Richard Smith

Mentoring teachers to research their classrooms: a practical handbook

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Contents

Introduction

Research done by teachers as a means of professional development has been shown to be a powerful process which can have a profound impact on teachers and learners. Indeed, participation in teacher-research has been increasing in various parts of the world, within British Council mentoring schemes in South Asia and Latin America, the TESOL International Association Electronic Village Online initiative 'Classroom-based research for professional development', the International Festival of Teacher-Research in ELT, and the English in Action project in Bangladesh.[1] Arising from these and other projects, there are now quite a few resources on classroom-based research which are easily available to teachers. However, there is a lack of resources on how to support teacher research, particularly as a mentor.

The concept of mentoring is well established, and mentoring is itself quite a common practice in education systems across the world. It is an open, wide-ranging process which can help improve a teacher's practice, and there are many guidelines and lists available in relation to the general skills and qualities an effective mentor needs to demonstrate. However, there is as yet very little specific guidance to enable mentors to play what can be a pivotal role in supporting teacher-research.

The purpose of this handbook is to help bridge this gap by offering insights, practical ideas and activities based on direct experience within the projects and programmes mentioned above. If you are a potential teacher-research mentor, or already acting as one, the book will help you to:

- develop your skills in effectively supporting classroom-based research

- enrich your professional development

- open up future academic and/or employment opportunities.

The book will also be of use to administrators considering implementing a teacher-research scheme and wondering how to provide training and development opportunities for mentors within such a scheme.

What is the book based on?

The chapters have been written on the basis of the author's wide-ranging experience of mentoring teachers to do research and co-ordinating teacher-research mentoring schemes internationally. The book is particularly informed by recent experiences supporting mentors on the British Council's Action Research Mentoring Scheme (ARMS) in India and Nepal (2017 onwards). The particular form of teacher-research promoted here – exploratory action research – was originally developed (from 2013 onwards) by the author with teachers in Chile,[2] as a means to address the difficult circumstances confronting many schoolteachers there and elsewhere in countries of the Global South. However, the book is written for all those interested in or tasked with the responsibility of mentoring teacher-researchers, regardless of whether you are working with teachers in low- or relatively high-resource classroom contexts, in schools, tertiary institutions or language schools.

In order to make things clear, the book is written in quite a directive way – there are a lot of 'You shoulds' and 'Do this-es!' and 'Don't do thats!'. These pieces of advice are always based on experience and to some extent research, but please bear in mind that following these instructions doesn't represent the only way to mentor teachers to do teacher-research, nor is the version of teacher-research favoured here the only one. You should feel free to react against the guidelines and to develop alternatives of your own. Indeed, this book will clearly have limitations, being – so far as we know – the only book so far published which directly addresses the area of how to mentor teacher-researchers. It is therefore hoped that the book will be updated at a later date and added to on the basis of others' experience, feedback and further research. Please support improvement in this area by sending in your own feedback, including experiences using the book, to the author at R.C.Smith@warwick.ac.uk. You are also invited to join a new 'Mentoring teacher-researchers' online community (see 'Further resources' at the end of the book) and to share your experiences there.

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1. British Council mentoring schemes in South Asia and Latin America: https://www.britishcouncil.in/programmes/english-partnerships/research-policy-dialogues/arms and https://www.britishcouncil.pe/en/education/champion-teachers
International Festival of Teacher-Research in ELT: https://trfestival.wordpress.com/about/
Electronic Village Online 'Classroom-based research for professional development': http://classroombasedresearch.weebly.com
English in Action in Bangladesh: http://www.camb-ed.com/download/file/127/744/eia-teachers-voices-book2017pdf

2. See Champion Teachers: Stories of Exploratory Action Research by Paula Rebolledo, Richard Smith and Deborah Bullock (British Council, 2016) and A Handbook for Exploratory Action Research by Richard Smith and Paula Rebolledo (British Council, 2018).

Who is the book for?

This book has been particularly designed for:

(a) teacher educators, teacher development group leaders, etc. who are currently mentoring teachers or student-teachers to do research into their classroom practice

(b) potential mentors who want to know more about the process before they begin

(c) curious but undecided potential mentors who want to know more about what's involved before they decide.

Readers may also be:

(d) decision makers, administrators, school leaders, teacher educators or group leaders wondering whether to initiate and/or design a programme to encourage teacher-research.

If you are in category (d), you will be able to find some answers here, even though when 'you' is used in the book it's generally assumed that you are one of (a) to (c) above.

How can the book be used?

The handbook can be used as a step-by-step guide, since it follows the typical path of a mentor working with teacher researchers. Equally, the units in the handbook can be used as stand-alone resources – the book can be dipped into when questions arise or clarity is needed. In other words, the units are designed to be self-sufficient, so you can choose to read them in any order you want.

You can use the book on your own, with a colleague or collaboratively in a learning group. It can also be used on training schemes for mentors.

The book doesn't assume that you have previous experience of mentoring other teachers, or even of having done (much) teacher-research yourself. The book acknowledges that readers will have had different kinds of relevant experience and will find certain chapters more useful than others.

Where do I start?

You can follow particular tracks, depending on your previous experience. For example:

• Have you engaged in teacher-research yourself? Are you thinking of mentoring colleagues to do the same, but you haven't done mentoring before? Perhaps start with Units 2 and 3.

• Are you familiar with the non-judgemental, 'counselling' kind of mentoring recommended in this book but haven't mentored research before? Start with Units 1 and 3.

• Have you carried out and/or supervised research before, but not teacher-research? Start with Unit 1.

In all these cases, the book will help you build on your previous experience.

How is a typical unit structured?

Each unit contains:

highlighted 'Key points'

concise information on 'Why is this topic important?'

textual input with embedded reflection and/or discussion tasks, divided into sections

directions to further information, when relevant

a QR code which will take the reader to a YouTube video of a mentor talking about their experiences in relation to the unit theme.

There is frequent cross-reference, by means of the abbreviation *Handbook for EAR*, to the publication for teacher-researchers *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018). This is freely downloadable from http://bit.ly/handbook-EAR.

Acknowledgements

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Checklist of competencies

Completing the checklist below will help you reflect on your abilities and skills as a mentor of teacher-researchers, as a starting point for getting involved in mentoring and/or for reading this book, and as something for you to return to at a later date. You may find it beneficial to use a similar kind of checklist with teacher-researchers before they begin their research (there is a suitable one in the *Handbook for Exploratory Action Research* on p. 7), to encourage them to reflect on and communicate to you what they need most help with and as a point of comparison with their abilities at a later point.

Developing mentoring skills				
How would you rate your capacity to … (from 1 (new to me) to 4 (highly developed))				
provide mentoring support, in general?	1	2	3	4
engage in supportive, non-judgemental conversations?	1	2	3	4
encourage teachers to do teacher-research?	1	2	3	4

Developing research-mentoring skills				
How would you rate your ability to help teachers to … (from 1 (new to me) to 4 (very high))				
formulate research questions?	1	2	3	4
decide on appropriate research methods?	1	2	3	4
design research tools (questionnaires, observation frameworks, etc.)?	1	2	3	4
plan a research schedule?	1	2	3	4
analyse data and draw conclusions?	1	2	3	4
communicate their findings?	1	2	3	4

Part I
Mentoring foundations

1. Introducing teacher-research

Key points

Before starting out, teachers should know (and mentors need to show) that:

- research involves seeking answers to questions, with evidence
- teacher-research is research by teachers for teachers (and their students/schools)
- teacher-research can be a valuable way for teachers to address important classroom issues and develop their practice accordingly
- action research is a practical and useful form of teacher-research
- it is valuable to explore a situation before trying to change it

Why is teacher-research important?

The benefits of teacher-research can include:

For teachers:
- Becoming better able to understand and address teaching challenges
- Feeling more empowered and more motivated in their work

For learners:
- Enhanced engagement in learning
- Feeling more trusted, as partners in research

For the school or institution:
- Continuing professional development which meets teachers' specific needs
- Increased commitment from teachers

For a mentor:
- Supporting a process with clear value for participants
- Learning new skills, and gaining new knowledge

For the wider profession:
- Contributing to a new approach to knowledge generation
- Sharing of ideas for effectively addressing real teaching issues.

It is quite likely that, at the beginning of the process of mentoring, you will need or want to present teachers with some information about teacher-research – what it is, what its advantages are and how it can be carried out overall. This might be in the form of an introduction to help them decide whether to participate, or to reassure, inform and orient teachers after they have already made a commitment. The sections in this unit will help you think how to do this.

1.1 Demystifying research

How can you explain what research is, in general terms? Consider the following:

- We all, including teachers, have pre-existing beliefs about and attitudes towards research. Eliciting and acknowledging preconceptions – our own as well as teachers' – may be a necessary and natural starting point.

- Teachers often believe that research is not 'for them'. It's done, they may think, by scientists or professional academics, not by practitioners, and they may also feel research findings are of limited relevance to them.

- If teachers have done research as part of a university degree, they may have academic preconceptions about what research is or should be like, including the idea that it must involve lots of reading of already published research or the writing of a highly academic report, for example.

For these reasons, you will probably need to demystify research and/or present an alternative view for those who have a very academic conception of research or for whom carrying out their own research seems unimaginable. One way to do this is to attempt to describe research and teacher-research in very down-to-earth terms, avoiding jargon. Another way is to provide relevant examples, including both examples of research in everyday life and cases of teachers who have successfully carried out research with clear benefit to themselves and their students (for the latter, you can share your own experiences of teacher-research; alternatively, there are some links to good examples in the Further information section at the end of this unit).

Task 1.1

Below, write down some possible definitions of research, from your own head and/or from the internet. What is the simplest definition you can find?

_____

_____

_____

_____

_____

Write down some examples of research that people normally carry out in everyday life:

_____

_____

_____

_____

_____

You can compare your ideas here with those on p. 72 of the Answer Key.

Consider sharing relatively clear/simple definitions and examples with teachers to show that research is a part of 'normal life' (and can be part of classroom life), not just something that professional researchers do.

For more on how to demystify research and how to counteract academic preconceptions, see below and Unit 4.

1.2 So, what is teacher-research?

How, next, will you explain what 'teacher-research' is?

There are various relevant terms that are widely used when talking about teacher-research.

Task 1.2

How, if asked, would you distinguish between:

- classroom research – or classroom-based research
- action research
- practitioner research
- teacher-research?

_____

_____

_____

_____

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_____

_____

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_____

_____

See the box below for an answer.

The defining feature of *teacher-research* is that it is research carried out – and usually initiated voluntarily – by teachers themselves into an issue that concerns them, for their own benefit and that of their students. It is therefore a form of *practitioner research* – research done by practitioners (who might include, for example, nurses, social workers, etc.) with the intention of understanding and perhaps improving their practice. *Action research* is practitioner research which seeks to effect change and evaluate the consequences.

Most teacher-research is centred on what happens in the teacher's own classroom, in other words it is a kind of *classroom research* or *classroom-based research*. But if the project belongs to and is mainly carried out by an outside researcher, this isn't classroom-based *teacher-research*.

Teacher-research, then, is *practitioner research* – usually, *classroom-based research* – which is initiated and carried out by and for teachers, for their own benefit and that of their students!

Task 1.3

Additionally, what distinguishes teacher-research from 'reflective practice'? Consider your own experiences of reflective practice and teacher-research. How are they different?

_____

_____

_____

_____

_____

_____

_____

_____

_____

See the Answer key (p. 72) for one response to this question.

Task 1.4

Do the following two cases involve 'research' or not?

1. A teacher has a teaching journal and sometimes spends a bit of time reflecting on interesting points, e.g. activities the students did or didn't enjoy; any misbehaviour; which students are having difficulties, and so on. He tries to take these points into account when planning for lessons.

2. A teacher doesn't understand why students seem to find listening so difficult. She decides to observe her students and make notes during listening activities, then spends some time discussing the problem with them to find out how they feel about listening and what they find difficult. Based on this, she modifies her approach to listening by introducing some pre-listening activities. After several lessons, she asks her students if the pre-listening activities have helped, and how, and how they feel about listening now.

See the Answer key (p. 72) for suggested answers.

_____

_____

_____

_____

_____

_____

_____

1.3 Why teacher-research?

What's the point of teacher-research? How can you persuade teachers to explore/investigate their own practice in their classrooms, and why do you want to help them to do so? Since you are reading this book, you probably have reasons that you can share with teachers already – and these may or may not correspond with those listed in 'Why is teacher-research important?'

Your thoughts:

Take a few moments now to write down your personal answers to the following:

• What are your own main reasons for favouring teacher-research?

_____

_____

_____

_____

_____

_____

• How can you convey the benefits of teacher-research to teachers?

_____

_____

_____

_____

_____

_____

• What might teachers' objections to teacher-research be?

_____

_____

_____

_____

_____

_____

Bearing in mind what you have written above, let's now consider how you might present teacher-research to teachers. Complete the following task and then consult the suggested answers on p. 72:

Task 1.5

What are the advantages/disadvantages of presenting each of the following to teachers?

… a list of potential advantages of teacher-research

Advantages	Disadvantages

… an example from your own teacher-research experience

Advantages	Disadvantages

… an example of a teacher-research study by a teacher in a similar context to that of teachers themselves

Advantages	Disadvantages

… a list of potential hindrances to teacher-research

Advantages	Disadvantages

Now compare your answers with those on p. 72 in the Answer key.

For more on how to motivate teachers to engage in teacher-research, see Units 3 and 4.

1.4 What's the value of exploring a situation before trying to change it?

As defined above, action research involves attempting to improve a situation via some kind of new action, and evaluating what does or does not change. This can then lead into a further cycle of attempted change and evaluation, and so on (see Figure 1).

Reflect
My students seem to be not motivated.

Plan
I plan and design an action plan.

Observe
I ask my students their perceptions.
I ask a colleague to observe my class.

Reflect
I analyse the results and make conclusions:
my students are more engaged but in some
groups more than others.

Act
I introduce some games which involve
students in speaking English.
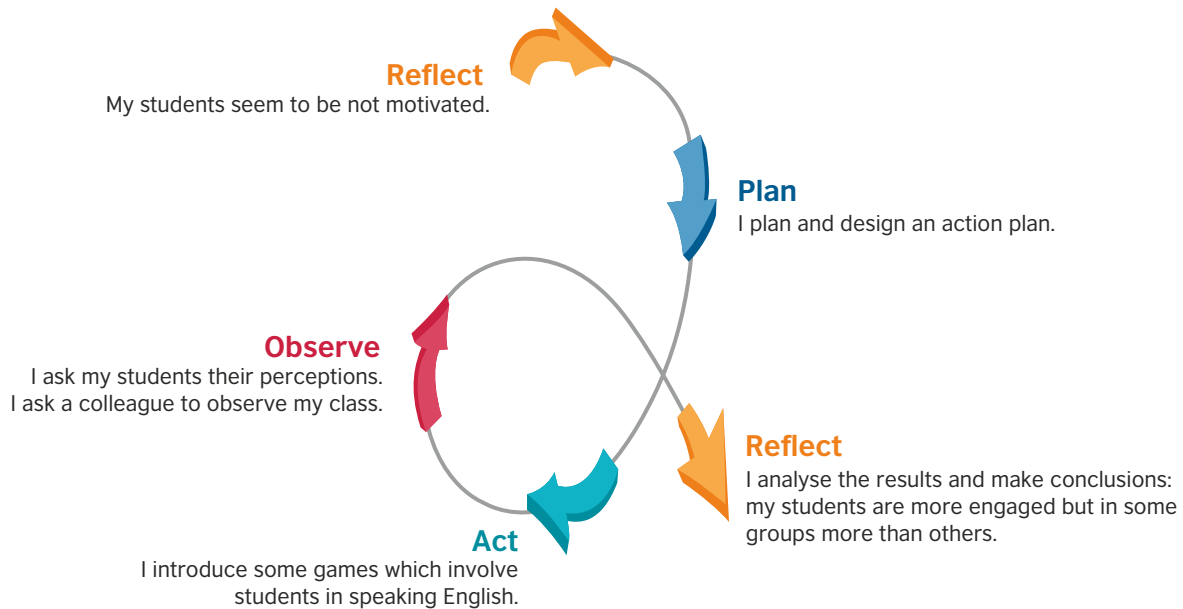
Figure 1: Action research

This is how action research may tend to be presented and carried out. However, exploring the nature of a situation before attempting to change it is usually a good idea, and is also illustrated, in Figure 2.

Reflect
I analyse the results and make conclusions: my
students want more speaking activities in class.

Reflect
My students seem to be not motivated.

Observe
I ask my students their perceptions.
I ask a colleague to observe my class.

Plan
I plan ways to collect data about
this issue.

Plan
I plan and design an action plan.

Observe
I ask my students their perceptions.
I ask a colleague to observe my class.

Reflect
I analyse the results and make conclusions: my
students are more engaged but in some groups
more than others.

Act
I introduce some games which involve
students in speaking English.

Figure 2: Exploratory action research

Task 1.6

What are some advantages of including an exploratory phase, as represented in the top half of Figure 2?

_____

_____

_____

_____

See p. 73 in the Answer key for some suggested answers.

For more on exploratory action research, see *A Handbook for Exploratory Action Research* (http://bit.ly/handbook-EAR) – henceforth, *Handbook for EAR* – in particular, Unit 3.

1.5 What are the stages of an (exploratory) action research project?

Task 1.7

Here are some things a teacher did in a project intended to investigate and try to improve students' writing. Number the actions to put them in order from 1 to 7.

___ A. Identify *Students misunderstand what they have to do for homework* as a problem.

___ B. Keep a record of which pieces of homework students do/don't complete.

___ C. Plan a new kind of homework or different explanations of homework.

___ D. Audio-record parts of lessons where I explain homework.

___ E. Give a questionnaire to students asking them for their opinions of the homework I've been explaining.

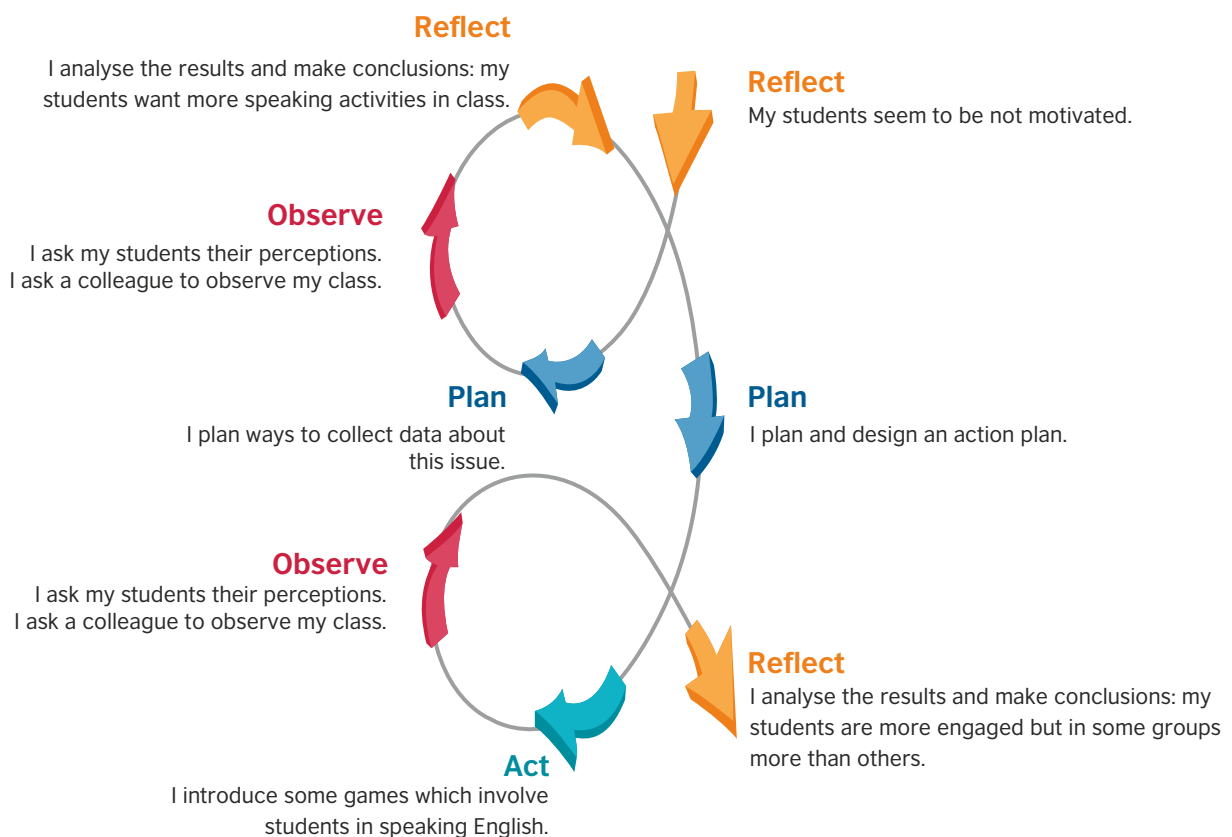___ F. Analyse all the information obtained and make conclusions.

