

Leh Wi Lan

Improving Secondary Education in Sierra Leone



TEACHER RESEARCH

HANDOUTS



These materials were produced by Cambridge Education with lead author Professor Rama Mathew. They were produced and delivered as part of the UK aid-funded Leh Wi Lan project for training teachers in government assisted junior and senior secondary schools in Sierra Leone. Materials can be shared and adapted for use as long as they are not used for commercial purposes.

Published: 2021

Main question:

Tell me about one thing you find challenging/good in your classroom.

Clarifying:

1. Can you say more about it?
2. What do you think is the main issue?

Understanding reasons and evidence:

3. Why is that happening?
4. What evidence do you have for this?
5. Could there be other reasons?
6. What other information do we need to know?
7. Is there any possibility that this is not the main reason?

Questioning assumptions

8. You seem to be assuming/....? Is that true?
9. Is there anything else we can assume instead?
10. What would happen if....?

Other possibilities

11. What is an alternative way of looking at it?
12. What could another person say about this?

Note: Socratic questioning is a form of disciplined [questioning](#) that can be used to [pursue](#) thought in many directions and for many purposes, including: to explore complex ideas, to get to the [truth](#) of things, to open up issues and problems, to uncover assumptions, to analyze concepts, to distinguish what we know from what we do not know, to follow [logical consequences](#) of thought or to control discussions. (from Wikipedia)

Read the following dialogue where two colleagues are helping each other to flesh out the situation/concern:

Find one example of each of the following ways of communicating write it next to the line in brackets.

Codes to use next to the line in the dialogue	Ways of communicating
[Q-C]	Questioning-asking for clarification
[Q-Pr]	Questioning-probing
[A]	Presenting alternatives
[S]	Structuring-guiding to action

Issue: Teacher feels she has no control over her class

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

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

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.

Colleague: When you say they don't listen to you, what do you mean? That they never listen to you, or at particular times?

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

Colleague: You mean when you give instructions?

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

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

Teacher: Yes.

Colleague: And do they have the same problem?

Teacher: Oh, I don't know.

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

Teacher: I could do that – good idea.

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

Module 2

Generating different types of research questions

It is useful to consider three perspectives/types of focus while generating research questions from an issue/concern:

- (i) The teacher's own perceptions (TP)
- (ii) Others' perceptions (pupils, colleagues, parents) (OP)
- (iii) Behaviour (teachers', pupils' etc) (B)

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 **pupils think** about speaking English in class? [OP]

RQ3: When exactly do they / don't they **use English**? [B]

Activity: In groups discuss the following situations and generate research questions based on the three perspectives.

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

RQ1:

.....

.....

RQ2:

.....

.....

RQ3:

.....

.....

Adapted from Smith, R. (2020). *Mentoring teachers to research their classrooms: a practical handbook*. New Delhi: British Council. pp. 45-46.

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

RQ1:

.....
.....

RQ2:

.....
.....

RQ3:

.....
.....

B. Students find it difficult to summarise ideas.

RQ1:

.....
.....

RQ2:

.....
.....

RQ3:

.....
.....

Adapted from Smith, R. (2020). *Mentoring teachers to research their classrooms: a practical handbook*. New Delhi: British Council. pp. 45-46..

C. Even though I prepare extra activities for fast finishers, it doesn't seem to work.

RQ1:

.....

.....

RQ2:

.....

.....

RQ3:

.....

.....

Notes

Adapted from Smith, R. (2020). Mentoring teachers to research their classrooms: a practical handbook. New Delhi: British Council. p. 16.

Module 2

Possible types of data gathering tools

Possible types of data gathering tools

- A teacher's own written reflections and/or notes
- Other people's written ideas on the topic
- Notes from informal conversations with colleagues
- Reflective writing by students
- Notes or recordings of focus group discussions
- Notes or recordings of interviews / chats with individuals
- Responses to a questionnaire
- Lesson plans and materials
- Lesson recordings (audio/video)
- Notes made by a critical friend (i.e. a sympathetic observer, e.g. a colleague) about your lesson
- Pictures of your class
- Students' performance on tasks (written or recorded)

Match the following research questions to appropriate data types by writing numbers from the figure being shown to you in the PPT 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 a large class affect pupil behaviour?

_____ B. How do I get pupils to participate?

_____ C. How do pupils feel when they speak English?

_____ D. How do I get girls to participate more?

Adapted from Smith, R. (2020). *Mentoring teachers to research their classrooms: a practical handbook*. New Delhi: British Council. pp. 50-51.

- _____ E. What teaching methods do pupils like me to use in maths lessons?
- _____ F. What type of tasks/exercises do pupils find most difficult?
- _____ G. How do I give instructions?
- _____ H. Which activities engage pupils most?
- _____ I. What kind of grouping strategies do my pupils find useful?
- _____ J. Do pupils feel they are making progress?
- _____ K. In what area(s) do I most want pupils to make progress?

Exploring your own perceptions

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

Exploring others' perceptions

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

Exploring behaviour

8. Lesson plans and materials.
9. Lesson recordings.
10. A colleague's observation notes about your lesson.
11. Pictures of your classes.
12. Pupil's work/performance on assignments/tests.

Module 3

Who is a mentor? Quotations on mentors

1. "A mentor is someone who allows you to see the hope inside yourself." — Oprah Winfrey

2. "My mentor said, 'Let's go do it,' not 'You go do it.' How powerful when someone says, 'Let's!'" — Jim Rohn

3. "One of the greatest values of mentors is the ability to see ahead what others cannot see and to help them navigate a course to their destination." — John C. Maxwell

4. "Our chief want in life is somebody who will make us do what we can." — Ralph Waldo Emerson

5. "I've learned a lot from mentors who were instrumental in shaping me, and I want to share what I've learned." — Herbie Hancock

6. "The delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves." — Steven Spielberg

7. "We make a living by what we get, we make a life by what we give." — Winston Churchill

8. "In a battery, I strive to maximize electrical potential. When mentoring, I strive to maximize human potential." — Donald Sadoway

9. "What I think the mentor gets is the great satisfaction of helping somebody along, helping somebody take advantage of an opportunity that maybe he or she did not have." — Clint Eastwood

10. "We're here for a reason. I believe a bit of the reason is to throw little torches out to lead people through the dark." — Whoopi Goldberg

¹ Adapted from AARMS induction workshop, British Council, India. 2018.

11. *"If I have seen further it is by standing on the shoulders of giants."* — Isaac Newton

12. *"A mentor is someone who sees more talent and ability within you, than you see in yourself, and helps bring it out of you."* — Bob Proctor

13. *"In order to be a mentor, and an effective one, one must care. You must care. You don't have to know how many square miles are in Idaho, you don't need to know what is the chemical makeup of chemistry, or of blood or water. Know what you know and care about the person, care about what you know and care about the person you're sharing with."* — Maya Angelou

1 Adapted from AARMS induction workshop, British Council, India. 2018.

Self evaluation of mentoring qualities/skills (for mentors)

Here is a list of 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? Tick the appropriate box against the five qualities you choose to be the most important: 'A' for the ones that you think represent your best qualities, B for 'average' attainment, or a 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	A	B	C
	I can provide constructive, non-judgmental feedback			
	I am willing to share knowledge, skills and experience			
	I show a positive attitude			
	I show enthusiasm			
	I show interest in others			
	I listen well (e.g. without interrupting)			
	I have experience in mentoring teacher-research			
	I am good at doing teacher research			
	I have experience in the present context e.g. Sierra Leone school education			
	I am willing to put aside my own beliefs and/or prejudices			
	I am interested in others' development			
	I feel responsible for others			
	I am able to imagine another person's difficulties			
	I am good at setting realistic goals			
	I am good at motivating others			
	I adapt my communication style to the listener's personality			
	I am consistent in communicating with others			
	I am clear in communicating with others			
	I am good at showing / demonstrating to others what to do			
	I am interested in improving myself.			

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 courage! At least, revisit this checklist occasionally to self-assess as you gain more experience.

Source: Smith, R. (2020). *Mentoring teachers to research their classrooms: a practical handbook*. New Delhi: British Council. pp. 14-15.

Module 3

Building mutual trust and rapport

Read this handout and discuss it with your partner.

Share some of your personal experience of how trust was built or broken and how you restored it.

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

2. 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.

Do you agree /disagree? What are your views?

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 will increase.

3. What practical steps could you take to bring about the following in your relationship with teacher-researchers you will be mentoring? Can you give an example for each of these?

- A sense of mutual respect: Example: You value what they know.
- A sense of equality:
- Honesty:
- Feeling valued:
- Feeling supported:

4. For building confidence, you could ask them to create a list of achievements and also look ahead and plan for what s/he wants to achieve.

Month	Activity	Who	Outcomes
1	Teachers meet in their schools to discuss their learning from the Workshop, and brainstorm their concerns/successes/puzzles	All teachers who attended the workshop	Through articulation and sharing, TRs get clarity on what they might want to work on.
2	Asking deeper questions and developing research questions through dialogues	All teachers with their mentor, mentors to meet teachers individually and as a team	Narrowing topic and arriving at research questions
3	Research Questions from three perspectives and planning tools for gathering evidence	All teachers with mentors	Plan to explore the research questions
4	Continue this work and draw up a plan for the next phase of work	Individually and as a group	A plan for implementation

Tracking teacher researchers' progress (Phase 1)

At the end of every month rate the teacher (very good: 3, satisfactory: 2, needs more support: 1) and mention some details of their strengths and weaknesses. **(Note: Add another sheet if necessary.)**

Teacher's name and phone number	End of first month Teachers' understanding of their work from the workshop. (Through articulation and sharing, Teachers get clarity on what they might want to work on.)	End of second month (Narrow their topics and arrive at research questions)	End of third month (Plan to explore the research questions)	End of fourth month (Plan of implementation)	Mentors' comments and observations (What support did you give the teachers?
1					
2					

Teacher's name and phone number	End of first month Teachers' understanding of their work from the workshop. (Through articulation and sharing, Teachers get clarity on what they might want to work on.)	End of second month (Narrow their topics and arrive at research questions)	End of third month (Plan to explore the research questions)	End of fourth month (Plan of implementation)	Mentors' comments and observations (What support did you give the teachers?)
3					
4					
5					
6					

Step 1: Look at your lesson plan (what you have in mind or what you might have on paper) and answer the questions given in the first set, before the class. You can select any five depending on your lesson focus.

Step 2: After the class, ask yourself the questions given in the second set and write the answers. Choose any five relevant questions.

Step 3: Write a brief diary/reflective account by answering questions in the third set.

Step 4: Repeat Steps 1, 2 and 3 after about a week or ten days. Write a brief comment on the difference(s) in the reports.

Step 5: Talk about your experience to your colleague. Write a brief description of the discussion and your learning/feelings.

Step 6: Repeat this whole cycle at least once more. Write about it in the form of a report.

First set

Before the lesson

1. Is the lesson that you have planned interesting?
2. Does it provide opportunities for students to be actively involved?
3. What classroom arrangement will you use? What materials do you need?
4. Which skills/concepts will you focus on in the class?
5. What might the students learn? Write the learning outcomes of your lesson.
6. How can I make the instructions clear?
7. What provision have you made for students who finish slowly/quickly?

Second set

After the lesson

1. What evidence was there that (a) the students were interested/not interested (b) the lesson was smoothly/badly organised?
2. Who was not involved? Why?
3. Note down on paper some language that the students used. Was it meaningful or meaningless?
4. What will you do next to follow up the lesson?

We often divide our class into groups/pairs for specific purposes: to ensure that many pupils have a chance to participate, they can learn from each other instead of only from the teacher, they learn about working collaboratively, it's easy for the teacher to monitor and support individual students this way and so on. Group work involves setting up a task at an appropriate time during the class, giving clear instructions so the task is clear to everyone, and making sure the objective of the task is achieved. It's a good idea to evaluate the group/pair work task to find out how well it achieved all the purposes. Also do students like it? Why? This feedback from different perspectives will teach us a lot about what went well, what didn't and based on that we can improve our teaching and pupil outcomes.

Step 1: You need to work on this **when you have just completed a class in which you organized pair/group work.** Evaluate it on the basis of the checklist given below:

- What was the purpose of group/pair work?
 - To increase student participation
 - To cater for different types of students
 - Any other (write it here)
- At what stage was the group/pair work planned for? Did you do it according to your plan?
- What was the basis of grouping?
 - Friendship
 - Level of ability/English
 - No specific reason
- Will this change each time you use group work/pair work in class? Why?
- When did you give instructions and how?
 - Before students formed groups/as they were forming groups/after
 - Orally
 - Through an example

- What factors/aspects did the instructions focus on?
 - The purpose of the task e.g. just discuss, discuss and answer the question, reach a consensus etc.
 - Time allotted for discussion, for writing/answering
 - Was there a group/pair leader, if so what was his/her role
 - Teacher's role (add others)
- What form did the feedback take?
 - Oral/written, on black board...
 - Given by the teacher/peers/group/pair leader
 - During the task/at the end

Step 2: Here are some practical problems you may have experienced in organising activities through pair/group work. Choose what was applicable to you and suggest possible solutions for next time.

