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Developing student-researchers in primary schools through inclusive inquiry

Kyriaki Messiou ^a and Amy Lowe^b

^aSouthampton Education School, University of Southampton, UK; ^bSouthampton Education School and Psychology, University of Southampton, UK

ABSTRACT

This paper argues that more should be done to draw on the views of children and young people when using collaborative action research to promote inclusion in schools. Drawing on the findings of a collaborative action research study which explored how primary school students (4-12-year-olds) could take on the role of researchers, through Inclusive Inquiry, an approach that focuses on the development of inclusive practices and thinking in schools, the paper throws light on the potential of this approach. Building on earlier research carried out with secondary schools, the findings reported here are based on work carried out in 30 primary schools in five countries. The analysis of data generated through these experiences suggests that collaborative action research approaches that involve children as researchers in schools can increase students' confidence, make them more engaged in lessons, and facilitate stronger relationships with their teachers. It is argued that these features can also lead to the development of student agency.

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Introduction

The need to develop resilient and engaged students in schools is more urgent than ever. UNESCO (2020) has argued for the promotion of student, youth and children's participation in a post-Covid world, as they return to school, and the need to find ways of reconnecting with them. The report goes on to suggest that students 'should be given a leading voice in designing the learning opportunities and learning communities' (15). Similarly, OECD (2019) has highlighted the need to develop 'student agency', both as a goal in itself and as a learning process.

This paper reports findings from three cycles of action research that was focused on finding ways to reach out to all children, particularly those seen as 'hard to reach' (Messiou and Ainscow 2020). The study employed collaborative action research and used an innovative approach, 'Inclusive Inquiry', that was developed through our earlier work (Messiou 2012; Messiou and Ainscow 2015; Messiou et al. 2016). The approach combines in a new way a well-established approach to professional learning, lesson study, with an emphasis on listening to the views of students by taking an active role, that of researchers.

CONTACT Kyriaki Messiou  k.messiou@soton.ac.uk

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More importantly, the approach moves beyond the simple gathering of the views of students, into having dialogues between children and teachers, and children and their classmates.

Situated within a broader concept of inclusion as an ongoing process (Ainscow 2007) that seeks to identify and address barriers to learning and participation (UNESCO 2017), another distinctive feature of the study was the bringing together of students and teachers in an effort to encourage engagement in lessons. This was achieved through dialogues between children and teachers. This contrasts with other research in inclusive education that either focuses on teachers (e.g. Avramidis and Norwich 2002; Florian and Black-Hawkins 2011), or, more recently, a growing number of studies that focus on children's views (e.g. Black-Hawkins, Maguire, and Kershner 2021; Shaw 2021). Studies that bring the two perspectives together and, importantly, in ways that allow them to work together, are rare, particularly in primary education. The study reported here has addressed this gap.

Students' voices research

Over the last 30 years, there has been a growing emphasis on the idea of focusing on students' voices in research and in the development of schools. This interest started with the UN Convention on the Rights of the Child (1989), particularly articles 12 and 13 that highlight children's rights to express their views about matters that affect them.

The term student voice has varying meanings in the literature. For example, Cook-Sather (2006) argues that "'voice" signals having a legitimate perspective and opinion, being present and taking part, and/or having an active role' (362). Others draw attention to the notion of voice beyond verbal expressions, such as emotional components and other non-verbal means of expressing views (Thomson 2008). However, Reay (2006) draws attention to the dangers of the collectiveness of the term voice and argues that 'instead of a common pupil voice there is often a cacophony of competing voices' (179).

In the UK, the influential work on pupil voice by Rudduck and McIntyre (2007), funded by ESRC, has focused on consulting pupils for learning and teaching with a view to school improvement. Rudduck (2006) distinguishes between consultation and participation, highlighting that the first refers to talking with students about things that matter in school, whereas participation is about involving them in a school's work and development. The 'Consulting Pupils about Teaching and Learning Project' (2001–2004) consisted of six interrelated enquiries, including the idea of involving students as researchers (Fielding and Bragg 2003).

Therefore, alongside this emphasis on listening to the views of students, a movement that focuses on developing students as researchers has also emerged. According to Fielding (2001), students can be seen in a number of ways, such as 'sources of data, students as active respondents, students as co-researchers, and students as researchers' (135). Internationally, researchers have focused on involving students as researchers, or co-researchers, through projects that explore various aspects of school life (Ainscow and Kaplan 2005; Bahou 2012; Bland and Atweh 2007; Carrington, Bland, and Brady 2009; Fielding 2001; Goldrick 2008; Hajisoteriou and Angelides 2015; Hajisoteriou, Karousiou, and Angelides 2017; Kellett 2009; Mitra 2003, 2004; Tangen 2009; Thomson and Gunter 2006).

Groundwater-Smith and Mockler (2016) argue that there has been a shift from earlier conceptualisations of students as a 'data source' to that of co-researchers and joint constructors of knowledge, illustrating a move towards more active student-teacher partnership. However, most of the examples that they discuss are either from secondary schools or tertiary education. Since then, more studies where students take the role of co-researchers have been published. A more recent review of studies by Sandoval and Messiou (2020) has similarly highlighted that although there is an increasing number of studies that engage students as co-researchers, there is still scope for students taking more prominent roles and ultimately becoming leaders of such approaches.

