.au/. PDF version: https://ppr.qed.qld.gov.au/. au/attachment/managing-risks-in-school-curriculu...
- 3 The Association of Independent Schools of New South Wales Ltd. (n.d.). *Chemical Safety in Schools*. Retrieved from AIS NSW: https://www.aisnsw.edu.au/school-leaders/workplace-management/workplace-...

CLEAPSS. (2004). S038 Training for science staff, the use of non-science specialists in secondary school science and the use of cover teachers in laboratories. Retrieved from CLEAPSS: https://science.cleapss.org.uk/Resource-Info/PS038-Training-of-science-s.... (Member login required for access).

CLEAPSS. (n.d.). *PS082 Using laboratories for non-science activities*. Retrieved from CLEAPSS: http://science.cleapss.org.uk/Resource-Info/PS082-Using-laboratories-for...

Safe Work Australia. (2018, May 1). *Model Code of Practice: How to manage work health and safety risks*. Retrieved from Safe Work Australia website: https://www.safeworkaustralia.gov.au/doc/model-code-practice-how-manage-...

Safe Work Australia. (2018, May 18). *Model Code of Practice: Managing risks of hazardous chemicals in the workplace*. Retrieved from Safe Work Australia website: https://www.safeworkaustralia.gov.au/doc/model-code-practice-managing-ri...

Australian Capital Territory

ACT Education Directorate. (2016). *Risk Management in ACT Government Schools Secondary Science Programs Appendix*. Retrieved from ACT Education Directorate: https://www.education.act.gov.au/publications_and_policies/policies (Internal access only).

ACT Education Directorate. (2016). *Risk Management in ACT Government Schools Secondary Science Programs Policy and Guidelines*, ACT Education Directorate: https://www.education.act.gov.au/publications and policies/policies (Internal access only).

New South Wales

NSW Government Department of Education. (2021, September 8). Safety and Compliance – Chemical safety in schools. Retrieved from NSW Government Department of Education, Curriculum: https://education.nsw.gov.au/teaching-and-learning/curriculum/science/sa...

The Association of Independent Schools of New South Wales Limited. (2015). Science and Technology Work Health and Safety. Risk management and assessment for practical activities, AISNSW: https://www.aisnsw.edu.au/Resources/WAL%204%20[Open%20Access]/Science%20...

Northern Territory

Northern Territory Department of Education. *Occupational Health and Safety, Science Guidelines* (Access is only available to NTG School and Corporate Staff via the Document Centre on the Education Intranet ed.ntschools.net intranet. The guidelines can be located in the A-Z listing under S).

Queensland

Queensland Government Department of Education. (2021, March 9). *Health and safety risk management*. Retrieved from Queensland Government Department of Education: https://education.qld.gov.au/initiatives-and-strategies/health-and-wellb...

Queensland Government Department of Education. (2021, October 28). *Managing risks in school curriculum activities procedure.* Retrieved from Queensland Government Department of Education: https://ppr.qed.qld.gov.au/pp/managing-risks-in-school-curriculum-activi...

South Australia

South Australian Government Department of Education. (2022, December 6). *Planning and risk management*. Retrieved from South Australian Government Department of Education: https://www.education.sa.gov.au/department/about-department/governance/p...

Tasmania

Tasmanian Government Department for Education, Children and Young People. (n.d.). *Document Library – Browse documents – Wellbeing, Behaviour and Safety.* Retrieved from Tasmanian Government Department for Education, Children and Young People: https://publicdocumentcentre.education.tas.gov.au/Policies

Victoria

Victoria State Government, Department of Education. (2018, October 9). *Hazard identification, risk assessment and risk control.* Retrieved from Victoria State Government, Department of Education: https://www.education.vic.gov.au/school/students/beyond/Pages/hazidentif...

Western Australia

Western Australia Government Department of Education. (2010). *Science Laboratory Manual*. Retrieved from Western Australian Government Department of Education: http://ecm.det.wa.edu.au/connect/resolver/view/K12SCI019/latest/index.html (Login required).

Western Australian Government Department of Education. (n.d.). *Non-government school registration limitations*. Retrieved from Western Australian Government Department of Education: https://www.education.wa.edu.au/non-government-school-registration-limit...

Overseas Resources

American Chemical Society. (2011). *Safety in the elementary science classroom.* Retrieved from American Chemical Society: https://www.acs.org/content/dam/acsorg/about/governance/committees/chemi...

American Chemical Society. (2012). ACS Guidelines and Recommendations for the Teaching of High School Chemistry. Retrieved from American Chemical Society: https://www.acs.org/content/dam/acsorg/education/policies/recommendation...

National Science Teachers Association. (2007, February). *NSTA Position Statement: The Integral Role of Laboratory Investigations in Science Instruction*. Retrieved from National Science Teachers Association: https://www.nsta.org/nstas-official-positions/integral-role-laboratory-i...

National Science Teachers Association. (2015, October). *NSTA Position Statement: Safety and School Science Instruction*. Retrieved from National Science Teachers Association: https://www.nsta.org/nstas-official-positions/safety-and-school-science-...

National Science Teachers Association. (2017, December). *NSTA Position Statement: Liability of Science Educators for Laboratory Safety*. Retrieved from National Science Teachers Association: https://www.nsta.org/nstas-official-positions/liability-science-educator...

National Education Union. (2019, July). *Safety in practical lessons*. Retrieved from National Education Union: https://neu.org.uk/advice/safety-practical-lessons

Nuffield Foundation. (n.d.). <i>Students and teachers</i> . Retrieved from https://www.nuffieldfoundation.org/students-teachers	m Nuffield Foundation:
<u>pon,</u>	
Source URL: https://assist.asta.edu.au/question/4328/legalities-	-practical-work