___ G. Decide on research questions to help understand the issue.

Check your answers on p. 73 in the Answer key.

Task 1.8

Now group the actions into three stages, e.g. A is part of the first stage, *Reflect and plan to explore*. What other actions are part of this stage? Write the letters for them next to 'A' in the column on the right. How could you label the next two stages for teachers' benefit? What actions correspond to these two stages?

Stage	Actions
Reflect and plan to explore	A,

What might the teacher do after the last action (number 7) above, to complete their project?

Check your answers on p. 73.

Task 1.9

Would you prefer to use spiral diagrams like the ones in Figures 1 and 2 for explaining the stages of an (exploratory) action research project to teachers or a steps diagram like the one in Figure 3? What are the advantages/disadvantages of each form of presentation?

Compare your response to this question with that in the Answer key, on p. 73.

You can read more in Unit 4 about how to plan an initial information or orientation session for teachers.

A. Plan to explore
B. Explore
C. Analyse and reflect
exploration

1. Plan (to change)
2. Act
3. Observe
4. Reflect
?
action
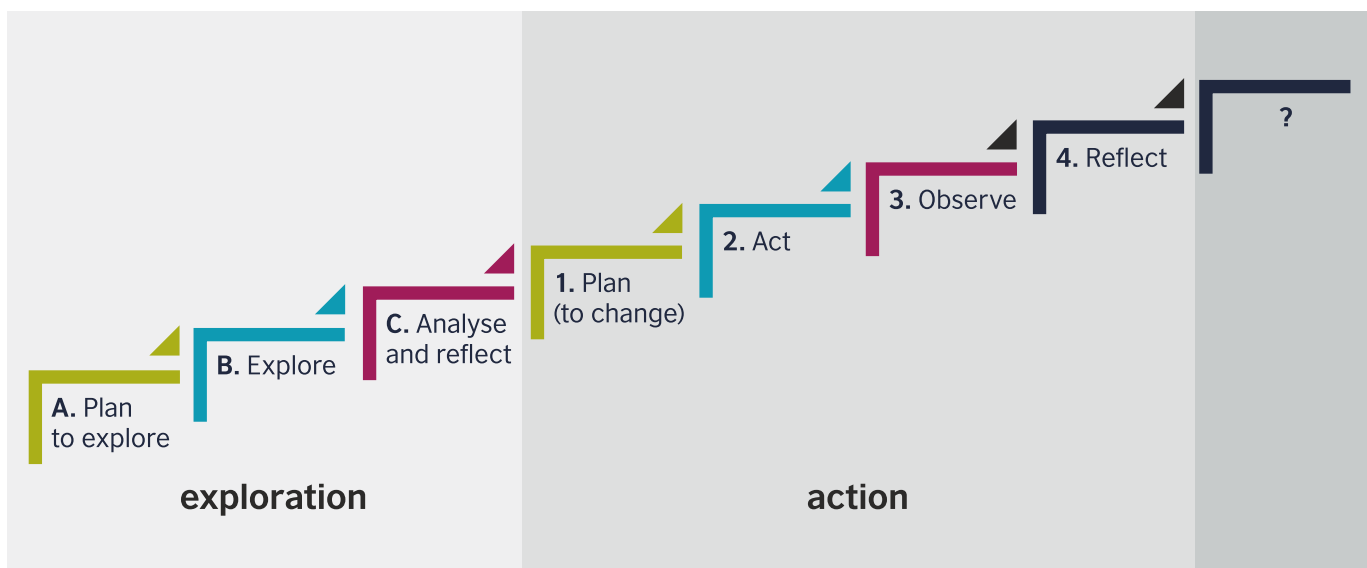
Figure 3: Steps of Exploratory Action Research (source: A Handbook for Exploratory Action Research*, p. 25)*

Mentors' experience

In this video, Richard Smith and Krishna Dixit talk about what teacher-research is and how it can help teachers.

For further ideas about how to present teacher-research, action research and/or exploratory action research to teachers, here are some resources which are freely available online:

- *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo. London: British Council, 2018.

- '*Getting started with Action Research*' webinar by Emily Edwards for IATEFL Research SIG, January 2018.

- '*An introduction to Exploratory Action Research*' webinar by Richard Smith for UNRWA teachers in Gaza, September 2018.

One book which provides examples of teachers doing (exploratory) action research is:

- *Champion Teachers: Stories of Exploratory Action Research*, edited by Paula Rebolledo, Richard Smith and Deborah Bullock. London: British Council, 2016.

- There are other books of teachers' stories on the IATEFL Research SIG website.

- There is a good list of further open access resources on the International Festival of Teacher-research in ELT website.

2. What does mentoring involve?

Key points

- mentoring is different from simply advising or telling, and mainly involves supporting someone to find their own way

- you should aim to establish a trusting and caring, relatively 'equal'/non-hierarchical relationship, where you learn from one another

- careful listening, different kinds of questioning and paraphrasing or 'reflecting back' are all necessary

- co-mentoring (mentoring with another person) can be a useful and enriching process

This unit is about mentoring in general, whereas Unit 3 provides specific information and guidance about mentoring teacher-research.

2.1 What is mentoring?

Mentoring can be defined simply as sharing knowledge, skills and experience in order to encourage and empower another person. In contexts of teacher development, this process involves enhancing teachers' autonomy to develop for themselves, increasing their ability and willingness to take control of their own learning rather than judging or directly advising them or telling them all the answers. In other words, mentoring for teacher development involves placing teachers at the centre, viewing them as people who can reflect on and address issues for themselves, as 'agents of change' for the improvement of teaching and learning. These days, in many contexts, novice teachers are often assigned a mentor, who is expected to ease their transition from a training to a real teaching situation. However, in the absence of training, many such mentors may engage in judging and 'telling' and not necessarily very much 'empowering'.

Your thoughts

Reflect on any experiences you have had of mentoring or being mentored. To what extent were these empowering experiences for yourself or the person you were mentoring? Why were or weren't they empowering?

_____

_____

_____

From your perspective, how is mentoring different from 'advising', 'telling', 'teaching' or 'training'?

_____

_____

_____

Compare your answer with that in the box above right.

Mentoring – according to the definition adopted here – is not the same thing as simply 'advising', which involves telling someone what you think they should do. Although it is quite natural to want to try to help others by giving them direct advice, this is not necessarily empowering. Instead of automatically providing advice, you need to focus on what the teacher thinks and attempt to help them discover a path for themselves, rather like a counsellor might do. As we shall see, this particularly involves listening, questioning and encouraging. You are likely to have partially developed these skills already in the course of some of your teaching or training work. However, mentoring skills generally need to be consciously developed further, via reflection on ongoing experience as well as the kind of reflective work encouraged in this book.

Of course, apart from mentoring in the way outlined here, there are occasions when you will need to be 'directive' – for example, deciding on an overall schedule and encouraging teachers to meet you to reflect on their current situation or work (cf. Unit 5), even when they appear reluctant. Also, part of your role will be to 'instruct' by providing information, at the appropriate times, which will help teachers to decide on what to do.

2.2 General qualities of mentors

A mentor aims to empower teachers to identify their own issues and pathway – not by telling them what to do but by questioning, listening, paraphrasing and suggesting different choices. Perhaps you have already developed ways of eliciting colleagues', students', friends' or family members' problems and opinions, and of providing them with non-judgemental, non-directive guidance on this basis – so you may already have some of the qualities and skills of a good mentor. If not, you may find that developing as a mentor will transfer positively to your work with students and more broadly to your life – at least, this is what some teachers who become teacher-research mentors have said.

Task 2.1

On the next page is a list of general mentoring qualities and skills. Put an asterisk (*) in the left-hand column next to the five qualities or skills that you think are most important for a good mentor. To what extent do you think you possess these qualities and skills already? Circle 'A' for the ones that you think represent your best qualities, 'B' for 'average' attainment or 'C' for those that you think require most improvement. Later, you can come back and see whether you've developed in these and the other areas!

Most important? [*]	Mentoring quality or skill	Self-assessment [A, B or C?]		
	I can provide constructive, non-judgemental feedback.	A	B	C
	I am willing to share knowledge, skills and experience.	A	B	C
	I show a positive attitude.	A	B	C
	I show enthusiasm.	A	B	C
	I show interest in others.	A	B	C
	I listen well (e.g. without interrupting).	A	B	C
	I have experience in the activity being mentored (teacher-research, in this case).	A	B	C
	I am expert in the activity being mentored.	A	B	C
	I have experience in the context being mentored for.	A	B	C
	I am willing to put aside my own beliefs and/or prejudices.	A	B	C
	I am interested in others' development.	A	B	C
	I feel responsible for others.	A	B	C
	I am able to imagine another person's difficulties.	A	B	C
	I am good at setting realistic goals.	A	B	C
	I am good at motivating others.	A	B	C
	I adapt my communication style to the listener's personality.	A	B	C
	I am consistent in communicating with others.	A	B	C
	I am clear in communicating with others.	A	B	C
	I am good at showing/demonstrating to others what to do.	A	B	C

If you're feeling brave, you could ask someone you know well and whom you trust (e.g. a family member) whether they think your self-assessment above is fair. To develop further, during and/or after the mentoring process, you could even ask your teachers to assess you in these areas – again, this requires some bravery! At least revisit this checklist occasionally to self-assess as you gain more experience.

2.3 Trust and mutual respect

The affective dimension – building trust and mutual respect – is a very important basis for mentoring. How can you develop a warm, trusting and respectful relationship with the teacher(s) you will be mentoring? The steps below might help you.

Your thoughts

1. Think of a person you have a warm, trusting and respectful relationship with – it may be a colleague, a family member, a friend or even a previous mentor of your own.

_____

2. What is that trust and mutual respect built on? What do you think are the three most important ingredients to a trusting relationship?

_____

_____

3. Now think about how you feel in a trusting relationship. Can you think of three adjectives to describe your feelings?

_____

_____

4. So, how would you seek to build similar feelings in yourself and in the teachers you mentor?

_____

_____

For more on how to build trust and mutual respect, see Unit 4.

2.4 Ways of communicating

Apart from listening actively (attentively, encouragingly), there are certain ways of communicating as a mentor which it will be important for you to try to develop. These include:

Code for the task	Way of communicating
[E]	Eliciting (getting someone to talk)
[Q-C]	Questioning – asking for clarification
[Q-Pr]	Questioning – probing (asking for deeper meaning)
[Para.]	Paraphrasing (also known as 'reflecting back')
[A]	Presenting alternatives
[S]	Structuring/Guiding to action

Task 2.2

Read the following dialogue between a mentor and a teacher about problems that the teacher is facing in her classroom. Place a code next to each of the mentor's questions in the text below. The first two questions have been done for you.

Teacher: I don't feel as if I have any control over the class.

Mentor: Could you give me an example? Is there something in particular you don't feel you have control over? [E]

Teacher: Well, I suppose what I'm most concerned about is that I just can't seem to get the students to listen to me.

Mentor: When you say they don't listen to you, what do you mean? That they never listen to you or at particular times? [Q-C]

Teacher: Mostly when they should, otherwise they don't know what to do.

Mentor: You mean when you give instructions?

Teacher: Yes, particularly when I give instructions. I end up repeating myself over and over, and shouting sometimes.

Mentor: Oh, I see. Do other teachers teach this group?

Teacher: Yes.

Mentor: And do they have the same problem?

Teacher: Oh, I don't know.

Mentor: Perhaps you could ask them, and also find out what they do?

Teacher: I could do that – good idea.

Mentor: And have you thought about how you give instructions?

Teacher: What do you mean how?

Mentor: For example, where you are in the room, the words you use, and so on?

Teacher: Not really.

Mentor: Do you think it could help to look more closely at this?

Teacher: I think so – I haven't really thought about it. I suppose I just thought if I shouted, they'd pay more attention.

There are further tasks in later units of the book (8.2, 10.4, 11.1) to develop this way of talking to teachers as a mentor at particular points in the teacher-research process.

Compare your answers with those on pp. 73-74.

2.5 What's valuable about co-mentoring and how can it work?

Mentoring a group of teachers together with another person (a 'co-mentor') can be very beneficial, although there are also things to be careful about.

The major advantage of co-mentoring is that ongoing discussion with a co-mentor is very useful for developing your teacher-research mentoring skills via reflective discussion (cf. Unit 6). The burden can be shared in what is likely to be a new and sometimes anxious journey for you as you both develop a new identity as teacher-research mentor.

On the other hand, here is a quotation from one member of a team of three mentors:

> [One] challenge was our own understanding of mentoring. It was our first experience in co-mentoring and there were a few technical snags, like who will initiate the response to teachers' queries and what to respond. Sometimes, we reflected conflicting messages to teachers. So the lesson learned is that first and foremost mentors should develop a shared philosophy of mentoring in co-mentoring situations.

These mentors also shared the following advice for co-mentoring:

- Negotiate clear 'rules' as to which mentor should or shouldn't do what.

- Agree a way of regularly communicating together.

- Share attention to the teachers you are working with, don't divide the teachers between you (this will enable you and your co-mentor(s) to discuss and reflect on any issues with a better shared understanding).

Is there anybody you would like to invite to be a co-mentor with you? If so, you could go through the rest of this book together.

Mentors' experience

Chandeep Marwah talks about the importance of motivating, supporting and building trust, and Krishna Dixit talks about why agreeing on a shared understanding of classroom research is important when co-mentoring.

Further information

Here are some freely available online sources containing further information about mentoring in general:

- *A Learning Guide for Teacher Mentors*. State Government Victoria, East Melbourne. Melbourne: State of Victoria (Department of Education and Early Childhood Development), 2010.

- 'Mentoring teachers: an interview with Angi Malderez' by Loreto Aliaga. *Bellaterra Journal of Teaching & Learning Language & Literature* 11/3: 109–122, 2018.

- 'The Terrors of Judgementoring' – lecture by Andrew Hobson, 7 December 2016.

3. Mentoring teacher-research

Key points

- mentoring aims in general to encourage self-development; this is also a major benefit/outcome of teacher-research
- a mentor can help maintain a teacher's motivation during the teacher-research process
- a mentor can usefully provide scaffolding at particularly challenging points in the teacher-research process

Why is this topic important?

With regard to teacher-research, a mentor is usually needed to help teachers become more conscious and systematic in their reflections and to guide them to engage in research, thereby transitioning from reflective practitioner to teacher-researcher. Mentoring is needed both to motivate and to scaffold would-be teacher-researchers through particularly challenging stages and to ensure the overall success of their projects.

Both teacher-research and effective mentoring can, separately, be very good means of engaging and enhancing teachers' autonomy and agency (cf. Units 1 and 2). So mentoring plus teacher-research is potentially a very strong combination for setting teachers on the road to greater autonomy and agency in relation to their own professional development – of course, with an overall goal of improving students' learning experiences in the classroom.

3.1 What can mentors of teacher-research achieve?

Teachers often reflect on why things are working or not working in their classrooms, making small or large changes to their teaching based on what they experience. However, this process tends to be informal and to some extent unconscious. A mentor can help teachers make this process more conscious, more systematic and therefore potentially more effective.

Even if they are already very reflective, teachers may not often collect data (in other words, gather evidence) to help them reflect on the issues confronting them, although of course some teachers do so, for example by asking students for feedback regularly or inviting a colleague to observe their teaching. A mentor can motivate and guide teachers to develop a focus and specific questions, gather evidence and thus engage in research, not just engage in reflection (cf. 1.2), to develop their practice. Finally, a mentor can also encourage and suggest ways for teachers to document and share what they find, to the benefit of teachers themselves and the wider teaching community.

In sum, whether or not teachers already engage in reflection and/or data collection in relation to their teaching, mentors can help them make the following career-changing transition:

From this:

- Teachers thinking in a relatively informal and possibly unconscious way about the classroom.

To this:

- Teachers being equipped to systematically explore, analyse and thereby understand what is going on in the classroom.

- Teachers being able to make evidence-informed changes to improve the quality of students' learning.

3.2 Encouraging teachers to do teacher-research

Ideally, teacher-research is teacher-initiated – i.e. it arises from the concerns and issues facing teachers themselves – but it may need to be encouraged (motivated) as well as structured and supported (scaffolded) by a mentor.

Let's consider here, specifically, the 'motivating' side of a mentor's role. Partly, this relates to generating initial interest and enthusiasm, which you can attempt to do in an orientation session (cf. Unit 4), where you can address some of the worries teachers may have, as well as sharing potential positive benefits of teacher-research (cf.1.3).

Something else you can provide for teachers who are anxious about the overall process is a clear schedule with deadlines and a definite, realistic end goal (cf. Unit 5). Conversely, vagueness or ambiguity about what to expect can be quite stressful and demotivating for some teachers. As with any very new experience, being told clearly what is expected can help reduce stress.

How, though, can you maintain teachers' motivation during potentially difficult stages of the teacher-research process? As reported by previous mentors, 'maintaining motivation' was one of the biggest difficulties they faced:

- 'The biggest challenge for me was to keep the teachers motivated. As administrators didn't understand the value of such work, the teachers got frustrated.'

- 'As there is no incentive, no encouragement, no support for such work in our context, it was too difficult to keep the teachers working. I always kept talking about the value of excellence and pleasure of research.'

- 'One teacher dropped out and I couldn't do anything about it.'

- Motivating and handholding at regular intervals was a major challenge for me.'

Providing ongoing encouragement throughout the process of research is one thing mentors of teacher-researchers may need to do, especially in some individual cases. This can be achieved via regular meetings and ongoing explicit encouragement, praise and pep-talks (see also 2.3 and 4.3 on building rapport and trust). You can also attempt to predict moments of crisis and reassure teachers that you will 'be there' for them particularly at those points.

In general, teachers will respond well to actions on your part which recognise their competence (sense of 'self-efficacy'), relatedness to others (sense of being cared for or cared about by others, including you) and autonomy (experience of being in control as opposed to being controlled by others). Conversely, demotivation can result from there being no or little recognition of teachers' own competence, relatedness and autonomy.

Your thoughts

Here are some statements from teachers in relation to particular difficulties they are facing. Think about what you could do or say in each case to motivate these teachers. You can find good ideas via the cross-referencing links to other units in this book.

I still haven't found out what to research.	(See Unit 7)
I can't find enough time to make a questionnaire, and classes break up for a holiday in two weeks.	(See Unit 9)
I don't really understand what I'm supposed to be doing with the data I've gathered.	(See Unit 10)
I'm stressed by the thought that I'll have to write a research report at the end.	(See Unit 12)

3.3 Scaffolding teacher-research

Depending on the extent to which they are already familiar with informal or formal kinds of reflection and data collection, teachers may need more or less scaffolding. This is an important word to bear in mind – it refers to the kind of support that is kept in place only as much or as long as is necessary, and is gradually taken away with the aim of developing someone else's autonomy to take decisions for themselves (think, for example, of helping someone to ride a bicycle and gradually letting go so that the rider takes more and more control).

While the process of teacher-research can often be an enjoyable one, the guidance in this handbook is mainly based on what teachers have said they find most challenging in the teacher-research process. The most difficult points seem to be:

- deciding on a topic (cf. Unit 7)
- formulating research questions (cf. Unit 8)
- deciding on methods (cf. Unit 9)
- data analysis (cf. Unit 10)
- deciding on a way forward (a plan for action, in action research) (cf. Unit 11)
- deciding how to present/'write up' findings (cf. Unit 12).