The benefits for student researchers have been documented in some studies. For example, Wilson (2000) demonstrated how such approaches can empower students themselves and can lead to 'deep participation', whereas other studies led to students' growth of agency, belonging and competence (Mitra 2003, 2004; Mitra and Serriere 2012). Most of such studies have taken place in secondary schools, something that is common for research that involves student researchers. As Gonzalez, Hernandez-Saca and Artiles (2017) highlight in a review of student voice studies published in the USA, the largest majority of research has focused on high school students (69.4% of the 49 studies), with none at the primary grade. Similarly, Robinson (2014), focusing on studies carried out since 2007 in the UK, concludes that more research is needed that focuses on children's experiences of primary schooling. Therefore, there seems to be a gap in the field, with fewer studies that involve children of primary school age.

Robinson (2014) also highlights through her review that most studies used surveys and only few used interviews. She also argues for more research into 'the ways in which primary pupils and teachers can work together to co-produce and co-research teaching and learning within schools.' (24). In addition, as Parsons (2021) argues, there is a need for collaboration for knowledge co-construction in 'close to practice' research.

Gonzalez, Hernandez-Saca and Artiles's (2017) review also suggests that only 20.4% of their identified student voice studies focused on learning and teaching. Furthermore, Parr and Hawe (2022) through an analysis of student voice studies in the literacy classroom suggest that only few studies present evidence of responses to student voice or of outcomes from those responses. As a result, they argue for the need for such evidence to evaluate whether student voice is instrumental in the enhancement of learning and teaching. Therefore, more explorations are needed in terms of student voice approaches and learning and teaching.

Studies that employ student researchers approaches closely relate to the field of Youth Participatory Action Research (YPAR). Drawing on the work of McIntyre (2000) and Rodríguez and Brown (2009), Desai (2019) describes three principles of YPAR: '(1) the collective investigation of a problem that directly addresses the needs of youth involved, (2) the reliance on marginalized youth knowledge that validates and incorporates their lived experiences, and (3) the desire to take collective action to improve the lives of oppressed youth.' (127). Here we see how the student (youth) involvement is central to YPAR approaches, something that closely links to student voice approaches. However, based on the evidence presented above, more student voice research that leads to actions in relation to learning and teaching in primary schools is needed, which was the focus of our study.

The study

Drawing on all these ideas, the research reported in this paper is distinctive in that it combines both consultation and participation of pupils, moving a step further from Rudduck and McIntyre's (2007) predominant focus on consultation as a way of improving learning and teaching. In addition, the study took place in primary schools involving children aged 4–12, where there are fewer studies involving student voice approaches as suggested by the reviews of Gonzalez, Hernandez-Saca and Artiles (2017) and Robinson (2014). In addition, the research brought together the perspectives of both teachers and children through dialogues about learning and teaching.

The study took place in 30 primary schools in five countries: Austria, Denmark, England, Portugal and Spain. Funded by the European Union, the overall aim was to identify ways to reach out to all students in schools, particularly those that were seen as 'hard to reach'. The study involved three cycles of collaborative action research.

This paper addresses the following research questions:

- How can primary school children be involved as student researchers in their schools?
- What is the impact on children, particularly those who take the role of researchers, as a result of their participation in collaborative action research?

Methodology

Collaborative action research involves 'climates of inquiry in communities of practice, often with different stakeholders functioning as co-researchers' (Mitchell, Reilly, and Logue 2009, 345). A focus on collaborative action research in schools involving teachers, or between teachers and university researchers, is an established way of working for a number of years in various countries (e.g. Ainscow, Booth, and Dyson 2006; Bruce, Flynn, and Stagg-Peterson 2011; Butler and Schnellert 2012; Feldman 1999; Fernandez-Díaz, Calvo, and Rodríguez-Hoyos 2014; Jaipal and Figg 2011; Levin and Rock 2003; Vaino, Holbrook, and Rannikmae 2013). However, collaboration between teachers and students in schools in studies that employ such approaches is not as common (Hadfield and Haw 2001).

The study reported in this paper has at its heart the idea of collaboration between teachers, students and university researchers. Building on the findings of our earlier research in secondary schools (Messiou and Ainscow 2015; Messiou et al. 2016), an approach, 'Inclusive Inquiry', was developed. This was then refined and used in primary schools (Messiou and Ainscow 2020).

Inclusive Inquiry involves teachers in forming trios and working collaboratively with students to design lessons that reach out to all learners. In practice, the approach involves three phases (Plan, Teach and Analyse) and a set of twelve steps, where students and teachers work collaboratively to design inclusive lessons in schools. A 'Levels of Use' instrument has been developed to ensure fidelity of the use of the approach in schools (Messiou and Ainscow 2020).

A distinctive feature of Inclusive Inquiry is the idea of children becoming researchers, who collect and analyse data from their classmates, to inform the planning of lessons. The students chosen by their teachers to be researchers were seen as being 'hard to reach' in

relation to various aspects of their learning. For example, some were children that fall into traditionally marginalised categories, such as those defined as having special educational needs, or coming from another country, as well as others that did not fall into any category but were seen as not engaged or not confident in lessons.

All the student researchers were trained by one of their school teachers, who had received relevant training from university researchers beforehand. The focus of the student researcher training was to familiarise themselves with various methods for gathering their classmates' views about learning and teaching, such as visual images, photography, drawings as well as interviews and questionnaires. In addition, student researchers were trained to carry out observations of lessons. At the same time, the student researchers were encouraged to develop their own activities for gathering their classmates' views.

Following the training, the student researchers collected and analysed their classmates' views about learning and teaching. Working collaboratively with their teachers, they then designed a lesson, considering all their classmates' views. This lesson was taught by the first teacher, whilst the other two teachers and the student researchers observed it. At the end of each lesson, the student researchers gathered the views of all the children in the class about the lesson and then discussions followed between the trio of teachers and the student researchers. Refinements to the lesson were made, before it was taught in the second class by another teacher in the trio. This process was repeated three times. At the end of this process, implications for practice were identified that were considered for future lessons.

