

Year 2 handbook



UCL Early Career Teacher Consortium

**Early Career Professional
Development Programme**

Year 2

Deepening understanding of the Early Career Framework
through practitioner inquiry

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Professional learning on Year 2 of the programme

This is a supplement to the programme handbook that guided everyone through the programme in Year 1. It is designed as a reference for Early Career Teachers, their mentors and training-session facilitators.

Year 2 is the opportunity for ECTs to deepen their understanding of the Early Career Framework and to develop their repertoire of teacher practices. Becoming a skilled teacher is largely about knowing which approach to take in which situation. In our Early Career Professional Development Programme, ECTs continue to benefit from the guidance of their mentors. They will revisit the ECF Standards and have the opportunity to return, as needed, to any of their learning from Year 1. As before, they will conduct an audit for each module, which will help them to focus on the areas they most need to develop.

Table 1: Module audits and the ECF Standards

Year 2 module	ECF Standards	Corresponding Year 1 module
6	1 & 7	1
7	2 & 3	2
8	4, 5 & 6	3 & 4
9 (no audit)	8	5

Why engage in practitioner inquiry?

This handbook supports ECTs, mentors and facilitators to understand the approaches to practitioner inquiry that will be a key method of professional learning in Year 2.

Practitioner inquiry goes by many other names: action research, disciplined inquiry, research and development. Essentially, all of these approaches amount to the same thing: an approach to professional development whereby the practitioner systematically investigates an aspect of their practice that might not otherwise be explored. The words 'inquiry' and 'enquiry' are often used interchangeably. However,

there is a key difference. To 'enquire' simply means 'to ask' (e.g. a telephone enquiry). 'Inquiry' means 'to investigate something formally'. For this reason, in this document, we use the phrase 'practitioner inquiry'.

Practitioner inquiry can be done individually, but it is often most effective when it is done collaboratively – working with a mentor or working with other Early Career Teachers. Through engaging in this process, ECTs can deepen their pedagogical content knowledge, enrich their practice and improve outcomes for their pupils. Early Career Framework Standard 8 includes:

- **8a.** Engaging in professional development focused on developing an area of practice with clear intentions for impact on pupil outcomes, sustained over time with built-in opportunities for practice.
- **8d.** Engaging critically with research and discussing evidence with colleagues.
- **8e.** Reflecting on progress made, recognising strengths and weaknesses and identifying next steps for further improvement.

A teacher is doing all of these things when they are conducting a practitioner inquiry.

When researchers talk about 'what works', what they really mean is 'what worked' in a particular research context. Teachers and school leaders need to work out what works for them in the contexts in which they work. Practitioner inquiry enables ECTs to make new sense of the ECF Standards within the context of their particular settings, implementing and evaluating impact through an ongoing process of inquiry and development.

Questions for reflection

- What are the opportunities and challenges of engaging in practitioner inquiry in your school currently?
- What kinds of evidence does your school draw on to:
 - analyse pupil outcomes?
 - improve learning?
 - improve staff practice?
 - support decision-making?
- What are the strengths and weaknesses of these types of data or evidence?

A note on workload

This handbook makes many mentions of data, evidence and evidence-collection methods. This might give the impression that we expect ECTs to be setting up large-scale surveys and crunching big numbers. This is not the case.

Schools are already data-rich environments. Practitioner inquiries first of all make use of what we call here 'naturally occurring' evidence. Some examples of evidence that occurs naturally in the course of a term include:

