



With the support of the
Erasmus+ programme
of the European Union



Version to be used between September 2018 - June 2019

Training student researchers to participate in Inclusive Inquiry: A guidance manual

This purpose of this manual is to enable teachers to train and support students to be co-researchers, involved in the process of Inclusive Inquiry. The intention is that they will collaborate with trios of teachers in making their lessons more inclusive.

The specific roles of student researchers are to:

- a. gather ideas from their classmates in order to understand better how lessons can become more inclusive;
- b. work with their teachers to design 'research lessons' that will be informed by their and their classmates' views;
- c. observe the research lessons; and
- d. take part in discussions with teachers about how the research lessons can be made more inclusive.

There are different ways in which the training can be organised. Below we offer illustrative examples from the five countries involved in the project and the ways in which they developed the training in their schools. We encourage flexibility in organising the training in your school, in such a way that it fits the realities of each context.

The Manual is organised in three sections:

- A. Planning the training
- B. Training sessions
- C. Collecting and analysing information

A. Planning the training

1. Choosing children researchers:

Identify which children you will train as researchers. (ideally, no more than 9; that is, 3 from each class that will take part in the research lessons)

Notes

Which students to involve is each teacher's decision. However, it is important to have a mix of students: both boys and girls, and some children who are, in different ways, seen as 'hard to reach'. Giving this role to these children is a good opportunity to empower them.

You might want to offer the training to a whole class and then choose three researchers from each class who will take on a more active role as researchers. If you choose to train a whole class as researchers, this is possible, provided that all children will have the opportunity to collect and analyse information from their classmates in some ways.

2. Justify choices:

Keep a note of the reasons why you chose the student researchers, remembering that you must include some seen as 'hard to reach'. Please, keep students' anonymity – do not use their full names (better to give them pseudonyms).

Notes

Examples might include: a student researcher defined as having special educational needs; a student recently arrived in the country; a student that does not seem to be confident; or one that appears to struggle working in groups. Some teachers have made a particular focus on those individuals who seem to be often overlooked.

Example 1: One teacher explained *"I looked into those who had more affinities with each other and I thought would be more comfortable going to each other's classrooms to observe. Although one of the selected girls is quite shy, I thought it would be a good challenge for her, as she makes a good pair with the chosen boy."*

Example 2: Another teacher said: *"The children we chose were ones that had been seen as 'hard to reach', at different stages of their learning"*.

3. Timing of training:

Decide when is the best time to hold the training and gather all the children together. You will need to devote about three hours overall for the training, although this might be made up of a sequence of shorter sessions. You might decide that one teacher leads the training, or that all three that will be teaching the research lessons are involved. Keep in mind the need to design an approach that suits your context.

Example 1: In Portugal, the training was led by the three teachers together. This was offered in the afternoon, during the programme of curricular enrichment activities. This strategy, which is for children in the first cycle of basic education, includes activities of an optional nature related to sports, art, science and technology. Due to the fact that not all children stay in the afternoon for these activities, the teachers had to choose children as researchers that they knew would be able to take part.

Example 2: In England, the training was organised by the facilitator of the project, a senior teacher who does not have full-time responsibility for a class. The training took place over two different days, with each session lasting for one and a half hours. During the second day, the three teachers who took part in the research lessons were also involved.

Example 3: In Spain, the training was led by researchers from the partner university, but the three teachers and the school principal were also present during the sessions. Six sessions were planned over a number of days: Session 1: 45 minutes, Session 2: 30 minutes, Session 3: 30 minutes, Session 4: 30 minutes, Session 5: 15 minutes and Session 6: 45 minutes.

B. Training sessions

The aim of the training is to enable student researchers to understand the purposes of their investigations and familiarise themselves with a range of methods that they can use to collect and analyse the views of their classmates.

The steps below are suggested in order to carry out the training.

1. Introduction:

At the start of the training, explain to the students what the project is about.

Example: *“This is research in five countries. There are other schools taking part in other European countries. Our aim is to try to understand how lessons can become more inclusive, using the views of children to ensure that all children participate and learn. In order to do this, we need to carry out research. What do you understand by this word?”*

2. What is research?

Explain to the students what research involves, why you decided to give them the role of researchers and how important their role is.

Example: In Spain the question “*what does investigate mean?*” was asked, to explore children’s existing understandings. The students felt that “research” was restricted to science, such as health investigations or researching in laboratories. It was explained that there are many ways of researching and that ours is going to be a *collaborative research* with the cooperation of teachers and students...themselves. Their faces were filled with perplexity, emotion, and expectations. At the end, a booklet and an identity card as researchers was distributed.

