Addressing Ethical Dilemmas in Implementing Coteaching

Colette Murphy & Jim Beggs

Abstract: This paper addresses some of the ethical dilemmas that have been reported in the literature. We found that including all coteaching participants in the research design gave them ownership of the coteaching model. This led to fuller engagement in implementing coteaching and in communication. Prior to coteaching placements school principals met with us to refine the model of coteaching, and coteachers (classroom teachers, pre-service teachers and university tutors) jointly addressed ethical issues which may arise. Coteachers produced a code of practice to which all signed up. Coteaching was enacted within this community of practice.

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1. Introduction

GALLO-FOX, WASSELL, SCANTLEBURY and JUCK (2006) outline the ethical dilemmas they encountered when implementing coteaching in a secondary science education program. They raise the global question of how can new approaches be advocated to teaching and teacher education when many in the field hold different philosophical perspectives. In this paper we respond to some of the ethical issues raised and to the question of teacher education reform. [1]

Many aspects of school education have changed over the past fifty years, particularly in relation to learner characteristics, increasing levels of government
regulation and bureaucracy, globalization and political uncertainty. Pre-service teacher education has not, in the main, embraced these changes, and new teachers consequently lack the agency and confidence required for effective engagement with students. Coteaching has the potential to increase the agency of both pre-service and classroom teachers to improve what they offer to students. However, the very nature of coteaching enshrines class teachers, university tutors, and pre-service teachers working together in new ways, disrupting the traditional hierarchical power structure of intern placements. This paper describes our learning curve and the ethical issues we encountered in order to integrate coteaching into the science methods course for prospective elementary school teachers. [2]

1.1 Coteaching

The aim of coteaching is to provide the most effective and enjoyable learning experiences for the learners, whilst at the same time, providing the coteachers with the opportunity to learn from each other and to improve their own practice. When teachers begin working together, and share the full responsibility for planning, teaching, and reflecting on lessons, there is "automatically a greater range of action possibilities" and collective activity enables each individual to develop since "any individual can now enact teaching practices not available in individual teaching" (ROTH & TOBIN, 2005, p.x). [3]

In our model of coteaching, the pre-service teachers act as equals to the classroom teachers, each bringing specific expertise to the lesson. We used coteaching as a way to expand the agency of pre-service teachers in the classroom. Our concept of agency can be described as the power of the pre-service teacher to appropriate resources in the classroom. We felt that via coteaching, they could access the greatest resource available to them: an experienced classroom teacher. LAVOIE and ROTH (2001, p.3) observed that student teachers rarely (if ever) get to work side by side with an experienced teacher—they normally observe someone teaching or teach alone. The pre-service teachers are science specialists; science makes up one-third of their bachelor of education degree. By the time they start coteaching (year three of a four-year degree), they have a good knowledge of science and science pedagogy, but their experience of elementary teaching (all subjects) will have totalled only sixteen weeks. The classroom teachers, on the other hand, are well experienced in elementary teaching, but many lack both the background science knowledge and confidence to teach science. By coteaching with a pre-service teacher who has a very good knowledge of science and science pedagogy, the classroom teachers might develop their own confidence in science teaching. [4]

There is much research evidence highlighting elementary teachers' lack of confidence in teaching science. In the USA there has been major concern about the standard of preparation of science and mathematics teachers (BARUFALDI & REINHARTZ, 2001). During the 1980s and 1990s more than 500 national reports addressed various inadequacies in science curricula and in the preparation of new teachers. Many of the resultant reforms centered on collaborative efforts to
effect change. In the UK, HARLEN, HOLROYD, and BYRNE (1995) found that many primary teachers lacked confidence in their ability to teach science and technology. A third of these teachers identified their own lack of background knowledge as a source of their problems. More recently, MURPHY and BEGGS (2005) carried out a large-scale study to explore teachers' views and experiences of primary science education across the UK and to identify ways in which it could be improved. They reported that a high proportion of primary teachers felt they lacked the confidence, expertise and training to teach current science curricula effectively. [5]

The coteaching projects described below were set up to address the joint issues of elementary teachers' lack of confidence in science teaching and pre-service teachers' lack of agency in the classroom so that children's experience and learning of science could be improved. [6]

