Inter-School Collaborations for Improving Educational and Social Outcomes for Children and Young People: A Systematic Review
Paul Connolly, Jennifer Hanratty, Joanne Hughes, Christopher Chapman, Danielle Blaylock

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BACKGROUND

Over the last 20 years, inter-school collaborations have become increasingly seen as a mechanism for improving educational and social outcomes amongst students. Countries around the world have incorporated a collaborative approach into their education systems in order to improve attainment, reduce inequality and address division along social, economic, religious or ethnic lines (Bell et al., 2006; Berger, Abu-Raiya, & Gelkopf, 2015; Borooah & Knox, 2015; Chapman, Collins, Sammons, Armstrong, & Muijs, 2009; Duffy & Gallagher, 2014b).

In relation to improving educational outcomes, Beacon schools for example emerged in England and Wales in the late 1990s with the aim of identifying high performing schools and funding them to build partnerships to share best practice and to be ‘twinned’ with schools believed to be ‘failing’ in order to improve performance (Rudd et al., 2000). More recently, the London Challenge and, later, its extension to other cities through the City Challenge built upon this approach by encouraging schools to work in partnership to raise standards and support the dissemination of best practice. Such initiatives have been replicated elsewhere, in Scotland for example with the School Improvement Partnership Programme (Chapman et al., 2014). Internationally, school networks have been developed in the USA, Europe and Hong Kong (Veugelers & O’Hair, 2005) and more recently in 2012 ‘exemplary collaboration grants’ were offered support collaboration between charter and public schools to boost academic excellence in the USA ("Ed.gov," 2012).

With regard to social outcomes, inter-school collaborations have been particularly used to reduce prejudice and promote positive community relations in areas characterised by racial and ethnic divisions. In the context of divided societies education policy has consistently promoted ways to improve children’s education and community cohesion through school-level action (Boehner, Miller, Kennedy, & Gregg, 2001; "Education and Inspections Act," 2006; Hansson, O’Connor Bones, & McCord, 2013; Ireland, 2009). While ‘integrated’ or ‘desegregated’ education has been widely promoted to try to improve community cohesion, from Magnet schools in the USA to bi-lingual, bi-national schools in Israel where Arabs and Jews are educated together, inter-school collaborations offer an alternative approach. Rather than drawing individuals from diverse backgrounds into a common school, inter-school collaboration allows schools to retain their distinctive ethos while increasing meaningful and sustained contact between members of separate groups through educational activities (Berger et al., 2015; Hughes, Lolliot, Hewstone, Schmid, & Carlisle, 2012; Neins, Kerr, & Connolly, 2013). One of the most extensive examples of this approach is Northern Ireland.
where the Sharing Education Programme has, to date, supporting more than 100 primary and post-primary schools to engage in collaborative projects across religious and social divides and sought to improve both educational and social outcomes. This use of inter-school collaborations to address the effects of racial and ethnic divisions and thus promote positive social outcomes has also been found in Israel (Berger et al., 2015), Bosnia-Herzegovina (see Hansson et al., 2013 for discussion) and Cyprus (Zembylas, 2010a, 2010b) with varying levels of success.

There are a number of mechanisms through which school collaborations may bring about change in educational and/or social outcomes. Schools collaborating to share professional expertise may improve teaching practice and in turn lead to better educational outcomes for pupils; particularly where ‘high performing’ schools are actively linked to support those deemed to be ‘underperforming’. Schools collaborating to share resources, be they equipment, staff or learning resources, may also improve the standards of teaching and educational outcomes. There are a number of theories that have been applied to explicate why collaboration may be a useful route to educational improvement (see Muijs, West, & Aisncow 2010 for details). For example, the COGNET programme in the US (Greenberg, 1996) applied social constructivist theory to explain improvements in standardised test scores in intervention schools as compared to comparison schools. Collaborations for improving social outcomes tend to use contact theory as the main theoretical perspective, where increasing positive contact between different groups leads to improved social relations between the groups.