Data collection and analysis

The findings reported here are based on work carried out in 30 primary schools in the five countries. Lesson observations, interviews with the student researchers and discussions after the lessons between teachers and students were analysed collaboratively by the researchers, teachers and student researchers. 'Group interpretive processes' (Ainscow, Booth, and Dyson 2006) were used for analysis and interpretation. Such processes provided a means of establishing trustworthiness, using the member check approach recommended by Lincoln and Guba (1985). In addition, accounts of practice (a total of 783 pages of text) that were prepared collaboratively between researchers and teachers were analysed thematically. These accounts included sections of dialogues between teachers and students. In addition, network meeting transcripts were analysed.

Codes were assigned to these data sets. These were then organised into themes in relation to the research agenda. This analysis led to the identification of themes in relation to impact on student researchers that are discussed in this paper. In addition, pre- and post- questionnaires monitoring student engagement were completed by all students in the classes where the lessons took place.

Findings

In what follows, three themes that were identified in relation to impact on student researchers are discussed. These are: increased student confidence, student engagement and the development of stronger student-teacher relationships. These findings emerged from data analysed from all different age groups.

Student confidence

Student researchers took a prominent role through this process, as described above. This led to increased confidence for these individuals, as reported by themselves, as well as based on teachers' observations. For example, one ten-year old boy in Year 5 in a school in England explained that his confidence grew *'massively, because I could not even talk in front of two people, unless they were like my close friends or family that I knew well and now I can talk in front of a lot of people, I can just talk in front of a million strangers like it was my best friends.'* Teachers who knew this student well explained how, previously, he was frequently leaving the classroom during lessons and, overall, they had struggled to find ways to keep him engaged in lessons. They also explained how they had tried several ways to ensure that he remains in lessons and be engaged, without any success. Participation in this project, was seen as the last resort of efforts since they felt that they have tried everything that they could have done.

This is not to suggest that just by taking part in this project resolved all the challenges that the school was facing in relation to this individual student. Even during the process of the project, we observed how his levels of engagement and confidence varied at different stages. So, for example, he was engaged and appeared to be leading on many occasions, when working in small groups of researchers during the training sessions. However, on another occasion, when it was the time to collect classmates' views and be in front of the whole class, he appeared to lose confidence and hid behind a small whiteboard, leaving the other two student researchers to complete the collection of data. The teacher facilitator tried to bring him back during the data collection session, but he refused, and, in the end, she decided not to push him into this. Discussing this with the boy later highlighted that there was still more work to be done to promote his confidence, especially in front of his peers.

Similar messages came from many other student researchers as to how the whole process helped them, particularly in relation to their confidence. In a school in Portugal, for example, during a focus group interview, student researchers explained how it made them feel trusted and more confident. One fourth grade boy answers the question by saying, *'Yes, I feel more confident, and I don't do many "wars" anymore.'*, and a 4th grade girl added, *'And I feel that I was chosen because people trust me.'*

To take another example, during a focus group interview in another English school with Year 4 students, at the end of the process, the following discussion took place:

Student researcher (Girl): So, now, it's just, it makes me want to do more things, yeah, it just makes me want to do more things.

Interviewer: What kind of things?

Student researcher (Girl): Things that I don't normally want to do, so, like standing up and talking to everyone.

Interviewer: Right. Right. That's very important, thank you. What did you think?

Student researcher (Boy): I thought it also helped my confidence because I can be quite shy sometimes, and it's a different feeling when you actually feel brave enough to stand up in front of people and say something.

Interviewer: I see ... What about you?

Student researcher (Another boy): Because at the beginning when I came here, before I was a pupil researcher, when the teacher asked anyone to answer the questions, I never put my hand up because I didn't have any confidence. And when I was a pupil researcher, I put my hand up.

Here we see, again, the word 'confidence' being used by one of the students. In addition, another boy offers a concrete example of how his behaviour changed as a result of becoming a student researcher, leading him to feel confident enough to put up his hand in class, something that he says he never used to do before.

Similarly, in a school in Spain a student researcher from the sixth grade said:

I have felt proud that the teachers have chosen me from among all of them. I felt so responsible that I couldn't let them down. In fact, I have raised my grades and I think it has been thanks to the project.

Here we notice how taking the role of researcher made students feeling proud, not least because they were the ones chosen by their teachers as being capable of carrying out such tasks. Interestingly, too, the Spanish student suggests that her grades had increased due to her involvement in the project. This invites the thought that advances based on a concern to foster inclusion can provide a pathway to excellence.

Student engagement

Student engagement within schools has been described as a multidimensional construct, with behavioural, emotional, and cognitive dimensions (Fredricks 2011). A fourth type of engagement has been suggested by Reeve and Tseng (2011), what they call agentic engagement, whilst other researchers have highlighted the challenges of measuring student engagement (Sinatra, Heddy, and Lombardi 2015).

Focusing both on student attitudes and behaviour, in this study we saw how the process impacted on student engagement. For example, a teacher in a Year 1 class (5–6-year-olds) in an English school was very impressed by seeing one of her student researchers becoming so engaged. She explained:

I've never seen C. do this much writing. If I asked him to write in an actual lesson, he would maybe write a sentence but a lot of it, the words with the letters, would be huge in his page. He'd scribble lots out. So, for him to do this much in that lesson is amazing. The point even when the children were feeding back right at the end, and we had groups of ten - he was actually writing down some of their ideas. So, he continued writing the whole time which for him is huge. And then at the end he said as he walked out 'I've just written C.'s ideas' so you know it's mine. And so right up until the end writing, which for him is massive.