Problems	Possible Solutions
1. Increase in the noise level	
2. Fixed and heavy furniture	
3. Lack of class space	
4. Insufficient time	
5. Difficulty in supervising	
6. Very large class	
7. Any other	

Step 3: Based on your answers in Step 1:

- Write your reflections on what you felt, what you learnt and how you resolved some of the challenges.
- If you redid this activity again, how would you modify it?
- Share your experience with the peer teacher or principal from the school to discuss the problems and possible solutions s/he may have faced.

Note: Just as problems emerge from particular classroom contexts, solutions will also need to be found within the context. Also these will always need to be modified according to particular situations. Some problems however will not have immediate solutions.

Step 4: What is your learning from this exercise? What changes would you be making to the way you planned and organized group/pair work in class? How often do you plan to set it up?

Step 5. Go through Steps 1 and 2 at least once more. Write a report on what you did and how it changed what you did next time and reflect on your experience.

Getting feedback from pupils

One method of looking critically at your teaching is to hold a structured discussion with the whole class where you ask the students for feedback.

The exercise takes 45-60 minutes to run. With a class of more than 50 it could take a little longer.

Step 1: Students work alone.

Students are asked to make notes about the good and bad features of their English/Math course, using the format given below.

Step 2: Students work in groups of four.

One student acts as a scribe and records comments agreed by members of the group. No comment may be recorded which is not a majority view (compromises and re-draftings may be necessary.)

Step 3: Students work as a whole class.

	Good points	Bad points
About the Pupils' book		
About teaching		
About us, the pupils		

The teacher takes one good point about the course from each group in turn, checks that most of the class agrees and then writes it up on the board, going round the groups until no new points emerge. The same process is continued for each of the six cells in the format. The class is then invited to adjust the overall picture which has been built up on the board.

A framework for structured group feedback

Step 4: Repeat steps 1, 2 and 3 after a gap of about 2 weeks. Write a brief report on the differences you see from the first exercise to the second with respect to each of the areas.

What was your learning? What is your students' learning/feelings? Would you like to repeat this exercise? Would they like you to repeat this exercise? With what modifications? Why?

Step 5: Talk to your colleague (peer teacher) about your experience. Record their views.

Step 6: Write a reflective account of all the work you have done as part of this whole activity.

Notes

Lined area for notes with horizontal ruling lines.

A study of pupils' perceptions of their role and their learning

It is always very interesting as well as useful to find out what pupils have to say about their learning, our teaching, and things in general. When we understand their likes and dislikes, even if we cannot possibly accommodate all their preferences, we can at least try, and they also appreciate the fact that we are trying. Also, not all pupils may be articulate and used to giving frank and honest feedback; it is something to be learnt. Becoming more articulate gradually helps to make them more responsible and informed learners.

Step 1: Look at the questions given below and decide how you would like to go about it. You can talk to a colleague about this, and you both can carry out the study together in your respective classes.

- When should the questions be given to students?

(Soon after the class, or at the end of every week)

- When and how should they fill it - during or after class, individually/in pairs/groups, oral/written?
- Will you give them paper to write on or will they use theirs?
- How do you intend to use the information?
- What problems do you foresee? How do you plan to overcome them?

Step 2: Give a brief introduction to how you would like them to give their frank and considered views on their English/Math class. Inform them about how you would like them to do it-oral/written, individual/pair/group etc. Note down any views they express on this.

Questions for pupils:

Did you like today's class?

Yes/No

- What was the most interesting part of the class?
- What was the most difficult part of the class?
- What math concepts/sums or language skills did you practise?
- What are some of the things you learnt in class?
- What else would you have liked the teacher to do?

Step 3: Think of the following questions after they have answered the questions. Write down your detailed comments to each of the questions.

- How did it work?
- How many students gave feedback?
- What did you do with the information?
- Do you want to modify the questions/procedure? How?
- What is your next plan of action?

Step 4: Repeat steps 2 and 3 at least twice more. Decide what modifications you will make to the procedure you followed. Review questions above (Step 1) to make changes. Note down all your comments.

Step 5: If you worked with a colleague, exchange notes regularly. How are your views changing/not changing? Comment on it in your diary.

Step 6: Collect all your comments/reflections into a report. Do not forget to write about your own learning and how it affected your teaching and pupils' learning.

Notes

Most traditional methods of evaluation treat students as objects and place the entire responsibility of assessment in the hands of teachers or other experts. There is little opportunity provided by these methods for students to assume responsibility or to take control of their own learning. In contrast, self-evaluation methods give learners a sense of involvement and encourage them to reflect on their learning, to assess their strengths and weaknesses and to plan the way they would like to go about learning. Teachers can help this process of self-evaluation leading to learner autonomy by providing guidance and support. Some of the specific ways of accomplishing this are:

Step 1: Have students write a brief note (or make a poster) on what they like/dislike about the English/Math course in general and particular lessons, why, what progress they think they have made, where there could be improvement and how. You can give them a set of open-ended questions for this.

Step 2: Allow students to discuss it with you/peers periodically and to indicate whether and how talking helped. Read or listen carefully to students' comments on their work and be interested, supportive and constructive on their self-evaluation when providing feedback. Note down any comments that you find useful and interesting.

Ask them what the teacher/others can do to help.

Step 3: Ask them to write a short diary— (in English or their native language) every week about what they liked and didn't like in their class. Encourage pupils to share/discuss their self-reflections with others.

Step 4: Ask them to talk about keeping self-evaluation diaries and how they help them learn better. You write reflective diary on what you are learning and how.

Note: Students' initial reflections may be simple and superficial. With time, practice, and a supportive climate, they will develop insights and learn to learn from their evaluation.

It may be a good idea to make it voluntary, say, 5-10 pupils who are willing to try it.

When the interested pupils start opening up and talk to you and their friends, you will see that others want to join in. Try this anyway.

Creating an inclusive classroom

What kinds of techniques are inclusive?

As a teacher one of your aims is for every student to feel comfortable in a learning environment that is happy and inclusive. Several techniques can be used very effectively to promote inclusion. For example, enjoyable language/math games; pair and group work; personalising learning; working through small simple steps.

What are the elements of an inclusive approach?

- Give equal and fair opportunities for participation

Example: *Ensure that girls have as many chances to participate as boys.*

- Reduce pressure and negative tensions.

Example: *Give plenty of chances to practice in pairs*

- Make chances for every student to succeed rather than to fail.

Example: *Sometimes let students choose which questions to answer; ask easier questions to weaker students.*

- Attend to individual students' needs

Example: *Focus on activities which make them work actively in the lessons, so that you can observe them and understand their needs.*

(Add others if you wish)

Step 1: Select at least two goals/elements from the above to create an inclusive environment. What kind of techniques and activities can you use to achieve them? Put them down.

Step 2: Plan your next 3-4 lessons using the ideas. Note down the details of how you will go about them specifically. Discuss this with your colleague and note down any new ideas that come up in your discussion.

Step 3: Use the two/three ideas you have selected. Keep a record of how you did your classes differently. Ask your colleague to observe your class if possible. Let him/her, keep notes on the observation specifically focusing on what you plan to do.

Step 4: This is optional but strongly recommended. Ask your students what they felt: did they experience any change in the way you taught the classes? How? This itself can be an interesting group activity. (See Pupil perception study for some details). Let them keep some notes on their discussion.

Step 5: After a gap of one week or so, repeat steps 2-4 by selecting some other ideas. Of course, you may decide to use the same ideas in a slightly different way from the last time. Note down what those changes are and why you're making those changes.

Step 6: Discuss this with your colleague and note down what emerges from your discussion.

Step 7: Collect all your learning/views and experience in the form of a report.

Note: It is important to remember that you are focusing on strategies for using in your class. You won't be repeating the lesson, but the strategies of including more pupils, and in a slightly modified form, based on your experience.

Specific issues with inclusion

Balanced activities Balance the different types of activities: physical and movement-based, visual-based, audio-based, lively, quiet. Different activities may make some students feel included: they may feel excluded and lose the motivation to learn and take part if there is too much that they find difficult, or which doesn't match their style of learning

Movement Physical and movement-based activities and games may be difficult for certain students due to physical challenges. Try not to exclude them from such activities: you may find various ways in which they can feel comfortable to take part according to their individual possibilities. For example, from their seats, with other students' help, by taking a different role such as timekeeping or calling out.

Seeing Make sure that every student can see what is written on the board or other visual displays such as posters. Some students may need additional support due to vision difficulties. For example you may need to read aloud for them or to have their neighbour to do this quietly. Pay attention to their individual needs regarding seating arrangements and working with partners who can help them.

Hearing Make sure that every student can hear you or other pupils when speaking to the whole class. Some students may need additional support due to hearing difficulties. For example, it may often help if they can see instructions or questions written down or if their neighbour can repeat something for them. Pay special attention to their individual needs regarding seating arrangements and working with partners who can help them.

How well did the technique work?

What process do you go through when you plan to use a teaching technique? How do you go about implementing it? What do you learn from your experience? How do you implement it next time? You can do a small research study on it.

Step 1: Think of the different techniques you have been introduced to. For example, group work, pupils explaining answers, asking different questions to different pupils, debate, pupil discussion any other. Select one or two techniques to try out specifically. Consider the following questions as you make your selection:

What is the purpose of using the technique? Which lessons in which class (given that this study will take place during January-April) will you like to look at?

Step 2: (How you will prepare for using the technique): By looking at the Lesson Plan Book and identifying a particular unit, will you do it with your peer or alone, if with the colleague what is her role?

Step 3: (How you implement it in class): Do you plan to use pair or group work? At what point in the class? How will you give instructions –in English/Krio/both --why? Will you set any time limit? What is the output/product? How will they present their work—individually? Or a group member/leader?

Step 4: (Checking students' understanding): How did it work in the classroom? (self-observation, students' feedback, observed by colleague/principal)

Step 5: How did you record/document it? (audio/video recorded, made some notes, questionnaire for students, wrote a diary capturing important points, other)

Step 6: What did you do after that? Discussed it with colleague/principal, decided to use another technique, repeated with another unit, etc)

Step 7: Repeat Steps 1-6 at least once more. Write a diary regularly capturing all your learning, apprehensions, doubts, what worked, what didn't, why etc.

Notes

Teaching large classes

Large classes can be difficult: not everyone can participate, you can't ask questions to everyone everyday or involve them all in all the activities. You will have to make a conscious effort to include everyone. In fact, large classes are very rich and can help the teacher deliver the lesson better because each student is a unique resource and the more students we have, the more resources we can potentially use. The purpose of this study is to share some ways to help you enjoy large classes and explore the richness the students bring to your lesson for everybody's benefit.

Step 1: Read through the various ways that are being suggested here to teach a large class more effectively.

1. Teach the whole class, not just the pupils sitting at the front and/or the pupils who are the best in class. Try to consciously make eye contact with most, if not all, students.
2. If you find it difficult to communicate with every student, then move the pupils so those at the back move to the front for a week for example, then change the sitting arrangement again so every row has the chance to sit at the front of the class.
3. Move individual pupils so they are learning to work with different classmates. This is very important as every student has different skills, no one is completely weak or completely strong, your pupils have different strengths and weaknesses. It is when the teacher uses these tools that pupils are given a chance to improve themselves because they can grow and develop skills, they are good at: a very motivating experience.
4. Make positive comments about what pupils have done. Say things like "Very good!" regularly throughout the lesson. When pupils make mistakes, don't be angry with them. Just help them to understand the mistake and correct it. It's very important that the students feel relaxed and happy in the lessons and are not scared of the teacher.
5. It is important to give students the chance to speak more. Using pair work and group work activities involves everyone and it gives you time to walk around the room and listen to those you cannot see when you stand at the front. Make sure there is never a lesson when some pupils leave without saying anything.
6. Encourage peer writing task, and peer correction, pupils learn to take responsibilities and learn the skills and confidence to be more independent, so they do not only rely on the teacher to learn.
7. To develop the idea of responsibility and empowerment, teach specific classroom language to make students voice their need as you cannot reach them all and be sure they all understand. Introduce them to some useful phrases and encourage them to use them. This is when pupils make themselves heard. There is less pressure on you to make everyone feel part of the lesson. For example, pupils may not have heard you or their classmate, they may not see, they may want to leave the room, close the door, ask for the spelling of the word --all this is a good tool to give to your pupils:

Excuse me, can you say this again?