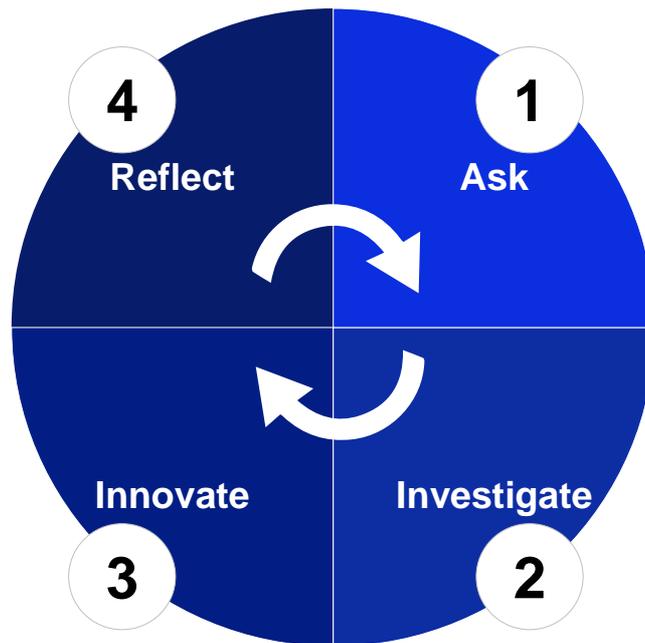
- the things pupils do, say and feel – how they behave and respond to feedback; how happy, confident and resourceful they are; what they say to each other, to their teachers and to their parents/carers
- the pupils' work – what it looks or sounds like and how much of it they do; its quality; how much better (or worse) it is than expected
- what ECTs and their colleagues do, say and feel

So: the sources of such evidence are easy to locate. They are in the pupils' work – and the ECT's assessment of it. They are in the words and reactions of the pupils – and what the ECT has heard or seen of this. When we refer to evidence collection, in the main we mean, 'Look at what the pupils have done, and listen to what they are saying.' A practitioner inquiry invites you to be more systematic about how you do this looking and listening, so you might *deliberately* ask a few questions of a few pupils for five minutes at the start of breaktime, or you might share lunch with a colleague and quiz them about how they approach a problem in their own class.

Using an inquiry cycle to engage in the ECF in Year 2

There are many different approaches to practitioner inquiry. We think it is helpful to picture this as a 4-stage process, which can be seen in the figure below.

Practitioner inquiry cycle



1. ASK

- Why research/R&D?
- How to:
 - evaluate evidence to inform practice
 - develop a research question/inquiry focus (data-informed)
 - devise expected outcomes/the difference you want to make
 - gather baseline data

Why should we engage in practitioner inquiry? What role does evidence play in our day-to-day professional lives? What questions might we ask about our practice? (Here is where the ECT, with their mentor, will carry out their module audit.) What simple baseline data do we need to collect in order to form a clearer picture of the current situation? At this stage, we write an exploratory inquiry question to guide our thinking.

2. INVESTIGATE

- Analysing baseline data
- Refining research focus
- Research strategies
- What's already known about this issue
- Accessing research and resources

What does the research in the ECF say about the issue we are interested in? Is there good practice in this area already in my school? What does our baseline data tell us about our chosen area of development? What does it not tell us? We could, at this point, write a 'simple evidence statement' about what the evidence seems to be telling us about our normal practice. Our exploratory inquiry may end here. Or, if there is time, we write an evaluative inquiry question to guide the next part of the inquiry cycle.

3. INNOVATE

- Tracking evidence of change (on practice and pupil learning)
- Refining and re-trialling strategies
- Critical analysis

Our module audit and the simple data we gathered in our exploratory inquiry suggest that we need to alter our practice in some way. This might be a tweak, or it might be a number of small changes to the way we are teaching. We look to the research in the ECF for suggestions for what that alteration should be, and we take guidance from our mentor. What do the research and practice summaries from the Year 1 sessions suggest might be worth trying? We decide on an aspect of teaching and learning that we would like to trial – to implement and evaluate the impact of. Usually, this is done over a period of 6 to 12 weeks. During this time, we collect impact data, often using a combination of two or three different methods of data collection and analysis – but always being mindful of our workload. Most of the data we are interested in is 'naturally occurring', i.e. it arises in the normal course of teaching and learning. With our mentor, we keep a close eye on how we are implementing this innovation (the alteration to our practice) and on the effects it is having on our pupils and ourselves. We may decide on a further 'adjustment' – to the focus of the inquiry or to the way we are teaching.