1.2 Addressing ethical dilemmas

GALLO-FOX, WASSELL, SCANTLEBURY and JUCK (2006) describe three ethical dilemmas which emerged in connection with their implementation of coteaching: some of the study's participants, including cooperating teachers, interns and supervisors, did not agree with the coteaching philosophy; some participants chose not to enact coteaching, and some stakeholders were not involved in the ensuing discussions among researchers. When we set out on our coteaching journey, our prime concern was to share the ownership of all aspects of the implementation with the participants. We felt that unless the school principals, teachers and pre-service teachers involved were fully cognizant of the principles of coteaching and willing to engage fully in the projects, we should not even attempt to proceed. [7]

2. Enabling Participant Voice in the Research Design

2.1 Who is included?

The idea of the coteaching projects was provided to the research team by a school principal who met with us and told us that to improve science in her school she needed our students (science-specialist pre-service teachers), our resources and ourselves (science teacher educators). We developed the idea of pre-service teachers working in the classroom with experienced teachers in a way which would ensure the sharing of expertise. We were fortunate to receive generous funding which enabled us to pay for teacher cover, science equipment for participating schools and meetings. [8]

Our guiding principle was to avoid anyone "stepping on each other's toes". From the outset the research team planned to actively include all participants in the research design and to ensure that each was willing to accept the responsibilities associated with working in new ways in the classroom. At all times we stressed that coteachers concentrated on enhancing the children's learning experience of school science. We also promoted communication channels that enabled
individuals to voice concerns about issues they felt uncomfortable discussing with their coteachers. In addition, and in response to advice from the school principals who were involved in the original research design, we organized workshops for classroom teachers to develop further their knowledge and skills in science teaching, so they would feel better equipped when working with the pre-service teachers. These sessions ran before, during and after the coteaching placements and provided the research team with valuable feedback from the class teachers in relation to their experiences of coteaching. The pre-service teachers provided similar feedback during science classes at the University College. [9]

2.2 How is their contribution enacted?

Initially, the research team set up a meeting with the principals of the first ten participating schools. The meeting was intentionally held on neutral ground (at a conference hotel) and explored issues relating to coteaching with the intention of refining the research and implementation design. For instance, the principals questioned the research team about the respective roles of pre-service and classroom teachers in the classroom. A collective decision was reached that project participants would develop codes of practice for classroom teachers, pre-service teachers and university tutors to which all would sign up. Principals were also concerned that some teachers might be anxious about how to co-teach. We were unable to provide a how-to guide; instead, a second collective decision was made that coteaching teams discuss a range of possible coteaching scenarios. The value of this work was immense. School principals were much more aware than the research team of possible constraints. They appreciated the need for great care in our approach during all steps of implementation. They accepted responsibility for their role in the project which, we felt, was crucial. In retrospect, their advice and intimate knowledge of the work was key to the successes we were able to report (MURPHY, BEGGS, CARLISLE & GREENWOOD, 2004). [10]

The next stage was a one-day launch seminar, attended by school principals, researchers and all coteachers: classroom teachers, pre-service teachers and university tutors. The seminar aimed at enabling coteachers to get to know each other and to work together in ways which would lead to developing successful working relationships. Coteaching teams developed codes of practice by adapting codes previously created for teachers and student teachers during "non-coteaching" school placements. They also discussed the strategies they may adopt in hypothetical coteaching situations, such as the following:

For each scenario, consider your strategies for (a) that day and (b) future planning:
1. The class teacher and student teacher have planned a science investigation to take place during week 2 of the placement. The class teacher is absent on that day—the student arrives and a supply teacher is in class.
2. The class teacher and student have planned a science investigation to take place during week 2 of the placement. The student phones in sick on that day.
3. After a week or two you feel that all is not well in your relationship with the class teacher/student teacher.


Other group activities included adapting a reflective diary for use by coteachers, discussions relating to anxieties surrounding coteaching and suggestions for improving the research design. This day was intensive and intentionally provocative so that participants appreciated their responsibilities in the project. Participants were asked to consider seriously their involvement in the project and those who were still willing were asked to send in a signed code of practice. There was to be no penalty for those who felt unable to sign. All participants signed up. Their evaluations of the day recognized the importance of their role in the design and implementation of coteaching. Most were really looking forward to the project and a few were also still anxious about their role. This anxiety partly arose as a result of the inability of the research team to inform coteachers about how to coteach. We had never tried this before. The project was innovative and we were hoping that the participants would apprise us as to how coteaching could be successfully enacted in the classroom. [12]

Typical comments from the pre-service teachers, recorded in the reflective diaries, indicated a mixture of their enthusiasm for science teaching, the value of learning from working together with experienced teachers and some anxiety about their role as coteachers, for instance:

I like the format that the project offers. I feel that it will give a certain degree of freedom to try new ideas and experiment with ways of teaching that will allow me to inject a more practical element back into science.