Can you write in larger script?

Can I leave the room please?

I'm sorry I did not hear.

Can you turn up the volume?

Can you turn down the volume?

Please say that again.

Can you repeat the word please?

Can I close the door?

Can I sit next to....?

I'm sorry I don't agree.

I'm sorry I didn't say that.

Can you spell this word please?

I'm sorry I can't see.

Can you write the word on the board?

Step 2: Select any 3 suggestions given and plan your next 3-4 lessons using the ideas. Note down the details of how you will go about them specifically. Discuss this with your colleague and note down any new ideas that come up in your discussion.

Step 3: Use the three ideas you have selected. Keep a record of how you did your classes differently. Ask your colleague to observe your class if possible. Let him/her, keep notes on the observation specifically focusing on what you plan to do.

Step 4: This is optional but strongly recommended. Ask your students what they felt: did they experience any change in the way you taught the classes? How? This itself can be an interesting group activity. (See Pupil perception study for some details). Let them keep some notes on their discussion.

Step 5: After a gap of one week or so, repeat steps 2-4 by selecting some other ideas. Of course, you may decide to use the same ideas in a slightly different way from the last time. Note down what those changes are and why you're making those changes.

Step 6: Discuss this with your colleague and note down what emerges from your discussion.

Step 7: Collect all your learning/views and experience in the form of a report.

Note: It is important to remember that you are focusing on strategies for using in large classes. You won't be repeating the lesson, but the strategies of teaching large classes, and in a slightly modified form, based on your experience.

Professional Development: How can we make peer and principal support work?

In this study, you, and your colleague and if possible, your principal will explore different ways of supporting each other. Therefore, you will first need to ensure that all of you are willing to together find some time to work on the study at least during the next 2-3 months.

Step 1: There are many ways in which you can support each other: looking at your Lesson Plan Book, discussing it and planning a class accordingly; observing each other's classes and discussing it (add others if you can) etc. Decide which ideas you wish to try out with your colleague/principal. It may be a good idea to focus on one or two ideas at the most.

Step 2: As you engage in working together and having a professional dialogue with your colleague(s), you will write diaries regularly, read each other's diaries and reflect on it. You will ask a lot of 'deep' questions as was demonstrated in the workshop. More importantly you will need to decide how often you will do each of these activities. Deciding to do it too often (for example every day) or only once in two weeks is not a good idea. There should be some continuity to your work so that it is useful and interesting.

You could also fill up the following grid (next page) to serve as a record.

Note: The tools you use to record all the information could be like other studies, for example, asking students through a short interview/some questions, looking at the observation data, and of course your own reflective diaries.

Step 3: Repeat the steps at least once more with whatever modifications you wish to make (why you need to make those modifications is important) and maintain a record of all the activities.

Step 4: Each of you can write an account of your experience or you can do it together. Try and capture all the good things and things you were not happy with honestly.

Tips for the observer (peer teacher/principal)

It is better to let the teacher know that you are observing her/his class.

It may also be a good idea to decide beforehand what you would like to observe: keep the focus very specific, for example, how the teacher asks questions, organizes group work, uses a particular technique, enables children to participate, etc. If you visit the classes regularly it will motivate the teacher to practice the techniques. When you observe a lesson keep the observation schedule and a pen ready so that you can record your observations. Sit at the back of the class and try not to disturb the class. Always discuss the class as soon as possible. Remember, you will learn by observing the lesson as much as the teacher learns when you discuss the class.

With your colleague/principal from the school fill up the grid and have a discussion regularly.

	How many times did you do this in the last one month?	How useful did you find it? Give specific examples. What were some of the questions that you dealt with?	Issues that you postponed for next time....
Looking at some specific lesson plans.			
Implementing it in the classroom			
Planning with the peer teacher			
Observing peer lesson			
Being observed			
Reflection meeting in school with peer/principal			
Add others			

This study aims to look at the classroom from different perspectives i.e., from the point of view of the teacher, pupils and yourself, the researcher.

Step 1: Observe at least two classes of the peer-teacher using an observation schedule (you could use the one provided, modify it if necessary or draw up your own).

Step 2: Interview the teacher and find out what the teacher has to say about the classes you observed (draw up a set of broad questions based on what you observed which you can develop as you interview the teacher).

Step 3: Interview a few pupils (one or two bright and one or two weak students or 3-4 randomly selected) along the same lines, but this time from the pupils' angle. (Make sure the pupils you select are willing to talk to you).

Step 4: Analyse the information you have gathered by looking first at your observation and then examining it in relation to what the teacher has to say about it and finally cross-checking it with feedback from pupils. You will thus build up a holistic class profile. Write a report highlighting the features that are endorsed by all the three sources of data and those that are not. Try and say why there might be a conflict in the different perspectives.

Note: A variation to the study could be to compare two class profiles, i.e., of classes taught by two different teachers two different subjects and so on.

Module 4

How can I make my class fun and include everyone?

Here you will see ways to make the lessons fun, and how to make sure everybody joins in. Put these ideas together: it's fun, and everybody joins in.

Step 1: Before you start, answer this question. How much fun are your lessons for the pupils? Are they happy, smiling and laughing, or are they quiet and serious? Choose a place on the line.

My lessons are serious, and not much fun for the pupils.

My lessons are lots lot of fun for the students.

My view ←—————→

Now ask your pupils whether **they** think your lessons are fun for them. Get some examples of when they think lessons are fun and when they become serious. Place their view on the line.

Pupils' view ←—————→

Note down any thoughts that come to your mind about why they are saying what they are saying. Are they all agreed on their view? Or is there a variation?

Step 2: Decide when you are going to make your lessons more fun and involving for your pupils, so everybody really wants to join in. Write your ideas here.

Class _____ Lesson _____ Ideas to make class more fun:

Step 3: After you try the methods, say, for two weeks, give yourself 1 to 5 points.

- How much did I use the new methods? 1 2 3 4 5
- How well did I use these methods? 1 2 3 4 5
- How much did the students enjoy these parts of the lesson? 1 2 3 4 5
- How well did I get all the pupils to join in with the activities? 1 2 3 4 5
- How good was my sense of humour in class? 1 2 3 4 5

Now ask your students to give you points for each of these questions. Tell them together you are going to make English/math lessons more fun and inclusive. You can also go through Step 1 to see where you and your pupils are on the line now.

Step 4: Repeat steps 2 and 3 at least twice more. Note down your response and your pupils' response. Note down any additional points that come to your mind. Talk to your colleague (peer-teacher) about this. What do you both feel? Note down those thoughts as well.

Step 5: Write a reflective account of all your experience from the time you started.

1. Getting pupils' feedback

- Did you like today's class? Yes/No
- What was the most interesting part of the class?
- What was the most difficult part of the class?
- What math concepts or language skills did you practise?
- Which maths concepts or language skills do you think you need more support with?
- What are some of the things you learnt in class?
- What else would you have liked the teacher to do?

2. Self-reflection after using a new method/approach

After you try any new method/technique, (for approximately two weeks), give yourself 1 to 5 points. (1-very poor, 5-very good)

- How much did I use the new methods? 1 2 3 4 5
- How well did I use these methods? 1 2 3 4 5
- How much did the pupils enjoy these parts of the lesson? 1 2 3 4 5
- How well did I get all the pupils to join in with the activities? 1 2 3 4 5
- How good was my sense of humour in class? 1 2 3 4 5
- How well did the pupils learn the maths / language skill? 1 2 3 4 5

3. Pupils' likes and dislikes

Add some more statements that focus on their likes and dislikes in a math/English class

Very much/somewhat/not at all

1. I like it when the teacher asks questions.
2. I don't like to do maths exercises when I'm not clear how to do it.
3. I enjoy it when the teacher does new things in class.
4. I like to figure out some 'puzzles' myself and do it by myself.

4. Classroom Observation (for a colleague)

(A) While observing the class note your reactions. ¹

What to observe?		After 15-20 min			After 30-35 min			Reasons for variations if any
		Yes	No	Some-times	Yes	No	Some-times	
1.	All instructions were clear.							
2.	The class understood what was to do.							
3.	Every pupil was involved.							
4.	Pupils were interested in the lesson.							
5.	The teacher made sure all the pupils understood instructions, discussion, content etc.							
6.	Materials and learning activities were appropriate for the pupils.							
7.	Class atmosphere was positive.							
8.	There was enough variety in the lesson.							
9.	There was the right amount of teacher talk.							
10.	Feedback was specific and helped pupils learn.							
11.	The teacher uses different methods to check (or assess) learning.							
12.	The teacher was skilled in organising pair/group work.							
13.	The teacher adapted the approach to children's needs and responses							

B) Another way of looking at the classroom (teacher-pupil interaction)²

Study and remember these seven categories. Put a tally against the category you see occurring MOST every minute, as you observe the class.

TL Teacher lectures – describes, explains, narrates, directs

TQ Teacher questions about content or procedure, which pupils are expected to answer

TR Teacher Responds-accepts feelings of the class, describes feelings (past and future) in a non-threatening way; praises, encourages, jokes with pupils; accepts or uses pupils' ideas, builds upon pupil responses, uses mild criticism such as 'no', 'not quite'.

¹ Adapted from Nunan, D. 1989. *Understanding Language Classrooms*. Prentice Hall.

² Brown, G. (1975), *Microteaching*. Methuen and Co.

- PR** Pupils respond directly and predictably to teacher questions and directions
- PV** Pupils volunteer information, comments, or questions.
- S** Silence -pauses, short pauses of silence
- X** Can't say what is going on, confusion in which communication can't be understood, unusual activities such as reprimanding, or criticizing pupils, short periods of blackboard work without accompanying teacher or pupil talk.

Tallies recorded every minute																			
TL																			
TQ																			
TR																			
PR																			
PV																			
S																			
X																			

Notes

Article 1 by Anantkrishnan**Introduction**

The new CBSE Interact Course has been a turning point in my teaching career. It presented me with a new challenge and I had to change both my concepts of language teaching and learning methods.

Initially I found it rather difficult to organise the various activities. Often, the classroom degenerated into chaos. From my point of view I found that there was hardly any 'teaching' and I found the coordination of activities rather difficult. The students many of whom were passive listeners found the process difficult. They could no longer sit and relax in class. They too found things difficult when the teacher no longer 'taught' but induced them to do things.

I have often pondered over my new role. How capable was I in organising activities? Encouraging the students to speak formed a vital part of the new curriculum. Of course, there would be some who are very eager to speak. What about the shy ones? Would I ever be able to instil confidence in them?

Although I have often analysed a day's work in a few minutes at the end of the day, I had never carried out a systematic step-by-step analysis. When I saw the mini project "Diary Study", I felt that it was a unique chance for an objective and frank self-analysis. This is my reason for choosing the topic! Was there a better way of improving oneself?

Procedure

The study involved detailed self-analysis based on certain important questions within a period of about a fortnight.

Step 1

First, I decided to analyse my performance on the basis of a lesson in the Main Course Book. In short, it involved a debate on setting up a mill at Srutipur. I chose this topic because I felt that it would be highly motivating and the inhibited students would be encouraged to join the mainstream. I planned the lesson well in advance. Students would bring magazine clippings on debatable topics. It would be organised well in advance. These clippings would then be read out (at least the most interesting ones). Coming back to the lesson, I would introduce the topic and assign various roles. The students would be in groups of six. They would discuss in groups followed by a class debate and the drafting of a letter to the editor.

After the lesson, I felt the class was satisfactory.

Findings at this point

1. I had managed to motivate the students quite well. They were extremely eager about the new course. They brought a lot of magazine clippings and their faces glowed, eager to participate!
2. I felt, however, that some showed the tendency of leaving the initiative to others. These students had to be constantly encouraged.
3. Occasionally, the class seemed to degenerate into chaos. I could not scold them as it would kill their enthusiasm. At the same time, I felt the need for better organisation with rules and regulations to avoid any sort of indiscipline.

From CBSE-ELT Curriculum Implementation Study, Teacher as researcher. 1994. Mini-project reports presented at the First Review Workshop held at CIEFL, Hyderabad.

4. I also felt that some of the organising could be done by the students themselves. They could fix the rules and decide who violates them. After all, self-discipline on the part of students was certainly far better than the teacher scolding or reminding them.

5. Some students kept asserting their points without listening to others. They had to be told that listening was as important as contradicting. Unless you listen carefully, how can you argue against a point of view. Equally important is the critical analysis of what the opponent says.

6. Better instructions and initial explanation could avoid misconceptions. One student had a misunderstanding and had to be corrected!

