# CRITICAL THINKING FOR ACHIEVEMENT

Geographical Association

The Association for Science Education

# What is Critical Thinking for Achievement?

The Critical Thinking for Achievement programme provides free CPD for primary and secondary teachers of geography and science, to strengthen their subject knowledge and build confidence and capability in curriculum planning and teaching.

## Key features

These include:

- 'plan-do-review' CPD over one school term, worth £360 per teacher
- £60 worth of vouchers for your school to spend on resources at the GA or ASE.
- a focus on knowledge application, critical use of data and construction of evidenced arguments to raise achievement in geography and science
- CPD tailored to local priorities, delivered through teacher networks
- support for teachers to apply techniques in their classroom
- an additional extension to core training on the use of data in geography and science, including geo-located and fieldwork data worth a further £360 per teacher
- all hosting schools will be able to claim £25 per participant who completes the programme that you can use to improve your school.

The programme is supported and funded by the Department for Education which allows us to offer it free to eligible schools.

Department for Education

## The Geographical Association

The Geographical Association is the leading subject association for all teachers of geography. It is a lively community of practice with over a century of innovation behind it and an unrivalled understanding of geography teaching. We are working in partnership with the Association for Science Education – the largest subject association in the UK – to deliver the Critical Thinking for Achievement programme.

Geographical Association

# Why is Critical Thinking for Achievement important?

There is an extensive and robust evidence base that suggests that:

- better use of evidence and enhanced criticality equips pupils with the knowledge and skills they need
- subject-specific CPD raises teaching quality most effectively
- sustained, collaborative enquiry through teacher networks is impactful, particularly when supported by external expertise.

## Building teacher capability

The Critical Thinking for Achievement programme builds teacher capability through:

- confidence in curriculum planning and critical pedagogies
- increased subject knowledge around data, scientific and geographical concepts and language
- effective teaching of reformed geography and science qualifications and curricula
- efficient planning through use of practical tools and quality-assured curriculum plans and resources.

## Raising pupil attainment

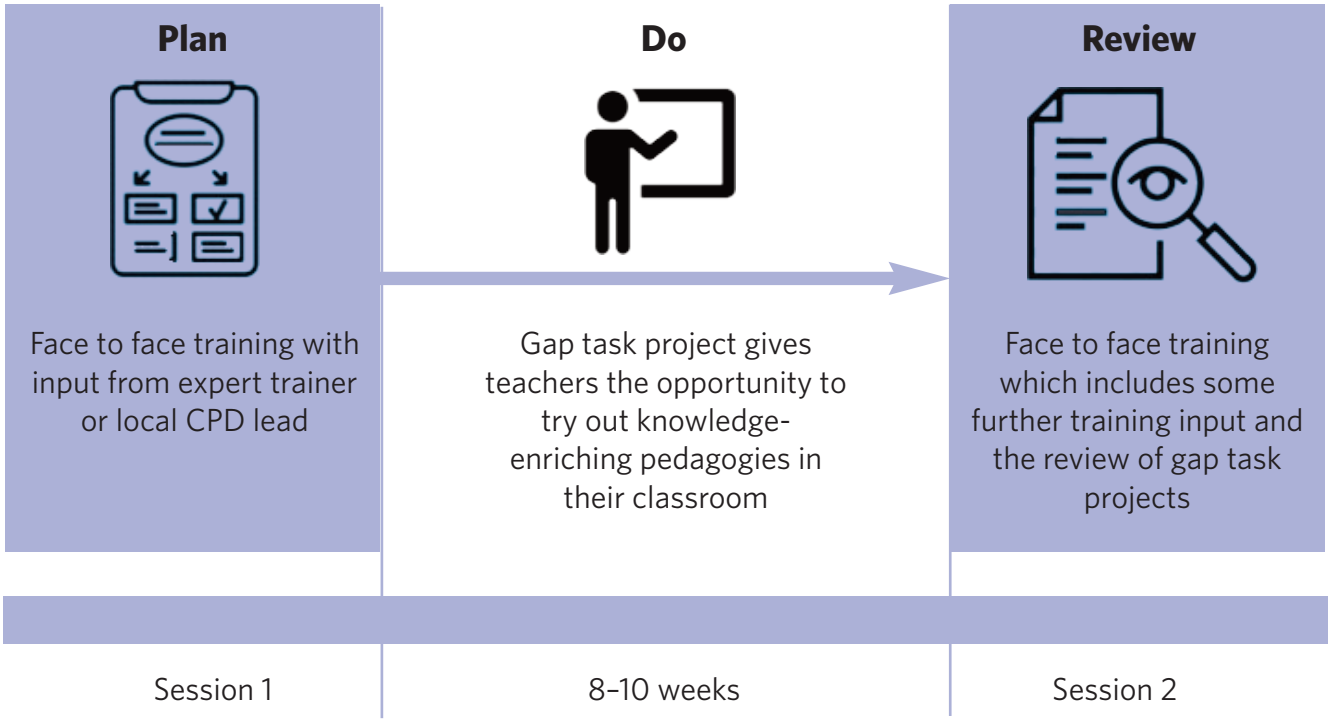
The Critical Thinking for Achievement programme raises attainment so pupils:

- gain the geographical and scientific knowledge and skills needed for success in examinations and further study
- tackle complex issues more independently and construct evidenced argument through social and natural scientific investigation
- make adept use of data, use evidence critically
- have appropriate challenge to increase engagement with geography and science, and generate interest in further study.