I am to use my knowledge to provide investigative and practical ideas to create a fun, discovery—learning, science environment in which children are stimulated to learning. To gain an understanding of children's thoughts opinions, ideas of what science is and their understanding of scientific concepts.

I expect this experience to be very beneficial for me as it will enable me to spend more time in the classroom working with children from varying backgrounds teaching a subject I enjoy and hopefully passing my enthusiasm onto the children.

I will gain an insight into the teaching of science in the primary classroom. I hope to learn different skills from the teacher and become more confident in the teaching of science.

I will learn about children's and teacher's views of science. Learn how a teacher goes about teaching science in the primary school, experience the management of a science lesson and experience the many safety aspects considered in a science lesson.

I'm a bit confused about my role in the classroom during this project. I understand the concept of team teaching but I'm not exactly sure how I will fit into this role. I feel I might be stepping on the teacher's toes if I interrupt her lesson questioning. On the other hand I don't want to feel like a spare part in this role of team teaching. I want to participate fully.
I hope it develops well and I'm very interested in how the team teaching will progress. I am also keen to teach science from an alternative perspective that I have been used to. [13]

In the first year of our work, we referred to the innovation as team teaching, until we read about coteaching which more accurately reflected the practice. [14]

The classroom teachers’ comments about what they expected from coteaching were different in that they reflected the teachers’ intention to support the pre-service teachers in the classroom and the hope that they would learn more about their own science teaching, for example:

- To give the student teacher the opportunity to grow in experience and help me to plan and deliver a science topic.
- To give students valuable opportunities to develop teaching skills in the class situation.
- To see science being taught by a specialist who can bring a different light into experiment and practical work for the children.
- To gain further understanding of the subject area and confidence in tackling activities previously not taught by using student's expertise. [15]

2.3 Addressing issues of social capital and agency

According to PUTNAM (1993) social capital refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit. We tried to ensure that our implementation of coteaching facilitated social capital and focused many of our efforts on building trust and openness. We also discussed changing power relationships with the coteachers: they were going to work in a non-traditional way in the classroom. The pre-service teachers would have more agency in the classroom and would be able to expand the opportunities now open to them. Classroom teachers would develop more agency in regard to science teaching: they would have more access to scientific resources and their use with children by working alongside the science specialist pre-service teachers. However, the classroom teacher would have less power in that they would be sharing access to children and the classroom. Children in the classroom would have much more agency in that they would have improved access to their teachers and would be given more time and resources to develop scientific thought and processes. University tutors would get more opportunity to work with children, pre-service teachers and classroom teachers, thus giving them more agency both in the classroom and in practicing what they preach. However, they would also lose power over the pre-service teachers and, to some extent, the classroom teachers. In the coteaching situation they would be expected to work alongside their new peers and, potentially, expose some of their inadequacy in the classroom situation. [16]
We promoted discussion of these issues during the launch seminar. The following quote from a school principal reiterated the importance of sharing ownership of the research design with the classroom teachers:

I thought the launch day was very good in the [hotel name] and I thought the working in small groups was very good, people discussing their priorities and groups of teachers putting in what they saw—because sometimes it can be very management directed. But the input of the teachers was very good because if they have input then they will want to follow it through … [17]

3. Enacting Equity in Coteaching Practice

3.1 Equal responsibility?

It is difficult to enact equal responsibility in coteaching. Having equal responsibility does not mean that coteachers are doing the same thing at the same time; it does not even require that coteachers are teaching together. Our working definition was that coteachers shared responsibility for the children's enjoyment and learning of science. After the first year, we identified the most common enactments of coteaching. In some classes, all were evident. These were: equal teaching roles for pre-service and classroom teachers; one leading under the guidance of another; one leading and the other acting as "assistant" and one leading as the other observes. [18]