4. REFLECT

- Evaluating impact
- Preparing to share learning and impact
- Mobilising knowledge
- Sharing processes
- Embedding new practices
- Asking new questions

What was the impact of our innovation on pupil outcomes? Depending on how we collected the data, how firm or how tentative are our 'claims' for what we think we now know? Perhaps most important is the question of knowledge mobilisation: what will we do differently in the future as a result of this process of practitioner inquiry? How will we share the findings of our inquiries with other ECTs, other colleagues and the wider education community? What new questions do we have that might be explored through future cycles of practitioner inquiry?

Module 6 and Module 7

Each of these modules spans a half-term.

Module 6 revisits your learning from Module 1 – Standards 1 & 7.

Module 7 revisits your learning from Module 2 – Standards 2 & 3.

Not every ECT is in the same situation: some will agree, with their mentors, that their time will be well-spent re-engaging with some of the sessions they first encountered in Year 1. All of those materials – the activities and the research and practice summaries – will still be available on the programme website.

If their progress has been uninterrupted and their practice has developed at the normally expected rate, we propose that ECTs engage in an exploratory inquiry for each of these modules. That means they will:

- conduct a module audit to decide on a focus for development: one or more elements from the ECF, which may already be an area of strength or one where the ECT needs to gain more secure practice

- decide on an exploratory question to find out more about their current normal practice: what they are doing, what they are not doing and what impact this has on their pupils
- gather some data on this
- create a simple evidence statement – a tentative conclusion to their inquiry

Practitioner inquiries are grounded in classroom practice. This means that the innovations and the evidence collection mainly take place while the ECT is teaching. In Year 2, the self-directed study is largely time to analyse the naturally occurring data or to create a simple data-collection tool; the mentor meetings are great opportunities to clarify understanding about the impacts of the ECT's teaching and to make decisions about useful changes. ECTs should be reminded that these are short inquiries, and they should rein in any instinct they may have to set up an inquiry that involves too much evidence collection.

Writing an exploratory inquiry question for Modules 6 & 7

An exploratory inquiry question (we sometimes use the abbreviation 'RQ' for 'research question') is designed to help ECTs find out more about their chosen area of focus.

This might involve asking questions such as:

- what is the current state of play regarding...?
- what do pupils say about...?
- why does... happen?
- to what extent do pupils...?
- to what extent do I...?
- in what conditions do pupils...?
- when are pupils more likely to...?
- how can I find out more about...?

For example, if their chosen area of focus is...

1d: Seeking opportunities to engage parents and carers in the education of their children (e.g. proactively highlighting successes).

...then the ECT's exploratory inquiry question might be something like the following:

- what do parents and carers say about making contact with teachers (likes, dislikes, timings, frequency, preferred methods – e.g. phone calls, texts, emails, postcards, letters, general information, personalised information)?
- how do effective teachers engage parents and carers?
- what do pupils say about parental engagement? Which methods do they prefer, and why?
- what methods of parental engagement are a) the most effective and b) the most time-efficient?

Alternatively, if their chosen area of focus is...

7e: Using consistent language and non-verbal signals for common classroom directions.

...then the ECT's exploratory inquiry question might be something like the following:

- What verbal and non-verbal signals do I use most frequently? Which are most effective?
- What non-verbal signals do effective teachers use to give classroom directions?
- What do pupils say about teachers' use of non-verbal signals?
- What kinds of consistent language do effective teachers use to give classroom directions?
- What routines and protocols might help me remember to use particular non-verbal signals or to use particular language consistently?