Overall, inter-school collaborations can take many forms and have been variously named: federations, consortia, partnerships, networks, confederations and collegiate. These terms may be interchangeable to an extent but all refer to some form of schools working together towards a common goal. Various schemes for classifying and describing inter-school collaborations have been proposed in the literature. For example Hanford and colleagues (Hanford, Houck, Iler, & Morgan, 1997) describe a four level typology of school collaborations which build from exchanging information (networking), to joint activities (coordination), sharing resources (cooperation) and enhancing capacity of partners (collaboration). Atkinson and colleagues (Atkinson, Springate, Johnson, & Halsey, 2007) proposed three principle dimensions of inter-school collaboration: organisational commitment and support; penetration of the collaboration; and holding a joint investment/vision. Others have classified inter-school collaborations in terms of the different combinations of schools types or partners involved. Chapman and colleagues (Chapman, Muijs, & MacAllister, 2011) for example, described six different types of federation including: cross-phase federations involving schools of different phases (primary and secondary); performance federations focused on linking high and low performing schools; mainstreaming federations linking special and mainstream schools; and academy federations or chains of schools with the same sponsor. Evidence on the effectiveness of inter-school collaborations has been inhibited by the variety of different approaches taken and also the difficulties in isolating the effects of inter-school collaborations. In relation to
the London Challenge, for example, early indicators suggested that participating schools were experiencing significantly faster improvements in exam results than schools in the rest of England. However, more recent studies have found it hard to attribute the specific causes of these effects to the London Challenge itself. For example Greaves et al. (Greaves, Macmillan, & Sibieta, 2014) highlighted the influence of primary schools in driving increases in attainment despite the major focus of the challenge being on secondary schools. Similarly Burgess (2014) argues that the greater numbers of high performing ethnic minority students accounts for some if not all of the ‘London effect’. Also, and in relation to shared education in Northern Ireland, associations between children’s involvement in shared education and positive improvements in attitudes and relationships has been found (Hughes, 2013). However, without a control group it is difficult to establish what changes are due to the collaboration itself rather than exogenous variables such as changes in government policy, changes in school leadership or wider political, social or community level changes which operate independently of school collaboration activities to improve outcomes.

Overall, therefore, whilst inter-school collaborations have become increasingly prominent in education policy and practice as a mechanism for school improvement and increasing educational and social outcomes, many different models exist and the evidence is not clear as to how effective it is and whether different models are more effective than others.

**OBJECTIVES**

This systematic review will seek to answer the following key questions:

1. Do inter-school collaborations improve educational and social outcomes for students?

2. Do differing types of inter-school collaboration lead to different effects on educational and social outcomes for students? If so, which types of inter-school collaboration are most effective?

3. For each core type of inter-school collaboration, is it possible to identify whether there are key characteristics that optimise their effectiveness on educational and social outcomes for students?

4. Do inter-school collaborations have differing effects for students depending on their initial levels of attaining, their socio-economic backgrounds, their gender, their ethnicity and/or their minority status? If so, do these differential effects vary in relation to differing types of inter-school collaboration?
EXISTING REVIEWS

There are currently three substantive reviews of the evidence regarding the effectiveness of inter-school collaborations on student outcomes. Bell et al. (2006) undertook a rapid review that provided a map of existing studies and examined the impact of networks on students. A total of 19 studies met their inclusion criteria, with variation in study quality and outcomes. The review found that effective networks had clear goals, many involved partners such as higher education institutions, business and parents and all used shared expertise to improve outcomes for learners. Greatest improvements were seen when ‘at-risk’ groups of pupils were targeted. The size and scale of a network had little impact, rather the quality of the collaboration was important. While this review represents a major effort in identifying the commonalities found in successful networks it was limited in its scope to studies published in English between 1995-2005 and involving 3 or more schools.

Atkinson et al. (2007) provided a narrative review of studies of school collaboration to summarise the different ways that schools work in partnership. This review focused on describing the nature and facilitators of inter-school collaboration without an analysis of empirical evidence for the effectiveness of collaboration in improving outcomes. Atkinson et al. provide a very useful overview of the area and made progress in classifying different levels and forms of inter-school collaboration, the potential benefits and factors which may influence successful collaboration. The review highlighted three main potential gains for schools collaborating: economic advantages of resource sharing; school improvement; and raising standards and forging relationships between schools. The review also highlighted the lack of good quality empirical evidence in the area at the time.

Dyson and Gallannaugh (2008) completed an EPPI-Centre review that provided a scoping map of studies on school-level actions to promote community cohesions. This extensive review was limited in scope to studies relating to the UK context published after 1987. This scoping map demonstrated that, at the time, much of the literature was descriptive with little focus on rigorous evaluation.

Since 2008 a number of empirical studies of the effectiveness of inter-school collaborations have been published (Chapman et al., 2009; Chapman et al., 2011; Duffy & Gallagher, 2014a; Neins et al., 2013)). Given the new evidence available and the limited scope of previous reviews, an up to date, systematic synthesis is now warranted.

