



A Brief View of Cooperative Learning¹ from Across the Pond, Around the World, and Over Time



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Cooperative learning has a long history and a rich and varied research tradition. This article examines historical trends in this research utilising Education Resource Information Center (ERIC) to conduct keyword searches of journal article abstracts plus abstracts reprinted in the Newsletter of the International Association for the Study of Cooperation in Education (IASCE). Trends suggest ongoing interest in teacher education and quality implementation and an emergent focus on the importance of philosophical and cultural context.

As the articles in this issue of the *Journal of Co-operative Studies* demonstrate, the study of cooperation in education includes many voices representing differing perspectives, interests and goals. An aspect of Alan Wilkins paper provides us with a helpful historical view related to philosophical foundations. Yael Sharan (2008), a founding member of the International Association for the Study of Cooperation in Education (IASCE), has also described these foundations. Her point of view is somewhat similar to Alan's in that she honours both the philosophical and research antecedents to what is currently often referred to as *cooperative learning*. Yael tells us:

Cooperative learning was born out of great respect for individual differences. Even its ancestry is heterogeneous – it was born to several “parents.” One of them, the philosopher John Dewey, a central figure in what was known in the 1930s and 40s as “progressive education,” sought educational means to ensure that students would grow up to be active, responsible citizens of a democratic society. Another, later “parent,” was the social psychologist Morton Deutsch, who studied cooperation and conflict from the 1960s on and founded the International Center for Cooperation and Conflict Resolution at Columbia University. He believed cooperation would help establish interpersonal trust and maintain stable relationships among individuals and groups.

Since Deutsch's work on social interdependence theory², research in “cooperation in education” has been steady and evolving. For instance, in 1981, the Johnsons made a major contribution with a meta-analysis of competitive, individualistic and cooperative goal structures and their effects on achievement. Contemporaries Spencer Kagan and Elizabeth Cohen focused their work on intergroup comparisons and relations. Kagan's early work (Kagan and Zahn, 1975) compared the competitive and cooperative social behaviour of Anglo- and Mexican-American children. Cohen's work (1984), centred in Expectation States Theory³, examined desegregated schools in the United States and the effects of status and power on interracial relations.

Since the early days, questions such as *Does it work? For what does it work? What works? When does it work? How does it work? For whom does it work?* and *How can we make it work?* have sustained research, implementation, and conversation about the use of cooperation in education — especially cooperative learning. To contextualise the work in the UK that is showcased in this issue, each question will be considered briefly.

Does it Work? For What?

Researchers and practitioners approach cooperative learning for a variety of reasons and from a variety of backgrounds. Whether your philosophical orientation, theoretical framework, interests, or immediate pedagogical concerns are related to achievement, intergroup relations, intrinsic motivation, creative or critical thinking, perseverance, psychological health, or positive

attitudes towards school, community and learning, research suggests that using cooperation for learning has potential positive effects.

For instance, a cursory Education Resource Information Center (ERIC) search, using the terms “cooperative learning” and “critical thinking” and limiting results to academic journals and publications from 1990 to 2011, returned 83 articles. If your interests are content specific - such as mathematics, science, second-language acquisition, distance education, or computer-assisted instruction - results are equally rich. Another quick ERIC search, this time using the terms “cooperative learning” and “mathematics” and the same date range, yielded 252 articles; when “motivation” was added as a descriptor, the choices were winnowed to 100. These are impressive numbers and support the Johnsons’ (2009) statement that:

widespread and increasing use of cooperative learning is one of the great success stories of social and educational psychology ... [which] largely rests on the relationships among theory, research, and practice.

Since 1979, one significant supporter and disseminator of cooperative learning theory, research, and practice has been The International Association for the Study of Cooperation in Education. Currently, IASCE publishes a newsletter three times a year and a prominent feature in each issue is *From the Journals*. This feature contains abstracts from articles, published in English, which relate to cooperative learning; a goal for this feature is to be as inclusive and current as possible. A brief analysis of abstracts from the last eight issues (2009, 2010, and through to the August 2011 issue; all available at IASCE.net) suggests limited research emphasis on *Does cooperation work for learning?* Given the depth and longevity of this type of research, this makes sense. Analysis of this same array of abstracts suggests patterns in “content area” focus — with 34 articles related to mathematics and/or science, 21 to technology, 18 to distance education, 15 to reading/language arts, and nine to second-language acquisition. Given technological trends, governmental mandates, and globalisation, these numbers, again, make sense.

What Works?