The post-it note method

1. Take three separate post-it notes. Thinking about your chosen area of focus, write three RQs – one on each post-it note. Don't overthink it – just write them as soon as they enter your head.
2. Next, circle or underline the key words on each post-it note.
3. Next, on a new post-it note, try to combine the best bits of your other questions together into an even better inquiry question. Try not to use the word 'and' – this may mean you are trying to answer two questions at once.

An exploratory inquiry question checklist

1. **Language.** Are the terms well-defined? If your question includes broad terms like 'resilience', 'independence' or 'engagement', what do you really mean by this? How might this be measured? Try to be as specific as possible.
2. **Data.** What kinds of data will you need to collect in order to answer your question? It's a good idea to combine different kinds of data, if possible.
3. **Is it realistic?** People often bite off more than they can chew. Will you be able to answer your exploratory question in just a few weeks?
4. **Pupils/characteristics.** Does your question specify which pupils you intend to study? (How many? 6 may be enough.)

Module 8

Module 8 revisits your learning from Modules 3 and 4 – Standards 4, 5 & 6

Some ECTs will agree, with their mentors, that their time will be well-spent re-engaging with some of the sessions they first encountered in Year 1. All of those materials – the activities and the research and practice summaries – will still be available on the programme website.

But, for the majority of ECTs, whose progress has been uninterrupted, we propose that they engage in an evaluative inquiry for this module. That means they will:

- conduct a module audit to decide on a focus for development: one or more elements from the ECF, which may already be an area of strength or one where the ECT needs to gain more secure practice
- decide on an exploratory question to find out more about their current normal practice: what they are doing, what they are not doing and what impact this has on their pupils
- gather some data on this
- with their mentor, agree on an alteration to their practice (this may be a small

innovation or a set of innovations and will be drawn from their understanding of the ECF research)

- decide on an evaluative question to find out the extent to which the alteration to their practice makes a positive difference to their pupils or themselves, or how to implement the alteration well
- gather some data on that
- adjust their approach as they evaluate the emerging evidence
- make a claim for what they now think they know
- share their findings with others

As with the earlier modules, it's important to remember that practitioner inquiries are grounded in classroom practice. That means that the innovations and the evidence collection mainly takes place while the ECT is teaching. ECTs will still use their self-directed study time to create data-collection tools and to analyse the evidence that they gather; the mentor meetings are still the opportunity to clarify understanding of the impacts of the ECT's teaching and to make decisions about useful changes.

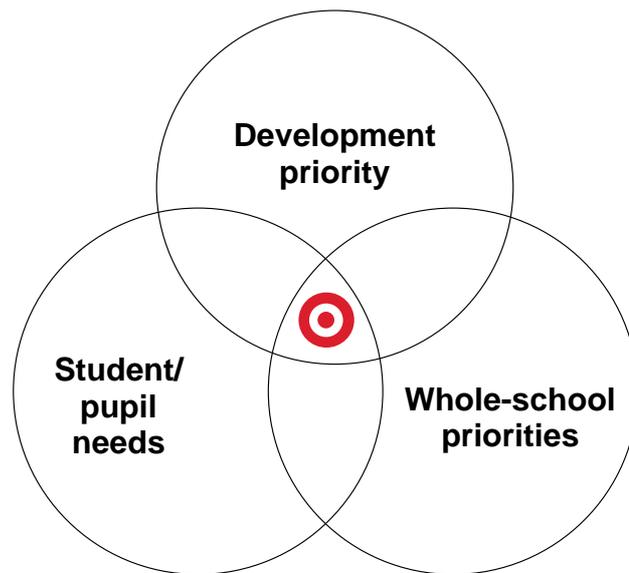
Module 8 also provides the option for ECTs to collaborate on an inquiry. This collaboration can take different forms, e.g.:

- an ECT and mentor do a joint inquiry where each applies the same alteration to practice – but to different classes – and gathers the same kind of data
- two (or more) ECTs in the one school conduct a joint inquiry as above
- two (or more) ECTs from a cluster conduct a joint inquiry
- two (or more) ECTs from the one school or cluster address the same issue but apply different approaches to it, hoping to find out 'what works better'

Writing an evaluative inquiry question for Module 8

The focus of the evaluative inquiry will have arisen originally from the module audit at the start. The ECT will then have found out more from their exploratory inquiry; this will have given them a baseline from which to measure any future impact.