A mentor can provide useful scaffolding at each point. As can be seen here, later units in this handbook are devoted to how to provide scaffolding at each of these particular stages.

Mentors' experience

Esther Gloria Sahu talks about the need to address teachers' fears that classroom research will involve extra work at school, and Krishna Dixit discusses how not supporting too much can be as important as being able to support with ideas, concepts, tools and materials.

Further information

The following three reflective reports by mentors of teacher-research in Turkey provide useful insights and are freely available online:

- 'Sustaining professional development of ELT practitioners' by Cemile Doğan, in K. Dikilitaş, M. Wyatt, J. Hanks and D. Bullock (eds), *Teachers Engaging in Research* (pp. 79–87). Faversham: IATEFL, 2016.

- 'What I've learned as an action research mentor: some highlights' by Seden Eraldemir Tuyan, in A. Burns, K. Dikilitaş, R. Smith and M. Wyatt (eds), *Developing Insights into Teacher Research* (pp. 39–52). Faversham: IATEFL, 2017.

- 'Insights into the process of mentoring action research by teachers of young learners' by Yasemin Kırkgöz, in A. Burns, K. Dikilitaş, R. Smith and M. Wyatt (eds), *Developing Insights into Teacher Research* (pp. 19–28). Faversham: IATEFL, 2017.

4. How to get started

Key points

- it's important to think carefully about who you'll be mentoring, and why
- there's a need to establish accurate expectations
- building trust, rapport and confidence is important
- it's useful to organise an initial workshop to bring a group together

4.1 Who will you mentor?

Here are some possible mentoring scenarios:

A   You are available/willing to support others and are able to choose who to mentor (assuming you will work with more than one).

B   You are invited by a school, teacher association or other body to (co-)mentor a group of teacher-researchers.

C   The job of mentoring and the choice of who you mentor are in some way 'imposed' on you.

D   You are approached by a teacher or teachers who want you to mentor them.

In situation A, the task below will help you consider who to invite. In situations B to D, even though you may have little choice about who you will be mentoring, it's still useful to reflect on what they, and you, hope to get out of the mentoring/teacher-research experience, and to see if your expectations can coincide (see 4.2).

Your thoughts

Here are some aspects to consider, as suggested by previous mentors:

Are the mentors that you might work with (or will work with):

eager to learn	not so eager to learn?
experienced in .... professional development	unfamiliar with professional development?
working in your .... institution	working elsewhere?
senior teachers	junior teachers?
separate individuals	in friendship pairs or groups?
with previous .... experience of research	without previous experience of research?

Task 4.1

Which end of each continuum above do you think previous mentors favoured?

Check in the Answer key on p. 74, and – if you're free to select who to mentor – consider the advice that previous mentors have given there.

For a good foundation, the teachers you're working with should be:

- contactable – so, if you're planning to work with teachers from remote areas, make sure there are adequate communication channels (see 5.3)

- available – ready to spare some time regularly

- active – are currently teaching and have a class of learners they can research with

- professional – motivated to engage in their own professional development

- reflective – willing to think about their teaching.

4.2 Establishing accurate expectations

If you haven't already got a teacher or group of teachers in mind for mentoring, you may wish to plan and advertise a 'taster' session where you introduce teacher-research and the programme of activity you want to establish. Such a meeting is an opportunity for you, too, to decide who you would like to work with and encourage those people, in particular, to join in – after all, getting on with the teachers you're working with on a personal level is important.

Alternatively, a first meeting may be arranged for participants who have already been selected. In this case, the session is an opportunity for you to verify the selection, and to see whether participants are still interested in taking part or seem reluctant. If the latter, this can be an opportunity for them to leave the group and/or for you to suggest that they should reconsider their participation, as appropriate.

Task 4.2

Here is what one mentor has written about the first meeting, in the light of his experience. To what extent do you agree or disagree with him?

Orient all the teachers regarding the process of the project. Also let them all be clear that they have to work in a timely fashion, have to attend all the workshops and accomplish all the tasks within the deadline. If they seem to hesitate to accomplish the tasks provided in a timely way, consider replacing them with other participants at the beginning, to avoid future problems.

Likewise, I would make the teachers clear about the effort and time they have to manage for this project. Also, I would make them clear that this project is not for any financial achievement, but is a professional enhancement opportunity.

I agree that _____

_____

I disagree that _____

_____

In the Answer key on p. 74 there is another mentor's response. See if it is the same as or different from your own response.

It is important that your and teachers' expectations coincide, although there will be a lot of learning and adjustment/negotiation of expectations as you go on through the process, and not everything can be fully established at the beginning.

Therefore, at an initial face-to-face information/ orientation session with a new group or teacher (whether 'in person' or as a webinar) and in follow-up individual sessions, try to ensure that everyone understands what will be involved in the teacher-research process (see Units 3, 5) and what the relationship with you will be like (see 4.3, 4.4).

4.3 Building trust and rapport

Building trust is an important part of the initial stages of mentoring (see 2.3); in fact, it's useful to consider ways in which relationship-building can be initiated and maintained throughout the teacher-research project.

Teacher-researchers will trust you more if:

- you are honest and open with them
- you do not try to assert superiority over them
- they feel that you understand – or are trying to understand – them
- you show a sense of responsibility towards them
- they feel valued by you
- they feel it's safe to share doubts, worries, areas for self-development, etc. with you
- they feel good about themselves when – and after – they talk to you
- they have freedom to make choices.

If these needs are met (though of course it won't be possible to meet all of them all of the time), teachers will feel relatively comfortable to try out new things without fear of being criticised, and their confidence (see 4.4) will increase.

Task 4.3

What practical steps could you take to bring about the following in your relationship with teacher-researchers you are or will be mentoring?

1. A sense of mutual respect (shared understanding and responsibility)

   Example answer: 'Establish clear expectations.'

2. A sense of equality

   _____

   _____

3. Honesty

   _____

   _____

4. Feeling valued

   _____

   _____

5. Feeling supported

   _____

   _____

You can find some suggestions on p. 74 in the Answer key.

4.4 Building confidence

In addition to relationship-building, a mentor needs to consider ways of building confidence in teachers with little or no experience of doing research. This can involve helping them to recognise that they are already experts in their own classrooms. Think for a moment about how you could help teachers to recognise this. What practical activities could you engage them in to demonstrate the value of their own, and their colleagues', existing expertise?

At an initial workshop you can do practical activities to gradually build teachers' confidence. For example, you can invite teachers to share recent successful teaching experiences related to their teaching contexts. Rather than immediately focusing on areas for development ('weaknesses') in their teaching, teachers can be encouraged to recall and share recent successes or report on what they perceive to be their general strengths. This can be an effective way of building teacher efficacy or confidence as a necessary initial foundation, at the same time as being a good way of 'breaking the ice' in the group.

Task 4.4

Can you think of any other practical confidence-building activities for an initial session?

_____

_____

_____

_____

_____

_____

See p. 75 in the Answer key for some possible activities.

4.5 Planning an initial orientation session

Here are some of the things you could attempt to do during an initial workshop:

- Demystify research and motivate teachers to participate. Consider:

  - What is research? / What images do you have of research?

  - What is teacher-research? / Why is it useful?

  - Examples of teacher-research.

  Parts of the above content could be conveyed via pre-reading material and incorporated into pre-session tasks. You could use some of the tasks in Unit 1 of this handbook or in Units 1 to 3 of _A Handbook for Exploratory Action Research_ (British Council, 2018). It might be useful to have teachers read about some examples of teacher-research before the workshop, e.g. from _Champion Teachers: Stories of Exploratory Action Research_ (British Council, 2016).

- Elicit/predict and address worries and objections (see Unit 3).

- Build trust and confidence (see 4.3 and 4.4 above).

- Introduce a typical timeline and stages for a classroom-based exploratory action research project (see Unit 5).

Task 4.5

Think of one interactive workshop activity that you could use to achieve each of the following aims:

- Demystify research

  _____

  _____

- Motivate teachers to participate

  _____

  _____

- Elicit and address worries and objections

  _____

  _____

- Introduce a timeline and stages for a classroom-based exploratory action research project

  _____

  _____

See p. 75 in the Answer key for some possible activities.

Task 4.6

Now plan your own initial session!

> ### Mentors' experience
>
> Suman Chawla and Usha Malhan talk about how spending time initially on orientation and building trust are crucial.

5. Planning a timeline, communications and record-keeping

Key points

- you can provide structure via an agreed overall timeline with milestones and deadlines
- managing time can be difficult – try to make things easier through predicting and planning
- establish effective channels of communication and schedule meetings in advance
- keeping records of meetings and of progress will help you and teachers keep on track

Why is this topic important?

Mentors of teacher-research identify time management and communication as two major challenges, and yet these are key to the success of the teacher-research mentoring process. For this reason, predicting and planning are essential, including agreeing an overall timeline, scheduling meetings and agreeing on modes of communication. Putting these in place will provide a solid foundation for mentoring teacher-research.

5.1 Providing structure via a shared timeline

After you have given participants an idea of what teacher-research involves and begun to establish trust, confidence and general expectations regarding the teacher-research and mentoring process (see Unit 4), it's important to try to provide as clear a structure as you can by means of an overall month-by-month and/or week-by-week time plan. Doing so involves deciding on the stages of teacher-research you expect teachers to move through (see 1.4, 1.5), predicting how long each stage will take – based on what you know of the participants and their teaching situations – and imagining at what points teachers will need different kinds of support (e.g. workshop-style or one-to-one).

The entire process from initial meeting to final reporting can be difficult to imagine when you haven't previously mentored teacher-researchers. Consulting the six units in Part 2 of this book will provide you with further insights into different teacher-research stages and a better ability to predict the lengths of time needed for each stage as well as the points when teachers will need most support. It is useful, also, to refer to memories you may have of doing teacher-research yourself, taking account of any differences with the context of the teachers you'll be working with.

If you have a clear endpoint in mind and can communicate the (approximate) date of this, along with information on what kind(s) of reporting will be expected (e.g. oral or written: see Unit 12), this can provide a sense of direction, and you can plan approximate lengths of stages backwards from there. However, you may prefer to keep the endpoint and forms of reporting undetermined – for example, in order to remain relatively open to negotiation with your teachers and/or responsive to their needs as these arise.

Task 5.1

On the next two pages there is a sample timeline, based on an exploratory action research model (see Unit 1). How many weeks do you think teachers in your context would require for each stage? Write your answers in the left-hand column (under 'How many weeks/months?'). Later (further below), you will be invited to complete the 'Types of meeting' column – don't complete this yet.

How many weeks/months?	Research stage	Types of meeting
1._____ weeks/months	Orientation	Workshop
	Narrowing topic	Individual meetings ('indiv. mtgs')
	Refining research questions	
	Planning data collection	Webinar on data-collection methods
	Planning exploration	Follow-up indiv. mtgs (phone)

By now:
• teachers should be ready to start their exploratory research.

2._____ weeks/months	Exploration	_____ _____

By now:
• all teachers should have been engaging in exploratory research.

3._____ weeks/months	Data analysis	_____ _____
	Planning further exploration / action for change	_____ _____

By now:
• all teachers should have completed their exploratory research
• all teachers should know how to analyse their data
• teachers should have analysed data and planned next steps (action for change or further exploration).

How many weeks/months?	Research stage	Types of meeting
4. ____ weeks/months	Implementing further exploration / action for change	
	Data analysis	
	Reflection	
By now: • all teachers should have completed their second phase of research (further exploratory research or action for change) • teachers should have completed evaluation of this second phase, including analysing data and reflecting • you will have planned an event or events for sharing their findings.		
5. ____ weeks/months	Sharing in the group and poster preparation	
	Public presentation	
6. ____ weeks/months	National event	
	Writing reports	

Compare your answers for 'How many weeks/months?' with the suggestion in the Answer key on p. 75, but remember there is no one correct answer – how long you need for the different stages depends on conditions in your own context.

Task 5.2

What timeline are you actually envisaging for your teacher(s)? Write down likely start and end dates for your mentoring project and plan out approximate lengths of time for the different stages you envisage teachers going through.

The timeline you create – however rough it is – can be shared with teachers at the beginning of the overall process. This will provide them with a sense of knowing where they are going – and hence a feeling of security. It is a good idea to be flexible, to keep the timeline open for discussion and to renegotiate it when plans are not achieved or when unexpected events interfere. However, even if they are not always met, it is important for there to be deadlines and milestones towards which you should encourage teachers to feel a sense of commitment.

5.2 Managing your time and supporting teachers to manage theirs

Time management is important – if time is not well managed, problems can arise, and this can have a negative impact on everyone involved. The first stage is to make an overall time plan (5.1 above). It is also useful to set deadlines for completion of different pieces of work (overall plan for exploration, data analysis, etc.) – you can incorporate these into your timeline.

Don't just wait for teachers to come to you when they need help but be proactive! Arrange meetings with them in advance, providing them with structure in this way as well as by agreeing an overall timeline and deadlines. Doing this – that is, planning clear meeting times in

advance – will also help you avoid problems which can arise if you make yourself available at all times. Consider your own boundaries – if there are times when you don't mind being contacted 'out of the blue', make it clear that outside these times you will not be available.

In the first instance, good time management means setting a good example yourself. You should keep to pre-arranged meeting times, try not to rearrange too many meetings and keep promises generally.

Frustrations connected with lack of time and/or time management (one's own as a mentor as well as the problems faced by teachers) are among the most common problems reported by mentors. For example:

> As with teachers, our main challenge was time management. It was very difficult for us to address every concern on time.

> Another challenge was that teachers were not allowed leave for their research, and we were not given leave either. We used our earned leaves to cope with this.

> Meeting deadlines as mentor and getting the teachers to meet the deadlines were a struggle.

> Balancing my job and project commitment was the greatest difficulty.

Being aware that lack of time is a challenge is the first step. The second step is to attempt to mitigate this through effectively predicting and planning. To help you and your teachers with this, here are some questions to ask yourself:

Task 5.3

Fill out answers to the following:

How many teachers will you be working with?	
What do you think will be the normal frequency of individual interactions with you? (daily, weekly, fortnightly, monthly)	
How much time will this take from your life, and will this be feasible?	
How frequently do you plan to bring your teacher-researchers together?	
At what times of day will you / will you not be able to communicate with teachers?	
Do you want to be open for communication without warning from teacher-researchers? If so, at what times?	

Of course, encouraging teachers to engage in good time management is just as important as managing your own time. You can ask them to reflect realistically on questions like those above in relation to their own commitments to teacher-research, compared with the other aspects of their lives which need attention. While 'lack of time' is a very frequently cited reason for teachers not to engage in or complete teacher-research, this can sometimes be mitigated by helping them reflect on and manage the time that is available.

5.3 Deciding on channels of communication

After time management, the second major area of challenge for mentors has often proved to be 'communication'. Here is what some mentors have said:

It was a bit of challenge to communicate with a few teachers.

Communicating with the teachers and making them understand what I wanted to convey were draining at times.

Initially lack of open communication was the biggest struggle for me.

The first, most basic, issue to consider in this area is how and when you will keep in touch with those you are mentoring.

Task 5.4

What are the modes of communication that will best suit your teachers? Try to find out and fill in the table below for teachers you are mentoring, with all the possible options. Also consider and highlight your own preferences. You can use this as a basis on which to negotiate meeting times and modalities with teachers, also taking account of your answers to Task 5.3 above.

	How often?	Best day/time of day?	Maximum duration each time?
Face-to-face (individual)			
Face-to-face (group)			
Videoconferencing (individual)			
Videoconferencing (group)			
Telephone			
Email (individual)			
Email (group)			
Text messaging (individual)			
Text messaging (group)			

Clearly, you should not forget to note down carefully all the phone numbers, email addresses, etc. that you will need for communicating with your teachers. It can also be useful to ask a group participant to create a text messaging or social media 'community', for free communication among group members and for general announcements.

Consider providing training/guidance with regard to videoconferencing or text messaging for those unfamiliar with these if you're going to be using them for group or individual communications. With regard to providing input, if it proves impossible to get teachers together physically at the same time in the same place for a workshop, consider offering webinars, using one of the online platforms that are freely available these days.

5.4 Making a communications plan

Communication at particular 'pressure points' is key to successful mentoring of teacher-research, so it is a good idea to schedule workshops or meetings in advance, where you can be sure to talk in person. In particular, it will probably be necessary to arrange individual meetings to discuss at least the following, one-to-one:

• clarifying research questions and research methods

• analysing data and considering further actions

• reviewing and reporting on findings.

Webinars and/or workshops for the whole group of teachers (assuming you are working with a group and not just with one individual teacher) can usefully be arranged as a foundation for individual meetings, for example on:

• matching research methods to research questions

• analysing and interpreting data, and planning action

• how to share findings

• actual sharing of findings (possibly, open to a wider public).

Here is some further advice about communication from mentors themselves:

> Be flexible about channels of communication – think of several means of communicating (in case one fails). The most important thing is to find a channel they're going to be comfortable with.

> Don't be dogmatic – communication needs to be something well integrated with teachers' own lives.

> Consider providing training/ guidance about how to use particular communication tools if you're going to be using a platform some teachers are unfamiliar with.

> Consider having a fixed time to meet.

> Be clear about how and when teachers can contact you (considering your own needs but being as open as possible).

All of the above also apply to communications between you and your co-mentor (if you have one) or with anybody who might be mentoring or otherwise helping you.

Task 5.5

Go back to the timeline in Task 5.1 and fill in the third column with appropriate modes of communication ('Types of meeting') to match the different stages. Number 1 has been done for you as an example. When you have finished, compare your answers with the suggestions in the Answer key on p. 76.

Task 5.6

Now do the same for your own timeline, which you began to sketch out in Task 5.2. What types of meeting/ communication will you attempt to engage in at different points?

5.5 Keeping records

For various reasons, it is useful to keep good records of your work with teachers. For one thing, you may need these records to tell others what you've been doing – because you have to, for example to write a report, or because you want to, for example to give a conference presentation. If you're working with a group of teachers, it may be difficult to remember what each of them is doing, and so each time you interact with them as individuals you can remind yourself by consulting your notes. Some mentors like to write a brief formal record of a meeting, e.g. what was discussed and agreements about action points, deadlines and date/time of next meeting. They may share this with the teacher concerned soon after the meeting so that the teacher also has a record and is clear about what they need to do before the next meeting; this can help teachers stay on track.

Regarding how to keep records, there are different options, for example:

• written journal in a notebook

• keeping different documents for different teachers on your computer

• audio-/video-recording your thoughts.

Such records can be very useful not only for monitoring and reporting purposes but also for ongoing reflection on/research into your practice (see Unit 6).

6. Reflecting on and researching your practice as a mentor

Key points

- it is useful to document your mentoring activities, including recording some of the interactions you have with teachers
- systematically reflecting on and evaluating your practice is important to your continuing professional development as a mentor
- engaging in research into your own mentoring practice sets a good example and can be of value to your own development, teacher-researchers' development and that of the wider professional community

Why is this topic important?

The activities that sustain teacher development apply equally to mentor development. Regularly reflecting on and evaluating your practice, and researching it, are keys to becoming an effective mentor. Additionally, being able to demonstrate to teacher-researchers that you too are serious about professional development sets a good example and earns you respect. Planning to carefully document your reflections will prove useful when evaluating your experiences and, if you later want to share what you have done and learned with a wider audience, you will have the records available to do so. Indeed, if you engage in systematic inquiry – collecting data about your practice according to specific questions in your mind – you can make an important contribution, as there has so far not been much research into teacher-research mentoring.

6.1 Documenting and reflecting on what you do

The records that you keep (see 5.5) can include reflections on the process of mentoring, which can in turn serve as a basis for self-improvement. For example, you can keep a mentoring diary (in written form or as an audio- or video-recorded account) and/or record dialogues you have with teachers in order to reflect on the language you are using and the extent to which you are or are not imposing your own views onto teachers.

Issues (problems or puzzles) will emerge from what you write or otherwise record about your teachers and about your mentoring, especially if you write or speak specifically about how your mentoring is going on an ongoing basis. As one way of addressing these concerns, speaking about them with somebody else (a friend, a co-mentor or somebody who can mentor you) can be very useful.