The 1980s and 1990s saw a proliferation of cooperative learning models, methods, and strategies. For instance (and the examples below are meant to be illustrative - not exhaustive), the Johnsons’ (1984) model of five elements - positive interdependence, face-to-face promotive interaction, individual accountability, social skills, and group processing - served as the foundation for their *Learning Together* method that teachers could utilise to help them develop cooperative lessons. At about the same time, Kagan (1985) outlined three basic principles for cooperative learning - positive interdependence, simultaneous interaction, and individual accountability. Kagan utilised these principles to codify and develop dozens of cooperative strategies that he called structures. Subsequently, *The Structural Approach* became a focal point in his work in helping teachers develop cooperative lessons. Aronson’s *Jigsaw* (1996) and Slavin’s (1995) *Teams Games Tournaments (TGT)* are further examples of methods based on a strategy approach. *TGT* stands out for its combined use of competition and cooperation, suggesting a somewhat different theoretical approach. Another significant model is Cohen’s work in *Complex Instruction* (1986), with three main components - multiple-abilities curricula, cooperative strategies with teacher observation and feedback, and status interventions. The Sharans’ (1992) *Group Investigation* method, with its emphasis on student-centred planning and inquiry, has firm philosophical antecedents in the work of Dewey and Thelen (1981), while Gibbs’ (1994) *Tribes* model emphasises the components needed to develop a caring culture.

The use of specific methods and strategies, and research into their use and effectiveness, appear to have considerable longevity. For instance, an ERIC search, using the terms “cooperative learning” and “jigsaw” yielded 46 articles in just a ten-year period between 2000 and 2010; a search of “group investigation” for the same period yielded 16. Today, while any given researcher or practitioner may prefer a particular theoretical orientation, method, or group of strategies, one hopes that researchers and practitioners alike are familiar with multiple



models, methods, and strategies. A comprehensive view will increase the likelihood that research will inform practice and that implementation decisions will support the attainment of desired outcomes.

How Does it Work? When Does it Work?

This is an exciting and continuing avenue of research. Historically, Webb, Dansereau, O'Donnell, and Hertz-Lazarowitz have been among those who explored these questions; an author search of their names can quickly situate one in a vital body of work. A more recent and prolific voice has been Robyn Gillies and her colleagues. In one study, for instance, Gillies and Haynes (2011) examined the conditions that tend to increase student problem solving, reasoning, and explanatory behaviour. Research investigating the conditions for high-quality cooperation is so varied that abstracts from just one 2011 issue of the IASCE newsletter include several titles that demonstrate the vitality and diversity of this work. Examples include: *The Investigation of Peer Assessment in Primary School Cooperative Learning Groups with Respect to Gender* (Yurdabakan, 2011), *Which Cognitive Processes Support Learning during Small-Group Discussion? The Role of Providing Explanations and Listening to Others* (van Blankenstein et al, 2011), and *Who Benefits from Cooperative Learning with Movement Activity?* (Shoval and Shulruf, 2011).

For Whom Does it Work?

To begin, we will return to the *From the Journals* analysis, and examine first the age range of the subjects in various studies and then the geographical locations of those studies. Thirteen abstracts represented studies which focused on children ranging from pre-school to about age ten: a) 11 focused on young adolescents, b) 11 focused on adolescents, and c) a surprising 40 on post-secondary students (this category included both vocational and university settings).

(The abstracts also included two longitudinal studies, and it was not possible to tell the age range of study participants, from abstracts alone, for over 40 studies.) Sixty-four abstracts were from studies conducted or published in the United States, five from the UK, fourteen from additional countries in the EU, nine from Asia, and an array came from additional countries including Australia, Turkey, and Canada. (It was not always possible to place each study in a geographical context from information included in the abstract and a few specifically focused on subjects from multiple countries.) The geographical analysis is of course skewed, and not necessarily representative of the wide range of work being done in the field, since all abstracts reprinted by IASCE are from articles published in English.

This data is a mere hint at a larger issue. An important trend in cooperative learning research has become the study of cultural context. Around the world, researchers and practitioners alike are becoming more sensitive to cultural context and more aware of assumptions (sometimes faulty) about implementation. Researchers are questioning even simple principles - such as the value of heterogeneity in group membership - and are learning that some principles, born of research in a particular historical and cultural context, don't necessarily "translate" well into a different context. Again, abstracts from just one 2011 issue of the IASCE newsletter include titles that suggest the diversity of this work. For instance: *Intangible Culture, Cooperation and Intercultural Dialogue among University Students* is a study of "intercultural competence and dialogue across cultural borders between university students from different Portuguese-speaking countries" (Goncalves, 2011). *Group Composition of Cooperative Learning: Does Heterogeneous Grouping Work in Asian Classrooms?* suggests that friendship groups are preferred in Confucian cultures and that cooperative learning activities need to be adapted for Asian classrooms (Thanh-Pham and Gillies, 2010). This issue of the *Journal of Co-operative Studies* is another fine contribution to this trend, as it provides a picture of "what's happening" in a particular time and place and explicitly examines the rich history and influence of the cooperative movement in the UK.