It's helpful to think of a 'sweet spot' when deciding on the focus



Development priority. What are the ECT's development needs, as indicated by the module audit?

Student/pupil needs. What are these, as indicated by the exploratory inquiry?

Whole-school priorities. Keep this in mind, too. There may be areas of excellent practice in their school that ECTs can benefit from.

ECTs will use learn how statements from the Early Career Framework (ECF) to choose an area to focus on, e.g.:

- 1d:** Seek opportunities to engage parents and carers in the education of their children (e.g. proactively highlighting successes).
- 7e:** Use consistent language and non-verbal signals for common classroom directions.

Writing an evaluative question is very straightforward.

Template A:

'To what extent does [teaching strategy], implemented for [duration of intervention], improve [measurable outcomes] among [target pupils]?'

Example:

'To what extent does using retrieval and spaced practice, implemented over a term, build automatic recall of key knowledge for the middle attainers in my Year 7 geography class?'

Template B:

‘How can I do [teaching strategy] well for [target pupils] so that they improve [measurable outcomes]?’

Example:

‘How can I best ensure, by the way that I group them, that my Year 4 pupils avoid the perception that their attainment levels are fixed?’

Worked example: from exploratory to evaluative inquiry

A teacher has noticed that Year 8 girls are underperforming in science and has chosen this as an area to focus on. Following a discussion with their mentor, they have realised that not all girls are underperforming – only some. So, they write the following exploratory question:

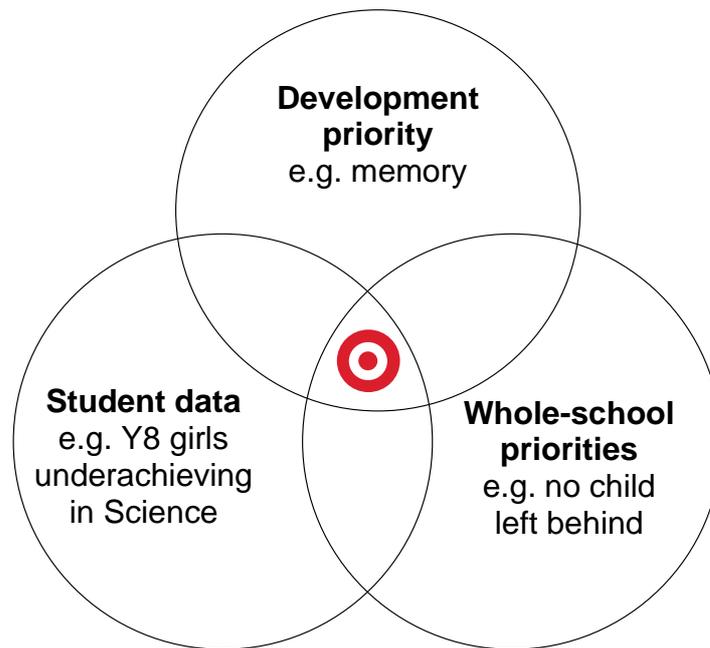
What are the characteristics of underachieving girls in Year 8 science?

They decide to investigate this by looking at pupil progress data, by observing particular pupils in lessons and by looking in those pupils’ books. Through this exploratory inquiry, the ECT realises that many underperforming girls work really hard – they make lots of notes in their books, for example – but for some reason, they aren’t able to retain their knowledge of science key words from one lesson to the next.

