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Cooperative Learning in Physical Education: A Research Based Approach, edited by Ben Dyson and Ashley Casey

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# Reviews (I)

Dyson, B., & Casey, A. (2012). (Eds.). *Cooperative learning in physical education: A research-based approach*. London: Routledge. ISBN: 978-0-415-66738-8

For policy makers, teachers, teacher educators, researchers and others seeking to improve education through creating highly effective learning environments, cooperative learning matters. Ben Dyson foregrounds the comprehensive evidence base of what cooperative learning achieves across the curriculum and in higher skills performance in physical education. Stanne et al. (1999) found in their meta-analysis of 64 studies that cooperation promotes higher motor skills performance than individualistic efforts or competition (effects sizes of 0.53 for cooperation; 0.36 for competitive or individualistic efforts). Hattie's (2009) synthesis of over 800 meta-analyses confirms these findings with an effect size of 0.54 for cooperative learning across the curriculum. The New Zealand best evidence syntheses confirm these findings and explain how skilful teaching combines and sequences whole class teaching, cooperative group work and individual engagement for optimum effect<sup>1</sup>. Indigenous leadership makes clear the critical role of discursive pedagogy, relationships and interaction to the success of learning (Bishop & Berryman, 2006).

A recent issue of the *Cambridge Journal of Education* highlighted the challenge that such evidence has rarely been compelling for educational policy (Galton & Hargreaves, 2009). The competitiveness of the New Zealand All Blacks is built upon years of cooperative skill and team building but so often the popular myth is that our children need to compete and struggle alone at the most difficult initial stages when learning challenging new skill; or accept failure early. For learners with

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disabilities business-as-usual physical education can too easily be a site of exclusion; despite new fields of evidence on the importance of movement to human health, well-being, brain functioning and achievement across the curriculum.

Cooperative learning does not just increase achievement. As the contributors to this volume highlight through a wide range of evidence; this approach to task development, and teaching and learning also brings about substantial gains in social and self-regulatory skills. Cooperative learning counters the bullying that inadvertently and invisibly flourishes or is exacerbated as a consequence of business-as-usual teaching practices (Bossert,1979). The index of primary student safety in the peer culture in schools in the 2006 Trends in International Mathematics and Science Study revealed 12 per cent of German students, 25 per cent of English students, 26 percent of Australian students and 33 per cent of New Zealand students to experience low safety amongst their peers at school. Only in Chinese Taipei did students experience less safety than New Zealand students out of the 35 participating countries.

This book leads the way not only for physical education but also for the paradigm shift needed in *developing* highly effective co-operative group work across the curriculum.

Many believe that effective group work just happens in schools. It doesn't. The great accomplishment of this book is that it illuminates the *how* and the *why* of the implementation challenge and provides invaluable and practical guidance to the profession about what is needed to make cooperative learning work. A feature of the book is the respect afforded to teachers by the editors as they seek to serve the profession by developing adaptive expertise. The book also provides an excellent theoretical framework for a cooperative learning pedagogical model that goes well beyond a narrow instructional focus to encompass teaching, learning, curriculum and context.

The book marks a milestone in giving curriculum-specific attention to cooperative task design and skill development. From the outset the editors ensure a clear focus on the evidence of effectiveness, policy and curriculum significance, the principles driving equitable teaching and learning opportunities, and the critical success factors for developing cooperative learning in practice. The volume attends to the: (a) challenges of developing interpersonal and small-group skills, (b) importance of structuring tasks for individual accountability, (c) significance of student interaction, (d) requirement to attain positive interdependence and (e) profound importance of the often neglected phase of group processing to enable ongoing improvement.

These contributions build on research and development across Spain, France, the United States, Australia, Germany, England, Canada, Israel and New Zealand.