3. Research Focus: Thinking about learning

Explain that when we do research it is important to be clear what we are trying to find out. So, for example, you could say: “*Our key research question for this project is: What are children’s thoughts about learning and teaching in lessons? What helps children in lessons? What makes it difficult for them? This is what you as researchers will try to find out. Your classmates’ views about lessons in schools.*”. The aim here is to start making the students think about learning and how they can explore issues of learning and teaching, through lesson observations and collecting the views of other children.

Example 1: In England, student researchers were asked to think and talk with the student next to them about their favourite subjects and what specifically makes them like these particular lessons. The teacher then moved on to get the children thinking about learning, instead of just focusing on what the children like. The student researchers were moved around to sit with someone from a different year group, so that they could have a chance to talk to someone else. Each pair of students was then given two photographs of children in other schools engaged in various activities, such as children playing around a water tray, children writing down in what looked to be like an exam situation, children chatting, etc. (see Appendix A). They were asked to discuss whether they think the students in the photos were learning and if they are, say how they know this, or what the evidence that that they are learning is. The teacher then raised another question: “Which picture do you think the children are learning the most? Why?”.

After discussing these ideas in pairs, all pictures were placed on the board and the discussion was focused on the question “How do we know if they are learning?”. For example, discussing one of the photos raised the issue of whether children can learn while playing. The students had different opinions about this, some students said yes, others said no, others said a little bit. The teacher encouraged them to justify their answers and give evidence from what they were looking at, such as they were laughing, they had a chat with their classmates, and so on. It became clear through the discussions about all the pictures that observers cannot be sure just by looking/observing whether learning is taking place, and that there is a need to dig

deeper to know what is happening and avoid making quick decisions. This was emphasised by the teacher-facilitator.

Example 2: In Austria, the teachers decided to take a different approach where the the whole class was involved.

The key questions explored were: *What are the characteristics of a perfect classroom?*” and *“What supports children’s learning?”* The ideas about *the perfect classroom* were either discussed by the students in small groups or/and by drawing pictures. The discussion in the small groups was taken to the whole class and the students together with the teacher discussed feasibility of their ideas.

In Grade 1, the students drew their perfect classrooms and presented the pictures to their classmates. Since the students were free in their choices, some ideas were rather unconventional and some were not really feasible (e.g., classroom without chairs, desks and doors on the roof; in the classroom you always get presents and you can eat cake all day long; there are trees and rockets in a classroom and everybody can fly; etc.). Some of the ideas, however, were used in the classroom, for example:

- In some parts of the lesson, students are allowed to sit next to their best friend
- Students are not always obliged to sit on their chair in front of a table. Some parts of their work can be done seated on the floor or a carpet.
- If students work well until the break, they are allowed to play with the toys
- If the majority of the students votes for it, the teacher can put on music in some phases of work.

In addition, focusing on exploring what helps students’ learning, the teacher put a card of a happy and a sad icon on the blackboard. The students then had to draw pictures about their ideas of “good learning” and “bad learning”. The pictures regarding “good learning” were then discussed in the classroom and the teacher summarized the main ideas about good learning on a big poster. At the end the students voted for the different ideas on good learning, which were then ranked after the voting (see Appendix B).

4. Practising observation:

It is important to give the children the opportunity to observe lessons before going into the research lessons. This can be done either through a video recorded lesson (3 minute observation is enough), or through going in another classroom that is not taking part in the research lessons. The important issue, both for the teachers as well as for the student researchers who will be observing, is to ensure that the focus is on what might be helping or preventing some children from participating and learning. This should be based on what can be seen and heard. It is also important to make sure that no real students’ names are used. Instead, “a boy”, “a girl” should be used. Finally, the student researchers who are observing should not be observing their own classmates in their classes.

Notes

Student researchers, especially the older ones, should use the same observation sheet that the teacher observers will be using (Appendix C). Younger children could keep brief points on post-it notes or just discuss what they noticed at the end of the observation.

Some general advice for student researchers when carrying out lesson observations!

When observing lessons, please, ensure that:

- you do not interrupt the lesson in any way
- write down what you observe – see and hear – not what you think about what you are observing
- do not mention anyone's names (say “a boy” “a girl”, “the teacher”)
- remember the focus of observation is on what helps children participate and what makes it difficult for them

Example 1: The student researchers in the English school were divided into three groups (one child from each class in each group), accompanied by an adult (the teacher facilitator and two researchers who were observing the session). Before going into the classrooms, the teacher ensured that everyone was clear that they should not distract the lesson and that they should be careful with not jumping to conclusions quickly, and that this time they would only be looking and listening but not keeping notes. The teachers had been notified in advance that observers might come briefly in their classrooms. The observation lasted for five minutes, after which the student researchers all gathered together to discuss their observations. Most of them did not keep any notes whereas some wrote keywords on a post-it note. The teacher facilitator reminded the students that they should not mention specific names. Rather, she suggested, they should say “a child”, instead of mentioning his/her name. She also praised them that it that they took their time and watched for a while before making their judgements. For example, one student researcher said *“I saw people talking but I realised when I saw them for a bit longer they were talking on task, because I realised that from far away because they were talking with their heads down writing. That kind of tells me they can't be talking about something that's not what they are supposed to be”*.