Here, the teacher was referring to when this boy was keeping notes whilst observing one of the lessons. As she points out, the fact that he was writing for such a long time was a big achievement for him. In addition, she is also referring to when the student researchers collected the views of the class in small groups, following the lesson observation and that he carried on writing down their ideas.

Similarly, when student researchers in the fourth grade in a school in Denmark were asked to reflect on the lesson prepared, they highlighted how diversity of activities and different elements facilitated student engagement:

Teacher: Why do you think people liked the lesson?

Student researcher 1: Because it included all the elements that people like.

Student researcher 2: Air

Student researcher 1: computer, physical activities

Here, it is worth remembering that all the student researchers took part in the lesson when it was taught in their own classroom, so they also had first-hand experience of being taught the lesson. Nevertheless, this did not prevent them from being critical of their own ideas, if something did not work. For example, as two teachers in another school in England discussed:

Year 5 teacher: And it was very interesting for the children, and for us to see the children notice that something that they suggested wasn't quite working. I think that was quite valuable as well and obviously for the things that did work. And for them to be able to see the little tweaks that needed to be made to their suggestions as well. And I wasn't sure if they were going to do that as well as they did but they impressed me.

Facilitator: It is hard for them to change their minds sometimes, even when they are confronted with evidence. So, I wondered, beforehand, if when they watched, they would still say it is brilliant even if they could see quite clearly that it wasn't. Because they want to say it is brilliant. But it was not quite like that at all. And just how much they want to be involved in this was also amazing. Because we do not do this enough, we do not ask them enough, and they really want to talk about their learning and to be involved in it. And the last two days, your class in particular, every time they saw me, 'When is our next meeting? When is our next meeting?'. They are so keen to keep it going. And they were able to be critical.

This level of engagement for student researchers, both during the process of becoming researchers and collecting and analysing data, and designing lessons collaboratively with their teachers, and then analysing the lesson together, was particularly impressive. In particular, it enabled them to focus on and identify what worked well and what did not work well, in order to suggest changes. At the same time, this led to improvements in engagement during lessons due, in part at least, to their increased confidence.

Teacher-student relationships

We recorded many examples of how involvement in Inclusive Inquiry led to improvements in relationships between adults and children. For example, a teacher in an English school explained how the approach had offered opportunities to come closer to students, in ways that were not possible before:

I don't always have the time in my class to give him as much one to one time as he needs from me because I've got quite a few other needs in the classroom. So, it's lovely to have that time with him to be able to just talk to him one to one and really listen to his ideas. And he kept saying, 'You hold the clipboard for me and when I've got an idea, I'll tell you and you write it down'. And it was just lovely to have that extra time, to give it to him, and he was really chatty

and really lovely. You know, I do give him that time at times, but, in day-to-day learning, that's quite hard. So, it was lovely to have that time with him.

Here the teacher was referring to when she was observing another teacher's lesson alongside student researchers as part of the Inclusive Inquiry process. This student researcher was keeping notes during the observation and was asking the teacher to help with recording his thoughts. As she explained, this had enabled the teacher to come closer to her student, something that she was not able to do before due in the busy classroom environment.

Reflecting on examples like this more generally, it seems reasonable to argue that what led to stronger relationships was that students felt listened to and trusted because the teachers used their ideas during the lesson. In other words, they saw that their ideas were indeed taken into account. To take another example, in a school in Austria the students from the third grade commented:

Student researcher 1: We were allowed to say something that the teachers could do better. Everything we said was then introduced in the lesson. Now we are allowed to sit on the floor very often.

Student researcher 2: Yes, we can sit on the floor. . . .

Student researcher 1: And because we know best, how the children are doing, because we are children ourselves.

Student researcher 2: Yes, that's right

From what these student researchers said, it seems that their ideas were not only taken into account and used in the specific lessons, but they also used more generally across other lessons. This was something that also was reported in other schools, suggesting that student-teacher dialogue of this sort has potential to promote professional learning within schools.

Another teacher in Spain reflected on the development of stronger relationships and emphasised how Inclusive Inquiry united teachers and students and encouraged empathy between them, as well as how the process was a learning opportunity in itself:

You are not a teacher in one day, we are learning, and this is a learning process. . . I am learning to be a teacher and we will never finish learning. You learn from your colleagues and from your students. I believe that the key to this "experiment" (meaning using Inclusive Inquiry), so to speak, has been to unite students and teachers. Seeing the teachers in a different way that they see us in a different way, encouraging empathy. . . they have seen from the teachers that we have taken them very much into account.

Discussion

As noted earlier in this paper, collaborative action research carried out by teachers, sometimes involving university researchers is widely used. However, this less often involves students, especially primary school children. The study reported here is significant in this respect. In particular, it is encouraging to report impacts on primary schools which are similar to previous studies that have demonstrated changes in student researchers' confidence and engagement in secondary schools (Bland and Atweh 2007; Mitra 2004; Wilson 2000).

Even more significant, however, is that the students involved in this study were seen as 'hard to reach' in some ways, including some that were chosen to be researchers because of their low confidence. Furthermore, the theme of increased confidence emerged, since this was indeed a student characteristic that many teachers chose to focus on. This suggests that further exploration is needed, focusing on various characteristics that student researchers may have and monitoring students over a longer period of time.