INTERVENTION

For the purposes of this systematic review, inter-school collaboration will be defined as two or more schools working together on a sustained basis with the purpose of enhancing educational provision to improve educational and/or social outcomes for students. Types of collaboration can include information sharing between teachers and/or students either face-
to-face or virtually; teacher professional development and enhancement activities; the sharing of resources; and bringing students together for shared educational experiences.

For the purposes of this review, ‘sustained’ will be defined as occurring for at least one school term (a minimum of 10 weeks) and on a regular basis. One-off or infrequent events, such as joint school trips, competitive events or sporting fixtures will therefore not be included.

Other collaborative approaches, such as professional learning communities, will not be included in this review, and have been reviewed elsewhere (Lomos, Hofman, & Bosker, 2011). In particular, we are interested in collaborations between schools as organisations, and not just the networks of individual teachers.

**POPULATION**

Students of a compulsory schools age. This will vary from country to country but will typically cover students aged between 5-18 attending primary/elementary schools and secondary/middle/high schools. Collaborations between two or more schools of any school type are eligible, including charter schools, free schools, faith schools and special schools.

**OUTCOMES**

The primary outcomes of interest will be educational attainment and social outcomes. Educational outcomes are most likely to include attainment in routine school tests and public examinations. However, it could also include standardised tests used for the purposes of an evaluation.

Social outcomes will most likely include: improvement in attitudes and/or reduction in prejudice towards students from a different socio-economic or ethnic background; and/or increase in cross-community friendships.

Secondary outcomes that will be considered will include any impacts on teachers (e.g. increased confidence, work-based relationships) and on other, education-related outcomes amongst students (e.g. attitudes towards school; school attendance; future career aspirations).

Adverse and unintended outcomes will also be included such as increasing fear, intergroup anxiety, resistance to future collaboration or reduced educational attainment.

**STUDY DESIGNS**

We anticipate that there will be few randomised (or cluster randomised) controlled trials and so we intend to include any controlled quasi-experimental studies where intervention schools and students are compared to control schools and students either not participating
in inter-school collaborations or participating in alternative types of collaboration. In such cases, the quality of matching procedures will be assessed and discussed.

Studies with no control group, case studies, opinion pieces or editorials will not be included.

No date or language restrictions will be placed on the searches or included studies.

To illustrate the type of study that would be included in this review, two studies that would be eligible for inclusion in our proposed review are briefly outlined below.

**Chapman et al. (2009)** aimed to identify the different ways federations operate and explore the impact this variation in approach to changes in school performance. This quantitative study compared 264 schools grouped into 122 school federations with 264 matched comparator schools. Federation, in this study, encompassed a range of different approaches to collaboration, for example performance federations where high and low performing schools collaborate to raise standards in the underperforming school to cross-phase federations where primary and secondary schools collaborate. National school level and pupil level data sets were used to compare performance of schools in the years prior to federation to performance after federation and compare this to matched comparison schools that were never federated. Analysis of baseline characteristics showed that federated and non-federated schools were well matched by size, percentage of pupils with special educational needs (SEN) and percentage of pupils reaching threshold targets in English. However, federation schools had a lower percentage of pupils reaching threshold targets in maths (74.3%) compared to non-federated schools (76.8%) at baseline. Overall, findings indicated that federation accounted for a large and statistically significant positive effect on school performance in maths and English. The variance in school level performance accounted for by federation increased over time. With regard to federation type, the main differences between federation and comparator schools were found for performance federations. For other federation types the findings were mixed, or there were too few cases to include particular federation types in the analysis. No differences were found for performance in school inspections, nor were there any differential effects of federation on students of different genders or from difference socio-economic backgrounds or for students with special educational needs.

**Neins et al. (2013)** conducted a cluster randomized controlled trial (RCT) and process evaluation of the effect of an initiative designed to promote cross-community relations through curricular materials and cross-community contact. This cluster RCT involved 30 primary and post-primary schools. Each school was paired with a potential partner school and these pairs were then randomly assigned to one of three conditions; “curriculum and contact”, “curriculum only” and “control”. In the contact condition pupils from each pair of schools received lessons together and paired schools were expected to collaborate to deliver these 12 lessons over a six-month period. Findings indicated that the curriculum-only intervention encouraged more positive attitudes towards other religious and cultural groups compared to the control group. However, no such positive gains were found amongst those
schools that introduced inter-school contact alongside the curriculum. There were no consistent patterns of differences in programme impact for children of different gender, religious community or receiving free school meals.