Your thoughts

Is there somebody who could act as a mentor or 'critical friend' to you as you go through the mentoring process? Ideally, this would be somebody who is themselves undergoing a mentoring experience, or who has recently been through such an experience. Write names of possible people here, then ask one of them if they would agree to help you:

_____

_____

_____

_____

_____

_____

_____

_____

If you can't find someone to discuss with on an ongoing basis, you can try to 'self-mentor', setting aside time to ask yourself questions about your feelings and concerns. Whether through writing down your thoughts, speaking them into a recording device or discussing with others, by reflecting on your practice you are likely to develop into a more effective mentor.

Task 6.1

Look at the timeline in the last unit, in Task 5.1. Identify points in the research process where self-reflection and self-evaluation of your mentoring could be useful to you. Note these points by placing a tick in the '?' column in the table below and write why you think it would be useful to reflect/self-evaluate at those particular points, in the right-hand column.

Research stage	✓?	Why reflect/self-evaluate at this stage?
1. Orientation Narrowing topic Refining research questions Planning data collection	_____ _____ _____ _____	_____ _____ _____ _____
2. Exploration	_____	_____ _____
3. Data analysis Planning further exploration / action for change	_____ _____	_____ _____ _____ _____
4. Implementing further exploration / action for change Data analysis Reflection	_____ _____ _____	_____ _____ _____ _____ _____ _____
5. Sharing in the group and poster preparation Public presentation	_____ _____	_____ _____ _____ _____
6. National event Writing reports	_____ _____	_____ _____ _____ _____

At these points you will find it helpful to have questions to reflect on. Here are some examples:

- What successes have I had during this stage?
- What were the reasons for the success?
- What can I learn from these experiences?
- What new skills/abilities have I developed?
- What challenges have I faced during this stage?
- What caused these challenges?

- How did I react/manage myself during the challenging times?
- How did I finally overcome them?
- What can I learn from these experiences?
- What disappointments have there been during this stage?
- Why was I disappointed?
- Do I need to change my expectations?

Disappointment is most often related to expectations. As a mentor, you have expectations of what teachers should be doing at different stages, but you also have expectations of how teachers should be behaving, especially towards you, their mentor. The mentor/teacher relationship may not turn out to be as you expected, so it is important to stop and reflect on this. A useful question to reflect on regularly throughout the process is:

- How do we differ? And how do those differences influence our attitudes to each other?

Your thoughts

Spend some time visualising your journey as a mentor, in advance. Knowing yourself and how you work and relate to others, imagine what might occur at each stage of the teacher-research process. On this basis, are there additional questions you may wish to reflect on at points along the way?

_____

_____

_____

_____

6.2 Developing as a mentor through research

Apart from reflecting (6.1 above), you should consider _researching_ your own practice as a mentor in order to become more effective, in other words exploring the situation by asking specific questions and gathering data, and maybe carrying out action research of your own. Some weeks into the mentoring experience, you could step back and relate to yourself the kinds of overall questions you have been asking teachers. See the table below.

It's a very good idea to 'walk the talk' in this way, in other words to research your own practice (with a view to improving it) in parallel with teachers researching their own classrooms. For one thing, teachers will appreciate your own attempts to develop via practitioner research. Although anything that you discover will be of use primarily to you and the teachers you're working with, it is likely also to be of interest and use to other mentors of teacher-research in your context or in other contexts. There are still rather few published reports of teacher-research mentoring practices, and by sharing any research you carry out, you will be able to contribute to this developing field (see 'Further information' at the end of Unit 3 for some of the few reports that have been published).

Question for you to consider	Notes for your answer
What are some successes/puzzles/problems you're experiencing as a mentor?	
What is a particularly important issue for you to do research about, from within your experience of mentoring?	
What do you still need to know in this particular area? / What are the associated research questions?	
How could you generate data to answer these questions during the remaining time you have with this/these teacher(s)?	
When will you gather this data?	

Mentors' experience

Sonika Gupta talks about how self-reflection, self-motivation and being open to feedback are important for developing as a mentor.

Part II
The process of teacher-research

7. Helping teachers to select a topic

Key points

- you can encourage teachers to recall recent successes, problems or puzzles – all of these can be appropriate starting points for teacher-research

- be aware that it can be difficult, even embarrassing, for teachers to identify and/or share areas of concern

- it can be hard for teachers to choose a particular topic among the many issues facing them – you can suggest criteria to help them with this process

Why is this topic important?

Teacher-research is usually motivated by an issue which arises in a teacher's own classroom experience. Therefore, it is important to encourage teachers to recall recent experiences, to enable them to select one for further investigation. Only one issue can be usefully focused upon in a particular cycle of teacher-research, so you need to support teachers to narrow down their focus. If their attention is divided among different issues, they may have to work harder than necessary but for only superficial gains in understanding.

7.1 Eliciting successes, problems and puzzles

As a starting point – whether in a workshop or in a one-to-one situation – ask teachers to remember, reflect on and share recent teaching experiences. This is a good way to encourage teachers to get to know one another, and for you to get to know them, as a basis for building rapport.

Asking teachers to share stories of recent success can be a particularly good confidence and trust-building exercise, especially in situations where teachers may feel reluctant to share challenges they are facing or to ask questions about things they are unsure about. As a mentor, be mindful that teachers are not always willing or able to reflect very deeply on the problems they are facing, at least not immediately. It can take time, trust-building and encouragement before they open up, and this may only occur in dialogue with you, especially as a result of the questions you might ask (see 2.4 and 8.2), more easily than within a wider group.

Here is an overview of starting points for teacher-research that you could present to teachers and which you could ask them to reflect about and share:

	Something that worked in your classroom and you would like to explore further [a success]
	Something that didn't work and you would like to improve [a problem]
	Something that you are unsure about in your students' learning and/or your teaching [a puzzle]

Teachers might wish to have some time to consider their responses to these prompts – for example, in preparation for a workshop or as follow-up – although it is usually quite possible for each teacher to generate a number of issues/areas of concern from these prompts within even a relatively brief initial workshop.

A different approach – for example, for teachers who are relatively new to reflecting openly on their teaching – could be to ask teachers to keep a reflective diary, noting down successes and areas of concern, and to analyse this for recurring issues.

You can paraphrase/reflect back and show appreciation of what you hear from teachers, and you may wish to ask questions, but be careful not to advise them regarding what they should or shouldn't have done in the situation they describe. If you are taking an exploratory action research approach, remind them – and other workshop participants too – that they will be exploring one of the situations more deeply, developing new understandings, but not trying to change anything immediately.

Your thoughts

Spend a few minutes reflecting on the three starting points yourself, in relation to your own recent teaching experience (a success, a problem, a puzzle).

Reflect by answering the following questions. If you are working through this handbook with a colleague, discuss the questions together.

1. What do you hear, see and feel in your remembered situations?

   _____

   _____

2. How difficult do you find it to remember?

   _____

   _____

3. Were you able to come up with possible issues/ areas of concern for research?

   _____

   _____

4. How would you feel about sharing these issues with others? *Or* How did you feel sharing these issues with your colleague?

   _____

   _____

7.2 Helping teachers to select one topic from among several in their mind

It is often the case that, following the above kind of activity, teachers find they have several areas of

concern or issues in mind. However, it is important for them to select just one issue as the topic for their research, so that they can go deeply into this without being distracted by other concerns.

One way to help teachers narrow down to one topic is to suggest criteria with which they can evaluate each possible issue. For example, ask them to predict whether researching each issue will be:

beneficial

- for students now and/or in the future
- for the teacher herself/himself
- for other teachers in the institution
- for their institution, in other ways
- for other teachers more widely

practicable

- possible to research
- researchable without relying too much on others
- researchable with the help of a colleague
- easy to research

interesting

- for the teacher
- for students
- for colleagues
- for other teachers more widely

important

- needing to be addressed sooner rather than later
- considered important by colleagues as well.

On this basis, teachers should be able to prioritise and decide on one topic to research. They can discuss their different topics according to the different criteria in a workshop and help each other to prioritise, and/or you can help by conversing with the teacher(s) yourself. Note that in teacher-research carried out for purposes of professional development, unlike in most relatively academic research, it isn't necessary for a teacher to consult what others have written, think about choosing an 'original' topic or build on what others have researched before – if the topic is beneficial, practicable, interesting and important for the teacher, that's good enough for teacher-research!

Task 7.1

To understand the suggested criteria for narrowing down topics better, consider the following possible research topics in relation to your own recent teaching. To what extent, for you, would researching each one be beneficial/practicable/interesting/important. Evaluate each topic, from your perspective, by completing the grid with X = no; ✓ = yes; ✓✓= very.

	Beneficial	Practicable	Interesting	Important
1. Getting students to work better in pairs or groups				
2. Getting students to understand and follow instructions				
3. Managing disruptive behaviour				
4. Improving homework performance				
5. Meeting needs in a multilevel class				
6. Getting parents more involved in their children's learning				

On this basis, if you had to research one of these topics, which one would you choose to research, and why?

7.3 Keeping track of progress

Task 7.2

If you are mentoring a teacher or a group of teachers now, fill in their name(s) in the table below (or one like it), and note down the one area of concern they each decide to investigate. We will build on this in following units.

Name of teacher	Issue/problem/puzzle

Your teachers' issues/problems/puzzles

The next stage in the teacher-research process – developing research questions (see Unit 8) – should come very soon after teachers have identified their focus. You can therefore already ask your teachers to begin thinking of questions which relate to their chosen issue/problem/puzzle.

Mentors' experience

Sonika Gupta talks about how taking time to explore a situation from different perspectives can help bring clarity.

Further information

For more information and tasks for teachers regarding how to decide on a research topic, see Chapter 4 ('What shall I explore – and what are my questions?') in *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018).

8. Guiding teachers to develop research questions

Key points

- forming research questions from a topic/issue is a challenging but crucial part of teacher-research, where a mentor can play an important role

- through conversation with a teacher, areas of uncertainty can emerge for a teacher, and these areas can become exploratory questions

- exploratory questions usually relate to (1) a teacher's own perceptions, (2) others' (e.g. students') perceptions and/or (3) teacher or student behaviour

- it's useful to think about whether research questions are 'effective'

Why is this topic important?

To be well focused and useful in relation to a particular issue, research needs to proceed from questions, not just from an issue or even aim. Questions can lead to answers and, thus, to new understandings or solutions. Helping teachers to develop suitable and effective research questions is important because these set the direction for everything that follows in the research process.

8.1 Why research questions – and what kind?

Helping teachers to form suitable research questions can be the most challenging, and at the same time the most rewarding, part of mentoring teachers to do teacher-research. After all, if a teacher can replace a problem with a question or questions about that situation, this can offer a positive way of addressing the situation – by starting off a search for answers and possible solutions.

So, converting a topic or 'issue' (see Unit 7) into questions is necessary if research is to proceed. For example, 'My students are not motivated' or 'Enhancing student motivation' is a topic or issue which can start to be researched if converted into the question 'How can I motivate my students?' or 'How can my students become more motivated?'

In this book, the assumption is made that the teachers you are working with will be interested in exploring (or you have persuaded them to explore) the nature of the current situation before planning a change. In other words, the assumption is made here that an overall question like 'How can my students become more motivated?' is best answered by first exploring, for example, what students say is demotivating or motivating for them and/or by observing their current behaviour, rather than by immediately introducing new ideas or techniques (see 1.4 for more on the distinction between action research and exploratory action research).

In the present unit, exploratory research questions will therefore be focused on. If you wish your teachers to proceed immediately to an action research phase – in other words, to try out a new action without exploring the current situation first – you should consult Unit 11, where research questions relating to new action are more specifically considered.

8.2 Identifying areas of uncertainty through mentoring dialogue

To help your teacher-researchers explore the nature of a situation thoroughly, you may need to show them that

there are aspects they cannot be sure about ('areas of uncertainty'), which they will need to research further. Teachers may have quite strong assumptions which can usefully be deconstructed with your help. For example, continuing with the above example (in 8.1), how does the teacher know that all students are demotivated in her class? There may be some, or even many, who are not. And does she know for sure what students find motivating or demotivating in her lessons?

Engaging teachers in a supportive but challenging one-to-one conversation is the best way to encourage them to reflect on their assumptions and to identify areas of uncertainty like these, which can lead to exploratory research questions.

Task 8.1

(a) Read the conversation below between a mentor and a teacher and consider how the mentor interacts with the teacher and leads her to identify areas of uncertainty. Can you find one example of each of the following ways of communicating (cf. 2.4)?

Code to write next to a line or lines	Way of communicating
[E]	Eliciting (getting someone to talk)
[Q-C]	Questioning – asking for clarification
[Q-Pr]	Questioning – probing (asking for deeper meaning)
[Para.]	Paraphrasing (also known as 'reflecting back')
[A]	Presenting alternatives
[S]	Structuring/Guiding to action

Teacher: I think a big problem is writing – they're just not very good at it.

Mentor: What do you mean exactly – they can't organise their writing or …?

Teacher: I don't know really – their sentences are all over the place and it's really difficult to understand what they mean sometimes.

Mentor: What level are the students?

Teacher: Oh, quite low, still beginner level really.

Mentor: OK, so quite elementary. So, when you say their sentences are all over the place – do you mean the words are in the wrong order …?

Teacher: Yeah, that's one problem. For example, we did a sports topic and they'll write 'My brother he like football' or mix up questions like 'What likes your sister play?'

Mentor: So they have problems with basic sentence structure?

Teacher: Yes, but I'd have to look again at their work to see what problems exactly.

Mentor: So, presumably they make the same mistakes when they speak?

Teacher: Oh, probably, yes – I don't notice it so much when they speak, though.

Mentor: So do you think the problem is writing or grammar?

Teacher: Yeah, it's more about grammar, although they should have learned that basic stuff last year.

Mentor: So, you gave me a couple of examples of the kinds of mistakes they make. Do you think it would be worth finding more examples from their written work to get a better idea of what the main grammar problems are?

Teacher: I could do that because I always keep a copy.

Mentor: And have you thought about how you respond to these mistakes?

Teacher: What do you mean 'respond'?

Mentor: For example, how you correct the written work, if you focus on these mistakes in the next lesson – how you follow up on these mistakes in your lesson planning or teaching of grammar.

Teacher: Not really.

Mentor: Do you think it could help to look more closely at this?

Teacher: Yeah, actually, I read something about using a correction code and something like that could help.

Mentor: Yes, that's something interesting to look into. But I think first, before you start trying out different ideas, you might need to just focus a bit on narrowing down your questions and thinking about what information you need. So you may choose to focus on the kinds of mistakes they make and how you deal with mistakes or follow up on mistakes, or you may want to focus on how you teach grammar, for example.

Teacher: At the moment I think it's probably more about how I deal with correction or how I follow up on the mistakes.

Mentor: So, do you think it would help to look into this – what you do?

Teacher: Yes.

Mentor: And what about the students? How do you think they feel about the way you correct their work?

Teacher: Hm, probably not very happy cos when they get it back, they can see all the mistakes crossed out! So, yeah, I could find out how they feel about that.

Mentor: And perhaps how useful or helpful it is to them, or what they prefer?

(b) What doesn't the teacher know / what isn't she sure about?

_____

_____

(c) What would be some possible questions for her to formulate (in relation to what she isn't sure about)?

_____?

_____?

_____?

8.3 From areas of uncertainty to exploratory research questions

Remember, the point of the kind of dialogue in Task 8.1 is to lead the teacher to identify areas of uncertainty and for these to form the foundation of research questions. Whenever the teacher answers 'I'm not (completely) sure' or 'I don't exactly know …', and so on, make a mental note and propose these points as the basis for possible research questions there and then or at the end of the conversation. Turning these into questions can be done in the following kind of way:

Mentor: Which students aren't motivated? All of them or just some of them (which ones)?

Teacher: I'm not sure.

Mentor: So, perhaps one of your research questions could be 'Which students say they're demotivated, and why?'

Task 8.2

Complete these dialogues by turning what the teacher is unsure about into research questions.

1.

Teacher: I'm concerned that students are always using L1.

Mentor: When you say 'always', when exactly?

Teacher: I'm not sure.

Mentor: So, perhaps one of your research questions could be …

_____

_____

_____

2.

Teacher: The problem is they always complain when they have to write.

Mentor: Does that happen with every type of writing, I mean, stories, essays, all writing?

Teacher: Actually, no. I think it's mostly with essays, but I'm not completely sure.

Mentor: So, perhaps one of your research questions could be …

_____

_____

_____

3.

Teacher: I want them to use dictionaries, you know, so that they are more independent, but they don't want to use them.

Mentor: Are you sure they don't want to use them? Could there be other reasons why they don't use them?

Teacher: Well, I'm not sure. I didn't think about that.

Mentor: So, perhaps one of your research questions could be …

_____

_____

_____

Now consult the suggested answers on p. 77 in the Answer key.

8.4 Different types of exploratory research questions

Teachers' exploratory research questions tend to have the following types of focus:

1. the teacher's own perceptions (TP)

2. others' perceptions (e.g. students', parents', other colleagues') (OP)

3. behaviour (teacher's, students' etc.) (B).

It can sometimes be useful (for you and for teachers) to consider these types in order to generate appropriate exploratory research questions.

Task 8.3

Consider the following issues. Try to think of three corresponding research questions in each case which fit into the different categories (1 to 3) above. It may help you to write 'TP' (teacher's own perceptions), 'OP' (others' perceptions) or B (behaviour) next to each research question to check you have thought of a question for each category, as in the example below:

Example: Students don't use English in my class.

RQ1: When do I think it's important for students to speak English in class? [TP]

RQ2: What do students think about speaking English in class? [OP]

Rq3: When exactly do they/don't they use English? [B]

1. Students don't pay attention when I give instructions.

RQ1: _____

_____

RQ2: _____

_____

RQ3: _____

_____

2. Students find it difficult to summarise ideas.

RQ1: _____

_____

RQ2: _____

_____

RQ3: _____

_____

3. I prepare extra activities for fast finishers but they don't seem interested in them.

RQ1: _____

_____

RQ2: _____

_____

RQ3: _____

_____

Now compare your answers with those in the Answer key, on p. 78.

Having two or three research questions is usually enough for teacher-research. Teachers themselves sometimes want to answer a larger number, and you could advise them that they may be able to discover more in the time available by means of relatively few questions. However, it's not a bad idea to ask teachers, initially, to think of all the possible questions they might want to find answers to and then to make a selection, e.g. according to which are most 'effective' (see 8.5). If they are enthusiastic, have effective questions and the time available to attempt to answer them, it is feasible to have more than three questions, so be flexible.

8.5 Effective and ineffective research questions

A 'good' – or 'effective' – exploratory research question is one which is answerable by the teacher, using information (data) which is easy to obtain and which leads them to understand the area of concern more deeply than before. An ineffective question, conversely, could be one that is difficult or impossible to answer via teacher-

research and/or which doesn't contribute much deeper understanding in relation to the stated area of concern. For example, in relation to the issue of 'How can my students become more motivated?', a question like 'What do students say is motivating for them?' could be quite productive, whereas seeking answers to the question 'What are students' favourite subjects at school?' is not directly related to the topic and is unlikely to be very helpful.

Task 8.4

Which of the following do you think are the three most effective exploratory research questions in relation to the issue 'My students don't seem to enjoy pair work'?

1. What kinds of games do students enjoy?

2. What are students' opinions about pair work?

3. How long do students spend speaking English in pairs, on average?

4. Why do I think pair work is necessary?

5. Why do I think pair work should be enjoyable?

6. What do students do when I engage them in pair work?

7. What is the best kind of pair work, in general?

Now compare your answers with those on p. 78 in the Answer key.

As can be seen, sometimes questions may be ineffective because they are just too general. However, it can also be the case that they are well focused but not related to the teacher's current area of (research) concern. You can also consult the *Handbook for EAR*, Unit 4 (p. 40) for 'SMART' criteria that teachers and you can use to evaluate the appropriateness and effectiveness of research questions.