It should be noted that the issue of confidence was not addressed in a simplistic way just by offering these students the role of student researchers. For example, we saw in one of the examples how during the process of Inclusive Inquiry we had fluctuating levels of confidence for the particular student researcher. What was important in that example, was having a skilled and sensitive teacher who knew when to step in to address such issues when they were arising, as we saw in the example when the boy did not feel confident to stand in front of his classmates. Such issues are complex and likely to be different for each student and each context. What we argue here, is that the Inclusive Inquiry process facilitates efforts towards increasing student confidence. However, this is only part of the ongoing work that is happening in schools to enable all students to be included. In other words, we are not claiming that increased confidence is happening automatically just by allocating students such a role. It also requires supporting students throughout the process to be able to fulfil this role successfully. The role of other student researchers in the process, as well as the role of teachers, can be significant in supporting students who may lose their confidence whilst this process is taking place, as we saw in the earlier example. Teachers and students demonstrating to those students that may be seen as 'hard to reach', that they believe in them taking such an important role, is significant.

Fullan (2007), an internationally recognised scholar on educational change, argues that this is essentially a social process. It is therefore significant that student voice approaches have been reported as creating stronger relationships between students and teachers (e.g. Fielding 2004; Fielding and Bragg 2003; Hope 2012). More specifically, Fielding (2004) argues that this can lead to 'a rupture of the ordinary', involving changes in teacher and student roles. As we have explained, the use of Inclusive Inquiry takes this thinking forward in that it requires teachers and student to work together in ways that develop stronger relationships through co-designing lessons. This is likely to address one of the dangers highlighted by Bland and Atweh (2007), that of privileging student voices over other voices in educational practices. Furthermore, the examples provided in this paper show how the approach created new possibilities to engage students in an active way and develop students' agency.

The importance of student-teacher relationships has been highlighted in various studies (e.g. Baker 2006; Quin, 2017). A meta-analysis of studies has suggested that the more student-centred teacher-student relationships are, the higher student achievement is likely to be (Cornelius-White, 2007). In addition, studies have identified a range of factors that relate to the quality of student-teacher relationships, such as a child's gender (Baker 2006; Silver et al. 2005), their use of language and communication (Rudasill et al., 2006), and their skills in self-regulation (Diaz et al, 2017). However, methodologically, such studies often rely on teachers' self-reporting.

A recent study by Walker and Graham (2021), adopted a more holistic approach for exploring student-teacher relationships, by focusing on children's characteristics, classroom interactions, and the quality of teacher-student relationships. This highlighted the

importance of inclusive and emotionally supportive classroom environments for the development of positive teacher-student relationships. However, there is little research available regarding concrete ways as to how such environments can be developed that will, indeed, facilitate the creation of positive teacher-student relationships. Inclusive Inquiry provides a way forward for developing stronger teacher-student relationships, and bring about educational changes, and this is something that deserves further exploration in other contexts.

It should be noted that despite the many benefits of using Inclusive Inquiry, both for teachers as well as for students, the processes involved in implementing Inclusive Inquiry are not straightforward. First and foremost, as highlighted above, there are power issues involved in the whole process, with students taking leading roles and teachers having to work with students in order to implement the approach. This required changes in the roles that each of us take, and we are aware that this may have not been easy for some teachers, as well as for some students. However, both teachers and students saw the benefits through this process, as we explored in the various examples.

In addition, the approach is time consuming and planning is essential, especially for training student researchers and for releasing teachers to be able to observe each of the lessons. What to include in the student training and ensuring that ethical procedures are followed by student researchers is also important. As part of the project, a set of materials for practitioners that wish to implement the approach, has been developed. These involve detailed guidance that schools can follow to implement the approach¹. In addressing all these challenges, what was important was the support from senior staff in each of the schools, who saw the benefits of the approach, and wanted to ensure that it was used in such a way to support the school's work.

We also need to point out here, that despite the detailed guidance in the documents that were produced, apart from the three phases of Inclusive Inquiry which involve twelve steps as described above, there is flexibility as to how each school can approach each of the steps, considering contextual differences. Due to these contextual differences, no one approach that was used in any of the schools can be recommended as the best approach to be used. Rather each school can decide what would be more appropriate within their given context. For example, some schools chose to engage the whole class in the first part of the student researcher training, but then only engage a small group of students (those seen as 'hard to reach') for conducting observations of lessons. On the other hand, other schools involved in the researchers training only those nine students seen as 'hard to reach'.

Involving all students in some form during the training is an inclusive approach but may take away the sense of importance that student researchers feel. Furthermore, if such approaches are used with whole classes, there is a danger of such initiatives being seen just as another lesson in the class, both by students as well as by teachers. When only a small group of students were trained, this was happening in different rooms and was giving the sense to student researchers of something new happening, therefore, assigning more importance to this role. This also enabled a more focused data analysis process and the opportunities for more extended dialogues between teachers and students, compared to what happens when teachers work with the whole class. However, more research is needed in exploring the differences between approaches in more depth. Our feeling is that working only with a few selected student researchers, is likely to have more impact on those individuals involved.

Ideally, the Inclusive Inquiry process should be repeated over the years and allow all students in schools at some point to take this important role of a researcher, who collects and analyses data from classmates, co-designs lessons and observes lessons with a view to promote inclusive practices and thinking. Having said this, the realities within schools, not least because of time pressures, may not allow giving opportunities to all students to take the student researcher role at some point in their school life. Therefore, the decisions about which of the suggested approaches to be used in each context, must be part of a reflective and collaborative process that must occur as part of dialogues amongst members of each school context.

Finally, the research reported in this paper also has methodological implication. In particular, it relates to the ideas of Bruce et al. (2011) who refer to various areas that have been highlighted in the literature as leading to the trustworthiness of collaborative action research, such as the mutual definition of research problems between researchers and teachers, the ongoing reflective processes and the contributions to collective knowledge about learning and teaching which is shared with others for wider educational benefits. Through Inclusive Inquiry students also become part of this collaborative process, contributing to the identification of areas to be explored further as well as co-constructing knowledge through processes of dialogue. Therefore, it could be argued that the involvement of student researchers can also contribute to enhancing collaborative action research's trustworthiness.

