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Bulletin 271 Health & Safety

There's no place like home

The COVID-19 situation has brought the issue of carrying out practical work in and around the home to the fore but it's not just a global pandemic that might prompt out-of-school practicals. Other scenarios include fire damage to a school building, prolonged severe weather or the extended absence of an individual.

A school technology room or science lab is certainly not a 'place like home'. It is a closely supervised environment with a number of safety features built in. Those supervising are highly trained. There is obviously no guarantee that this situation exists in the average home. Risk assessments for school practical work will have to be reviewed to determine whether additional control measures are needed in the home, or indeed whether the activity is entirely unsuitable for the home environment. Be particularly aware that an activity that is viewed as low risk in a school may require additional control measures to reduce the risk to the same level in a home setting.

Factors to take into account when reviewing risk assessments

Does the activity require PPE?
If so, then it almost certainly should not be carried out at home by younger students. PPE is usually the least favoured option in industrial environments because it requires people to be responsible enough to wear it. In schools, the level of supervision is such that we can rely on PPE for protection. That level of supervision will not necessarily exist at home.

Does the activity involve equipment or materials that require special storage?
If so, the activity should not be carried out at home, but bear in mind that small quantities of materials may be safe enough.

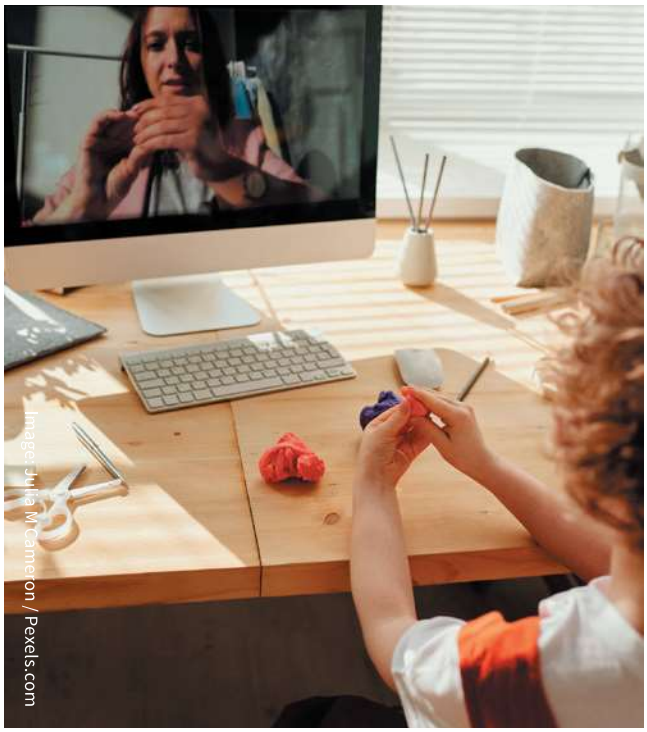
Image: Julia M Cameron / Pexels.com

How will kit be transported home?
It would not be appropriate for students to transport craft knives home, for example. If chemicals are to be used, can they be transported safely? >>

Other topics

Consider younger siblings and cognitively-impaired adults
The materials may be safe enough for use by the student, but what about others in the household who may have access to them? Please see the section on Parent/Carer Involvement.

Environmental considerations
Are any of the materials or products harmful to the environment. If so, how will they be recycled or disposed of?

Don't make assumptions regarding the safety of equipment/material already in the home
There are plenty of things on supermarket shelves that are not considered safe for use by children, even when supervised - dual voltage hair dryers, dishwasher tablets etc.

Something doesn't suddenly become dangerous just because it's used in the context of an experiment
Children put vinegar on their chips without resorting to PPE. There is no need for them to wear it when experimenting with small quantities of vinegar. Nobody wears safety glasses when making a coffee.

Results of risk assessment

There are three possible scenarios:

- The activity can go ahead - no control measures are required. This would be the case, for example, if only tools such as scissors were being used, or chemicals such as sugar or salt.
- The activity can go ahead provided certain control measures are in place.
- The activity is not suitable for home.

Parent/Carer involvement

If an activity requires control measures, parents and carers should be informed in advance and their active consent sought. We do not recommend that you send a 'five steps' (as was) risk assessment form home. Simply describe the equipment being sent home and the purpose of the activity. List any hazards. Bullet-point the control measures. It is probably best not to use the phrase 'control measures' as it will not be familiar to many people. 'Safety instructions' is fine. The parent or carer can then decide if the activity can be carried out. Point out to the parent that the activity has been assessed as appropriate for the pupil if they follow safety instructions. Materials supplied are not necessarily suitable for use by other members of the household, for example younger siblings, adults with dementia. One of our correspondents pointed out that the presence of pets could be a factor.


Image: Julia M Cameron / Pexels.com

Making activities safer

This practice is already widespread in practical science and technology. We use small quantities of chemicals in low concentrations where possible and low voltages for experiments involving electricity. These measures can slow down processes, but that may not be an issue for a pupil working at their own pace at home.

Packing and transporting material

The factors to consider here are fairly obvious:

- Use containers that will not break.
- Protect sharp points, e.g. using a cork.
- Use tape over the ends of batteries to avoid shorting.
- Label individual containers and apply any necessary warning symbols.

In the case of a pandemic, material can be wiped with sanitiser. Alternatively, it can be bagged and left to quarantine for 72 hours before being distributed to pupils. A zip-lock bag containing the materials for the activity and instructions could be used. Equipment which has been returned can be left in a tub and quarantined for 72 hours.

In summary

If you propose that pupils carry out practical work at home:

- Review risk assessments.
- Liaise with parents and carers if control measures are necessary for significant hazards.