The programme helps stimulate and effect a cultural shift where knowledge, skills and applied thinking are considered simultaneously to 'close the gap' in attainment and achievement. It advocates doing things differently, not doing more.

# How is the programme structured?

The programme empowers teachers to be reflective practitioners through a plan-do-review model where the concluding CPD session will invite sharing and critical reflection through peer and expert challenge.




It has a flexible programme delivery format of full days, half days or twilights which allows local networks to make the best use of staff time and financial resources.

- The programme balances guidance with autonomy: 'working with' schools rather than 'doing to' schools to integrate new knowledge straight into curriculum planning.
- Teachers have ownership over their gap task project which can be tailored to target their improvement plan priorities.
- They are also able to access a dedicated online networking group which establishes ongoing collaborative professional dialogue.

# Gap task project example 1

## PROJECT CASE STUDY

### Alison Pryce – Guilsborough CEVA Primary School, Northamptonshire

**Aims**
We wanted to improve the quality of the questions that Year 1 pupils were using.

**Prior learning**
Year 1 had already worked on the question words, but I thought adding the 'were ..., did ..., could ..., might ...' extensions would generate more thoughtful and interesting questions to consider.

| | Were | Could | Might |
|---|---|---|---|
| What | | | |
| When | | | |
| How | | | |
| Why | | | |

**Technique**
Using the activities from the GA critical thinking course, I devised a simplified grid. I used the question stems across the curriculum – particularly in English and RE as well as in geography.

**Impacts**

- Pupils became adept at thinking of higher level questions when the stems were available as a prompt
- They were able to ask interesting questions of a volcanologist who came to talk to them about their topic
- The questions asked by lower attaining pupils were much improved and they were beginning to think about how they would go about finding answers to these questions
- Higher attaining pupils enjoyed challenging themselves as to how many different stems they could think of a questions for.

# Gap task project example 2

## PROJECT CASE STUDY

### Bethany Byers – Brackenhale School, Bracknell

I wanted to encourage our Year 11 pupils in thinking independently and critically about their fieldwork as the pupils find it difficult to come up with their own ideas and suggestions without teacher support.

With the help of the trainers, I designed a learning journey

**1 – Thinking critically alone**

The pupils were given a table conaining a variety of statements about their fieldwork and were asked to tick or cross the box dependant on whether they agreed or disagreed.

**2 – Silent debate**

Pupils now had to justify why they thought what they did. The statements were written out on A3 around the room and they had to silently write down what they thought about each statement and why.

**3 – Consolidation**

As a group or in pairs, they had to summarise the arguments given on the A3 pieces of paper and feedback while the rest of the class filled in a table related to the specific exam question the points fed into.

**4 – Structure grids**

I then used a simple exam answer structure grid to allow the pupils to write their own independent answer, based on the critical thought developed throughout the lesson.

### The benefits of teaching this way were:

- it increased pupils' willingness to participate
- it developed confidence in pupils expressing their own opinions
- it supported pupils in accessing higher level skills such as justification and evaluation
- it helped create a culture where pupils independently attempted to solve problems in their fieldwork
- it increased Paper 3 GCSE fieldwork scores.

# What do teachers say about the programme?

99% of the teachers who have engaged in the programme so far rate it as good or better.

Pupils are more engaged, confident they will be challenged and be successful at GCSE and A level...retention from geography is exceptional and results extremely strong.
**Abbeyfields School**

This project had a strong and important impact on my teaching. It helped me to think more critically about planning lessons, ensuring I had more questioning techniques to encourage student participation and get them to develop ideas.
**Chesterton Community College**

Within three sessions the impact on engagement and achievement was incredible... children's participation increased and they used higher order thinking.
**Leigh Primary**

Discussion and debate resulted in writing produced at a very high standard.
**Central Park Primary**

Children were able to think beyond their own experiences and use their knowledge to help them answer more complex questions.
**Queen's Crescent Primary**

# Is my school eligible?

This course is aimed at priority schools (primary and secondary schools with Ofsted category 3 or 4) and schools within priority areas (Department for Education category 5 or 6 and Opportunity Areas).

**To check your eligibility visit https://tlif.education.gov.uk**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## Contact us

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