Conclusion

Collaborative action research is a powerful approach for shifting power dynamics in research in education, as well as ensuring research that has a direct impact on participants' lives. Through the examples explored in this paper, the benefits for a certain group of students that took the role of researchers were analysed. It can be argued that the identified impacts of the approach on student researchers, student confidence, student engagement and improved student-teacher relationships, are features that can lead to the development of student agency.

OECD (2019) argues that student agency 'is about acting rather than being acted upon; shaping rather than being shaped; and making responsible decisions and choices rather than accepting those determined by others.' (4). Here, we saw how students were actively involved in the design of lessons and made choices for those lessons based on critical observations and discussions between them and their teachers. Schoon (2018) argues that learner agency is not a personality characteristic, but rather a relational process which emerges through interaction with others. Collaborative action research facilitates such interactions and as illustrated in this paper it can lead to the development of student agency, and the development of stronger relationships between teachers and students.

Note

1. A set of six booklets in five languages can be accessed for free at: <https://reachingthehardtoreach.eu/>.

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ORCID

Kyriaki Messiou  <http://orcid.org/0000-0003-3412-3108>

References

- Ainscow, M. 2007. "From Special Education to Effective Schools for All: A Review of Progress so Far." In *The SAGE Handbook of Special Education*, edited by L. Florian, 146–159. London: SAGE.
- Ainscow, M., T. Booth, and A. Dyson. 2006. *Improving Schools, Developing Inclusion*. London: Routledge.
- Ainscow, M., and I. Kaplan. 2005. "Using Evidence to Encourage Inclusive School Development: Possibilities and Challenges." *Australasian Journal of Special Education* 29 (2): 106–116. <https://doi.org/10.1017/S103001120002529X>.
- Avramidis, E., and B. Norwich. 2002. "Teachers' Attitudes Towards Integration/Inclusion: A Review of the Literature." *European Journal of Special Needs Education* 17 (2): 129–147. <https://doi.org/10.1080/08856250210129056>.
- Bahou, L. 2012. "Cultivating Student Agency and Teachers as Learners in One Lebanese School." *Educational Action Research* 20 (2): 233–250. <https://doi.org/10.1080/09650792.2012.676288>.
- Baker, J., A. 2006. "Contributions of Teacher–Child Relationships to Positive School Adjustment During Elementary School." *Journal of School Psychology* 44 (3): 211–229. <https://doi.org/10.1016/j.jsp.2006.02.002>.
- Black-Hawkins, K., L. Maguire, and R. Kershner. 2021. "Developing Inclusive Classroom Communities: What Matters to Children?" *Education* 50 (5): 3–13. <https://doi.org/10.1080/03004279.2021.1873398>.
- Bland, D., and B. Atweh. 2007. "Students as Researchers: Engaging students' Voices in PAR." *Educational Action Research* 15 (3): 337–349. <https://doi.org/10.1080/09650790701514259>.
- Bruce, C.D., T. Flynn, and S. Stagg-Peterson. 2011. "Examining What We Mean by *Collaboration* in Collaborative Action Research: A Cross-Case Analysis." *Educational Action Research* 19 (4): 433–452. <https://doi.org/10.1080/09650792.2011.625667>.
- Butler, D. L., and L. Schnellert. 2012. "Collaborative Inquiry in Teacher Professional Development." *Teaching and Teacher Education* 28 (8): 1206–1220. <https://doi.org/10.1016/j.tate.2012.07.009>.