An important role you can perform is to guide teachers towards more manageable, suitable and relevant questions when necessary. However, there's no such thing as a 'perfect' question – and you will yourself probably need to learn by trial and error what works and what doesn't with your teachers. Don't forget that research questions are not 'set in stone' – they can change in the course of teacher-research and sometimes can change even after a researcher has gathered all their data.

8.6 Keeping track of progress

Task 8.5

If you are mentoring a group of teachers, you can keep track of the research questions they decide upon (and potentially get the advice of someone who can mentor you: see 6.1) by filling in the right-hand column in a table like the one below. It isn't necessary for each teacher to come up with three questions – fewer or more are also acceptable.

Name of teacher	Issue/problem/puzzle	Exploratory questions
		1. _____ 2. _____ 3. _____
		1. _____ 2. _____ 3. _____
		1. _____ 2. _____ 3. _____
		Etc.

Your teachers' issues/problems/puzzles and exploratory research questions

Once research questions are settled, the next step will be matching appropriate types of data to these questions (see Unit 9). Ask the teachers (and ask yourself!) to begin to think what would be an appropriate type of data for answering each exploratory research question.

Mentors' experience

Anirudha Rout and Santosh Mahapatra talk about why spending time on framing research questions is important in the research process and how it affects the quality of the research.

Further information

For more information and tasks to help teachers decide on exploratory research questions, see Chapter 4 ('What shall I explore – and what are my questions?') in *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018).

9. Preparing teachers to collect data

Key points

- research involves gathering and analysing data, that is, information which is relevant for answering a particular question

- a questionnaire is not the only way to collect data, and teacher-research should not interfere too much with normal teaching

- different kinds of data are suitable for answering different types of research question

- preparing a data collection schedule can help teachers keep on track

Why is this topic important?

A common preconception about research is that it must involve questionnaires. However, these are not always useful, and only the right kind of data can shed light on the issue being investigated. A mentor can play an important role in discussing the various options for data collection, and in guiding the teacher to more appropriate alternatives when necessary. Teachers may also need advice and guidance during the process of data collection itself. Unforeseen problems can arise, and a mentor will need to monitor and advise on alternative courses of action when necessary.

9.1 Building research into normal teaching

Without guidance, many teachers tend to think they should construct a questionnaire for students as a kind of default research method. However, questionnaires can be time-consuming to prepare and are not the only way of accessing students' opinions. You can emphasise that research doesn't have to interfere too much with teachers' everyday teaching or be an added burden. Indeed, if it is to be feasible and sustainable, research should, as far as possible, be built into normal teaching and be beneficial to students, for instance in encouraging them to reflect on their learning.

If the idea of making a questionnaire is uppermost in teachers' minds, the above points can be illustrated as follows. Tell them that questionnaires certainly can be useful for learning about students' opinions, ideas or feelings but they are not the only way. For example, useful information can often be gathered just from reflective writing, i.e. asking students a question and inviting them to write about their ideas, opinions or feelings on a piece of paper. This can be managed quite easily during the last five minutes of a class, and it can be useful for students to reflect on their learning in this way.

If necessary, a questionnaire can then be prepared using statements from students' own writing, instead of the teacher trying to think up good questionnaire items for themselves.

Task 9.1

Here are some students' written responses to the question 'What do you most enjoy doing in our classes?' (relating to the underlying research question 'What do students say motivates them?', itself derived from the issue of 'Enhancing motivation' or 'How can students become more motivated?'). How could you help a teacher turn these statements into items for a questionnaire, in order to check whether these opinions are commonly shared?

1. I enjoy games best.

2. I like working with my partner.

3. I like working in teams.

4. I like projects and making posters.

5. I enjoy most quizzes.

Compare your answers with the suggestion in the Answer key on p. 78.

9.2 Introducing teachers to different types of data

Teacher-researchers need to gather or generate data, i.e. information, which is well matched to their research questions. A questionnaire, for example, may or may not be appropriate – certainly, if there are research questions relating to students' performance or behaviour, a questionnaire is unlikely to be sufficient on its own: it will be necessary to seek some way of measuring performance or observing behaviour.

Identifying relevant kinds of data is as important as developing effective research questions (see Unit 8), so it's important to introduce teachers to a variety of types of data, and to show how these can be well matched to different kinds of questions.

It's a good idea to present a variety of possible kinds of data via examples of teachers who have carried out teacher-research, for example the stories referred to in *Handbook for EAR*, Unit 5. The examples there are accompanied by tasks which invite the reader to identify types of data and to match these to underlying research questions.

You can also present a list of possible types of data and explain and/or exemplify the uses of each one in turn, for example:

1. a teacher's own written reflections and/or notes

2. other people's written ideas on the topic

3. notes from informal conversations with colleagues

4. reflective writing by students

5. notes or recordings of focus group discussions

6. notes or recordings of interviews/chats with individuals

7. responses to a questionnaire

8. lesson plans and materials

9. lesson recordings

10. notes made by a critical friend (i.e. a sympathetic observer, e.g. a colleague) about your lesson

11. pictures of your class

12. students' performance on tasks (written or recorded).

See Unit 5, *Handbook for EAR* for more on these different types of data.

Task 9.2

Read Unit 5 in [*Handbook for EAR*](#), paying attention to the way that examples of teachers' research stories are used to illustrate different types of data and their match to research questions (see especially Tasks 5.1, 5.5 and 5.6 in that book).

Now choose a different teacher-research report from your own experience or from one of the sources listed in the 'Further information' box at the end of this unit. Design a task that requires teachers to identify the research questions and corresponding data types for the report you have chosen.

9.3 Matching data types to research questions

It's important for methods to be well matched to research questions – in other words, the right kind of data should be gathered for the questions being asked. As we have seen, questionnaires, for example, are well suited to gathering information about students' ideas or opinions but not about how they behave in class. Better for this would be some kind of observation, either by the teacher themselves, as they teach, or by a colleague. Figure 4 is a representation of how the different types of data listed under 9.2 above might correspond with different kinds of research question (see 8.4):
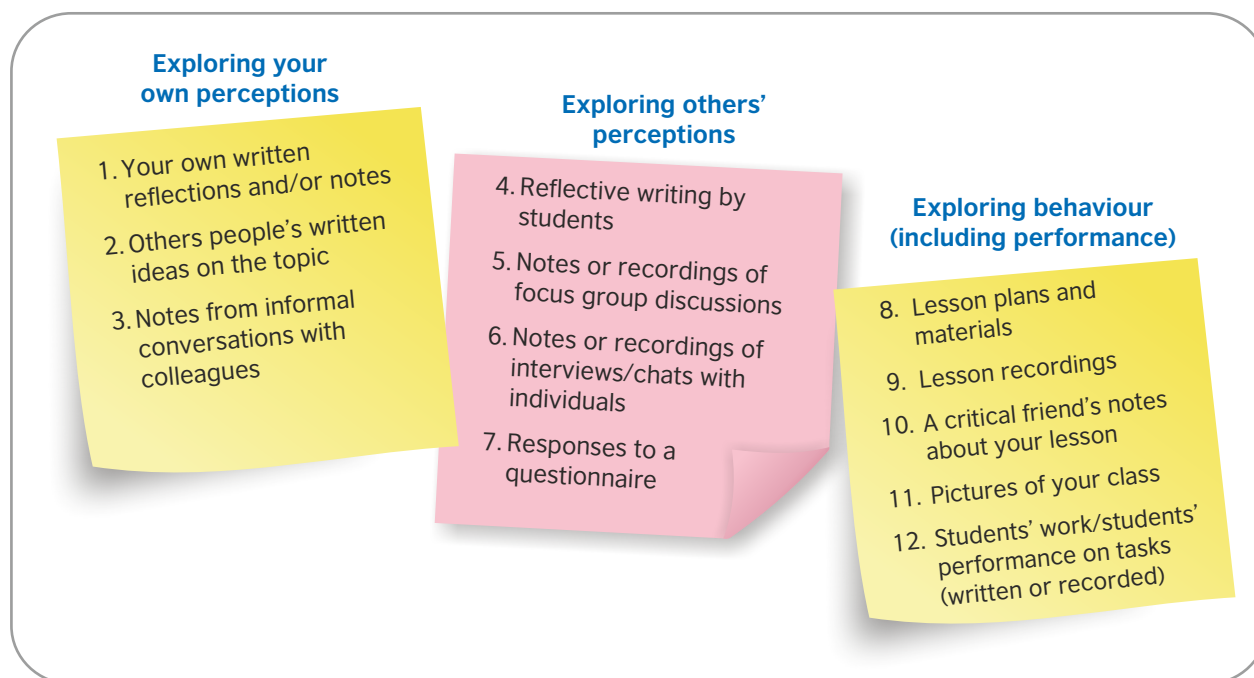

Exploring your own perceptions

1. Your own written reflections and/or notes
2. Others people's written ideas on the topic
3. Notes from informal conversations with colleagues

Exploring others' perceptions

4. Reflective writing by students
5. Notes or recordings of focus group discussions
6. Notes or recordings of interviews/chats with individuals
7. Responses to a questionnaire

Exploring behaviour (including performance)

8. Lesson plans and materials
9. Lesson recordings
10. A critical friend's notes about your lesson
11. Pictures of your class
12. Students' work/students' performance on tasks (written or recorded)

Figure 4: *Types of data suitable for different kinds of research question*
Source: *Handbook for EAR*, p. 50

Task 9.3

Match the following research questions to appropriate data types by writing numbers from the sticky notes in Figure 4 next to the questions (there may be more than one answer for each research question). First, consider whether the question is mainly about the teacher's own perceptions, others' (e.g. students') perceptions or actual behaviour/performance.

— A. How does the classroom layout affect behaviour?

— B. How do I try to get students to participate?

— C. How do students feel when they speak English?

— D. In what parts of the class do I want students to participate more?

— E. How do I teach vocabulary?

— F. What types of reading comprehension tasks do students find most difficult?

— G. How do I give instructions?

— H. Which activities engage students most?

— I.   What reading strategies do my students use?

— J. Do students feel they are making progress?

— K. In what area(s) do I most want students to make progress?

Compare your answers with those on p. 79 in the Answer key.

Helping teachers to identify appropriate data types (and thence a data-collection schedule: see 9.5) is just as important as helping them develop effective research questions (see Unit 8), and they will benefit from one-to-one mentoring.

This one-to-one work can be done at the same time as research question development, or later if you wish to be less directive, allowing more time for the teacher to consider appropriate data types and strategies for themselves. You should still comment and guide the teacher to more appropriate, more manageable alternatives when this seems necessary. In fact, this may be one of the times when mentoring comes closest to 'advising', even if, in all other respects, you wish to let teachers more freely chart their own path. Certainly, you should strongly recommend to teachers that they consult you about research questions and data collection strategies before they embark on their research.

9.4 Gaining necessary permissions

It's important to encourage teachers to reflect, from early on, about any ethical issues their research might entail. In essence, this means encouraging them to think seriously about whether their research is going to do good and avoid harm in all respects, including with regard to any future sharing of findings outside the classroom. Of course, if teachers are carrying out their research primarily for professional development and improvement of student learning, their engagement in research may not add to the ethical obligations they already have as teachers. However, it is quite likely that, following completion of the research, teachers will find themselves in a situation where they wish to and/or are asked to share insights into their classroom with a wider audience (see Unit 12). This makes teacher-research different from much other professional development activity. In this case, it will have been important to gain informed consent from students and (if they are still 'minors') their parents; in other words teachers will have needed to prepare an information sheet assuring anonymity as well as a consent form for students/parents to fill out and sign, ideally at the beginning of the data-collection process. Institutional permission to publicise the research may also be needed. Teachers should be advised to reflect on these issues at an early stage (see *Handbook for EAR*, 9.3, for some related considerations), and they should be encouraged to consult school principals and others in their local educational community for further advice.

9.5 Helping teachers to plan a data-collection schedule

It's a good idea for teachers to plan out in advance when and where (in which lesson(s) or at what other times, for example in the case of interviews) the collection of different kinds of data will occur, and with whom (if, for example, a colleague is going to be invited to observe the teacher's class or if particular students are going to be invited for an out-of-class interview). Sufficient time should be set aside for gaining any early permissions needed (see 9.4) and for designing data-collection tools as well, if they are going to have to be specially constructed (e.g. a questionnaire, a list of interview questions or a checklist for an observer to refer to). You can encourage this kind of planning by inviting teachers to talk to you or in a group about what they plan to do when, where and with whom, and then to write this down for you when they have decided on the best plan.

9.6 Difficulties in data collection

The idea of collecting data can be quite daunting. Encouraging teachers to plan data collection in the ways highlighted in 9.3 and 9.4 will help, but problems can arise during the process of designing and implementing data-collection methods. It is important to make yourself available during this time, for example to give advice on drafts of questionnaires or proposed interview questions, or to suggest alternatives when – as often happens – things don't go to plan.

There is always the possibility that unforeseen circumstances will arise, and these can cause anxiety for teacher-researchers. However, there are usually alternative possibilities available, and the role of the mentor is to help the teacher be aware of these, consider them and be ready to help them adjust or adapt their plans or methods.

Task 9.4

What alternative courses of action could you advise teachers to take in the following situations?

1. Classes are cancelled due to a strike

   _____

   _____

2. No time to make a questionnaire

   _____

   _____

3. A colleague falls ill and is unable to observe as planned

   _____

   _____

   _____

4. The teacher-researcher is given added responsibilities at school

   _____

   _____

   _____

5. Students are absent when they were supposed to be interviewed

   _____

   _____

   _____

Compare your answers with those on p. 79 in the Answer key.

9.7 Keeping track of progress

Task 9.5

If you are mentoring a group of teachers, you can keep track of their progress in deciding on types of data to collect by filling in the 'Types of data' column as well as the 'Exploratory questions' column in the table below. You could use this as a basis for seeing whether the types of data seem to correspond well with the research questions. It might also be useful if the teachers note down for you – and you record this, using the right-hand column in the table – their planned start and end dates for collecting each type of data.

Name of teacher	Exploratory questions	Types of data	Data collection dates and other information
	1. _____? 2. _____? 3. _____?	1. _____ 2. _____ 3. _____	1. _____ 2. _____ 3. _____
	1. _____? 2. _____? 3. _____?	1. _____ 2. _____ 3. _____	1. _____ 2. _____ 3. _____
	1. _____? 2. _____? 3. _____?	1. _____ 2. _____ 3. _____	1. _____ 2. _____ 3. _____

Your teachers' exploratory research questions and intended data collection strategies

Further information

For more information and tasks to help teachers decide on types of data and how to go about collecting it, see Chapter 5 ('How can I explore?') in *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018).

For stories of teacher-research which can be used to exemplify types of data and appropriate matching of data to exploratory research questions, see, for example:

- Rebolledo, P., Smith, R. and Bullock, D. (eds) (2016) *Champion Teachers: Stories of Exploratory Action Research.* London: British Council.

- Rebolledo, P., Bullock, D. and Smith, R. (eds) (2017) *Champion Teachers Peru: Stories of Exploratory Action Research.* London: British Council.

- Sağlam, A.L.G. and Dikilitaş, K. (eds) *Stories by Teacher Researchers in an Online Research Community.* Faversham: IATEFL.

10. Supporting teachers to analyse and interpret data

Key points

- teachers usually need support and guidance with analysing and interpreting data, for example in a workshop
- quantitative and qualitative data can both be useful, and neither should be neglected
- what a teacher gains personally and professionally from the research process is a key, not-to-be-neglected teacher-research 'finding'

Why is this topic important?

The idea of analysing data can seem daunting to teachers and they may not know how to begin, so a mentor's role can be crucial. A common perception about research is that it must involve generating numerical data and must provide generalisable findings. However, qualitative data and corresponding analysis can provide deeper insights into classroom issues. In teacher-research, the focus is on enhancement of the teacher's own understanding and practice in a particular context, not on achieving universally relevant findings.

10.1 Quantitative and qualitative data

A mentor can play an important role in guiding and supporting teachers to understand how much data they need, whether quantitative or qualitative analysis will be beneficial and how to analyse and interpret data in relation to their own concerns. It can be helpful to organise a data analysis workshop or provide input and practice in analysis via some other kind of 'training' for teacher-researchers. Tasks like those mentioned below can be carried out and/or teachers could bring their own data for analysis together with others in a group.

In a workshop, how, for example, would you convey to teachers the difference between quantitative and qualitative data? A simple way is to characterise quantitative data as 'numbers' and qualitative data as non-numerical, usually consisting of words (spoken or written) reflecting opinions, ideas, feelings or observations about a particular topic. When you measure something and give it a number, you are dealing with quantitative data; when you describe something by summarising it or label something by assigning it to a particular category, you are engaging in qualitative data analysis.

For example, let's imagine that a teacher wants to know more about how successful her question-asking is, and so she records one of her lessons. The total number of questions she asks in the lesson is quantitative data. The actual questions she asks constitute text – i.e. qualitative data – and she could divide (qualitatively analyse) these into different types (for example, Wh- vs. Yes-No questions). The average number of words produced by students following each type of question would be further quantitative data of possible interest (for example, Wh-questions might produce longer answers). However, the 'content' of the answers, e.g. the extent to which students refer to their own lives or opinions in them, would constitute further qualitative data.

As this example shows, quantitative and qualitative data can both be useful, and neither should be neglected. However, since a common conception of research is that it involves numbers and generalising by means of statistics, it might be particularly important to introduce teachers to the (perhaps unfamiliar) value of qualitative data, showing (1) that deeper classroom understandings can often be gained from qualitative data than from numbers and (2) that the main purpose of teacher-research is local – to gain deeper understanding and improvement in the teachers' own classroom – not necessarily to generalise beyond it.

Task 10.1

Here are some examples and questions that you might like to share with teachers to bring about a deeper appreciation of the value of qualitative data:

1. A teacher wants to improve the motivation of her students. Will it be more useful for her to …

   (a) give learners a list of classroom activities, ask them to tick those they enjoy, then the teacher totals the results?

   or

   (b) prepare some open questions and then hold a focus group discussion or get students to write down their responses. For example: 'What do you enjoy doing during the lessons? Why? What don't you enjoy? Why not? Is there anything else you would like to do during the lessons?'

2. A teacher wants to know more about the preferred reading topics of her students. Will it be better for her to …

   (a) give them a list of topics and ask them to rank them in order of preference?

   or

   (b) get students to work in groups and create a poster about their reading interests?

3. A teacher wants to improve her students' grammar. Will she learn more by …

   (a) giving them a list of grammar points and asking them to rate how difficult they find each one on a scale of 1—5?

   or

   (b) giving students a writing task and then identifying and classifying the different types of mistake?

10.2 Coding and categorising qualitative data

Whereas dealing with quantitative data (counting, averaging, etc.) – see 10.3 below – is something we are quite used to from our everyday lives, teachers may be less confident about how to analyse qualitative data. However, categorising or identifying themes in such data is less complicated than is sometimes thought, and there are ways to 'demystify' this aspect of research through clear instructions and examples.

It may be useful to convey one 'technical' distinction, however – the distinction between 'deductive' and 'inductive' analysis. In 'deductive' (top-down) qualitative analysis, categories are pre-determined according to what you expect to find – an example would be a teacher categorising the questions she asks in a lesson into Wh-vs Yes-No questions, as in 10.1 above. However, a teacher can often learn more by engaging in 'inductive' (bottom-up) qualitative analysis, that is, allowing categories to emerge from the data. With a set of reflective statements from students about their lessons, for example, the first step could be to code all the different statements according to what they seem to be 'about'. In other words:

1. Think of a keyword or phrase to summarise an idea in the data.

2. Use this as a 'code', writing it next to all the statements which contain this idea.

> For example (in relation to concentrating in class):
>
> a. It is difficult to concentrate when the teacher talks for too long [teacher lecturing]
>
> b. I lose concentration when other students misbehave [other students' behaviour]
>
> c. I get sleepy in the afternoons [afternoon]
>
> d. If my teacher doesn't let us ask questions, I can't concentrate [teacher lecturing]
>
> e. After lunch my brain feels quite slow [afternoon]
>
> f. Other students talking too much makes me distracted [other students' behaviour]

3. Change the keyword or phrase if necessary, or merge it with other ones, as you go along.

It will be found that the same keyword or phrase can often be used for differently worded statements and/or that different keywords fit together in some way, forming larger categories or 'themes'. Alternatively, similar-seeming statements can be grouped together from the beginning using 'cut and paste' in a word-processing program and the category can be labelled later. The result will be the same – a thematic analysis of data which provides good answers to the teacher's research questions.