Example 2: In Denmark, the student researchers focused on the different activities used in a lesson and the kind of participation that occurs during each of the activities. The children used an observation grid (see Appendix D) to identify which activities allow for children's greater participation. The table for observation focused on a) participates by listening and following the teachers' instructions, b) do not participate, and c) is occupied with something else. It was important that the observers' attention was on the activity, not on naming children who do not participate or participate in class.

5. How to have constructive dialogues with teachers after observing a lesson

Student researchers will need to discuss their observations with the teachers involved in order to decide how the research lesson can be improved. Here, it is crucial that the student researchers are encouraged to be sensitive with the language they use, in order to have a constructive dialogue with teachers about the lessons.

Example: In England, the session started with the facilitator summing up what was discussed during the previous session, especially highlighting that the focus of the observation should be on children's participation in the lesson. Then the teacher asked them to work in trios (one student from each year group in each of the trios), with one of the teachers attached to each of the trios. The trios were given statements, such as: "There were lots of opportunities for children to work together", "The teacher talked too much" (see Appendix E for the list of statements), and asked to discuss whether they were constructive or not. This was a crucial activity in helping the student researchers how to have constructive dialogues with the teachers that they would be observing.

6. Planning for data collection: choosing methods

The purpose here is to discuss with the student researchers a range of methods that they can use in order to collect their own classmates' views. Start by asking their ideas: "How can you find out your classmates' views about their lessons?" It is very likely that they will mention questionnaires and interviews. However, we want to encourage children's creativity in developing their own activities, as well as using existing methods. After they share their ideas you can also share some of the student voice activities from the Pupil Voice Toolkit. It is up to the teachers to decide which activities they want to share. However, it is important to allow the student researchers to decide which methods to use with their classmates.

Example 1: In Portugal, the student researchers developed one activity to listen to their classmates' opinions about the organization of the classroom. This included:

1. Students draw individually how they would like their classroom to be;
2. Students shared their proposals with the class;
3. One class selected one of the proposals by voting. The other two classes tried out all the proposals presented, considering only the layout/organization of the desks;
4. At the end of the process, after trying and discussing about the better way to organize their classes, the students from each class selected what they saw as the more effective option.

Example 2: The purpose of this meeting in Spain was to consider how student researchers could ask questions that would provide relevant information for planning the research lesson. This involved the use of role-play, during which the student researchers had to say if they considered the questions asked as appropriate. Reflecting on these discussions, the children went on to agree a list of the sorts of questions they would use (see Table 1 in the Inclusive Inquiry Guide).

They also agreed general guidance about carrying out either individual or group interviews. This was that the student researchers should make sure that:

- people are happy to be interviewed by you
- you are friendly with the people you interview and respect their answers
- you have prepared a set of questions in advance to help you during the interview
- you avoid questions that can give only yes or no answers.

C. Collecting and analysing information

Using the methods described above, including pupil voice activities (see separate document Pupil Voice Toolkit), the student researchers are expected to gather their own classmates' views before any of the research lessons are carried out, as well as after each of the research lessons.

Example 1: In Portugal, the student researchers with the teachers created questionnaires to collect student opinions. There were two versions: one multiple choice and the other involving open questions (see Appendix F).

The first questionnaire included four questions:

1. How do you prefer to work?
 - a) Alone
 - b) In pairs
 - c) In groups
2. You like to work...
 - a) With the class-book
 - b) With worksheets
 - c) With materials
3. You learn better...
 - a) When the teacher explains
 - b) When a classmate explains
4. What does not let you learn well?
 - a) When a classmate starts talking with me
 - b) When someone interrupts the teacher
 - c) When there is noise in the class
 - d) When I am tired

When the student researchers discussed the results with the trio of teachers they suggested:

- . To use an open questionnaire;
- . To eliminate question number 2.;
- . And to rewrite the question “You learn better...” into “How do you learn better?”.

The refined version was used by student researchers in all the participating classes in order to gather their classmates’ views.