7. When the students spoke spontaneously, some of their language habits and mannerisms became obvious! If they thought and planned what they spoke, maybe, we would not have been able to find out!

Step 2

The class on 'spark mills' resulted in interesting discussions on 'silent valley' and 'the role of English in India'. Students were interested in debating and I felt it a good method to draw introverts into the mainstream.

This time, I took for debate, a topic more relevant to their day-to-day life. 'TV viewing is harmful for children'. The organisation was different this time. The class was divided into groups of four and by drawing lots, they decided whether they were 'for' or 'against' the topic.

In every group, there would be a group leader, a group secretary, a group artist and a group speaker. The roles and duties were clearly assigned. Moreover, the students played a greater role in the organisation. The role of the teacher was further reduced. We would also have a chair-person, debate secretary, and time keeper for the overall organisation. Their roles were clearly defined. As in the previous case, there were ample opportunities for the students to be involved. I felt that individual responsibility was more this time, the roles being clearly assigned. My aim now was to improve the communicative and organisational skills of the students.

There was a class debate on the topic followed by the drafting of a report.

Findings

1. This time, I felt that the organisation was better! I felt encouraged to find the introverts playing a prominent role, compared to previous occasions.

2. There was better discipline in class. This was due to a) better organisation and rules b) students having a role to play in the organisation.

3. I felt that the entire class moved on smoothly without a single moment of chaos.

4. Students who kept asserting their points previously now spoke only after listening to their opponents. They had understood what I had told them in this regard.

5. Students were trying to get rid of their wrong language habits and unnecessary repetitions. They were succeeding. The student who kept on using the word 'like' used it less this period!

6. The instructions were clear this time. There was no misunderstanding.

Conclusion

As a teacher handling the new Interact Course, one might encounter some of these problems. Yes. At the beginning there is every chance for one to encounter difficulties.

Although, superficially, the role of the teacher is reduced, actually he has to put in a lot of effort. The success of this whole experiment depends upon the success of the teacher's efforts to organise, inspire and motivate!

Yes, the course is effective! Students who would sit idle in a traditional class as passive listeners now come forth to speak out. This depends on the motivation and encouragement they get, and the personality of the teacher.

The unnerving 'chaotic' situations are a result of bad organisation and can easily be rectified. The charge that the course destroys discipline in class is baseless.

Constant interaction in English would certainly improve the language skills of students. This won't happen in a 'traditional' class.

The last few months have changed me from a sceptic to a supporter of 'Interact in English' and I end by wishing the new CBSE course a bright future!

Module 4

Exploratory Practice: Investigating my own classroom pedagogy¹ by Yasmin Dar

Read this article and discuss the following questions in groups of 3-4. Notice that it relates to a college classroom. But look at how the teacher is using an 'exploratory way' to understand how she can maximize their learning through outside-classroom activities, like home work.

1. What was the main issue the teacher was concerned about, with regard to homework?
2. What were the two main problems she noticed with regard to homework?
3. How did she find out that there were these problems?
4. What did she decide to do about it?
5. Do you think this way of going about your classroom work is useful/interesting?
6. Which aspects of her study would be relevant to your work?

Data collection using regular classroom activities

My students seemed enthusiastic and eager in class, which I thought I could use to maximise their learning outside class time by carefully picking out extra learning opportunities: e.g. setting homework tasks where they had to do some research on classroom topics to write paragraphs. From the start of the course, they all seemed to look forward to receiving homework, but only a few actually completed it, and I needed to identify the underlying reasons before I made a decision about my next step.

As part of my 'normal' classroom pedagogy, I carefully selected homework tasks so that the students could revisit and practise the target language (English) that had been covered in each class. For instance, in the last 5 minutes of each class, I would explain instructions for their homework, for example to follow a link to a website to practise a grammar point covered in class, and/or carry out specific research on a topic covered in class and write a paragraph which they must email to me so that I could check it and provide individual feedback. I would also email the group with these instructions.

To collect the data, at the start of each class I exploited my group's pair-work and group-work discussion activities by including the following topic: "Ask your partner if they have completed their homework. If the answer is no, ask why". My role was to note down the students' answers not only for data purposes but also for peer feedback on key pronunciation and grammar errors during the activity. During class feedback I would summarise the main reasons students had given for not completing their 'homework', and then ask the following question for whole class discussion, "Can you think of any ideas of how to solve these problems?", which generated key suggestions that I myself could have suggested, but instead the students had to work hard to make their meaning clear by self-, peer and tutor correction. The common answers suggested that some students did not have enough time due to domestic commitments such as buying ingredients to cook fresh meals every night. However, I was surprised to discover that most students were not as computer literate as I had expected, as their feedback suggested that they needed to be shown step by step how to use the virtual learning environment (VLE) platform that is specifically used by the university.

1. This is a short and edited version of the article published in: Bullock, D. and Smith, R. (Eds.) (2015) *Teachers Research! IATEFL Research Special Interest group, IATEFL* (pp.51-55).

Implications for me and my learners

The data supplied me with findings that were available immediately and were relevant to my context. For example:

- Some practical changes were needed in my teaching practice. For instance, I decided to offer IT support by providing photo shots with step by step instructions on how to access specific resources, as well as using the classroom computer and whiteboard to carry out a demonstration.
- Some students seemed to show resistance to engage in extra learning activities outside class time. I decided to accept their resistance, but continued to gently encourage them to complete their homework.

Conclusion

I found the whole experience personally more rewarding than researching my classroom with a problem/solution focus so much so that I chose to continue using the principles of Exploratory Practice to regularly research my classroom practice. This case study has hopefully demonstrated that the nature of Exploratory Practice encourages data to be collected with minimum time and effort, which for me means less chance of reaching burnout whilst researching my classroom pedagogy, and I have also tried to show the benefit of doing research where the results from my data are immediate and relevant to my specific context, and probably to other similar contexts.

Notes

Module 4

Self-evaluation of Exploratory Action Research competencies (For participating teachers)

Try out this self-diagnosis exercise before we begin. It gives an overview of the different kinds of skills and ability ('competency') we hope you will have developed by the end of the teacher research programme. The exercise will be repeated at the end of this process to help you see what you've learned.

The main purpose of this tool is to help you identify existing strengths and areas where you would particularly value professional development and support. The diagnostic tool is based on fifteen exploratory action research competencies.

Each competency has five levels, and you need to decide for each competency which level you are currently working at. It is expected that you will have a range of competencies at different levels, but at the start you may not have many (or any) above Level 0.

Level 0: I do not currently have this competency.

Level 1: I am beginning to apply this competency.

Level 2: I am applying this competency but have areas which require improvement.

Level 3: I am applying this competency with confidence.

Level 4: I am applying this competency with strength.

Fill out the table below by putting a tick in the box corresponding to the level you are currently working at for each competency.

Competencies		0	1	2	3	4
A.	I can reflect on and analyse my teaching.					
B.	I know how to improve my teaching.					
C.	I can identify what is good about my teaching.					
D.	I can see what problems are occurring in my classroom.					
E.	I can identify a focus for research into my classroom.					
F.	I can consider how to turn successes, problems, and other issues into research questions.					
G.	I can identify appropriate sources of evidence for research questions.					
H.	I can decide how to gather information to answer my questions.					
I.	I can collect evidence to answer research questions.					
J.	I can analyse evidence collected.					
K.	I can incorporate my students' suggestions and/or opinions into my teaching.					
L.	I can design an action plan based on exploration of my teaching.					
M.	I can put an action plan into practice based on exploration of my teaching.					
N.	I can evaluate the results of an action plan.					
O.	I know how to communicate/present research findings orally and in writing.					

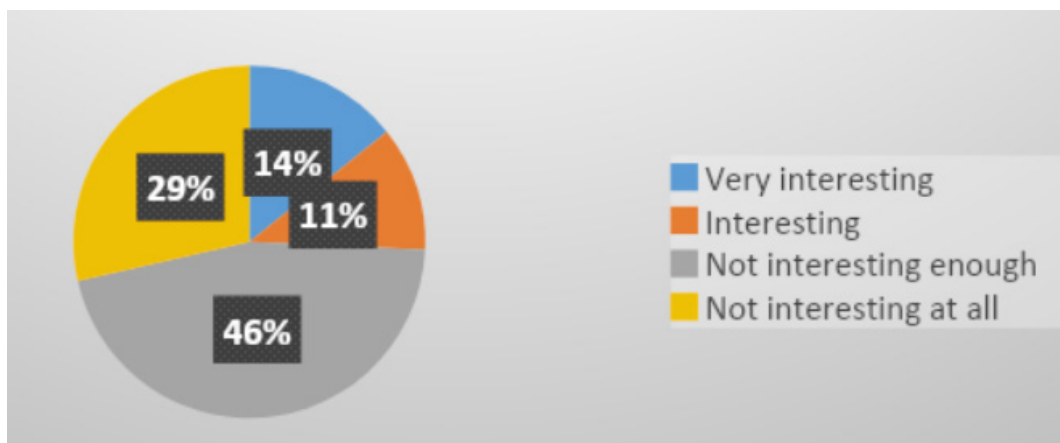
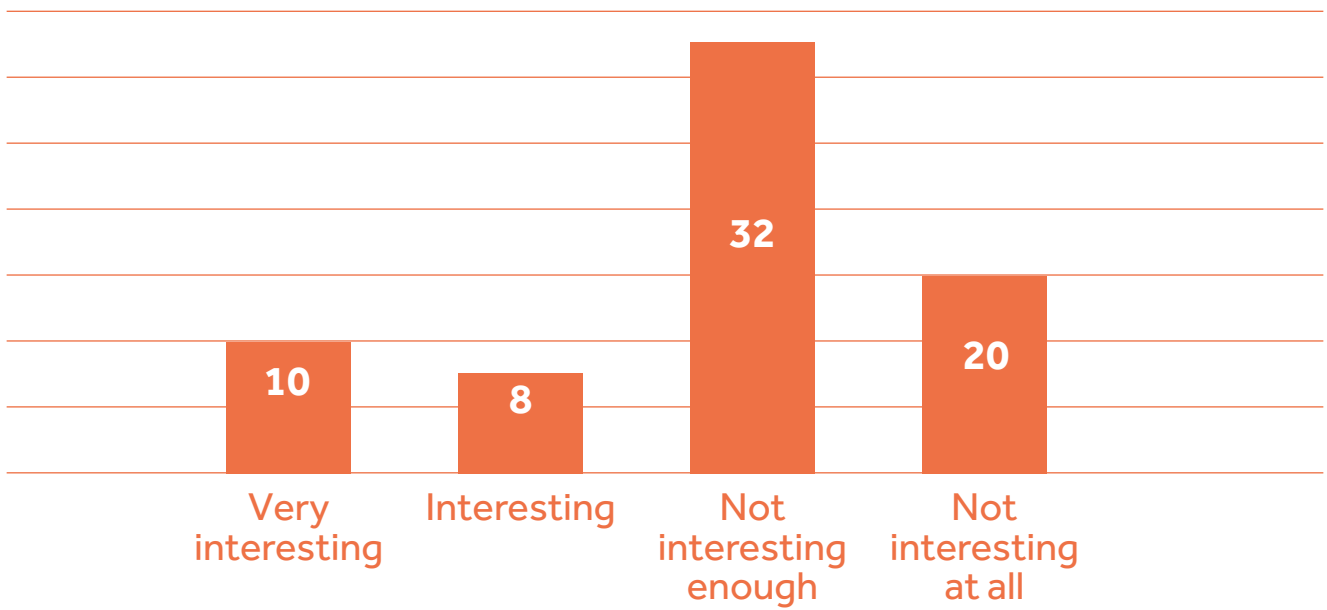
Source: Smith, R. and Rebolledo, P. (2018). *A handbook for exploratory action research*, British Council, p.6