> For example (according to the above data):
>
> Research question: When do students say they find it difficult to concentrate?
>
> Answer: Overall, students give three reasons:
>
> 1. When the teacher talks too much (a., d.);
>
> 2. When other students misbehave (b., f.); or
>
> 3. In the afternoon (c., e.).

Demonstrating and giving teachers practice with a small set of examples can be a good way to develop an initial understanding of how to analyse qualitative data thematically (see *Handbook for EAR*, section 6.2, and Tasks 6.3 and 6.4 for further guidance, specifically written for teachers).

Task 10.2

If you'd like some practice with thematic analysis yourself, on a topic of relevance to this book, here is a set of responses from a group of Indian teacher-research mentors to the question 'What has been challenging for you in mentoring teacher-researchers?' Carry out a thematic analysis of this data yourself by placing keywords next to the statements and then writing a list of the categories which emerge:

- I felt that my teachers required a lot of support initially and depended on me for all decisions related to the exploratory action research project. Being readily available in the same campus proved a hindrance for their growth

- First, it was difficult for me to remain patient with the teachers. Then at some point, I thought I was a little imposing. Thirdly, I had a tough time keeping my expectations to an achievable level

- Training the mind to be calm under any circumstance, not always was the mind calm

- Another challenge was our own understanding of mentoring. It was our first experience in co-mentoring and there were a few technical snags like who will initiate the response to teachers' queries and what to respond

- Different working styles of people: it took time to understand people's way of working and responses to the tasks

- Some people are difficult to work with. Group work is not an easy task

- Finding appropriate times for teachers to get together for workshops

- Other challenge was communication. It was a bit of challenge to communicate with a few teachers

- Our teachers were from different places, and had different work schedules. So we faced the challenge of bringing them together to attend our workshops

- Finally, communicating with the teachers and making them understand what I wanted to convey were draining at times

- I could not overcome the challenges of managing time and communicating effectively with them

- Communicating (due to age difference between me and the teachers) – they were keeping away

- Initially lack of open communication was the biggest struggle for me and I realised that teachers were hesitating in sharing their experiences because of fear of not doing the right thing

- Previously built strong notions about research was also a big challenge for me as teachers used to think that research can't be the part of curriculum and they tend to plan separately for that which was putting unnecessary burden on them

- Hesitation in sharing own research experiences because of fear of not doing the right thing

- Stupid to mention so, but I need to, that I was not a smart phone person

- The biggest challenge for me was to keep the teachers motivated. As neither parents nor administrators wanted the learners to participate in such a work, the teachers got frustrated

- As there is no incentive, no encouragement, no support for such work in our context, it was too difficult to keep the teachers working. I always kept talking about the value of excellence and pleasure of research

- Dropouts

- Motivating and hand-holding at regular intervals

- As with teachers our main challenge was also time management. It was very difficult for us to address every concern on time. Teachers were from different places and had their own ideas of teaching-and-learning. So we had to understand teachers first by talking to them and by examining their responses to tasks

- The main challenge faced by us was time constraint

- Another challenge was teachers were not allowed leave for their research, and we were not given research leave. We used our earned leaves to cope with this

- Next, managing time and devoting time towards mentoring were demanding

- I could not overcome the challenges of managing time and communicating effectively with them

- Meeting deadlines as mentor and getting the teachers to meet the deadlines. Struggling still

- Managing time with the group

- Balancing my job and project commitment

- Time constraints

- Could not complete my research as per the plan but personal reflections and observations continued

- Meeting deadlines

Now look at the Answer key on pp. 79-81 to see one way of thematically analysing these statements. Compare your analysis. Would you change your own analysis in any way?

10.3 Working with quantitative data

Teachers may need to be reassured that there is no need to present complex statistics in teacher-research. Nor should bar charts, graphs and so on (see *Handbook for EAR*, 6.3) be presented just for the sake of it – what's important is the understanding that is gained by the teacher and – potentially – shared with an audience later. It's important, then, to ask teachers to interpret quantitative data (see 10.4 below) in relation to their research questions. If the numbers on their own don't give them a new understanding, it's likely that qualitative data will also need to be looked at.

One way in which quantitative data can bring about new understandings is when a teacher wants to check if opinions or ideas they've discovered in some students' comments are shared by the whole class. For this, the technique described in more detail in 9.1 is quite useful. The teacher-researcher can convert individual students' opinions or ideas into questionnaire items and, in this way, confirm the relevance of the qualitative data with quantitative data relating to the whole class.

Task 10.3

Look again at the kinds of qualitative data generated in 1b, 2b, and 3b in Task 10.1. In each case, how could the teacher confirm whether the qualitative findings are true of the whole class by collecting quantitative data?

1b. _____

_____

2b._____

_____

3b._____

_____

You can find suggestions for possible courses of action in the Answer key, on p. 81.

10.4 A mentor's role in helping teachers analyse and interpret data

Teachers may wonder when they have 'enough' data, and you should be on hand to help answer this question. Data collection could go on for ever, but at some point a teacher needs to pull together what they've gathered, analyse it and decide what the next steps are going to be.

Interpreting findings is the stage which follows analysis when teacher-researchers make explicit what they have learned from their data. It's important for you to provide an opportunity for teachers to discuss their interpretations, to help them make sense of their findings. You can ask teacher-researchers questions like these:

- 'So, what do you think the findings mean?' or 'So, what do you learn from the findings overall?'

- 'What were your research questions and how can you answer them in a sentence or two?'

- 'Have any findings particularly surprised you?'

- 'What's next?' (For more on this, see 11.1.)

Teachers' answers might reveal that enough data has been generated and analysed or that more should be collected. Discussing interpretations of data in this way needs to be done in a one-to-one situation, and the last question above, in particular, will lead in to overall planning of next steps (see Unit 11).

Task 10.4

How would you 'interpret' what you found from your analysis of mentors' comments in Task 10.2? If the research question is *What are the main types of challenge that teacher-research mentors face?*, how would you answer (in one sentence), according to this data?

_____

_____

_____

Now compare your answer with that on p. 81 in the Answer key.

10.5 Teacher-learning – an emerging research 'finding'

Although teachers don't usually ask themselves, as a research question, 'How will I develop as a result of carrying out teacher-research?', it's often the case that they do develop new skills and attitudes, and in many cases they might consider this to be one of the most important 'findings' (in the sense of 'outcomes') of their research (see *Handbook for EAR*, 8.5).

So, it can be worthwhile for you to ask, retrospectively, whether teachers feel their own attitudes or mindset have changed in any way, and to encourage them to report on overall learning or change, as well as learning in relation to their particular area of concern. Encourage them to consider this learning or change in attitude as an important outcome of the research, along with findings related to the research questions that they did ask themselves in advance.

Mentors' Experience

Amol Padwad and Raminder Mac talk about how they have helped teacher-researchers work with quantitative data.

Further information

For more information and tasks to help teachers learn how to analyse data, see Chapter 6 ('What do I find?') in *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018).

11. Supporting teachers to plan and evaluate change

Key points

- engagement in an action research phase requires ideas for new action, and research questions
- planning for data collection should be done in parallel with planning of action
- a mentor needs to encourage critical interpretation of action research findings
- a mentor can show teachers how they can go further even when they've been successful in bringing about an improvement

Why is this topic important?

When action research is undertaken – in other words, when an attempt is made to bring about change and evaluate the consequences – a teacher will need to find appropriate ideas for an action plan, formulate appropriate action research questions and plan not only the action but also the evaluation of the action. Teacher-researchers are sometimes too focused on proving the success of an action, so a mentor may need to guide them to look closely and critically at the findings, reminding them that the end of one phase can be the beginning of a new one.
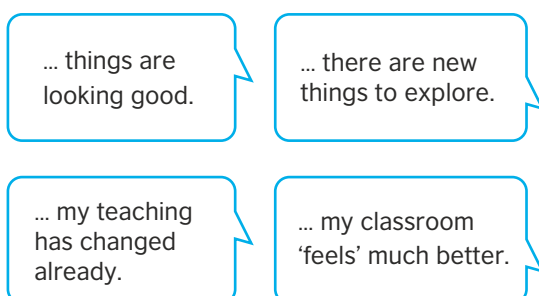
11.1 Deciding on next steps following exploration

If teachers have completed some exploratory research in relation to their area of concern (as detailed in Units 8–10), they will often want to progress to action research – practitioner research which seeks not just to understand a situation but to bring about change and evaluate the consequences (see 1.2). However, when you help teachers interpret exploratory findings (see 10.4), it is worth checking whether they do want to go on to do action research, by asking questions like these:

• Do you want to explore some more?

• If so, do you want to explore a new topic or continue with the same one in a new way?

• Do you need to try to change anything in your classroom?

• If so, what will you try to change, based on your findings?

The desire to change something, as in action research, sometimes disappears after teachers have engaged in a phase of exploratory research. As is explained further in *Handbook for EAR* (7.1), if teachers have the following perceptions, this might mean that they don't actually need or want to engage in action research:

Based on my exploratory research …

> … things are looking good.

> … there are new things to explore.

> … my teaching has changed already.

> … my classroom 'feels' much better.

Task 11. 1

Would you encourage the following teachers to explore the same topic further, explore a new topic or take action for change (i.e. do action research)?

1. Although I set out to focus on just the students who were struggling, after analysing the data, I think it may be worthwhile to explore the whole group's perceptions of the activities and see whether in fact they may be too challenging for all.

    _____

    _____

2. It seems that they don't have a problem understanding the content of the lesson when they do simple exercises in the book. The issue arises when they write texts or do activities which require longer answers.

    _____

    _____

3. I didn't realise that they preferred working in groups. I thought they liked pair work, but it seems a main reason why they don't participate is because they find working with a partner all the time boring.

    _____

    _____

4. My findings show that I ask a good mix of types of question and use effective strategies to ensure all students have the opportunity to answer, so I'm not sure that I need to change anything in this area.

    _____

    _____

Compare your answers with those in the Answer key on pp. 81-82.

Although there may be situations like 1. and 4. above, many teachers are excited by the idea that they can now make choices for practice which are based on evidence (as in situation 3), and in the rest of this unit the assumption is made that your teachers are, in fact, going to carry out action research.

11.2 Sources of appropriate action

If teachers wish to engage in action research, the question arises of where ideas for positive change can come from. Here are some alternatives:

• Implementing student suggestions

• Implementing the teacher's own ideas

• Implementing others' ideas.

To ensure their actions are based on evidence and are appropriate, it is useful for you to ask teachers to explain how their ideas are connected with their exploratory findings and/or to justify them according to what they know about students in other ways. You can usefully guide teachers to possible sources of reading and/or provide ideas of your own if they are unsure regarding possible new actions.

Your thoughts

Which of the following (1) could be useful and (2) are accessible/available to your teachers as sources of possible ideas for action? Could you help make some of these more accessible to teachers?

• Academic journals

• Teacher association newsletters

• Websites containing teaching ideas

• Other teachers in a teacher association or other professional development group

• Other teachers in the same institution

• Students' ideas

• Facebook, Twitter or WhatsApp professional groups

11.3 Evaluating change

The overriding research question in action research, in order to evaluate the effectiveness of the action a teacher is attempting, is: 'What are the effects of the change(s) that I attempt?' More specific research questions need to focus on particular aspects of this. Here is an example of how exploratory research questions might feed into action research questions:

Overall issue: My students do not appear to be motivated to speak English.

Exploratory research questions:

- When do I want students to speak English, and why? (reflective writing by the teacher)

- What do students say about their level of motivation to speak English? (focus group interview followed by questionnaire)

- How much and when do students speak English in class? (observation)

Action research questions (to evaluate a particular change that has been attempted):

- What do students say now about their level of motivation – and how does this compare with before? (questionnaire)

- How much and when do students now speak English in class – and how does this compare with before? (observation)

As can be seen from this example, if exploratory research (see Units 8 to 10) has been carried out as a first step, exploratory research questions can be repeated in modified form for action research, and the 'before' and 'after' answers can be compared.

Task 11.2

As is also clear from this case, not all exploratory research questions need to be repeated in the action research phase of exploratory action research, nor do all research methods need to be used again. Can you explain why reflective writing by the teacher and interview are not repeated in the above example?

_____

_____

_____

_____

_____

_____

Sometimes, a new, more change-focused question and accompanying research method can also be introduced. For example, in the above case, the teacher might want to implement both role play and game activities to get students to speak more English, and she will want to know which is more successful. In this case, an additional research question and method like the following could be added:

- Do the same students speak more in role play or in games? (recording of one or two pairs of students, and comparison of the role play and game recordings)

Action research involves comparing the situation 'before' and 'after' the new action. So, if there hasn't been any exploratory research to establish the nature of the 'before' situation, the action research questions will need to reflect this. For example, in the above case, rather than comparing students' before and after answers herself, the teacher will need to ask questions like:

- What do students say about any change in the level of their motivation? (questionnaire)

- How much and when do students now speak English in class compared with what I remember from before? (observation followed by reflective writing by the teacher)

Relying on (student and teacher) memories like this rather than actual comparisons of data is not entirely trustworthy (cf. 11.5) – this is one of the main reasons why exploratory action research is recommended in this book (see Introduction and 1.4).

11.4 Planning a schedule for action and evaluation

You will need to ensure that, in parallel with designing a plan for action, teachers also make a plan and schedule for the associated research, as indicated in this table:

Action	Evaluation of action	From when to when?
Design an action plan	Establish research questions and decide on types of data	
Plan dates and times for implementing action plan	Plan dates and times for data collection	
Analyse and reflect on the data gathered: what have the effects been?		

Task 11.3

You could fill in the boxes in the right-hand column above with what your own teachers intend to do and when.

11.5 Interpreting findings from the 'action' stage

It is natural for teachers to want to see improvement via the action stage in action research. However, one danger of this desire is that teachers may believe improvement has occurred without looking closely enough at actual data. It's important to encourage teachers to welcome the possibility that change may not occur to the same extent or in the same way as they were expecting. You should challenge teachers with the questions 'What have you found?' and – especially – 'How do you know?', and ask them to look carefully and critically at the data they gather.

Data can constitute evidence for improvement but can also be an opportunity to reflect on why an intervention didn't work out as planned. Some of the information can take the teacher into a further cycle of exploration and/or attempted improvement – your role will be to engage in a mentoring dialogue (cf. 2.4) which helps the teacher make sense of their data and plan next steps accordingly.

So, part of your role in discussing action research findings with teachers can be to encourage them to think where they should head from now in their research (cf. 10.4) at the same time as encouraging them to reflect on and share the findings they have come up with so far (see Unit 12).

Further information

For more information and tasks for teachers regarding how to plan and evaluate change, see Chapter 7 ('What shall I change?') and Chapter 8 ('What happens?') in A Handbook for Exploratory Action Research by Richard Smith and Paula Rebolledo (British Council, 2018).

- 'Getting started with Action Research' (Emily Edwards): invited webinar for IATEFL Research SIG, January 2018.

- 'Action Research: Collecting and analysing data' (Emily Edwards): invited webinar for IATEFL Research SIG, November 2018.

- *Teachers' Voices* – eight volumes of action research reports from Australia, available from: http://www.ameprc.mq.edu.au/resources/professional_development_resources/professional_development_resources

12. Helping teachers to share and reflect on their research

Key points

- sharing research can be beneficial to teacher-researchers and the wider professional community
- oral presentation is one form of 'publication' and it can form a good basis for later writing
- a 'gallery walk' format can be effective
- teacher-research presentations or write-ups should include reflections on the overall experience

Why is this topic important?

There are several benefits for teachers themselves in sharing their research – e.g. consolidation of learning and gaining useful feedback. What they share is also likely to have value to a wider audience. Teachers, however, may have little or no experience or confidence in presenting their work publicly. It can be a good idea to start with oral presentations before moving into any writing for publication, and mentors can introduce teacher-friendly possibilities and platforms.

12.1 Why should teachers share their research?

Teachers may not feel they have to share their research with others as they come towards the end of a project but good reasons for doing so can be highlighted. These might include:

- providing a motivating goal and a satisfying end for a project

- clarifying/consolidating learning through presenting to an audience

- providing an opportunity for feedback from peers, colleagues and others in the educational community

- gaining appreciation and understanding of their research and consolidating its benefits within their institution

- giving the teacher a valuable new (presenting) experience and developing their confidence

- offering practical and appropriate insights and ideas to other teachers

- inspiring other teachers and/or future teachers to do their own teacher-research.

The findings of teacher-research may not be directly generalisable or applicable beyond the teacher's own classroom context. Nevertheless, other teachers can gain a lot, and are often inspired, when they hear/see teacher-research being reported.

12.2 Sharing through presenting

When you have been mentoring a group of teachers, it's a good idea to first arrange an opportunity for sharing of findings and experiences orally within the group, and this can build confidence for a later, more public event.

Teachers may themselves expect to present using PowerPoint slides, but consider getting away from formal, conference-style formats and instead encourage the use of posters. These can be home-made, using poster paper, coloured paper, scissors, glue and marker pens, and do

not necessarily have to be professionally printed (for some examples, see *Handbook for EAR*, 9.1, and links in the 'Further information' box below). Teachers can give short (three- to five-minute) 'taster' introductions to their posters and can then benefit from a lot of interaction and feedback as participants walk around, viewing posters in a kind of 'gallery walk'. This can also be the format for a more public event, open to an external audience. If teachers are willing, recordings of short oral presentations can later be placed online, together with photographs of posters, for wider sharing (see 12.5 below). Such presentations can even be live-streamed, with teachers' permission.

Task 12.1

You decide to do a 'gallery walk' activity with your teacher-researchers and ask them to prepare a poster of their research.

- How would you justify the use of posters rather than PowerPoint slides?

  _____

  _____

- What advice would you give on preparing the posters? What factors do teachers need to consider?

  _____

  _____

- How would you organise the 'gallery walk' activity?

  _____

  _____

Here is a checklist of possible audiences for teacher-research oral presentations:

- the teacher's own students

- colleagues in the teacher's own institution

- a wider audience (outside the institution, face-to-face).

And here are possible venues:

- a specially organised event

- an existing conference or other event (e.g. teacher association conference)

- online (e.g. webinar or uploaded recording).

After they've had some practice sharing their research findings in a relatively small group consisting of people they already know, you could encourage teacher-researchers to present at a bigger event, for example a teacher association conference, as a group presentation

with other teacher-researchers or individually. This can lead to further opportunities.

If all mentors could publicise their teachers' work in this way (or, for example, by constructing or contributing to a web-space for recorded oral presentations, which are then publicised via social media (see 12.5)), more teachers might be encouraged to engage in teacher-research of their own.

12.3 What should be in a research presentation or write-up?

Here are some ingredients of a teacher-research report, whether oral or written:

• Description of context

• Topic/issue, and explanation of how it arose in the teacher's experience

• Research questions

• Types of data consulted

• Findings

• Narrative description of new actions

• Evaluation of effects of actions

• Reflections on the overall experience of doing teacher-research.

Sufficient space on a poster and time in a presentation (more than half) should be devoted to findings, any new actions and overall reflections – audiences are generally most interested in these, rather than in all the details of how the research was carried out.

12.4 Encouraging overall reflection

Encouraging teachers to reflect on the overall experience of teacher-research can help to consolidate its benefits and can serve as a stepping stone into further activity, as well as being particularly interesting for audiences. Prompts you could use for this final stage might include, for example:

• What do you feel you have gained from the process of teacher-research?

• What were some of the difficulties, and how did you overcome them?

• Are there any particular successes, problems or puzzles you would like to continue to pursue?

• Are there any other avenues you would like to pursue as a consequence of this experience?