The ECF research and the research and practice summaries in the Year 1 materials contain high-probability teaching strategies that improve the accurate retention and recall of knowledge across time. Through these, the ECT identify low-stakes quizzing as an idea that they want to explore to see whether it helps underperforming girls with the accurate use and retention of science key words in a six-week unit on electricity.

At this stage, the ECT is ready to move on to a larger, evaluative inquiry, driven by the following evaluative question:

‘To what extent is low-stakes quizzing of key words, implemented once a week for 2 months, an effective strategy for improving the accurate use and retention of science key words among high-effort/low-progress girls in Year 8?’



Collecting and analysing data

The kind of inquiry question the ECT asks will determine what kinds of data they need to collect in order to answer it.

For example, in relation to ECF Standard 4, answering the question ‘What homework tasks do boys with English as an additional language (EAL) in Year 10 find the most helpful for their learning, and why?’ would likely involve a survey, interviews or focus groups – or, potentially, some combination of these methods. The boys’ responses might also be compared with the views of teachers, parents or other pupils.

Alternatively, answering the question ‘What kinds of consistent language do effective teachers use when giving classroom directions?’ might involve peer observations, a survey or interviews with teachers – or, again, some combination of these methods. Remember, the ECT should not be encouraged to add unreasonably to their workload when gathering or analysing this data. Without adding to their workload, the ECT could gather data in these ways:

- a survey can be conducted in class with hands up
- an interview with a colleague can take place over a coffee in the staffroom

- interviews with pupils might happen during a lesson while others are working independently
- peer observations may be done in tandem with the school's normal professional development programme

Broadly speaking, there are two kinds of data:

- quantitative: counted, measured, number-based
 - e.g. test scores, behaviour points, survey results, the use of control or comparison groups...
- qualitative: descriptive, conceptual, text-based
 - e.g. observations, interviews, looking in pupils' books

Examples of 'naturally occurring data'

Progress and attainment data

Across different educational settings, there are systems in place to track whether pupils are working at, below or in advance of expected levels of progress. ECTs can explore what data is used to make these judgements in their schools. How are they already using this data themselves, and how might they analyse and interpret the data to provide evidence which answers their inquiry questions?

Pupils' work

Early years, schools and colleges use a variety of processes for collecting information or data about the quality of pupils' work, and this may vary between subjects too. What systems exist for ensuring this is done consistently across the ECT's school? How do they record changes in the quality of pupils' work in their classes? Do they keep a mark-book? How might their pupils' work be used as evidence to answer their inquiry questions?

Behaviour data

Educational settings track the behaviour of pupils in a variety of ways. They are required to report on permanent and fixed-period exclusions. At secondary level in particular, they may also track the number of times a pupil is given a detention or when

they receive a particular sanction. What system does the ECT's school use to track behaviour? How do they evaluate pupil behaviour within their own classroom? How might this data connect to their inquiry questions?

Attendance data

Schools usually have an electronic system for recording and reporting on pupil attendance and punctuality. How is this data used to support pupils to improve in these areas if needed? What other information might the ECT need to be able to fully address these issues with individual pupils?

SEND data

Educational settings hold a range of data or information on pupils' special educational needs and disabilities (SEND), in accordance with the SEN Code of Practice (2015). It is for individual institutions to decide what information they hold, but the provision made for pupils with SEND should be accurate and up to date. What data is held regarding pupils with SEND in the ECT's school, and how is this information used to support their learning? How could SEND data be used to ensure that in answering their inquiry questions, the ECT is considering the needs of all pupils?

Additional data-collection tools

If it can be managed within a reasonable workload, it is generally a good idea to use a combination of two or three different data-collection tools. In this way, we can triangulate the data from different sources to see whether they tell the same story. Each data-collection method has advantages and disadvantages, and each illuminates a different part of the problem. Combining the use of multiple data sources helps overcome the limitations associated with any single method.

Collecting and analysing data does not have to be time-consuming. For example, an inquiry might involve looking at progress data, a sample of books and a focus group with a small group of pupils.