Module 4

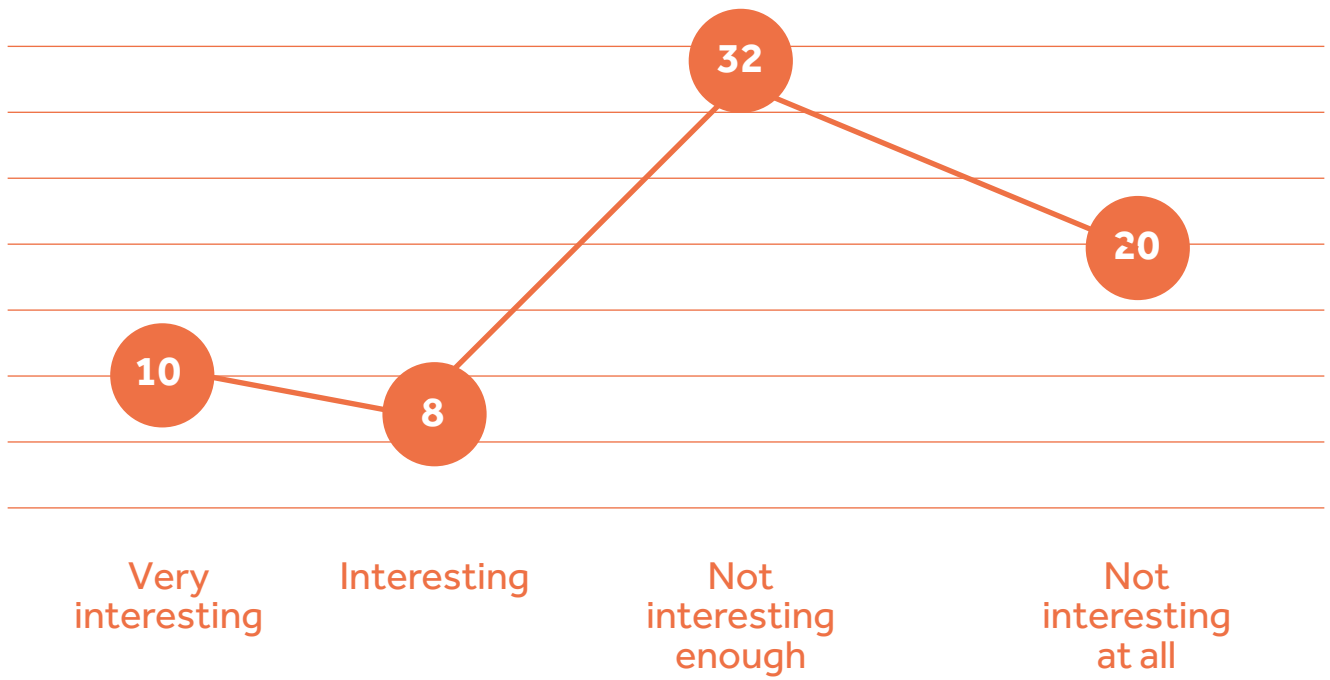
From data to charts

Very interesting	Interesting	Not interesting enough	Not interesting at all
10	8	32	20

What do you think of math sums in class?



What do you think of math sums in class?



Notes

Source: From Smith, R. and Rebolledo, P. (2018). *A handbook for exploratory action research*, British Council.

Turning data into a diagram for better understanding

Example 1

Diana¹ asked her class the question: 'what percentage of my instructions do you understand?' She asked them to indicate it on a line with 10, 20, 30, ... 100 % shown. This is the table she made to show how many understood what percentage of her instructions.

Percentage	100%	90%	80%	70%	60%	50%	40%	30%	20%	10%	0%
Pupils	3	8	15	8	20	9	5	3	2	2	0

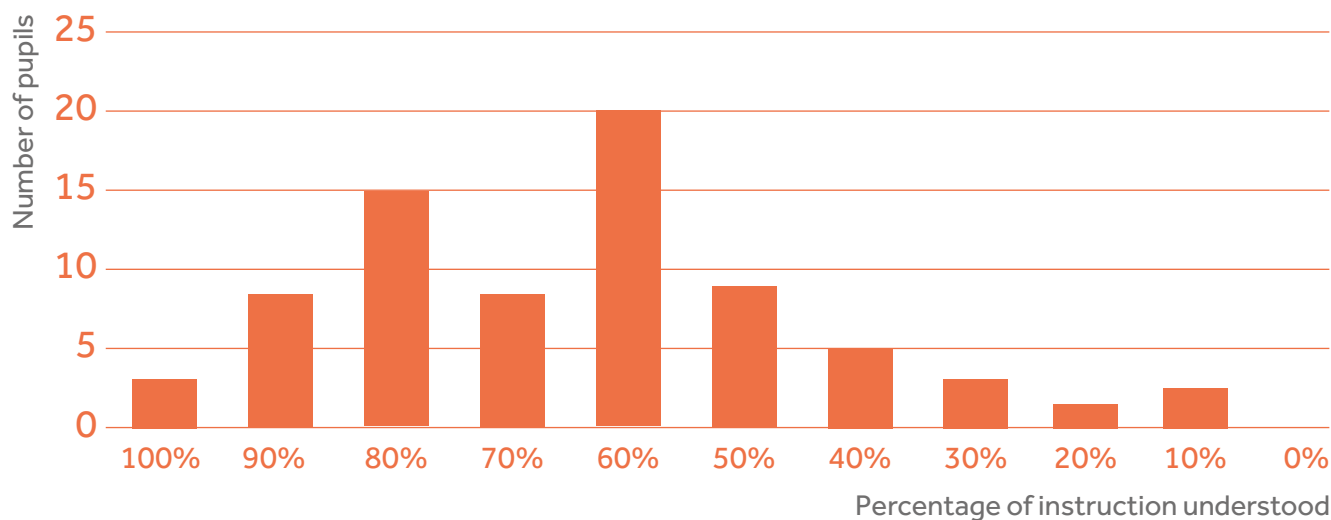
She further asked them to say what they understood or didn't understand well. Diana's research question was 'How much do pupils understand in my class?' Make a bar chart to show the data in a clear and interesting way.

She then made a summary of the responses they gave to her question: pupils who understood 50 % or more of her instructions said, they found some words difficult, or when instructions were too long or there were no examples given. But they said they could manage to do the task as they understood the gist of her instructions.

The ones who indicated that they understood only part of her instructions said, they can't attentively listen to her instructions, other pupils distract them and the instructions were too 'high' level.

What conclusions can you arrive at from this data?

Pupils' understanding of teacher's instructions



Possible conclusion: From the teacher's perspective, majority of her pupils (63 out of 75 or 84% of them) understood her instructions at least to the extent of 50% and gave reasons for their answer. Also notice that there are two 'peaks' in the data. There is a peak at 80% and at 60%. Diana can find out more about these peaks from her pupils. This is generally a positive picture for Diana.

1. From Smith, R. and Rebolledo, P. (2018). *A handbook for exploratory action research*, British Council.

There are of course some pupils who don't understand her instructions and can't probably do the task. She will need to probe this further and find out the actual problems and even find solutions to them.

Example 2

Look at the observation data in the table below. What are some of the striking features of this classroom?

Description of categories:




- TL** Teacher lectures – describes, explains, narrates, directs
- TQ** Teacher questions about content or procedure, which pupils are expected to answer
- TR** Teacher Responds-accepts feelings of the class, describes feelings (past and future) in a non-threatening way; praises, encourages, jokes with pupils; accepts or uses pupils' ideas, builds upon pupil responses, uses mild criticism such as 'no', 'not quite'.
- PR** Pupils respond directly and predictably to teacher questions and directions
- PV** Pupils volunteer information, comments, or questions.
- S** Silence -pauses, short pauses of silence
- X** Can't say what is going on, confusion in which communication can't be understood, unusual activities such as reprimanding, or criticizing pupils, short periods of blackboard work without accompanying teacher or pupil talk.

	Tallies recorded every minute										
TL	X	X	X					X	X	X	
TQ				X							
TR						X					
PR					X						
PV											
S							X				
X											X

- How many minutes' class has been observed? How do we know?
- What is the most striking feature of this class? How do we know?
- Who is talking more, the teacher or pupils?
- Compare the first three categories that are about teacher behavior and the next two that are about pupil behavior. What can you say about it?
- Are there other comments you wish to make based on the data? What else do you wish to investigate further?

Things to consider as you design your tools for data collection¹

As you are aware, questionnaires, interviews and classroom observations are very common methods to collect data. These are a list of things you can consider for each of the methods before starting the data collection process.

Research method	Things to consider
Questionnaires 	<ul style="list-style-type: none"> ■ Keep questions simple to avoid confusion and misinterpretations. ■ Use the type of questions that will give you the information you need. It might be useful to vary between closed and open questions (see the example in Extra Material (no. 2) at the back of the book, where spaces are provided for 'other' responses). ■ Keep the questionnaire to the point and brief. Sometimes questionnaires have too many questions which are not relevant. Good questionnaires are not good because they are long but because they ask the right questions in the minimum time possible. ■ Ask a colleague to check the questionnaire and give you feedback and, if possible, ask a student from a different class to answer it in order to make sure questions are clear.
Interviews 	<ul style="list-style-type: none"> ■ Decide your questions before the interview. ■ Plan additional questions in case the responses you get are too short and provide too little information ■ Try to ask 'open' questions and try to avoid 'leading' students to a particular answer ■ Plan a date and time for the interviews to take place ahead of time.
Classroom observations 	<ul style="list-style-type: none"> ■ Decide areas to focus on before the observation. For this you can design an observation checklist (see the example in Extra Material (no. 2) at the back of the book). ■ If you are planning to ask a colleague to observe your classes, make sure you agree the focus and procedure with your colleague ahead of time. ■ If you are recording a lesson, advise your students they will be recorded. ■ Prepare the recording device properly as to avoid any technical difficulties. ■ Consider carefully where to place the recording device, in advance. ■ Plan the date and time of the recoding ahead of time.

1. Source: Smith, R. and Rebolledo, P. (2018). *A handbook for exploratory action research*, British Council, p.52.

Data analysis: an example²

Here is some data from three teachers' questionnaire. We'll try and figure out how this data can now be interpreted. The first step is to calculate some percentages and then understand what the %s mean and plan the next steps.

1. Do you like or enjoy working in groups?		
Yes, I do: 25	Sometimes: 12	No, I don't: 3

2. Is it important to learn maths?		
Yes, it is: 15	Not sure: 14	No, it isn't: 36

3. Would you like to speak English in future?		
Yes, I would: 25	Maybe: 12	No, I won't: 11

Task:

Look at the answers given by pupils, complete the following sentences. You may need a calculator.

..... % of pupils definitely enjoy working in groups.

..... % of pupils think it's not important to learn maths.

..... % of pupils would like to speak in English in future but% of them wouldn't like to and% of them are not sure if they would like to.

Next let's look at the other answers in the three questionnaires and answer these questions:

A. What else does the data tell us?

B. What other questions would you now like to ask the pupils so you've a better picture of the situation?

(Hint: Try asking what, why, when, how questions to probe further and get a better understanding of the situation.)

2. Adapted from Smith, R. and Rebolledo, P. (2018). *A handbook for exploratory action research*, British Council, pp.56-57

Tracking teacher researchers' progress (Phase 2)

At the end of every month rate the teacher (very good: 3, satisfactory: 2, needs more support: 1) and mention some details of their strengths and weaknesses. Use the descriptors given on the next page to describe the teacher's work. Please note that what is shown as output for each month is only a rough indicator. Some teachers will go beyond that, and some will need more time and support to achieve that output.

Teacher's name and phone number	End of first month Through discussion and sharing, TRs revisit the 'topic' and the RQs they have identified. They will also take help from the mini-study outlines.	End of second month Ts decide on the tools they wish to use and get a rough draft of their tool ready. Colleagues and mentors review the tools and help Ts to revise them.	End of third month Ts administer the tools and get data on all the three perspectives (Cycle 1). Mentors and Ts discuss ways of looking at the data and make sure the RQ is being addressed.	End of fourth month Where possible, the mentor and all Ts in the district meet and discuss their initial findings and plan Cycle 2. T has some data and initial findings ready for discussion during the next workshop.	Mentors' comments and observations (What support did you give the teachers?
1.					
2.					
3.					
4.					

Descriptors for teachers' work

Given below are some of the competencies/abilities teacher researchers will need to demonstrate and develop as they go through the second phase of this programme. Select one or more of these to describe teachers' progress every month during the second phase. Feel free to add your own.

The teacher can:

- Finalise the research question(s).
- Identify appropriate sources of evidence for research questions.
- Draw up a monthly plan for doing research within their teaching schedule (i.e., decide when they will do what, who will they involve (pupils, colleagues, principal, parents), etc.
- Decide how to gather information to answer the research questions.
- Collect evidence to answer research questions.
- Analyse evidence collected and arrive at some findings.
- Reflect on his/her research work and use it to understand the findings better.
- Decide the next steps /action plan based on the findings.
-
-
-
-
-
-
-
- Add your own.