12.5 Sharing through writing

An oral presentation is a form of publication ('public sharing') in its own right – and this may be sufficient for many teachers. However, a written report is sometimes required by sponsors or institutions, and/or teachers themselves may wish to write about their work for publication. In these cases, a previous oral presentation – if it has been recorded – can still be very useful. Transcribing the recording can form the basis for a draft which teachers can then fill in with further details (see *Handbook for EAR*, 9.2). Doing this helps get over the initial 'writer's block', which can otherwise arise, and means that the written report is started off in a friendly, first-person, relatively informal tone, which can be quite appropriate in many cases.

Indeed, if the readers of a written report will mainly be other teachers, care should be taken to adopt a relatively reader-friendly, jargon-free tone. A report like this can be published as a blog post – in story form with pictures – or could be submitted to a teacher association newsletter.

If a more academic form is desired (e.g. for submission to a journal), normal considerations for such writing will apply. Mentoring writing of this kind is beyond the scope of this book. However, it should probably be pointed out that to have 'academic' legitimacy, a report of teacher-research generally needs to be seen to make a contribution within a wider body of literature, which also needs to be reviewed. In these cases, a literature review needs to be added to the ingredients of teacher-research reporting listed in 12.3.

12.6 Sharing multimodally online

Due to their primarily local relevance, it can be difficult to find a national or international publisher for teacher-research write-ups, but you and your teachers can investigate possibilities for self-publishing online. For example, you could:

• make a website for your group's reports using a free platform like WordPress.com or Weebly.com

• link such a site to video recordings of oral presentations which you have uploaded to YouTube

• upload photographs of posters and written reports

• publicise the website via social media.

There are some examples of such sites in the Further information box below.

12.7 Publishing your own experiences and reflections

Mentors, too, should reflect on and think about publicly sharing their experiences of mentoring teacher-researchers.

You may need to report on your mentoring activity to a sponsor, or you may simply wish to record your experiences as a good way to complete a particular round of mentoring and as an opportunity to reflect and plan better for the future. You may also find that the data you gather in this process, with appropriate permissions from the teachers involved, can be used for a conference presentation and/or an article for a wider audience. A good basis for your report on mentoring experience can in fact be teachers' own reports (see 12.3, 12.4 above); you may also find it useful to prepare a questionnaire and/or a focus group interview to elicit teachers' overall perceptions of the impact of the teacher-research and mentoring experience. As with teachers' reports, in order to get started with writing, you may find it useful to first present and record your thoughts orally and then transcribe them. You could even report in the same venue(s) as the teachers (see 12.2 above) and write in parallel with them, adopting the same process as they do towards publication of a written report.

Task 12.2

Make a timeline for final reporting (teacher-researchers' and your own), based on the suggestions given above. Don't forget that if there is to be reporting in writing, this will need sufficient time – and an additional possible commitment from you – beyond the end of the teacher-research itself.

Finally, don't forget to share reflections with other mentors and potential mentors regarding your own experiences and development, to inspire others to take on this valuable role and to help them overcome their own challenges. See 'Further resources' at the end of this book for information about a new social network for mentors of teacher-research where such sharing could happen – please join!

Mentors' experience

Kuheli Mukherjee and Vivek Joshi talk about how sharing research is beneficial and how they encouraged their mentees to share.

Further information

For more information and tasks for teachers regarding how to share their work, see Chapter 9 ('Where do I go from here?') in *A Handbook for Exploratory Action Research* by Richard Smith and Paula Rebolledo (British Council, 2018).

Here are some examples of different ways in which reports of teacher-research can be disseminated, which might give you and your teachers ideas for presentation and/or publication formats:

1. Recordings uploaded to websites:

British Council AARMS India - 'classroom-based mela' - poster presentations /gallery walk	
Andrea Robles López – audio recording of presentation	
Lorena Muñoz – presentation at a conference of RICELT – published on YouTube	

2.

Examples of online presentations: EVO Classroom-based research for professional development	

3. Facebook groups where teachers can share oral or written reports internationally:

Teachers Research!	
IATEFL Research SIG	

4. Examples of webpages made with Wordpress.com:

Report on Teacher Research! Buenos Aires 2017	
Reports of EVO participant presentations 2017	

5.

Example of a website made with Weebly.com: IATEFL Research SIG	

Finally, here is an article which discusses alternative formats for sharing teacher-research

Smith, R., Bullock, D., Rebolledo, P. and Robles López, A. 2016. 'By teachers for teachers: innovative, teacher-friendly publishing of practitioner research'. *English Language Teacher Education and Development (ELTED)* Journal 20: 116–125.	

Checklist of competencies (revisited)

How would you rate your abilities to mentor classroom-based teacher-research now, having read this book and/or having engaged in some mentoring of teacher-researchers?

Developing mentoring skills				
How would you rate your capacity to … (from 1 (new to me) to 4 (highly developed))				
provide mentoring support, in general?	1	2	3	4
engage in supportive, non-judgemental conversations?	1	2	3	4
encourage teachers to do teacher-research?	1	2	3	4

Developing research-mentoring skills				
How would you rate your ability to help teachers to … (from 1 (new to me) to 4 (very high))				
formulate research questions?	1	2	3	4
decide on appropriate research methods?	1	2	3	4
design research tools (questionnaires, observation frameworks, etc.)?	1	2	3	4
plan a research schedule?	1	2	3	4
analyse data and draw conclusions?	1	2	3	4
communicate their findings?	1	2	3	4

Now compare your ratings with how you felt before you started (p. 4). Consider in which areas you can still improve and reflect on how you will do so. Will you explore further or take immediate action? Your assessment here could start off an (exploratory) action research journey of your own!

Finally …

Where do you go from here?

Here are some developments that mentors reported at the end of a year-long experience of mentoring teacher-research in India:

- I got a proposal from the [TESOL International Association] EVO team to be a moderator for EVO 2018 [see Further resources] and I cheerfully accepted it. It was an altogether new and enriching experience for me to work and learn with people from different countries.

- A few schools have asked me to mentor their teachers. They will organize workshops too and have asked me to be a part of it to share.

- Now I have been worrying how more teachers can be involved and how it can be a continuous process for all the teachers.

- The administration should support it and recommend it. I am working on taking it to the school education board.

- We are thinking of initiating more action research with new groups of teachers under government agencies.

- I have been given an opportunity by my School Principal to mentor teachers from different departments in the forthcoming session to enable them to carry out exploratory action research in their classrooms.

Do these give you any good ideas?

Further resources

All the resources selected below and recommended in 'Further information' boxes in the book are open access, that is, they are freely downloadable from the internet. There are additionally, of course, good books available for purchase on how to do different kinds of teacher-research (e.g. by Dick Allwright, Anne Burns, Donald Freeman and Judith Hanks) and on how to mentor in general (e.g. by Angi Malderez and Lily Orland-Barak, among others), but apparently no previous books specifically on how to mentor teacher-research.

Online introductions to teacher-research

Smith, R. and Rebolledo, P. 2018. *A Handbook for Exploratory Action Research.* London: British Council.	
Week 1 to Week 5 webinars and webpages for 'Classroom-based research for professional development' TESOL Electronic Village Online.	
'An introduction to Exploratory Action Research' (R. Smith): invited webinar for UNRWA teachers in Gaza at the invitation of the Hands Up Project. Part I: https://youtu.be/57Z2P08pTvo. Part II: https://youtu.be/TpHL5ui0luo, September 2018.	
'Getting started with Action Research' (Emily Edwards): invited webinar for IATEFL Research' SIG, January 2018.	
'Action Research: Collecting and analysing data' (Emily Edwards): invited webinar for IATEFL Research SIG, November 2018.	

Online reports of teacher-research

Bullock, D. and Smith, R. (eds) (2015). *Teachers Research!* Faversham: IATEFL.	
Burns, A. (ed.) (2011). *Cambridge ESOL Research Notes* 44 [reports from an action research programme in Australia].	
Dikilitas, K., Smith, R. and Trotman, W. (eds) (2015). *Teacher-researchers in Action*. Faversham: IATEFL.	
Dikilitas, K., Wyatt, M., Hanks, J. and Bullock, D. (eds) (2016). *Teachers Engaging in Research*. Faversham: IATEFL.	
Hadley, G. (ed.) (2003). *Action Research in Action*. Singapore: SEAMEO Regional Language Centre.	
Rebolledo, P., Bullock, D. and Smith, R. (eds) (2017). *Champion Teachers Peru: Stories of Exploratory Action Research*. London: British Council.	
Rebolledo, P., Smith, R. and Bullock, D. (eds) (2016). *Champion Teachers: Stories of Exploratory Action Research*. London: British Council.	
Sağlam, A.L.G. and Dikilitaş, K. (eds) *Stories by Teacher Researchers in an Online Research Community*. Faversham: IATEFL.	
Sarkar, B.C., Hedges, C., Griffiths, M., Mathew, R. and Biswas, S.K. (eds) (2017). *Teachers' Voices: Capturing the Dynamics of Change*. Dhaka: English in Action.	

Smith, R., Padwad, A. and Bullock, D. (eds) (2018). *Teaching in Low-resource Classrooms: Voices of Experience*. London: British Council.	
Smith, R., with Xerri, D., Dar, Y. and Salvi, A. (2014). *Teachers Research! Posters, Talks, Discussions*: Record of an event for teacher-researchers in April 2014, organised by IATEFL Research SIG.	
Teachers' Voices – eight volumes of action research in ELT from Australia.	

Online communities for teacher-researchers:

Classroom-based Research for Professional Development Electronic Village Online: http://www.classroombasedresearch.weebly.com/	
International Festival of Teacher-research in ELT: http://www.trfestival.wordpress.com	
Teachers Research! Facebook group: http://www.facebook.com/groups/teachersresearch	

Reports of mentoring teacher-research:

There are some reports in these books:

Barkhuizen, G., Burns, A., Dikilitaş, K. and Wyatt, M. (eds) (2018). *Empowering Teacher-researchers, Empowering Learners.* Faversham: IATEFL	
Burns, A., Dikilitaş, K., Smith, R. and Wyatt, M. (eds) (2017). *Developing Insights into Teacher Research.* Faversham: IATEFL.	

Special mention should be made, also, of this pioneering article, though the full article is unfortunately not freely available: Dikilitaş, K. and Wyatt, M. (2018). Learning teacher-research-mentoring: stories from Turkey, *Teacher Development*, 22/4: 537–553. DOI: 10.1080/13664530.2017.1403369.	
See also (for some insights into what can go wrong as well as right in a mentoring scheme): Smith, R., Connelly, T. and Rebolledo, P. (2014). 'Teacher-research as continuing professional development: A project with Chilean secondary school teachers' in Hayes, D. (ed.), *Innovations in the Continuing Professional Development of English Language Teachers*. London: British Council, pp. 111–128.	
An online community for mentors of teacher-research, set up to coincide with publication of the present book: Mentoring Teacher-research Facebook group: http://www.facebook.com/groups/mentoring-TR	
Mentoring Teacher-research website: http://www.mentoring-TR.weebly.com	

Answer key

1. Introducing teacher-research

Task 1.1
What is research?

According to the Oxford English Dictionary, research is 'systematic investigation [...] to establish facts and reach new conclusions'. In simple terms, research is the process of asking questions and answering them with data (relevant information or evidence) in an organised way.

Examples of research that people carry out in normal, everyday life are:

- planning and organising a journey

- finding out how to repair something that's broken or has broken down

- learning how to do something for the first time, e.g. how best to cook and prepare a lobster

- shopping, e.g. finding the mobile phone that suits your budget but does everything you want it to do.

Task 1.3
What distinguishes teacher-research from 'reflective practice'?

According to the simple definition of 'research' above, research is about answering questions with data and it is 'organised'. Reflective practice may not involve gathering data. How organised it is depends on the teacher, and it isn't usually focused on a particular issue.

Task 1.4
Do the following two cases involve 'research' or not?

1. In this example, the teacher is somewhat organised – he notes interesting points in a journal, but he isn't gathering data in relation to a particular issue. So, it is a case of 'reflective practice' but not really of 'research'.

2. In this example, the teacher is investigating a specific issue in an organised and methodical manner – she is trying to establish facts by gathering data and is addressing a particular classroom issue. So, it is an example of 'research'.

Task 1.5
What are the advantages/disadvantages of presenting each of the following to teachers?

... a list of potential advantages of teacher-research	
Advantages	It can encourage teachers to see the benefits and rewards teacher-research offers.
Disadvantages	It can paint an unrealistic picture if potential problems are ignored.
... an example from your own teacher-research experience	
Advantages	A concrete example is easier to relate to than abstract concepts.
Disadvantages	The example may seem unachievable due to differences in context, expertise and experience.
... an example of a teacher-research study by a teacher in a similar context to that of teachers themselves	
Advantages	Teachers can relate to this easily; it makes teacher-research appear doable and manageable.
Disadvantages	Teachers may want to replicate the approach, methods, etc. used by that teacher rather than what is appropriate to their own learners.
... a list of potential hindrances to teacher-research	
Advantages	It can paint a realistic picture; it can help teachers anticipate difficulties and come up with possible solutions; it manages expectations.
Disadvantages	It focuses on the negative and may be off-putting if the benefits are ignored.

Task 1.6
What are some advantages of including an exploratory phase, as represented in the top half of Figure 2?

Often teachers attempt to solve a problem by immediately leaping into action. However, taking a decision too quickly and without exploring the situation further can involve acting on incorrect assumptions. Exploring the situation helps a teacher to uncover the 'real' reasons for the situation and to plan appropriate solutions. It is important for teachers to consider whether they're acting 'right', especially for important decisions. Also, by establishing a clear picture of the current situation, they can easily assess the effects of any change they attempt to bring about.

Task 1.7
Number the stages of an (exploratory) action research project.

1. A. Identify *Students misunderstand what they have to do for homework* as a problem.

4. B. Keep a record of which pieces of homework students do/don't complete.

7. C. Plan a new kind of homework or different explanations of homework.

3. D. Audio-record parts of lessons where I explain homework.

5. E. Give a questionnaire to students asking them for their opinions of the homework I've been explaining.

6. F. Analyse all the information obtained and make conclusions.

2. G. Decide on research questions to help understand the issue.

Task 1.8
Group and label the stages of an (exploratory) action research project

Stage	Actions
Reflect and plan to explore	A, G
Explore	D, B, E
Analyse and reflect	F, C

After planning a new kind of homework or different explanation of homework, the teacher might repeat actions D, B and E in order to see the effects of the change, followed again by F and, potentially, further action or exploration.

Task 1.9
Would you prefer to use spiral diagrams or a steps diagram?
What are the advantages/ disadvantages of each?

The spiral diagram better illustrates the process as a cycle which can be repeated; the steps diagram presents a linear process, and may seem less 'academic'. If we consider that individuals process information differently, both may be useful. Some teachers will find the steps easier to understand; others may appreciate the spiral.

2. What does mentoring involve?

Task 2.2
Place codes next to the mentor's questions in the text where specific techniques are occurring.

Teacher: I don't feel as if I have any control over the class.

Mentor: Could you give me an example? Is there something in particular you don't feel you have control over? [E]

Teacher: Well, I suppose what I'm most concerned about is that I just can't seem to get the students to listen to me.

Mentor: When you say they don't listen to you, what do you mean? That they never listen to you or at particular times? [Q-C]

Teacher: Mostly when they should, otherwise they don't know what to do.

Mentor: You mean when you give instructions? [Para.]

Teacher: Yes, particularly when I give instructions. I end up repeating myself over and over, and shouting sometimes.

Mentor: Oh, I see. Do other teachers teach this group? [Q-Pr]

Teacher: Yes.

Mentor: And do they have the same problem? [Q-Pr]

Teacher: Oh, I don't know.

Mentor: Perhaps you could ask them, and also find out what they do? [S]

Teacher: I could do that – good idea.

Mentor: And have you thought about how you give instructions? [Q-Pr]

Teacher: What do you mean how?

Mentor: For example, where you are in the room, the words you use, and so on? [Q-Pr]

Teacher: Not really.

Mentor: Do you think it could help to look more closely at this? [S]

Teacher: I think so – I haven't really thought about it. I suppose I just thought if I shouted, they'd pay more attention.

4. How to get started

Task 4.1
Which end of each continuum did previous mentors favour?

This is what some previous mentors have said (you may agree or disagree!):

Eagerness to learn: 'Try to choose people who have a genuine motivation to develop themselves (and are not just joining for the perceived prestige or material advantage).'

Experience with professional development: 'Those who haven't previously experienced continuing professional development (CPD) opportunities are often good candidates because such teachers are more willing to work hard for the new CPD opportunity.'

Being in your institution or employed elsewhere: 'There are many advantages to being a mentor of teachers who work in the same institution as you. Not least, you can be readily available when needed.' However: 'If you're in a management role, some teachers may resist opening up, so you need to try extra hard to build trust.'

Seniority: 'Newly qualified teachers can sometimes be more flexible, and the benefits of teacher-research can be more long-lasting, but senior teachers may have more influence to help the programme continue if it's successful.'

In pairs/groups or otherwise: 'If there are teachers who would like to work together, this is definitely to be encouraged. It can be especially effective if they are already close colleagues or friends within the same institution. They can discuss and plan their research together and help each other by observing one another's classes.'

Previous experience of research: 'Prior experience of research isn't essential – indeed, sometimes those who have carried out relatively academic studies (for example, for a degree course at university) have unrealistic expectations regarding teacher-research, which are difficult to change.'

Task 4.2
Here is another mentor's response:

'I think this approach is super hard! What I think is important to establish is:

- why they want to be part of the process
- what they're hoping to get out of it
- managing their expectations, e.g. "I'm not going to tell you what to do."
- the need to attend regular meetings
- sharing your experiences - the good, the bad and the ugly
- the tasks they need to carry out, and so on.

When that's been clearly understood, it's about asking them whether this is something, given their current workload and home life responsibilities, they have the capacity to commit to, really commit to – and don't paint a rosy picture.

I also think it's important to recognise that it might not be the path for every teacher at that specific time. Nevertheless, we should always leave the door open, always be encouraging that this is a practice they should engage in at some point in their career. Because if we just exclude people without them understanding why, then we'll never be able to get them on the teacher-research train!'

Task 4.3
What practical steps could you take to bring about the following in your relationship with teacher-researchers you are or will be mentoring?

1. A sense of mutual respect: Establish clear expectations.

2. A sense of equality: Recognise strengths and differences.

3. Honesty: Be transparent and communicate honestly and openly, e.g. when giving feedback (although you need to do this sensitively).

4. Feeling valued: Be willing to listen; acknowledge positives and strengths.

5. Feeling supported: Regularly contact individual teachers to ask how they are getting on.

Task 4.4
Can you think of any other practical confidence-building activities?

Each participant creates a list of achievements, e.g.

1. Skills I've mastered

2. Fears I've conquered

3. Challenges I've met and overcome

4. Difficult situations I've dealt with

5. Achievements I've attained.

Create an activity focused on the positive achievements, e.g.

• Ask teachers to work in pairs.

• In pairs, teachers look at each other's lists and ask follow-up questions.

• Each teacher tells the whole group about one of their partner's achievements.

This is just one example of how you could use positive achievements. There are many other classroom activities, including whole-group activities, that would work just as well.

Task 4.5
Think of one interactive activity that you could use to achieve each of these aims:

Demystify research

• You could get teachers to work in groups to brainstorm and discuss answers to the questions considered in section 1.1 of this handbook: What is a simple definition of research? What examples of research that people normally carry out in everyday life can you think of?

Motivate teachers to participate

• You could ask each teacher to read a different teacher-research story from a collection like *Champion Teachers: Stories of Exploratory Action Research* (Rebolledo, Smith & Bullock 2016, British Council) and convey to the others what benefits the teacher gained from the experience.

Elicit and address worries and objections

You could get teachers to:

• work in groups to brainstorm potential benefits and hindrances (cf. answers above to the task in 1.3)

• then present an example of a teacher-research study by a teacher in a similar context to that of teachers themselves. Ask teachers to identify any benefits and hindrances that this teacher experienced and compare these with their own ideas.

Introduce a timeline and stages for a classroom-based exploratory action research project

You could:

• get teachers to label the steps of an example project (perhaps the one you presented to address worries and objections above)

or

• get teachers to map stages of a project onto the spiral or steps illustrations

• get teachers to categorise example steps into three stages.