3.2 No assessment, supervision or mentoring

In response to concerns that coteaching was a new way of working and could lead to feelings of anxiety in regard to enacting the role as coteacher, we intentionally promoted the idea that coteaching in the classroom would not be assessed. When university tutors visited classrooms, their role was to support the children's learning by adding their expertise and not to supervise the pre-service teachers. There was no debriefing about the teaching performance. Instead, the university tutors were included in the lesson evaluation discussion and invited to share their experiences. These discussions were similar to cogenerative dialogues (ROTH & TOBIN, 2002). They could not be presented as true cogenerative dialogues, however, since they did not include representatives of all groups participating in the lesson; there were no children present. [19]

We were also concerned that obvious mentoring by the classroom teachers might serve to diminish the agency of the pre-service teachers and make the latter feel as though they were being judged, as opposed to acting as an equal participant in the promotion of better science learning and teaching in the classroom. Coteachers were encouraged to share expertise. [20]

3.3 Enacting sharing

It was clear from the start that we were asking teachers to share that which they were used to doing alone. There would be many ethical issues arising. The
preparatory work described above was carried out to raise awareness and anticipate the particular types of issues pertaining to each classroom. After the first year of coteaching it was evident that, in some cases, random pairing of pre-service and classroom teachers was not always ideal. We discussed the possibility of introducing an element of matching for future projects. The participants felt this may be a useful step. The University College co-director of the coteaching projects visited each school principal and they discussed potential coteaching teams which would work best to promote children's enjoyment and learning of science. This careful and sensitive process did lead to more harmonious coteaching and was adopted in all future work. [21]

4. Contradictions

4.1 School-level decisions

Issues arose during coteaching in schools which were beyond intervention by the project team. For instance, in one school a pre-service teacher was re-assigned to a different cooperating teacher due to school-related demands on the first. The new cooperating teacher had not been involved in any of the preparatory work and her attitude to coteaching was quite negative. Clearly, such a new way of working requires much preparation and all coteachers must be fully aware of the principles involved. We would not advocate the introduction of coteaching to participants who are not fully aware of its nature, goals and challenges. Further, we would strongly recommend that all participants sign up to a code of practice. [22]

4.2 Role anxiety

Anxiety about how to coteach is the most challenging aspect for all concerned. The research team acknowledge this and initially invited participants to share their different ways of enacting coteaching for subsequent cohorts. We videoed several cotaught sessions and were able to provide concrete information about ways to coteach. The following extract from a discussion between Jim, project co-director, and Loretta, a school principal, provides some insight to some of the issues surrounding role anxiety:

Jim: Had you any concerns that affected your decision to take part?
Loretta: I was very interested from the very start. The concerns I had would have been to do with any project. First of all I was concerned about the quality of the students, how well they would be able to support our teachers and to work alongside them. I was also concerned about the consistency of the program: would people turn up regularly or would there be reasons why the program couldn't run on certain days? That could create a problem in schools in that teachers and children are waiting for someone to come in and if they don't arrive they get very disappointed. That, in turn, affects the whole program. The other concerns I had really were that it was a different relationship to teaching practice and I was wondering how both the teachers and the students would cope with that.

Jim: How were these issues addressed for you before the project started?
Loretta: We had talked about the quality of students and obviously not every student is at exactly the same level and we knew there was going to be a slight variation. Having said that, we were very happy with the quality of support that was provided and in some cases there were students who weren't brilliant at the beginning but with confidence did become much better and contributed a lot to the program. The students were very consistent. They had been here for the whole 10 weeks and I felt that contributed a lot to what the teachers got out of it. They expected it to happen each week and it did happen and they were happy with that. The relationship issue just really wasn't one in the end. They both got on and worked well together and no concerns were brought to me by teachers about that.

Jim: Why did you become involved?

Loretta: First of all, I'm really interested in primary science I think it's a brilliant subject for primary school. It's a cross curricular subject in which children can learn skills in all sorts of areas but also it teaches them a particular way of thinking about things which they don't get in other subjects. That's the main reason why I would be interested in any project of this type. Secondly I was very interested in a professional development point of view for my teachers and interested in anything that can enhance their skills in the classroom. Thirdly I'm also interested in research and getting teachers involved in research.

Jim: Did you feel you got enough information about how the project was being organized?

Loretta: Yes I felt I was kept fully informed. You contacted me regularly to let me know what was happening. Karen [research assistant] was very good about keeping in touch with us about when she was coming and yes I'd no problem with communication.

Jim: How would you describe the purpose of the project?

Loretta: The purpose I felt was that it was further development of the partnership of the College and the students and the school for the good of all working in the area of science. That it was something that would give extra support to teachers in the area that they had identified where some were lacking in confidence or expertise. It would also give students more experience in working in classrooms.