- Carrington, S., D. Bland, and K. Brady. 2009. "Training Young People as Researchers to Investigate Engagement and Disengagement in the Middle Years." *International Journal of Inclusive Education* 14 (5): 449–462. <https://doi.org/10.1080/13603110802504945>.
- Cook-Sather, A. 2006. "Sound, Presence, and Power: "Student Voice" in Educational Research and Reform." *Curriculum Inquiry* 36 (4): 359–390. <https://doi.org/10.1111/j.1467-873X.2006.00363.x>.
- Cornelius-White, J. 2007. "Learner-Centered Teacher - Student Relationships are Effective: A Meta Analysis." *Review of Educational Research* 77 (1): 113–143.
- Desai, S.R. 2019. "Youth Participatory Action Research: The Nuts and Bolts as Well as the Roses and Thorns." In *Research Methods for Social Justice and Equity in Education*, edited by, K.K. Strunk and L. A. Locke, 125–135. Switzerland: Palgrave Macmillan.
- Diaz, A., N. Eisenberg, C Valiente, S VanSchyndel, T. L Spinrad, R Berger, M. M. Hernandez, K. M. Silva, and J Southworth. 2017. "Relations of Positive and Negative Expressivity and Effortful Control to Kindergarteners' Student-Teacher Relationship, Academic Engagement, and Externalizing Problems at School." *Journal of Research in Personality* 67 (April): 3–14. <https://doi.org/10.1016/j.jrp.2015.11.002>.
- Feldman, A. 1999. "The Role of Conversation in Collaborative Action Research." *Educational Action Research* 7 (1): 125–147. <https://doi.org/10.1080/09650799900200076>.
- Fernandez-Díaz, E., A. Calvo, and C. Rodríguez-Hoyos. 2014. "Towards a Collaborative Action Research in Spain to Improve Teaching Practice." *Educational Action Research* 22 (3): 397–410. <https://doi.org/10.1080/09650792.2014.882261>.
- Fielding, M. 2001. "Students as Radical Agents of Change." *Journal of Educational Change* 2 (2): 123–141. <https://doi.org/10.1023/A:1017949213447>.
- Fielding, M. 2004. "Transformative Approaches to Student Voice: Theoretical Underpinnings, Recalcitrant Realities." *British Educational Research Journal* 30 (2): 295–311. <https://doi.org/10.1080/0141192042000195236>.
- Fielding, M., and S. Bragg. 2003. *Students as Researchers, Making a Difference*. Cambridge: Pearson.
- Florian, L., and K. Black-Hawkins. 2011. "Exploring Inclusive Pedagogy." *British Educational Research Journal* 37 (5): 813–828. <https://doi.org/10.1080/01411926.2010.501096>.
- Fredricks, J. A. 2011. "Engagement in School and Out-Of-School Contexts: A Multidimensional View of Engagement." *Theory into Practice* 50 (4): 327–335. <https://doi.org/10.1080/00405841.2011.607401>.
- Fullan, M. 2007. *The New Meaning of Educational Change*. London: Routledge.
- Goldrick, S. 2008. "Tackling Inequalities in Education Systems: Exploring the Role of Students Voice." *Paper presented at the Annual Conference of the Australian Association for Research in Education*, Brisbane.
- Gonzalez, T.E., D. I. Hernandez-Saca, and A.J. Artilles. 2017. "In Search of Voice: Theory and Methods in K-12 Student Voice Research in the US, 1990–2010." *Educational Review* 69 (4): 451–473. <https://doi.org/10.1080/00131911.2016.1231661>.
- Groundwater-Smith, S., and N. Mockler. 2016. "From Data Source to Co-Researchers? Tracing the Shift from 'Student voice' to Student-Teacher Partnerships in Educational Action Research." *Educational Action Research* 24 (2): 159–176. <https://doi.org/10.1080/09650792.2015.1053507>.
- Hadfield, M., and K. Haw. 2001. "Voice', Young People and Action Research." *Educational Action Research* 9 (3): 485–502. <https://doi.org/10.1080/09650790100200165>.
- Hajisoteriou, C., and P. Angelides. 2015. "Listening to Children's Voices on Intercultural Education Policy and Practice." *International Journal of Qualitative Studies in Education* 28 (1): 112–130. <https://doi.org/10.1080/09518398.2013.872813>.
- Hajisoteriou, C., C. Karousiou, and P. Angelides. 2017. "Mapping Cultural Diversity Through Children's Voices: From Confusion to Clear Understandings." *British Educational Research Journal* 43 (2): 330–349. <https://doi.org/10.1002/berj.3266>.
- Hope, M. 2012. "The Importance of Belonging: Learning from the Student Experience of Democratic Education." *Journal of School Leadership* 22 (4): 733–750. <https://doi.org/10.1177/105268461202200403>.

- Jaipal, K., and C. Figg. 2011. "Collaborative Action Research Approaches Promoting Professional Development for Elementary School Teachers." *Educational Action Research* 19 (1): 59–72. <https://doi.org/10.1080/09650792.2011.547688>.
- Kellett, M. 2009. "Children as Researchers: What We Can Learn from Them About the Impact of Poverty on Literacy Opportunities?" *International Journal of Inclusive Education* 13 (4): 395–408. <https://doi.org/10.1080/10236240802106606>.
- Levin, B., and T. Rock. 2003. "The Effects of Collaborative Action Research on Preservice and Experienced Teacher Partners in Professional Development Schools." *Journal of Teacher Education* 54 (2): 135–149. <https://doi.org/10.1177/0022487102250287>.
- Lincoln, Y. S., and E. G. Guba. 1985. *Naturalistic Inquiry*. London: SAGE.
- McIntyre, A. 2000. "Constructing Meaning About Violence, School, and Community: Participatory Action Research with Urban Youth." *The Urban Review* 32 (2): 123–154. <https://doi.org/10.1023/A:1005181731698>.
- Messiou, K. 2012. "Collaborating with Children in Exploring Marginalisation: An Approach to Inclusive Education." *International Journal of Inclusive Education* 16 (12): 1311–1322. <https://doi.org/10.1080/13603116.2011.572188>.
- Messiou, K., and M. Ainscow. 2015. "Responding to Learner Diversity: Student Views as a Catalyst for Powerful Teacher Development?" *Teaching and Teacher Education* 51:246–255. <https://doi.org/10.1016/j.tate.2015.07.002>.
- Messiou, K., and M. Ainscow. 2020. "Inclusive Inquiry: Student-Teacher Dialogue as a Means of Promoting Inclusion in Schools." *British Educational Research Journal* 46 (3): 670–687. <https://doi.org/10.1002/berj.3602>.
- Messiou, K., M. Ainscow, G. Echeita, S. Goldrick, M. Hope, I. Paes, M. Sandoval, C. Simón, and T. Vitorino. 2016. "Learning from Differences: A Strategy for Teacher Development in Respect to Student Diversity." *School Effectiveness and School Improvement* 27 (1): 45–61. <https://doi.org/10.1080/09243453.2014.966726>.
- Mitchell, S.N., R.C. Reilly, and M.E. Logue. 2009. "Benefits of Collaborative Action Research for the Beginning Teacher." *Teaching & Teacher Education* 25:344–349. <https://doi.org/10.1016/j.tate.2008.06.008>.
- Mitra, D. L. 2003. "Student Voice in School Reform: Reframing Student–Teacher Relationships." *McGill Journal of Education* 38 (2): 289–304.
- Mitra, D. L. 2004. "The Significance of Students: Can Increasing 'Student voice' in Schools Lead to Gains in Youth Development?" *Teachers College Record* 106 (4): 651–688. <https://doi.org/10.1177/016146810410600402>.
- Mitra, D.L., and S.C. Serriere. 2012. "Student Voice in Elementary School Reform: Examining Youth Development in Fifth Graders." *American Educational Research Journal* 49 (4): 743–744. <https://doi.org/10.3102/0002831212443079>.
- OECD. 2019. "Conceptual Learning Framework: Student Agency for 2030." <https://www.oecd.org/education/2030-project/teaching-and-learning/learning/student-agency/>.
- Parr, J., and E. Hawe. 2022. "Student Pedagogic Voice in the Literacy Classroom: A Review." *Research Papers in Education* 37 (6): 773–796. <https://doi.org/10.1080/02671522.2020.1864769>.
- Parsons, S. 2021. "The Importance of Collaboration for Knowledge Co-Construction in 'Close to practice' Research." *British Educational Research Journal* 17 (6): 1490–1499. <https://doi.org/10.1002/berj.3714>.
- Quin, Daniel. 2017. "Longitudinal and Contextual Associations Between Teacher–Student Relationships and Student Engagement." *Review of Educational Research* 87 (2): 345–387. <https://doi.org/10.3102/0034654316669434>.
- Reay, D. 2006. "I'm Not Seen as One of the Clever children': Consulting Primary School Pupils About the Social Conditions of Learning." *Educational Review* 58 (2): 171–181. <https://doi.org/10.1080/00131910600584066>.
- Reeve, J., and C. M. Tseng. 2011. "Agency as a Fourth Aspect of students' Engagement During Learning Activities." *Contemporary Educational Psychology* 36 (4): 257–267. <https://doi.org/10.1016/j.cedpsych.2011.05.002>.