Each chapter makes a valuable contribution. The New Zealand contributors, Ovens, Dyson and Smith highlight the collaborative research and development approach that is needed for research-based evidence to become a real driver for improved practice that benefits students and teachers and can strengthen teacher education. They highlight the kind of academic leadership and collaborative endeavour that is needed to respond to the hunger for such professional learning expressed by the New Zealand teacher unions. Ashley Casey reveals a personal journey using research to improve his teaching. His reflexive attention to the specific challenges of training and supporting learners to use cooperative learning will be of particular value to others. He identifies what does not work and uses that knowledge as a resource for improvement.

Many in education identify poverty or resource constraints as insurmountable barriers. Fernández-Río and Méndez-Giménez attend to issues of equity, achievement and sustainability. They explain a crosscurricular strategy for engaging students and their communities in developing self-made materials to support cooperative learning in physical education.

Grenier and Yeaton's explanation of the theory and the detail of the practice of pedagogical inclusion that benefits all students in physical education is a tour de force. Their article has the potential to transform traditional practices that have so often marginalised students with 'special needs' in physical education and sport.

Veláquez-Callado, Sutherland, Lafont and Dowler each explain their theoretical perspectives while providing also specific strategies to strengthen the repertoires, understanding and skills teachers need to use cooperative learning in ways that accelerate achievement in physical education and/or sport. Contributors across this collection from many different countries demonstrate how they are building knowledge about the effective use of cooperative learning in teaching and through initial teacher education and professional learning. A recurrent theme is how much more time and capacity building is needed for both students and teachers at the initial stages of preparing for successful cooperative learning.

I salute the leadership of Dyson and Casey in revealing what can be possible through research and development in education. What they have achieved in this volume is no easy feat. Slavin (2010) commented recently on the historical failure of such compelling evidence of effectiveness to translate into practice.

In comparison with schooling practices that are often supported by governments – such as tutoring, technology use and school restructuring – co-operative learning is relatively inexpensive and easily adopted. Yet, thirty years after much of the foundational research was completed, it remains at the edge of school policy. This does not have to remain the case: as governments come to support the larger concept of evidence-based reform, the strong evidence base for co-operative learning may lead to a greater focus on this set of approaches at the core of instructional practice. In the learning environments of the 21st century, co-operative learning should play a central role. (p. 174).

I believe this book can make a significant contribution to moving such research beyond the margins to informing core practice in schooling. We have a growing body of evidence of *what works* in education. Co-operative learning can make a bigger difference across a wide range of valued outcomes for diverse learners as it accelerates achievement. Busy teachers need support to develop such high yield pedagogies. This book is an international and national treasure for the profession in its scholarly attention to the *how* of cooperative skills building, and to the *how* of equitable and inclusive teaching.

## Notes

<sup>1</sup> www.educationcounts.minedu.govt.n/goto/BES

#### References

Bishop, R., & Berryman, M. (2006). *Culture speaks*. Wellington: Huia.
Bossert, S. (1979). *Tasks and social relationships in classrooms: A study of instructional organization and its consequences*. Arnold and Caroline Rose Monograph Series of the American Sociological Association. New York: Cambridge University Press.

Galton, M., & Hargreaves, L. (2009). (Eds). Group work: still a neglected art? *Cambridge Journal of Education*, *39*(1) 1-6. doi: 10.1080/03057640902726917

Hattie, J. (2009). Visible learning. London: Routledge

- Mullis, I., Martin, M. O., & Foy, P. (2007). TIMMS 2006 international mathematics report: Findings from IEA's trends in mathematics and science study at the fourth and eighth grades. In collaboration with J. F. Olson, C. Preschoff, E. Erberber, A. Arora, & J. Galia (Eds.), *Index of students' perception of being safe in school* (SPBSS) and trends. United States: TIMSS & PIRLS International Study Center.
- Slavin, R. (2010). Co-operative learning: what makes group-work work?. In H. Dumont, D. Instance & F. Benavides (Eds.). *The nature of learning: Using research to inspire practice*. Paris: OECD.
- Stanne, M.B., Johnson, D.W. & Johnson, R.T. (1999). Does competition enhance or inhibit motor performance? A meta-analysis. *Psychological Bulletin*, 125, 133 – 54.

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