Jim: What do you feel the outcomes were for your school from involvement in the workshop held in the college?

Loretta: For the teachers there was enhanced professionalism. They were very aware of what was going on in school and they responded very well to that. It also raised their self-esteem. They were happy to be involved in the project and telling other staff about it. It helped their classroom skills in working in the area of practical, investigative science and it stimulated interest among other staff about what was going on. In the hard area of science it was useful to us, especially the outcomes of the workshops where we got specific feedback on our own schemes. The content of the workshops really came from teacher's identification of the issues and I see that in the long term being very useful to us as we further develop our schemes.

Jim: Did you keep a day-to-day involvement or give that responsibility to, for example, science co-ordinator or Vice-Principal?
Loretta: I’m really interested in science and because I am here at the end of the phone I was obviously the person who was closely involved with yourself and Karen. But my coordinator is a Primary 6 teacher [teaches 9–10 year olds] and he also was kept very involved. He attended the workshops, and because the other two Primary 6 colleagues were involved, he was also very aware of what was going on and they shared with him what they were doing within the classrooms. So I’d say it was a good fifty-fifty between he and I.

Jim: Would you continue to be involved in a similar project of this type? What changes might you suggest?

Loretta: Yes I felt it was very beneficial for the staff and the school and I would be interested in being involved. Basically I thought it went very well but no matter what you do time is always the biggest issue. Time for planning and review is as important as actual teaching. The change I would suggest is that there should be the same amount of time spent planning and reviewing of all the outcomes for the students and teachers as the time spent in the classroom. [23]

5. Advocating New Approaches to Teaching and Teacher Education

Teachers in schools sometimes view research and development in teacher education with skepticism. WILSON and EASTON (2003) described the results of a research project aimed at identifying the ways in which local education authorities can facilitate the use of research for school improvement (WILSON, HEMSLEY-BROWN, EASTON, & SHARP, 2003). She summarized aspects of the debate surrounding the contribution of research for school improvement for policy makers and practitioners, citing the work of HARGREAVES (1996), who reported that research has limited use and usefulness for practitioners as the findings are often viewed as complex, contradictory and of little direct relevance to classroom practice. She also cited the seminal work of SHKEDI (1998) that explored the attitudes of teachers towards research literature, and found that very few teachers turned to research literature to expand their professional knowledge, solve problems or meet the requirements of their job. However, WILSON’S research found that despite its negative image, teachers are using research to inform their knowledge and practice. [24]

Our experience was that four elements are crucial for schools to engage seriously with educational research and development. Firstly, researchers intending to work in schools must engage with school personnel from the start of their research design. It is at this stage that researchers get the most valuable insights into the workability of their projects in school. Secondly, researchers and school personnel need to share ownership and responsibility for the research: there must be equal weight given to all participant voices (using, for example, cogenerative dialogue—a conversation with stakeholders about a shared experience (ROTH & TOBIN, 2005). Thirdly, researchers must plan for sustainability of work that has benefits for school participants. There is a serious ethical issue regarding short-term, beneficial projects in schools which are discontinued when the funding runs out, leaving the situation to revert back and any benefits to be lost. Fourthly, the results should be disseminated in a form that
is accessible to all participants and to those interested in accessing the work. Advocating new approaches to teaching and teacher education is a deeply sensitive process, fraught with potential ethical issues. Care in this regard could lead to more successful integration of new approaches and speed up the necessary changes in teacher education required for twenty-first-century teaching. [25]

References


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Authors

Colette MURPHY is a senior lecturer in Queen's University Belfast. Her research interests include coteaching and cogenerative dialogue, science teacher education, children's attitudes to school science, environmental education and evaluating the role computers in education.

Contact:
Dr Colette Murphy
School of Education
Queen's University Belfast
69 University St, BELFAST BT7 1HL
Northern Ireland
Phone: ++44 2890 975 953
E-mail: c.a.murphy@qub.ac.uk

Jim BEGGS is Head of Science at St Mary's University College Belfast. His research interests include coteaching and cogenerative dialogue, science teacher education, children's attitudes to school science

Contact:
Dr Jim Beggs
St Mary's University College
191 Falls Rd, BELFAST BT12 6FE
Northern Ireland
Phone: ++44 2890 327 678
E-mail: j.beggs@smucb.ac.uk

Citation