The table below details some common methods of data collection and some advantages and disadvantages associated with each.

Table 2: Methods of data collection and analysis

Data collection method	Advantages	Disadvantages
Existing assessment data	<ul style="list-style-type: none"> ▪ Easy and quick to access ▪ Generally has some pre-existing rigour/validity 	<ul style="list-style-type: none"> ▪ Not designed for your particular inquiry issue ▪ Often more 'general' than the factor you really want to look at
Test data	<ul style="list-style-type: none"> ▪ Specific 	<ul style="list-style-type: none"> ▪ Validity and reliability ▪ Many confounding factors affect the results
Questionnaires	<ul style="list-style-type: none"> ▪ Easy to collect large samples ▪ Collect attitudes and opinions ▪ Can be anonymous ▪ There are many existing ones you can use that are good 	<ul style="list-style-type: none"> ▪ People may just tick boxes at random ▪ Can be tricky to design ▪ Can have low response rate, and who responds can bias your sample ▪ Questions are fixed – you can't sense-check
Pupil work	<ul style="list-style-type: none"> ▪ Authentic classroom work ▪ Matches your intervention/action 	<ul style="list-style-type: none"> ▪ Can be difficult to analyse across different pupils ▪ Can be affected by other factors
Interviews	<ul style="list-style-type: none"> ▪ Design them to fit – pairs, individual, focus groups ▪ Insight, interest, get below the surface ▪ Enables 'sense-checking' ▪ Guaranteed to take place ▪ Can get data from a representative group of pupils – balanced sample 	<ul style="list-style-type: none"> ▪ Focus groups can be difficult to manage ▪ Require interpretation – subjective ▪ Subject to bias ▪ People may answer to please ▪ Time
Observation	<ul style="list-style-type: none"> ▪ Can see what is happening in real time ▪ Different types of observations to fit the purpose (whole-class, individual, small-group) 	<ul style="list-style-type: none"> ▪ Hard to do in a fair way – subjective ▪ You can only observe what is observable

Drawing conclusions and making claims

Schools are busy, complex places, and pupils' learning is affected by many factors. It is therefore not often possible to collect data that definitively 'proves' that teaching method X led to outcome Y. It is also extremely difficult to generalise inquiry findings from one setting to another.

However, by combining the use of multiple methods of data collection, we can strengthen the claims we can draw from our inquiries. For example, if a teacher notices that low-stakes quizzing seems to help her pupils – and if the pupils say it helps – and pupil progress data suggests that their attainment increased when low-stakes quizzing was introduced, then she can make a fairly strong claim that low-stakes quizzing raises attainment for these particular pupils at this particular point in time.

It is also important to be aware of the limitations of practitioner inquiry and to be honest about these when we are seeking to make claims about our inquiries. Inquiries that lead to uncertain conclusions are not a waste of time – quite the reverse, such inquiries often generate more questions for further investigation. Negative findings can also be incredibly valuable. All teachers want to be able to see evidence that our pupils are learning effectively. Collecting data that suggests that our efforts may not be effective as we might hope for can be incredibly valuable in helping us refine our practice and improve outcomes for pupils in the future. The aim of practitioner inquiry for ECTs is not to 'prove' that they are incredibly effective already, but to deepen their subject and pedagogical content knowledge, to support the development of their practice and to improve pupil outcomes.

Sharing your findings

Most practitioner inquiry ends with some form of written report or poster presentation. Inquiry findings can be shared with colleagues within school or at teacher research conferences. Some teachers choose to publish their research inquiries online in a teacher research journal or in a blog.

Sharing our inquiries helps the development of professional knowledge and understanding and is an important way to recognise and celebrate the fruits of practitioner inquiry. It also addresses what is perhaps the most important question of all: 'So what?' What is the ECT going to do differently as a result of their inquiry?

How can they take what they have learned and apply it to improving outcomes for pupils at their school, and more widely?