- Robinson, C. 2014. *Children, Their Voices and Their Experiences of School: What Does the Evidence Tell Us?*. York: Cambridge Primary Review Trust.
- Rodríguez, L. F. and T. M. Brown 2009. "From Voice to Agency: Guiding Principles for Participatory Action Research with Youth." *New Directions for Youth Development* 2009 (123): 19–34. <https://doi.org/10.1002/yd.312>.
- Rudasill, K, S. Rimm-Kaufman, L. Justice, and K. Pence. 2006. "Temperament and Language Skills as Predictors of Teacher-Child Relationship Quality in Preschool." *Early Education & Development* 17 (2): 271–291. https://doi.org/10.1207/s15566935eed1702_4.
- Rudduck, J. 2006. "The Past, the Papers and the Project." *Educational Review* 58 (2): 131–143. <https://doi.org/10.1080/00131910600583993>.
- Rudduck, J., and D. McIntyre. 2007. *Improving Learning Through Consulting Pupils*. London and New York: Routledge.
- Sandoval, M., and K. Messiou. 2020. "Students as Researchers for Promoting School Improvement and Inclusion: A Review of Studies." *International Journal of Inclusive Education* 1–16. <https://doi.org/10.1080/13603116.2020.1730456>.
- Schoon, I. 2018. *Conceptualising Learner Agency: A Socio-Ecological Developmental Approach*. Published by the Centre for Learning and Life Chances in Knowledge Economies and Societies at www.llakes.ac.uk.
- Shaw, P. A. 2021. "Photo-Elicitation and Photo-Voice: Using Visual Methodological Tools to Engage with Younger Children's Voices About Inclusion in Education." *International Journal of Research & Method in Education* 44 (4): 337–351. <https://doi.org/10.1080/1743727X.2020.1755248>.
- Silver, R. B., J. R. Measelle, J. M. Armstrong, and M. J. Essex. 2005. "Trajectories of Classroom Externalizing Behavior: Contributions of Child Characteristics, Family Characteristics, and the Teacher-Child Relationship During the School Transition." *Journal of School Psychology* 43 (1): 39–60. <https://doi.org/10.1016/j.jsp.2004.11.003>.
- Sinatra, G.M., B. H. Heddy, and B. Lombardi. 2015. "The Challenges of Defining and Measuring Student Engagement in Science." *Educational Psychologist* 50 (1): 1–13. <https://doi.org/10.1080/00461520.2014.1002924>.
- Tangen, R. 2009. "Conceptualising Quality of School Life from Pupils' Perspectives: A Four-Dimensional Model." *International Journal of Inclusive Education* 13 (8): 829–844. <https://doi.org/10.1080/13603110802155649>.
- Thomson, P. 2008. "Children and Young People: Voices in Visual Research." In *Doing Visual Research with Children and Young People*, edited by P. Thomson, 1–19. London: Routledge.
- Thomson, P., and H. Gunter. 2006. "From 'Consulting Pupils' to 'Pupils as Researchers': A Situated Case Narrative." *British Educational Research Journal* 32 (6): 839–856. <https://doi.org/10.1080/01411920600989487>.
- UNESCO. 2017. *A Guide for Ensuring Inclusion and Equity in Education*. Paris: UNESCO.
- UNESCO. 2020. *Education in a Post-Covid World: Nine Ideas for Public Action*. Paris: United Nations Educational, Scientific and Cultural Organization.
- Vaino, K., J. Holbrook, and M. Rannikmae. 2013. "A Case Study Examining Change in Teacher Beliefs Through Collaborative Action Research." *International Journal of Science Education* 35 (1): 1–30. <https://doi.org/10.1080/09500693.2012.736034>.
- Walker, S., and L. Graham. 2021. "At Risk Students and Teacher-Student Relationships: Student Characteristics, Attitudes to School and Classroom Climate." *International Journal of Inclusive Education* 25 (8): 896–913. <https://doi.org/10.1080/13603116.2019.1588925>.
- Wilson, S. 2000. "Schooling for Democracy." *Youth Studies Australia* 19 (2): 25–32.