How Can we Make it Work?

For several years, the IASCE Newsletter featured stories of cooperative learning implementation in different parts of the world. These stories - from countries as varied as Turkey, Armenia, Finland, Hong Kong, Israel, Cyprus, and Germany - provided insights into the challenges of cultural context, political mandates, and resource allocation. The newsletter regularly includes reports from conferences as well. In recent years, the newsletter has featured reports from Italy, Canada, Korea, Latvia, Greece, Japan, and Australia; each provides a sense of issues important to the region.

Quality implementation of cooperative learning has always been an issue. As early as 1992, Kohn analysed implementation problems, suggesting that cooperative learning is sometimes "deleted or diluted" because it is threatening. Fullan (1993), the Child Development Project (Schaps, 2003), and others have written extensively about systemic educational change efforts, specifically as they relate to cooperative learning. In 1998, IASCE supported the publication of *Professional Development for Cooperative Learning: Issues and Approaches*. In 2004, the organisation supported *Teaching Cooperative Learning: The Challenge for Teacher Education*. Both books represented important and timely topics. In the past few years, Lesson Study⁴ has become a promising and popular model for teacher development. The *From the Journals* analysis identified 13 abstracts describing studies linked to teacher education or professional development; and ERIC search yielded 240 results from 2000 to 2011. These numbers suggest that researchers consider this to be a critical focus. In 2010, Sharan published *Cooperative Learning for Academic and Social Gains: Valued Pedagogy, Problematic Practice*. Not surprisingly, multiple authors in this issue of the *Journal of Co-operative Studies* discuss the challenges of professional development and sustained cooperative learning implementation. Initial preparation, on-going professional development and support, cultural contexts, fiscal realities, and political mandates all effect the implementation of quality.

Moving Forward

As the study of cooperation in education and the use of cooperative learning move forward, it is important to remember that this work is supported by an extraordinarily rich and diverse research base, widespread success stories of large scale, small scale, and individual implementations, and considerable critique and analyses of implementation shortcomings and disappointments. The research base is so rich that it takes an on-going commitment to sort out “what we know” about any particular aspect of the use of cooperation in education. It is important that we make this effort and support implementations that build on what we know. It is equally important that we do not adhere so thoroughly to what worked, or to a particular model or method, that we become blind or indifferent to differing contexts and needs or miss opportunities to learn new approaches or a purposeful blend of approaches. There is little need or benefit to be gained from “reinventing the wheel”, but there is benefit to be gained from examining each wheel and making sure it is well designed for its purpose.

It is this rich history and rich research literature that has moved the use of cooperation in education in general, and cooperative learning in particular, away from the margins and into the mainstream. We can now utilise this same rich history and research to sharpen the focus on cooperation and to respond to challenges and detractors. Most likely, we will need to question practices and policies that would serve to move us away from cooperation - whether such a move is intentional or the unintentional consequence of other agendas and initiatives. We will certainly need to participate in the development of practices and policies that can move us forward, towards greater cooperation. It is crucial, as we engage in debate and planning, that we model the values, skills, and dispositions of cooperation. Those are our greatest strengths.

The Author

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Notes

- 1 In this article, the author's use of the unhyphenated terms "cooperative" and "cooperation" appears, reflecting their use in international settings when describing cooperative learning as a pedagogy. Also see reference to this in the editorial of this *Journal*.
- 2 Deutsch defined two types of social interdependence - promotive (cooperative) and contrient (competitive). Promotive interdependence is created when people work together in such a way that one person's efforts to achieve a goal make it more likely that another person will also achieve. Contrient interdependence is created when one person's successful efforts to achieve a goal contribute to another person's failure. (In comparison to cooperative and competitive efforts and goal structures, individualistic efforts suggest no social interdependence.)
- 3 Expectation States Theory, first proposed by sociologist Joseph Berger, has served as the foundation for research to explain the origins and influence of beliefs about the status of different social groups, especially as those differences relate to social inequality. Cohen, building on this theory throughout her career, identified what status differences look and sound like in classroom groups, and developed curricular principles, cooperative strategies, and teacher interventions to mitigate these differences and their effects.
- 4 Lesson Study, which originated in Japan, involves teachers working in small groups to discuss learning goals, plan a "research" lesson, observe this lesson being taught by one of the group's members, revise, and report on the results for the benefit of other teachers.