Some important points for mentors to remember and implement with their group of teachers

- Mini study outlines: There are 11 study outlines. Encourage teachers to become familiar with this as much as possible. While they should base their study on the concerns/issues from their classrooms, mini study outlines can help to focus the concern better.
- There are steps to be followed in the mini studies. It's a good idea to follow a systematic approach to their study as suggested here.
- Tools suggested here can be used as they are, if they match the research question and, in any case, can be adapted according to the context. Encourage teachers to look at the tools suggested here first. They can then look at Handout 12.
- Collaborative research: Let them discuss the details of their work with other teacher-research colleagues including the principal in their schools. Colleagues can come into this programme even if they are not officially part of it. This way all will learn more and find the work more exciting.
- Can a school principal be involved in supporting these teachers?
- Number of tools to be used in the study: We would like them to use Reflective Journal as one of the tools in their study. We want to encourage them to keep thinking and recording in writing deeply about their work and relate it to their everyday teaching/learning. Other than this they can use at least two other tools, which bring in others' perspectives (pupils, colleagues, parents) and one source of data based on actual behaviour (classroom observation).
- Reflective journals can be written on a regular basis, for example once every week, or when there is something significant (positive or negative) that they wish to write about. Journal writing becomes easy and meaningful with practice. To start with they can answer simple questions like: What is it that I am very happy about today? What is troubling me today? This can of course be developed by adding further sub-questions.
- Try and ensure that there are not too many repetitions of the 'SAME' kind of study. However, if the concerns across classes/schools are similar the RQs may be similar/same but try and ensure that they are studied from different perspectives.
- Open ended questions can be asked in an interview format especially when you want to probe deeper and are looking at fewer respondents (5-6).
- Teachers can get a colleague in the school, especially the other teacher researcher or the principal to observe their class and discuss their observations and take notes on that. It is also possible to self-observe and take notes. Try audio recording to see if you would like to see how much 'teacher talk' there is as opposed to 'pupil talk'.
- Take as many photos of important moments as possible. Also, audio record pupils' conversations/your conversations with your colleague /your own class as you teach. This is a powerful source of data.
- Visit your schools as many times as you can. This is the most crucial part of the teacher-research programme. Have ongoing discussions with the concerned DD and get back to us with any question you may have!

What kinds of data has the teacher gathered?

Note: The teacher has been addressed as 'you'. Please consider each of your teachers in completing this handout and give the information for each of them.

Type of data	Who provided it?	Tool
Views/perceptions/opinions/discussions of those involved in teaching/learning (Perceptions)	I can provide constructive, non-judgmental feedback	Questionnaire/open ended questions, interview, Focus group discussion, checklists, audio/video recordings, etc
To get an idea of how things are going on, for example, classroom observation (Behaviour)	Myself/colleague	Observation schedule (Some questions written down), audio/video recording
My own self-evaluation, self-reflection, diary, notes I jotted down regularly (Self-perception)	Myself	Open ended writing or questions to answer

The three columns above give three bits of information about the data you've collected so far. Recall what kinds of data you have collected and provide the following information.

- (i) Types of data you have collected
- (ii) Who provided the data (data source) and
- (iii) Tools used

Mention in brackets how many times each type of data was collected.

Read the description given by a teacher and see if you can find the above information about it.

"I was concerned about why students were not participating well in group work activities. To start with, I asked my pupils some open-ended questions and got some idea about it. I also asked a colleague to observe my class about the same issue. For this together we arrived at some aspects of group work that she could observe. Then we discussed what she had observed. I could infer from this and from what students had told me that the task I gave them was usually too difficult; moreover, my instructions were not clear. All this while I was keeping my notes on my thoughts about this whole thing. So I decided to incorporate both these ideas in my next lessons....."

Now provide this kind of information for each of the teachers you are working with in Handouts 17A and Handout 17B. Important: Mention each teacher only once either in 17 A or 17 B. For example, if the teacher has gone on to the Action Research phase, mention him/her only in 17 B.

Module 5 (Day 1)

Record of the data teachers collected during the exploratory

Name of Mentor:

District:

Name of teacher + Research Question	Perceptions/views	Observation (Behaviour)	Self-reflection
1.			
2.			
3.			
4.			
5.			
7.			
8.			

Module 5 (Day 1)

Record of the kind of data teachers collected after the exploratory

How many teachers have gone to the next stage where they took some 'action' to address the issue they explored in the first phase? Fill up a similar grid for the second phase with this information.

Name of Mentor:

District:

Name of teacher + Research Question	Perceptions/views	Observation (Behaviour)	Self-reflection
1.			
2.			
3.			
4.			
5.			
7.			
8.			

Very often we begin with a specific concern and based on some initial data we realize that our focus needs to shift. What do we do then? Read this account of a research study carried out by a teacher and answer the questions at the end:

"I had noticed that whenever I did group work, not all participated to the same extent. I could see some were shy, especially girls, others were disinterested in the topic of discussion, and only a few participated and learnt. My concern was how to get most pupils to participate in group work. I got my colleague to observe my class focusing on which ones didn't participate and at what points in the lesson. I also asked my pupils to tell me why they were unable to speak up.

Many students told me that they couldn't speak in English properly and so they were unwilling to answer questions or present the group-discussion to the whole class. Even my colleague confirmed that many students were in fact discussing in groups, but mostly in their mother tongue. That made me decide to set up some simple speaking tasks for them to practise and get the confidence to speak. Over the next few weeks, I did many tasks to give them opportunities to speak single words, mix their mother tongue with English, and freely express their ideas even if they made mistakes. This gave them a lot of courage and they started speaking in class, though a bit hesitantly.

When I asked my colleague to observe my class again, she was quite surprised to see the shy students making a lot of effort to express their views without hesitation. This made me and my students quite happy. Of course I had to work more on getting them to speak continuously on different topics, give long answers and so on."

Answer these questions:

- (i) What is the focus of the study?
- (ii) What are the research questions the study has addressed
- (iii) What would be a suitable title for the study?

Optional example:

"Some of my pupils were finding it difficult to understand the topic 'fractions' (Maths). I had to find out why and do something about it. I decided to ask all pupils, not just those who found it difficult, to frankly give me the reasons. I asked some open ended questions, so that they could tell me what they felt. To my shock, they told me that I was quite strict, was very harsh if they made mistakes or couldn't understand. I knew that I did punish them at times by asking them to carry water from their homes to school if I thought they were lazy. This they didn't like at all, though they did it out of fear. When I discussed this with my colleagues, they also told me a little hesitatingly that I was too strict and that pupils didn't like my maths classes.

I started observing myself in class focusing more on my behavior rather than theirs and wrote reflective journals regularly. This made me think deeply and changed my behavior towards my pupils. They had opened my eyes to how I could approach not just 'fractions' but any topic."

Module 5 (Day 2)

Self-evaluation of mentoring qualities/skills

Here is a list of mentoring qualities and skills. To what extent do you think you possess these qualities and skills already? 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.

Tick the appropriate box against the five qualities you choose to be the most important: 'A' for the ones that you think represent your best qualities, B for 'average' attainment, or a 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 [*]	Ways of communicating	A	B	C
	I can provide constructive, non-judgmental feedback			
	I am willing to share knowledge, skills and experience			
	I show a positive attitude			
	I show enthusiasm			
	I show interest in others			
	I listen well (e.g. without interrupting)			
	I have experience in mentoring teacher-research			
	I am good at doing teacher research			
	I have experience in the present context e.g. Sierra Leone school education			
	I am willing to put aside my own beliefs and/or prejudices			
	I am interested in others' development			
	I feel responsible for others			
	I am able to imagine another person's difficulties			
	I am good at setting realistic goals			
	I am good at motivating others			
	I adapt my communication style to the listener's personality			
	I am consistent in communicating with others			
	I am clear in communicating with others			
	I am good at showing / demonstrating to others what to do			
	I am interested in improving myself.			

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 courage! At least, revisit this checklist occasionally to self-assess as you gain more experience.

From Smith, R. 2019. *Mentoring teachers to research their classrooms*. New Delhi: British Council.

Notes

Module 5 (Day 2)

Reflective writing and the spirit of inquiry¹

Mary Louise Holly

Read the summary of an article given below and answer the questions given at the end:

Constructing (and reconstructing) the everyday and unusual events and experiences of classroom life in vignettes and portraits of practice enables the author to direct perspective transformation. Writing 'works' because it enables us to come to know ourselves through the multiple voices our experiences take, to describe our contexts and histories as they shape the many minds and selves who define us and others. Through writing we intentionally focus our attention and in so doing assert and affirm both our ideas and the mind itself.

Knowing the self means being a self and many current conditions of teaching make this difficult. There is often cause for doubt as teachers wrestle with what they think and feel is best for the children they teach against much that is mandated and prescribed and at odds with their consciences. Teaching is more complicated than most people think; it is so complicated that we need methods of documentation which hold it still long enough to reflect on it and to begin to understand and direct it. But we also need methods which celebrate and respect the complexity of the unique human relationships which are teaching and learning; this keeps alive the spirit which moves one to become a teacher, but gets lost the longer one stays in teaching (in an unreflecting way).

She cites Ferrucci in this article:

"Writing...can be much more powerful than we may think at first. If we start by freely writing about the issue that concerns us, we will find ourselves expressing things not previously thought of. We have to formulate explicitly that which we feel implicitly, thereby clarifying to ourselves what may have been a confused, muddy ground. In this process we may also come to new conclusions and ideas about courses of action to take... We should not be surprised that unconscious material surfaces so readily in our writing... Writing stimulates this interchange and allows us to observe, direct and understand". (pp. 75-76)

- (a) What is the author trying to say about reflective writing? (one-two sentences)
- (b) Pick out one or two phrases/ideas from this text you like most that you would like to take back with you.

Samples of teachers' diary/ reflective journal

Paul Morison-Holyoke - JSS
 20/1/20
 My Research Topic
 ↓
 Pupils in JSS to improve on groupwork
 Background of my Research
 When the use of the Lesson Plan manual (LPM) was introduced in the classroom teaching, much room was created for group and pair works during lessons.
 I have a class of ~~forty-two~~ ^{forty-two (42)} ~~pupils~~ ^{pupils} (42) that I am expected to manage and at the same time teach Language Arts. In simple words, I am both the class master and Language Arts teacher for JSS IX.
 I decided to implement this group or pair work Method of teaching in two lessons. My observation was that more than fifty Percent of the participants were inactive or did not take part in the group

work as expected. In fact they used this period asking for frequent Permissions to go out of the classroom, discussing Personal matters, Playing, Comedies, Mocking others, looking into the air and so on.
 That was just my personal observation. To Prove this further three other colleagues assisted me to look into the activities of the pupils during group work in three different lessons. They were to look at three major aspects:
 1. # of Pupils who asks for Permission to go out of the classroom
 2. # of Pupils who are talk aside
 3. # of Pupils who do not talk at all
 * Data from Mr Mohamed Foday 1/2/20
 1st observer

1	2	3
###	### ###	###
5	10	8
12%	24%	19%

After 2ND Round of Observation

the reflective bit

During these episodes I felt had grown a bit more conscious of my teaching technique (mainly in positive sense) & especially because seeing someone else teach helped to get into the student's shoes better.

One thing which I noticed this way was the blackboard usage. At times we overcrowd the blackboard, sometimes unintentionally & at times deliberately not rubbing the old work for students who may not have ~~to~~ noticed at the normal pace of the class, BUT sitting at the back I felt that may be it was better to rub off & create clear space to add new information (but then --- if we want to back refer?)

Module 6

Writing an account of your research study

1. Title of the study:

2. Teacher's own contextual focus:

Prompt Questions

- **What** did you want to find out?
- **Why** was it important for your teaching? These two questions help to arrive at the background to the study.

3. Evidence: (What data did you gather)

Prompt Questions

- **How** did you gather information/data for your study?

Examples of possible sources of evidence:

- Your reflections/diary
- Discussion with students
- Talking to the principal/colleague
- Observation of classroom activities
- What questions did you ask your students/principal/colleague?
- How are they related to the focus of your study?
- Which areas did you cover while observing classroom activities? (Example - students' participation, focus on task, collaborative skills etc.)
- How are they related to the focus of your study?

If the data collected does not match the chosen focus of the study – DO NOT PANIC!

Check the information again and try to find a relevant focus for your study. Re-word the title above accordingly. Ask for help from your peers/Mentor, if needed.

4. Outcomes of the study:

Jot down your learning based on the evidence gathered and the experience of conducting the study.

- Learning from the first cycle...

- Learning from the second cycle... _____

- Learning from the third cycle... _____

Prompt Questions

- What did you do in your second cycle that was different from the first? Why?
- What was the change from second cycle to the third cycle?
- Did you learn something new and interesting that may not be related to the focus of your study?
- What evidence do you have to say this?
- What else have you learnt by reflecting on the experience of conducting the study?

This will help you to produce your conclusions.

5. My learning:

Prompt Questions

- How have you developed because of carrying out this research study?
- Have you developed any new skills/abilities, do you feel your own attitudes and mindsets have changed in any way?
- Report on overall learning or change that you can consider an outcome of this study. Reflect on your experiences of going through the processes of the study.