5. Planning a timeline, communications and record-keeping

Task 5.1
How many weeks do you think teachers in your context would require for each stage?

Here are sample durations, for an eight-month programme:

1. 6 weeks

2. 6 weeks

3. 1 month

4. 2 months

5. 1 month

6. 1 month

Task 5.5
Deciding on channels of communication

How many weeks / months?	Stage	Types of meeting
1. 6 weeks	Orientation	Workshop
	Narrowing topic	Individual meetings ('indiv. mtgs')
	Refining research questions	
	Planning data collection	Webinar on data collection methods
	Planning exploration	Follow-up indiv. mtgs (phone)
By now: • teachers should be ready to start their exploratory research.		
2. 6 weeks	Exploration	Indiv. mtgs to monitor if necessary
By now: • all teachers should have been engaging in exploratory research.		
3. 1 month	Data analysis	Workshop on data analysis Indiv. mtgs to help with data analysis
	Planning further exploration / action for change	Webinar on planning next steps Indiv. mtgs to discuss plans
By now: • all teachers should have completed their exploratory research • all teachers should know how to analyse their data • teachers should have analysed data and planned next steps (action for change or further exploration).		
4. 2 months	Implementing further exploration / action for change	Indiv. mtgs to monitor if necessary Webinar on 'Evaluating, analysing and reflecting on change'
	Data analysis	Indiv. mtgs to evaluate the second phase (further exploration / action for change)
	Reflection	
By now: • all teachers should have completed their second phase of research (further exploratory research or action for change) • teachers should have completed evaluation of this second phase, including analysing data and reflecting • you will have planned an event or events for sharing their findings.		

5. 1 month	Sharing in the group and poster preparation	Discussion meeting for informal sharing of findings and reflections and for making drafts of posters Indiv. consultation via email to comment on posters
	Public presentation	Seminar with invited guests
6. 1 month	National event	Conference presentation
	Writing reports	Indiv. mtgs to give feedback on reports

8. Guiding teachers to develop research questions

Task 8.1
(a) Read a conversation between a mentor and a teacher and consider how the mentor interacts with the teacher. Find one example of each of the following ways of communicating:

Code	Example
[E]	So, presumably they make the same mistakes when they speak?
[Q-C]	What do you mean exactly – they can't organise their writing or…?
[Q-Pr]	And have you thought about how you respond to these mistakes?
[Para.]	So they have problems with basic sentence structure?
[A]	So do you think the problem is writing or grammar?
[S]	Do you think it would be worth finding more examples from their written work […]?

b. What doesn't the teacher know / what isn't she sure about?

She isn't sure about:

- the types of mistake students mostly make
- how she follows up on mistakes in written work
- whether her corrections are useful or helpful to students
- how students feel about the way she corrects their writing – what impact that has on them.

c. What would be some possible questions for her to formulate (in relation to what she isn't sure about)?

Possible questions:

- What are the most common types of mistake in written work?
- How do I follow up on mistakes in written work?
- Are my corrections useful to students? How?
- How does the way I correct written work make my students feel?

Task 8.2
Complete the dialogues by turning what the teacher is unsure about into research questions.

The research questions could be:

1. 'At what points in the lesson do students use their first language?'
2. 'What types of writing do students dislike, and why?'
3. 'What reasons do students give for not using a dictionary?'

Task 8.3
Try to think of three corresponding research questions in each case which fit into the different categories.

Here are some possible questions:

1. Students don't pay attention when I give instructions.

RQ1: What makes me think they don't pay attention? [TP]

RQ2: What do students think about my instructions? [OP]

RQ3: What do I say when I give instructions? [B]

2. Students find it difficult to summarise ideas.

RQ1: Why do I want students to summarise ideas? [TP]

RQ2: What do students think about summarising? [OP]

RQ3: What do I say when I tell students to summarise? [B]

3. I prepare extra activities for fast finishers but they don't seem interested in them.

RQ1: What do I think extra activities should achieve? [TP]

RQ2: What kinds of activities do fast finishers say they would find interesting? [OP]

RQ3: What do students do instead of the activities? [B]

Task 8.4
Which of the following do you think are the three most effective exploratory research questions in relation to the issue 'My students don't seem to enjoy pair work'?

The following questions seem quite effective (related to the topic, likely to produce useful information, etc.):

2. What are students' opinions about pair work?

5. Why do I think pair work should be enjoyable?

6. What do students do when I engage them in pair work?

The following questions are relatively ineffective:

1. What kinds of games do students enjoy? (this assumes too much that students will enjoy games and that introducing them will solve the pair-work problem)

3. How long do students spend speaking English in pairs, on average? (not directly relevant because the question is about amount of enjoyment, not time spent on pair work)

4. Why do I think pair work is necessary? (because the focus is on enjoyability of pair work, not whether or not pair work is necessary)

7. What is the best kind of pair work? (this is difficult to answer because situations vary so much – and, in any case, your focus is on your own context, not on situations elsewhere)

9. Preparing teachers to collect data

Task 9.1
How could you help a teacher turn the statements into items for a questionnaire?

The simplest way to do this would be to copy and paste the students' statements into a grid, modifying them slightly and adding an instruction, as below.

State whether you strongly agree (SA), agree (A), disagree (D) or strongly disagree (SD) with the following statements by placing a '✓' in the relevant column. Write any comments to explain your answers.

	SA	A	D	SD	Comments
1. I enjoy games					
2. I like working with my partner					
3. I like working in teams					
4. I like projects					
5. I like making posters					
6. I enjoy quizzes					

Notes: a) 'best' and 'most' have been deleted from students' statements since overall favourite activities will come from totalling all students' choices; b) 'projects' and 'making posters' have been divided to obtain information on two separate activities; c) it can be advisable, as here, to force a choice and not provide a 'no opinion' or 'I don't know' column between 'A' and 'D' – forcing a choice will provide the teacher with more useful information since otherwise many students will choose the neutral choice.

Task 9.3
Match the following research questions to appropriate data types by writing numbers from the sticky notes next to the questions.

A. How does the classroom layout affect behaviour? 10. 11. 1.

B. How do I try to get students to participate? 9. 10. 1.

C How do students feel when they speak English? 4. 5. 6. 7.

D. In what parts of the class do I want students to participate more? 4. 5. 6. 7.

E. How do I teach vocabulary? 8. 9. 10. 1.

F. What types of reading comprehension tasks do students find most difficult? 12. 4. 5. 6. 7.

G. How do I give instructions? 9. 10.

H. Which activities engage students most? 10. 4. 5. 6. 7.

I. What reading strategies do my students use? 10. 12. 5. 6. 7.

J. Do students feel they are making progress? 4. 5. 6. 7.

K. In what area(s) do I most want students to make progress? 1. 2. 3.

Task 9.4
What alternative courses of action could you advise teachers to take in the following situations?

1. Classes are cancelled due to a strike
   Can the data be collected later? Is there time? Can questionnaire data be collected electronically, e.g. by email? Can a focus group interview take place outside school, either face-to-face or online? Can a different method be used, e.g. analysing lesson plans and reflection notes in place of a peer observation?

2. No time to make a questionnaire
   Could you use other methods, e.g. a focus group interview, students' reflection notes or a specific written task to elicit perceptions instead?

3. A colleague falls ill and is unable to observe as planned
   Can another colleague step in? Can you record the lesson and take notes from that yourself?

4. The teacher-researcher is given added responsibilities at school
   What time do you have, and when? Could you use other methods that are less time-consuming to get the necessary data?

5. Students are absent when they were supposed to be interviewed
   Could you reschedule? Could you give them a questionnaire instead? Could you interview different students?

10. Supporting teachers to analyse and interpret data

Task 10.1
Examples and questions to bring about a deeper appreciation of the value of qualitative data.

In each case, you could highlight that the teacher will gain new understandings mainly through qualitative rather than quantitative data-generation procedures (i.e. (b) rather than (a) in each case).

1. Both strategies have their merits – in the case of (a), the teacher can quickly get an overview of students' opinions about activities in her mind, but she may forget some activities and may not learn as much about what students actually enjoy beyond this list; more importantly, with (b) she will find out reasons for students' perceptions and their ideas for future work – in other words, she can gain a deeper understanding.

2. For the same reasons as in 1. above, by adopting a more qualitative approach (i.e. (b)) the teacher will learn things she could not predict and will gain a deeper understanding of her students.

3. More accurate/trustworthy information can usually be gained by analysing actual performance on a task than by asking students to report how they think they perform (though it can be interesting and useful to know what students find difficult). Apart from this, the types of mistakes that students make may not all be predictable in advance. Although it is relatively time-consuming, the teacher will be able to discover what mistakes students actually make by classifying them qualitatively (i.e. (b)).

Task 10.2
Carry out a thematic analysis of this data by placing keywords next to the statements and then writing a list of the categories which emerge.

Here is one possible thematic analysis of the data:

Communication

• Other challenge was communication. It was a bit of challenge to communicate with a few teachers

- Finally, communicating with the teachers and making them understand what I wanted to convey were draining at times

- [I could not overcome the challenge] of communicating effectively with them

- Communicating (due to age difference between me and the teachers) – they were keeping away

- Initially lack of open communication was the biggest struggle for me and I realised that teachers were hesitating in sharing their experiences because of fear of not doing the right thing

- Stupid to mention so, but I need to, that I was not a smart phone person

Time management

- I could not overcome the [challenge] of managing time

- As with teachers our main challenge was also time management. It was very difficult for us to address every concern on time

- The main challenge faced by us was time constraint

- Another challenge was teachers were not allowed leave for their research, and we were not given research leave. We used our earned leaves to cope with this

- Next, managing time and devoting time towards mentoring were demanding

- Meeting deadlines as mentor and getting the teachers to meet the deadlines. Struggling still

- Managing time with the group

- Balancing my job and project commitment

- Time constraints

- Meeting deadlines

Co-mentoring

- Another challenge was our own understanding of mentoring. It was our first experience in co-mentoring and there were a few technical snags like who will initiate the response to teachers' queries and what to respond

Dependence of teachers

- I felt that my teachers required a lot of support initially and depended on me for all decisions related to the exploratory action research project. Being readily available in the same campus proved a hindrance for their growth

Difficulty of being patient/calm; having manageable expectations

- First, it was difficult for me to remain patient with the teachers. Then at some point, I thought I was a little imposing. Thirdly, I had a tough time keeping my expectations to an achievable level

- Training the mind to be calm under any circumstance, not always was the mind calm

Individual differences / personal relationship difficulties

- Different working styles of people: it took time to understand people's way of working and responses to the tasks

- Some people are difficult to work with. Group work is not an easy task

Conducting joint/group sessions (including logistics)

- Finding appropriate times for teachers to get together for workshops

- Our teachers were from different places, and had different work schedules. So we faced the challenge of bringing them together to attend our workshops

Teachers' previous conceptions of research

- Previously built strong notions about research was also a big challenge for me as teachers used to think that research can't be the part of curriculum and they tend to plan separately for that which was putting unnecessary burden on them

Teachers' hesitation in sharing / lack of confidence

- Hesitation in sharing own research experiences because of fear of not doing the right thing

Maintaining motivation

- The biggest challenge for me was to keep the teachers motivated. As neither parents nor administrators wanted the learners to participate in such a work, the teachers got frustrated

- As there is no incentive, no encouragement, no support for such work in our context, it was too difficult to keep the teachers working. I always kept talking about the value of excellence and pleasure of research

- Dropouts

- Motivating and hand-holding at regular intervals

Differences among teachers/taking time to understand

- Teachers were from different places and had their own ideas of teaching-and-learning. So we had to understand teachers first by talking to them and by examining their responses to tasks

Difficulty of completing own research

- Could not complete my research as per the plan but personal reflections and observations continued

Task 10.3
How could the teacher confirm whether the qualitative findings are true of the whole class by collecting quantitative data?

1b. The teacher can put individual students' statements into a simple questionnaire format with columns for 'Strongly agree (SA)', 'Agree (A)', '(Disagree (D)' and 'Strongly Disagree (SD)'

	SD	D	A	SA
1. I enjoy working in groups				
2. I don't like grammar exercises				
3. I like speaking in English				
4. I want to listen to songs in English				
Etc.				

All students in the class can indicate their agreement or disagreement with each statement by marking a cross or tick in the appropriate column, then the teacher can count the totals for each item to get a picture of overall class opinion.

2b. A questionnaire can be made from groups' expressed interests, as in 1b. above, e.g.:

I'm interested in reading about …	SD	D	A	SA
1. films				
2. football				
3. environmental issues				
4. pop music				
Etc.				

Asking students to rank topics in order of preference (as in 2a) is another possibility, but analysing such data (by assigning points to each rank) will be more time-consuming than simply totalling.

3b. Once the classification of different types of mistake is complete, the teacher can go back and count the number of errors in each category to get a general picture of what students, overall, are finding most difficult.

Task 10.4
How would you 'interpret' what you found from your analysis of mentors' comments in Task 10.2?

You might have come up with a sentence something like this, in answer to the exploratory research question *What are the main types of challenge that teacher-research mentors face?'*

'According to this data, the biggest challenges that teacher-researchers face are communication – in particular, maintaining contact – and time management, on the part both of teachers and of mentors themselves.'

11. Supporting teachers to plan and evaluate change

Task 11.1
Would you encourage these teachers to explore the same topic further, explore a new topic or take action for change?

1. Explore further – This teacher clearly wishes to explore further before attempting to bring about a change.

2. Any one of these possibilities – This teacher has realised that the problem is only with more complex activities. She might now benefit from further

exploration in this area, but she might equally well decide to try out something new or just accept that students will inevitably make a relatively high number of mistakes in more complex activities.

3. Action for change – This teacher seems ready to try out increasing the number of group-work activities and evaluating the results.

4. Take up a new topic – This teacher was worried about his way of asking questions but emerges satisfied with this. Rather than taking any new action, he might be interested in exploring a new topic.

Task 11.2
Can you explain why reflective writing by the teacher and interview are not repeated in the example?

The first question is not repeated, and so there is no reflective writing, because the teacher has already satisfactorily established when and why she thinks students 'should' speak in English. The aim now is to bring about that situation in reality. The focus group interview doesn't have to be repeated (although it could be) because the teacher is not necessarily looking for new ideas – the main need is to get an overview of the class level of motivation following the change.

12. Helping teachers to share and reflect on their research

Task 12.1

**How would you justify the use of posters rather than PowerPoint slides?**

- You can use it more than once, and you don't need to rely on technology!

- You can be more creative with a poster (unless you are a genius with technology!) and each poster is unique and individual.

- Posters can be more permanently displayed than PowerPoint slides.

- With posters, more than one project can be discussed at a time (gallery-style), so it is time-saving and avoids any boredom due to there being too many long presentations.

- Participants can choose what they are interested in learning about with the 'gallery walk', making the activity more interactive than a PowerPoint presentation – there's likely to be much more time for discussion and questions.

What advice would you give on preparing the posters? What factors do teachers need to consider?

- How to structure/represent the research experience, e.g. as a journey, a cycle, a flowchart

- What information to include

- Use of images – where and why

- Making it attractive

How would you organise the 'gallery walk' activity?

- E.g. Each poster presenter introduces their poster for three minutes, after which participants move around the room approaching the posters of their interest and engaging in a dialogue with presenters and other participants alike.
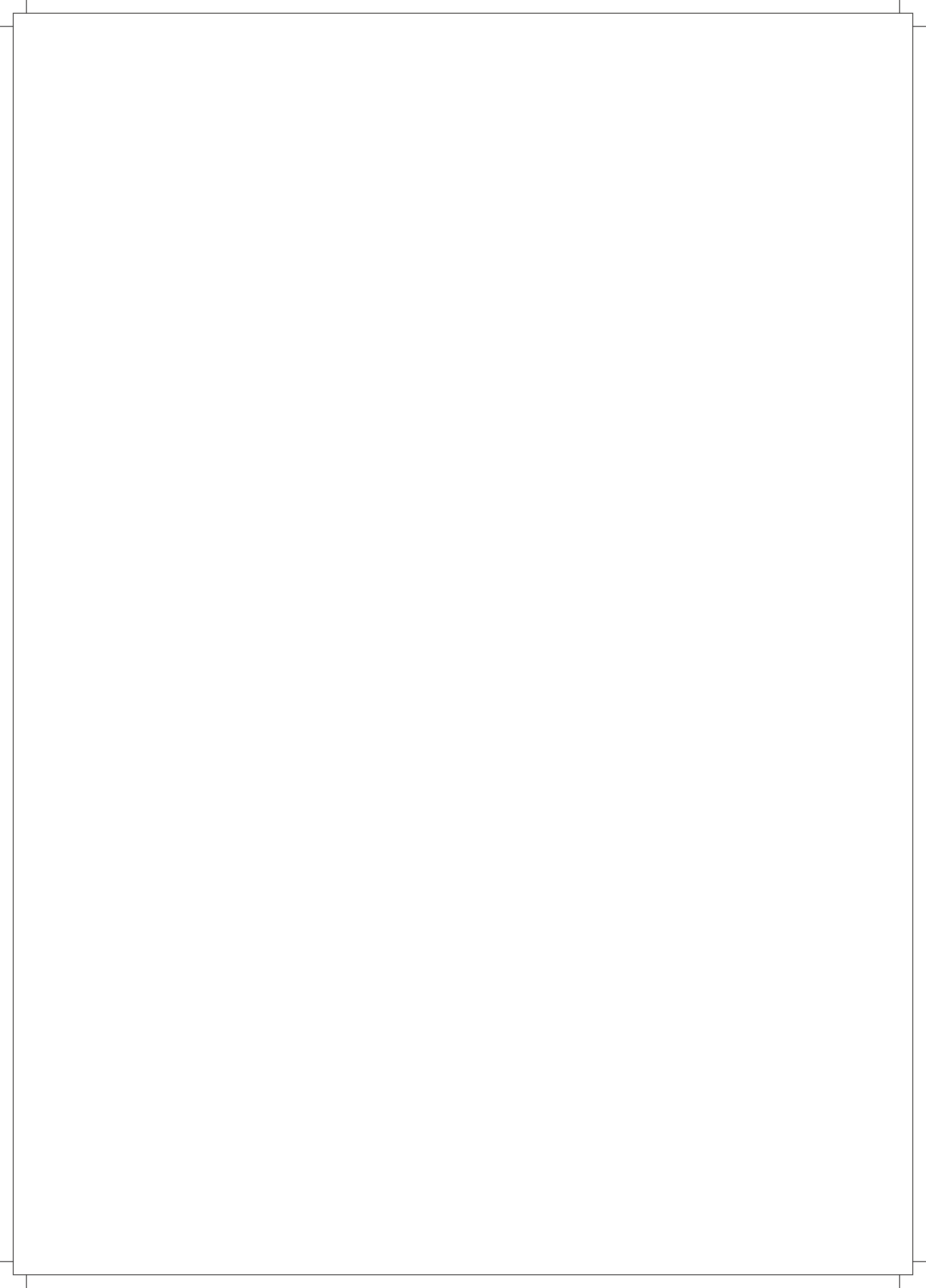
Interest in teacher-research for purposes of professional development has been on the increase for several years, and the needs for effective mentoring in this area are widely recognised. However, there has been a lack of guidance and material support regarding how mentors can help teachers engage in research. This book bridges the gap by offering insights, practical ideas and activities based on direct experience within teacher-research mentoring projects and programmes internationally, in particular in Latin America and South Asia. Via down-to-earth advice and engaging activities, the book will help both practising and intending teacher-research mentors to develop their skills in this increasingly important area.

About the author

Dr Richard Smith has worked in teacher education for almost twenty-five years, the last twenty of them in the UK at the University of Warwick. He is the co-founder and former co-ordinator (2008–18) of the Teaching English in Large Classes research and development network (TELCnet), former co-ordinator of the IATEFL Research SIG (2011–15) and founder and chair of the steering committee of the International Festival of Teacher-research in ELT (2017–18). He has published widely on topics ranging from teacher-research to the history of language learning and teaching, and has worked with teachers from many countries, both directly and as academic adviser to teacher-research mentoring schemes in Latin America and South Asia. For his other publications and further information see http://warwick.ac.uk/richardcsmith.