These two studies illustrate the diverse aims of studies that will be included in this review. Chapman is an example of inter-school collaboration where the main aim is to improve school performance and academic outcomes while in Neins et al. school collaboration was motivated by a desire to improve cross-community relations and social outcomes.

REFERENCES


No Child Left Behind Act (The elementary and secondary education Act), (2001).


**REVIEW AUTHORS**

**Lead review author:** The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review.

<table>
<thead>
<tr>
<th>Name:</th>
<th>Prof. Paul Connolly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title:</td>
<td>Professor of Education</td>
</tr>
<tr>
<td>Affiliation:</td>
<td>Queen’s University Belfast</td>
</tr>
<tr>
<td>Address:</td>
<td>School of Education, 69-71 University Street</td>
</tr>
<tr>
<td>City, State, Province or County:</td>
<td>Belfast</td>
</tr>
<tr>
<td>Postal Code:</td>
<td>BT7 1HL</td>
</tr>
<tr>
<td>Country:</td>
<td>UK</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:paul.connolly@qub.ac.uk">paul.connolly@qub.ac.uk</a></td>
</tr>
</tbody>
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**Co-author:**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Dr Jennifer Hanratty</th>
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<tr>
<td>Title:</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Affiliation:</td>
<td>Queen’s University Belfast</td>
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<tr>
<td>Address:</td>
<td>School of Education, 69-71 University Street</td>
</tr>
<tr>
<td>City, State, Province or County:</td>
<td>Belfast</td>
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<tr>
<td>Postal Code:</td>
<td>BT7 1HL</td>
</tr>
<tr>
<td>Country:</td>
<td>UK</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:j.hanratty@qub.ac.uk">j.hanratty@qub.ac.uk</a></td>
</tr>
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ROLES AND RESPONSIBILITIES

Connolly will have overall responsibility for the design, conduct, analysis and write up of the systematic review. The team will have regular meetings to coordinate progress and ensure that all members contribute to all aspects of the review. However, and within this, the particular expertise and lead contributions of team members will be as follows:
• Content: Chapman, Hughes, Blaylock.

• Systematic review methods: Connolly, Hanratty.

• Statistical analysis: Connolly, Hanratty.

• Information retrieval (searching, screening and data extraction): Hanratty, Blaylock, Connolly.

FUNDING

This review is being funded by a grant from The Atlantic Philanthropies.

POTENTIAL CONFLICTS OF INTEREST

The Atlantic Philanthropies have provided significant support for the development of ‘shared education’ in Northern Ireland, a particular model of inter-school collaborations to improve educational outcomes and to promote better relationships between Catholic and Protestant communities. However, The Atlantic Philanthropies has no editorial control or influence over this proposed review.

Individual members of the review team have also undertaken evaluations of the effectiveness of different types of inter-school collaborations that may be eligible for inclusion in this proposed review.

PRELIMINARY TIMEFRAME

Note, if the protocol or review are not submitted within 6 months and 18 months of title registration, respectively, the review area is opened up for other authors.

• Date you plan to submit a draft protocol: 31st March 2016

• Date you plan to submit a draft review: 30th November 2016

AUTHOR DECLARATION

Authors’ responsibilities

By completing this form, you accept responsibility for preparing, maintaining, and updating the review in accordance with Campbell Collaboration policy. The Coordinating Group will provide as much support as possible to assist with the preparation of the review.

A draft protocol must be submitted to the Coordinating Group within one year of title acceptance. If drafts are not submitted before the agreed deadlines, or if we are unable to
contact you for an extended period, the Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

You accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review every five years, when substantial new evidence becomes available, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group.

**Publication in the Campbell Library**

The support of the Coordinating Group in preparing your review is conditional upon your agreement to publish the protocol, finished review, and subsequent updates in the Campbell Library. The Campbell Collaboration places no restrictions on publication of the findings of a Campbell systematic review in a more abbreviated form as a journal article either before or after the publication of the monograph version in *Campbell Systematic Reviews*. Some journals, however, have restrictions that preclude publication of findings that have been, or will be, reported elsewhere and authors considering publication in such a journal should be aware of possible conflict with publication of the monograph version in *Campbell Systematic Reviews*. Publication in a journal after publication or in press status in *Campbell Systematic Reviews* should acknowledge the Campbell version and include a citation to it. Note that systematic reviews published in *Campbell Systematic Reviews* and co-registered with the Cochrane Collaboration may have additional requirements or restrictions for co-publication. Review authors accept responsibility for meeting any co-publication requirements.

**I understand the commitment required to undertake a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:**

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