Notes

Module 6

Guidelines for presentation

- 1. Title of your presentation:** A maximum of 10 words (Make it catchy!)
- 2. Length of your abstract:** 50-70 words (See Presentation Handout 3 for some help with how to write abstracts)
- 3. Presentation type:** you can choose from the following:
 - a. Poster - one poster if you're an individual or several if you are a team (each one focusing on each of your studies + one introducing the whole thing). See below for more details about poster presentation.
 - b. Talk - presentation to a group of people usually with the help of a Power Point (PPT). If it is a team, identify a teacher from the group to introduce the topic followed by presentations by each team member ending with a brief conclusion. (Time 30 minutes for a single presenter, 90 minutes for a group of four presenters with 20 minutes for each presenter and 10 minutes for Q &A. The template for a PPT will be made available.

It is very important to keep to the time limit as you will be asked to stop at the end of your time even if you have not finished your presentation.

What is a poster?

The poster is usually a mixture of a brief text and tables, graphs, pictures, and other presentation formats. At a conference, the researcher stands by the poster while other participants can come and view the poster and interact with the researcher. Sometimes it is a one-on-one conversation.

Recommended size of the poster: 70 cm x 1 metre.

What makes a good poster?

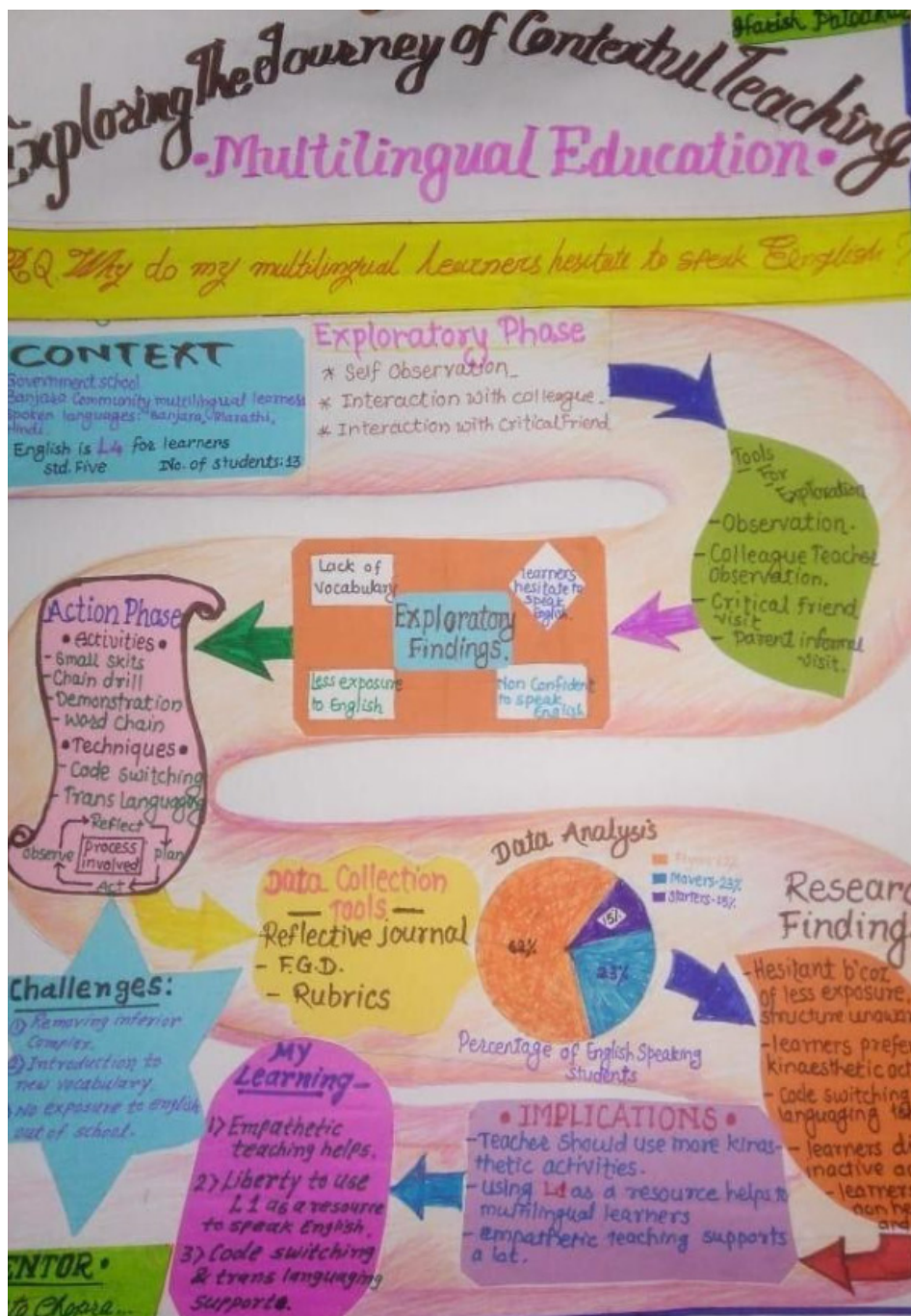
- Important information should be readable from about 5 feet away
- Title is short and draws interest
- Text is clear and to the point; a poster is not text-heavy.
- Use of bullets, numbering, and headlines make it easy to read
- Effective use of graphics, colour and fonts
- Consistent and clean layout
- Includes acknowledgments, your name and institutional affiliation

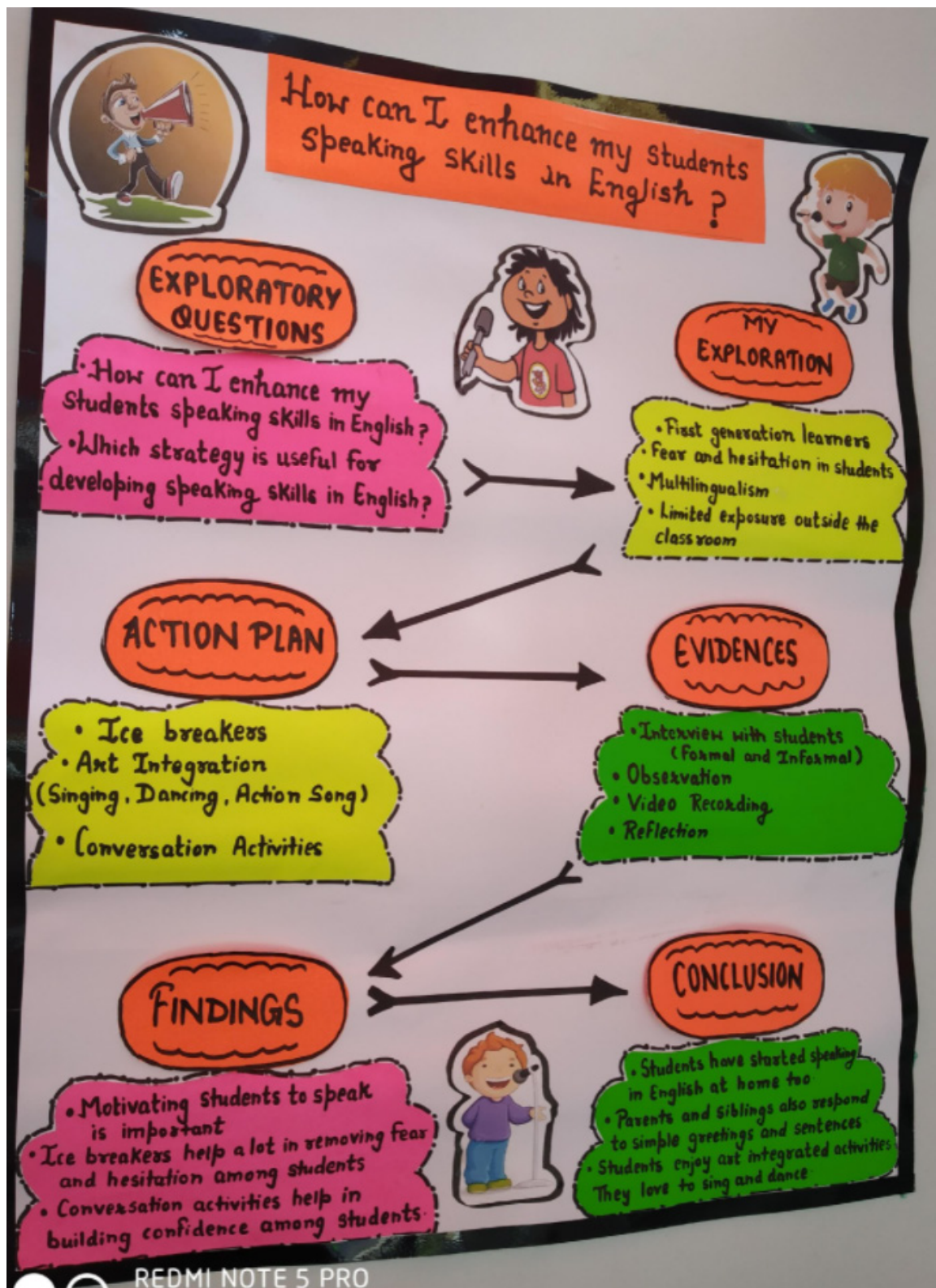
There is no one way of making a poster. Use your imagination and creativity and develop an attractive, readable poster. Some examples of posters are shown below and also on the PPT. Study them and get an idea about it.

What is a talk?

A talk describes what you have done, focusing on what motivated you to take up the study, how you went about your work and what you have found. Follow the structure given to you so that you don't miss out important points. Those who opt for the talk, they can decide to use a PPT, oral presentation, photos, audio-videos or all of these in combination. While a combination provides variety, it is important to have a balance between them so that you are not using just one of them for very long. It is also important to keep to the time allotted. We also request you to allow adequate time for a question and answer session. When you prepare your PPT, use a minimum of 24pt font.

Examples of posters:





AARMS CLASSROOM BASED ACTION RESEARCH MELA, CHENNAI

ENABLING THE LEARNERS TO BECOME BETTER READERS

RESEARCHER
Nurjahan Naik
A.S.D.Topiwalla Highschool, Malvan
Sindhudurg, Maharashtra.

PRESENT SCENARIO



Learners who

- Can identify letters
- Still need practice
- Can read bigger words
- Can read smaller words

CHANGES IN LEARNERS

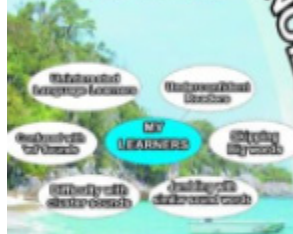


MY LEARNING

CHANGES IN LEARNERS

- Appreciating efforts boosts confidence
- Appreciation improves performance
- Extra practice by supplementary reading helps
- Collaborating with good readers benefits

MY CONTEXT



- EXPLORATORY QUESTIONS**
- Do my learners like to read in English?
 - How many opportunities do I provide them for reading in English?
 - Why can't they read in English?
 - What can I do to make them read in English?

TOOLS FOR EXPLORATION



You will need to write an abstract of your presentation (poster or talk) in about 60-70 words. The abstract should be crisp and clear and capture the salient points of your presentation. The objective of an abstract is to help the audience get a gist of what your presentation is about. It is better to mention the main area of your study and what you will be presenting. Avoid repeating your title – you need to continue from the title and mention the salient points. See below two examples, one is better than the other.

Read the two abstracts and say which one is doing its job of giving a clear picture of the presentation. Give your reasons.

A. Title: Enhancing student participation through group work

My class had become quite boring as the same smart students answered all the time. I tried out different groupings: mix of shy and bright first, and then all shy and all bright and I found that this grouping worked better. It also raised other questions about discipline, inclusion and my ability to make good tasks. I will discuss these and suggest ways to increase student participation.

B. Title: Why do students hesitate to speak in English?

Techniques to make students practise English speaking in class have helped to make the class better. Earlier we used a lot of mother tongue as the students couldn't understand English. They were also very shy. My study is about doing lots of drills, miming, bingo and other things that make students learn to speak English. At least during English class, they are trying to speak in English.

Notes

This is the last time we'll be tracking teacher researchers' progress before they present their work. We should evaluate their overall performance on their research work and see if they will be ready to present. At the end of the first month, rate the teacher on a 3 point scale (1 to show 'not at all' and 3 to show 'all components completed')

Teacher's name and phone number	End of first month	End of second month	End of third month	End of fourth month
1.	Ts take stock of the different components of the study with mentors' help. Any loose ends need to be tied up at this point. Mentors to rate the teacher and give the teacher a clear idea of where they stand.	All the data has been collected. This may be just for Cycle 1 (EAR). Teachers are helped to make meaning of the data and turn it into appropriate tables/ diagrams.	Ts complete their research work including data analysis and interpretation. Mentors provide support with finalizing their conclusions and recommendations.	Ts write up the report according to the given format by the given date. The selected teachers come to the presenters and/ or writers' clinics. Mentors give them the necessary support.
2.				
3.				
4.				