Example 2: In England, with a Year 6 class, after introducing the project to their classmates, the student researchers, presented on a flip chart statements that they read out loud to the whole class. There were a total of 9 statements, as follows:

1. *I learn best when I can work in a group*
2. *I learn best when I work on my own*
3. *I learn best when I can choose where to sit*
4. *I learn best when I can decide how I learn*
5. *I learn best when I get helped by the teacher*
6. *I learn best when the teacher lets us get on with it*
7. *I learn best when we have music on*
8. *I learn best when we have silence*
9. *Your own suggestions*

The student researchers then asked their classmates to go around the room, where they had placed pieces of papers with the above statements on the tables, and vote which ways of learning they like. In addition, they were asked to justify their voting by adding comments on post-it notes. Then, the children discussed in groups, talking about why they chose those statements. After the discussion, one student researcher said: “*What we are doing now can change learning in a good way for the teacher and what we are doing now with other countries we might change it in a few years to come*”. One of the statements that had the most votes was: “*I learn best when we have music on*”, with an extra comment (added on a post-it note) “*I love music because it helps me concentrate more, especially the calm ones*”. Another statement with the most votes, “*I learn best when I can choose where to sit*”, was accompanied by an extra comment from the children: “*We sit next to someone we work well with because we can sit with people who have the same tasks and we won’t get distracted*”. At the end of the session, the student researchers explained to the class what they planned to do after having the suggestions from the children.

Analysing the information

Once the student researchers have collected information from their classmates, they will need to be supported in making sense of it. In particular, you will need to ensure that the main issues that emerged from the methods used are highlighted. The student researchers could, for example, prepare a table summarising the issues that are raised through the various methods (e.g students want fun activities; students said they find group work difficult; etc.). Or, they could write in post it notes key words that emerge from the students’ views about issues that help with their learning such as “group work”, “games” etc. These will be shared with teachers in order to inform the planning of the research lesson.

APPENDIX A:



APPENDIX B:

Ich kann gut / nicht gut lernen wenn...	I learn best... (rated by icons)		
			
 es warm ist	14	4	7
 es hell ist	8	5	12
 die Lehrperson redet	10	8	7
 ich herum gehen darf	21	4	
 es kalt ist	19	5	1
 es laut ist			25
 mit meinem Freund lernen darf	23	2	

I learn best... (rated by icons)
...when it is warm
...when it is cold
...when the teacher is talking
...when I am allowed to walk around
...when it is bright
...when it is loud
...when I am allowed to learn with my friend

Ich kann gut / nicht gut lernen wenn...	I learn best... (rated by icons)		
			
 Musik gespielt wird	17	6	2
 es leise ist	25		

I learn best... (rated by icons)
...when music is on.
...when it is silent.

APPENDIX C:

OBSERVATIONS GRID:

How are the students encouraged to participate and learn in the lesson?

What factors seem to prevent some students from participating and learning in this lesson?

How do students contribute to others' participation and learning?

APPENDIX D:

Observation Tool

Activity and Materials	Observation: Participates by listening and following	Observation: Do not participate	Observation: Doing something else
1. Welcome and plan for this lesson			
2 Video: Watch this video and listen to the words			
3.Mix and match game			
4. Read a text a) images b) keywords c) read me d) read with a mate: copy sheet			
5. Board game: rules, teams, games			
6. Explore: review activities - and get started			

APPENDIX E:

This lesson was boring

The teacher talked too much

The teacher is really nice

The activity allowed everyone to be involved

There were lots of opportunities for children to work together

Everyone joined in with the starter task

Only two people could take part in the starter and everyone else just had to watch

Some children were off task when they were waiting for their turn

Children were working on their own a lot

The task was way too hard and no one could do it

The children should be able to learn without any adults in the room

The children should teach the adults

APPENDIX F:


 With the support of the Erasmus+ programme of the European Union
 

Guião da entrevista aos alunos

Entrevistadores: Emma e Catarina, Turma 2

1) **Como preferem trabalhar?**

a) sozinho Observações:

b) a pares

c) em grupo

2) **Gostam mais de trabalhar...**

a) com os manuais Observações:

b) com fichas Observações:

c) com materiais

3) **Aprendem melhor...**

a) quando explica a professora Observações:

b) quando explica um colega

4) **O que não vos deixa aprender bem?**

a) quando um colega se põe a conversar comigo

b) quando interrompem a professora

c) quando há barulho

d) quando estou cansado

Observações:


 With the support of the Erasmus+ programme of the European Union
 

Guião da entrevista aos alunos

Entrevistadores: Catarina e Emma Turma 2

1) **Como preferem trabalhar?**

Observações:

2) **Como é que aprendem melhor...**

Observações:

3) **O que não vos deixa aprender?**

Observações: