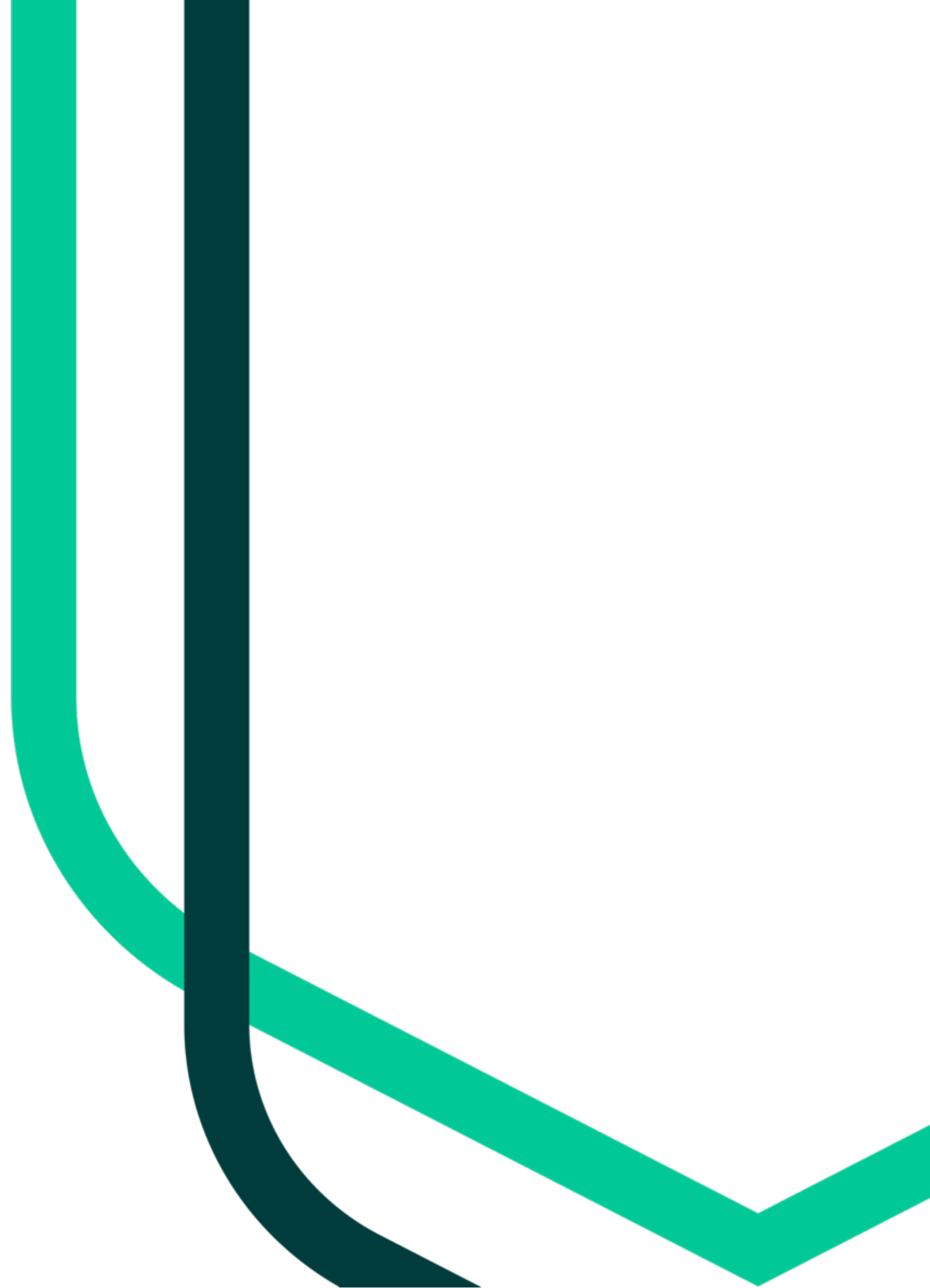




University
of Exeter

Science ITAP
October 2023





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**Intensive Training and
Practice Pilot - ITAP**

Why is there ITAP this year?

All ITE programmes have been reaccredited to deliver in 24/25 as mandated by the government. 'ITAP' provision must form part of the ITE programme. There needs to be 20 ITAP days across the course and providers need to pilot their ITAPs.

We would like to run a pilot ITAP in science so we can evaluate the effectiveness and add to the research base.

We have worked hard to develop a model for this ITAP that we think will work in our programme with our partnership schools and we are really grateful to the school staff who gave us feedback on an earlier draft.

ITAP draws together 4 sources of knowledge

University teaching sessions

We will explore the meaning of 'effective practical work' and using practical work for learning in science. You will have the opportunity to try out some more spectacular demonstrations and discuss your ideas with your peers.

Academic and professional reading

'hands on & minds on' Abrahams, I. and Reiss, M. (2017) and others

School observations

Planning needs to be contextualised and the specific demands of each context will be different. You will observe and discuss planning with teachers in your school. We will support you in learning to observe teaching through watching video material and exploring the use of the Exeter tools.

Trainees own teaching experience

You should teach at least 4 short episodes in your two weeks in school.

What we hope from the ITAP pilot

It will help trainees make clearer links between the 4 sources of knowledge and between what they learn at the university and what they learn in school

The focus of the ITAP that we are piloting is Planning with a specific science-related focus on planning for practical work.

ITAP benefits for trainees

Building confidence

Encouraging dialogue with experienced teachers

Developing reflective practice

Helping trainees make connections between the 4 knowledge sources

What does this mean for subject mentors?

Supporting trainees to complete their ITAP tasks

Supporting trainees to focus on observing teachers (demonstrations) where appropriate practical science

Helping us evaluate the ITAP pilot if you wish

What will trainees be doing on ITAP?

- ITAP (planning) will run in the November placement
- The trainees will be given a set of tasks to complete in placement that we will go through with them in advance and afterwards.
- Trainees need to spend the equivalent of one day in school on ITAP*
- Recording their activities in the IDP

ITAP tasks

Aim to carry out activity 1 to 4 and one (or more) from activity 5 and the reflection (activity 6)

Demonstrations

1. Teaching lesson segments
2. Planning in your school context
3. Shadowing a lab technician

Demonstrations and Agendas

4. Observing beginnings and/or endings of lessons
- 5a. Observing practical lessons: giving instructions
- 5b. Observing practical lessons: managing equipment
- 5c. Observing practical lessons: learning through practical work
6. Reflection on ITAP 1 Planning for practical work



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Examples of the ITAP activities

While we have called the ITAP planning for practical work, examples of planning that trainees could try out for themselves could include:

Beginning and endings of lessons

Choosing and using a phrase to ask for quiet

Planning how to distribute resources (and, if necessary, collect them back in)

Planning to give instructions for a task

We will provide you with

A copy of these slides

A copy of the task booklet that the trainees get

A copy of the key pre-reading

Trainee Pre-Reading

Abrahams, I. and Reiss, M. (2017) Enhancing learning with effective practical science. London: Bloomsbury. Pages 5-27 Chapter 2 the role of Practical work and Chapter 3 'hands on and minds on'

Ian Abrahams & Robin Millar (2008) Does Practical Work Really Work? A study of the effectiveness of practical work as a teaching and learning method in school science, *International Journal of Science Education*, 30:14, 1945-1969, DOI: 10.1080/09500690701749305

Brookfield, S. (2017) *Becoming a Critically Reflective Teacher*. San Francisco. Jossey Bass. (opens in Encore)

EEF (n.d.) Improving secondary science. p.28-31.

Ofsted (2021). Research review series: science (Practical Work Section)