Teacher's name and phone number	End of first month	End of second month	End of third month	End of fourth month
5.	Ts take stock of the different components of the study with mentors' help. Any loose ends need to be tied up at this point. Mentors to rate the teacher and give the teacher a clear idea of where they stand.	All the data has been collected. This may be just for Cycle 1 (EAR). Teachers are helped to make meaning of the data and turn it into appropriate tables/ diagrams.	Ts complete their research work including data analysis and interpretation. Mentors provide support with finalizing their conclusions and recommendations.	Ts write up the report according to the given format by the given date. The selected teachers come to the presenters and/ or writers' clinics. Mentors give them the necessary support.
6.				
7.				
8.				

For rating the teacher use these indicators: The teacher should have almost completed the study by the end of the first month to be able to complete the rest of the work before they present.

1: Will not be able to complete the work as they've lagged behind substantially.

2: May be able to complete, which means they have the necessary data but may need extra help with analyzing and interpreting it.

3: Completed 2 out of 3 cycles and got the study 'under control'.

Module 7

Format for writing and submitting a report for the book

Writing your research report:

1 Title of the study: It should be short (maximum 10 words), should capture the main focus of the study and be catchy so that it attracts reader's attention. This could be the same title as your presentation, if you are happy with it.

2. Background to the study (about 100 words): Say briefly **why** you did this study. Try to mention the most important and specific reasons rather than giving a general introduction (for example, avoid mentioning the importance of learning English for learning other subjects, or why maths teaching in Sierra Leone is important). Say it in first person: for example, 'I was not happy with the way I did my group work because I noticed that many students did not participate in the activity I set up...' etc. The background should lead you on to what you did in your study.

3. Describe briefly **what** you did in your study (about 150 words): Describe how you went about the study. You can mention the research questions and show connection between the background (why you did the study) and what you did. Mention who you involved: students, peer teacher, school principal etc. Also mention what you did in cycle 1, to start with.

4. Describe **how** you did the study (150 words): Describe the tools you used, give an example or two of what types of questions/true-false statements you had, how you wrote the journal/diary, how often, and how you made changes from Cycle 1 to Cycle 2 to Cycle 3. Describe the process you went through to conduct the study.

5. Discuss the results: (500 words): Discuss the findings you came up with –**you must show evidence** for the findings you present. Try to show link between your research questions and findings with evidence. This could be a graph, Table or any other form that shows how you came up with the results. It could also be without graphs but you should clearly show the basis for your findings. Here you will discuss in detail what happened from Cycle 1 to 2 to 3 and why. Capture the progress across the whole study. You could choose one or two digital photos that gives an idea of the study in progress, for example: group work in class, working with teachers etc.

6. Discuss your learning from the study: (400 words): This section is for a personal account of what you learnt from the study by looking at your own work deeply, talking to students, peer teacher teachers, principals or others. Also include what remains to be still explored, how you began the journey of researching, where you are now and where you plan to go. Talk about the team work you did—your mentor (SSO), other teachers in the group and you: Was it enriching? In what way? Did it have some challenges? What were they? If you were to do the study again, would you do it differently? Why?

7. Conclusion: (150 words): Conclude the article by putting together your personal thoughts on what the whole journey of researching has been and how you plan to take it forward.

8. Include a brief section acknowledging the support you received for conducting the study (not more than 40 words)

Structuring your research report

1. First page:

- a. Title of the study:
- b. Your name:
- c. School Name:
- d. District:
- e. Your SSO's name:
- f. Gender:
- g. Subject:

2. Mention the subheadings at the top of each section. You can reword it, but it should convey what is expected in each section. Underline the subheadings.

3. Number the pages using this format: bottom of page at the centre, say 1 of 10, 2 of 10 and so on depending on how many pages there are in the report altogether. It's shown here below. This will help us to see if all the pages are received.

4. Write a rough copy first, read it carefully for any errors in grammar, spelling, and any omissions and correct them. Get one person (e.g. a colleague, SSO) to read it and give you some suggestions. When you are satisfied with it, neatly copy it onto another sheet leaving at least 1 inch margin on all sides.

5. Draw your tables, graphs and other diagrams very carefully and label them. When the reader looks at it, it should be self-explanatory.

6. Wherever you wish to paste a photo, draw an empty square to indicate the place. Give a label to show what it conveys. Don't send the photo at this stage. Keep it carefully with you.

7. If you have typing facilities, then at this stage you can get it typed. Use Times New Roman/Arial or Calibri in 12 font where possible.

Submitting your research report

1. If you're sending a hand written copy take photos /scan the report by putting it on a plain, flat surface. Take time to make sure the page is straight and fills the screen. Make sure there aren't too many distractions around the page (such as your legs if you're sitting at a desk or a table cloth with lots of designs). If there are too many designs where you place the paper, then we'll have to spend a lot of time cleaning/trimming it up, to be able to read.

2. When you send it on email or whatsapp, **don't convert it to pdf format**. If it's a scan or photo, send it as it is (or jpeg format).

3. Submit your finished version to the facilitator.

Planning

1. Getting your planning right. Getting your ideas organised is the basis of good writing. On a separate sheet of paper write out each of the section titles of the research report. Then in note form, list the main things you wish to say under each section. Don't write sentences at this stage.
2. Keep referring back to your research questions. Imagine that each research question is a golden thread which needs to run throughout your report so the content stays focused. This means that you need to clearly state your research questions at the start of the report and clearly return to them at each stage of the report (for example in your methodology, findings/results etc).
3. Look for key points. Now, read through your research report and underline the key point in each section. These are the most important points, findings or actions that are essential to the research you undertook. Are these the same as your notes? Think about revising your points. Keep them if they are right.
4. Directly answer each section. Now, go through each section and make sure that your key points directly address that section. If the section is about what you did, do each of your key points directly deal with your actions? Under findings, do your main points directly describe your findings? Check and revise.
5. Lead with main points. Now, take each section of the research report and identify the one point you must make under each heading. They might be from your notes or the points you underlined. These main points work best when they start a section. Try reordering sections so that each section starts with the main point you wish to make.
6. Use supporting evidence. Do each of those key points have evidence or observations to back them up? Wherever possible, support your main points with something you observed, facts about the situation, evidence you gathered or insights from those you worked with.

Creating powerful paragraphs

1. **Ensure each paragraph contains one idea.** Paragraphs are the building blocks of your research report. They show how well you have planned what to write. For every key point you have, write one paragraph.
2. **Make important paragraphs follow a clear structure.** Important paragraphs, such as those that start a section, work best when they follow a clear structure. Use this structure to create a powerful paragraph:

POINT. EVIDENCE. EXPLANATION.

Make your key point or assertion. Provide evidence, facts or observations to support the point, then explain (why this is important, what you did, or how it worked). The preparation done in the planning exercise should help you to organise paragraphs.

3. **Create topic sentences to start each paragraph.** Your key point can be called a topic sentence. Make sure the rest of the paragraph only expands on this key point and does not add anything new. A topic sentence frames your paragraph. Look at this example:

"I found that students study better when they work in groups."

The next sentence will provide evidence or facts to support this point. You should then explain why or how this is the case. Remember the whole paragraph must only address this key point. If it doesn't, start a new paragraph. Now, look at this sentence and decide what the paragraph should contain.

"My first task was to understand why students do not enjoy mathematics."

4. Ensure sentences contain one thought. Just as paragraphs express one idea, sentences contain one single thought. Review sentences and see if they try to express too many thoughts. Sentence length is often a sign of this. As you develop your paragraphs pay attention to sentence length and split sentences when they go on for too long.

5. Try varying the length of sentences within a paragraph. Varying sentence length injects pace into your writing. Too many long sentences can be boring to read. Too many short sentences can make ideas appear too disjointed. A good mix of long and short makes paragraphs flow better.

Using data and charts in your reports

- **Make sure the data you use makes a key point.** Whilst you may have created a range of data during your research report, it is best to use only the data that makes (or supports) an essential point you are making. A simple guide is to check whether the data describes a) The problem your research addresses or b) The solutions you looked for or c) The impact of what you did on the students or classroom practice. If you can answer yes to any of these questions, your data will be of value.
- **Clearly describe your data.** A common mistake is to include a chart that does not make clear what it shows. Check that your chart has a title that clearly describes what the data shows. Where you have bars or lines on the chart, what do these represent? Put the description on the axis or include a key.
- **Use bar charts to show difference and sometimes change.** Our brains respond to bar charts when we want to show difference. This could be the different values (numbers or percentages) of responses from students or the difference between boys and girls. If you asked the same question at the start and end of your research project, using the same visual approach can effectively show the change that occurred after you applied your ideas.
- **Strive for clarity.** Make sure that your data are portrayed in a way that is visually clear. Make sure that you have explained the elements of the graph clearly. Consider your audience. Will your reader be familiar with the type of figure you are using? Avoid elements that just make graphs visually confusing. Your reader does not want to spend 15 minutes figuring out the point of your graph.
- **Strive for accuracy.** Carefully check your graph for errors. Even a simple graphical error can change the meaning and interpretation of the data. Use graphs responsibly and always check the data is correct before submitting your report.

Top tips for editing your research report

- **Read and review your text.** Spend time re-reading your research report. Read it out loud and see if it all reads well. Is it interesting to read? Make a note of what you will address in the editing process.
- **Get your openings right.** Check your work asking these three essential questions and review and revise to make sure you can answer "yes" to all three:
 - Does the report's introduction set the scene – describing the problem or challenge – and making it clear why the research project was necessary?
 - Does each section start with the main point I wish to make?
 - Does the conclusion describe the main impact or result of the research?

- **Let a colleague read your text.** Give your report to a colleague and ask her/him to underline anything that is not clear. Rewrite the sentence or section and ask your colleague if it has improved.
- **Remove repetition and reduce text.** Look through your report to find any ideas that are repeated. Delete repetition. Look for places where you can reduce sentence length. If a sentence goes over more than three lines, you can usually split it into two sentences. Are you using several words where one will do? Try to delete words in a sentence, ensuring it still makes sense. Words like “very”, “there is” and, “there are”, “some” can often be removed.
- **Use a spell checker tool.** If you are using a laptop and your report is in Word, go to Editor and see what suggestions it makes. Be careful that you don’t allow the editor to change names! It should give you suggestions on verb and noun agreement, extra spaces in words and the removal of unnecessary words. Check the suggestion and accept if you are happy to do so.
- **Separate your editing tasks.** First, read through your text without making any changes. Read it out loud and make a mental note of anything that doesn’t sound right. Second, with a pen, re-again, underlining anything that isn’t clear. Third, go through section by section, making sure every opening sentence makes a key point. Fourth, go through sentence by sentence, removing repetition and unnecessary words. Finally, use a spell checker. Editing takes time. The more time you spend, the better your text.

Common dos and don’ts

A review of the teacher research reports highlighted some common dos and don’ts. As you revise your own report, be sure to check for these.

1. You have mostly used three tools: pupil perceptions, reflective journal and classroom observation by a colleague. Make sure you give a flavour of what each one revealed.
2. Explain in a phrase or a sentence terms you my use: e.g. To read fluently, participation, spider web method, discussion method, teacher centric approach
3. Mention under ‘How you did the study’ how long your study lasted: Don’t include gaps due to COVID interruption. Say 6 months or 3 months or whatever.
4. When you say you ‘Interviewed 20/2/5 pupils’ - was it individually, or as a group (FGD)? If a group, how many altogether? Was this the whole class or a sample?
5. When you don’t have percentages or the exact number of people responding to a question, but you have a rough idea about the data, you can use these words: about a quarter of the class, 1/3, half, two thirds etc. When the %s are not clear, use these: very few, a few, some, quite a few, many, most/majority.
6. Look at the first three sections: why, what and how. Ensure that you have covered all the essential details about the study within these three sections. Don’t repeat anything. The word limit for these three sections is 400 words.
7. Remove research objectives/aims of the study but mention research questions.
8. Under Limitations or challenges faced, avoid mentioning the following: COVID interruption, not enough stationery, that you were a beginner in teacher research. This will be common for all of you. Mention other specific points. We’ll be writing about COVID and other common problems we’ve all faced in the Introduction to the book. Similarly remove Acknowledgements.
9. Avoid general sentences: “Teachers are problem solvers. When once a problem is detected in the classroom, we have the responsibility to remedy the situation so that learning becomes more effective.” “Homework is a task assigned by a teacher for pupils to do after school. It is also a means of self-assessment by pupils that leads to academic achievement”.

