

# Cooperative learning: principles and practice



**Jason Anderson** considers what cooperative learning can offer communicative language teachers.

*'It is not the similarity or dissimilarity of individuals that constitutes a group, but interdependence of fate.'* (Kurt Lewin, 1939)

Terms such as *cooperative learning*, *collaborative learning* and *interactive learning* are often used interchangeably in conversations – and even articles – about teaching, to invoke the same basic idea: that of learners working together in the classroom.

However, the first of these, *cooperative learning*, has a particular history and specific principles that are often overlooked in more general discussions of learner-centred teaching. This article investigates the origins of cooperative learning, its influence on communicative language teaching (CLT), and what it can offer English language teachers today, especially those working in the challenging environments of secondary or primary education around the world.

## The origins of cooperative learning

Cooperative learning is an approach to teaching that fits well within the tradition of learner-centred pedagogy, dating back at least to the writings of John Dewey at the turn of the 20th century. While the principles and practices of cooperative learning draw upon Dewey's work, they derive more directly

from the work of two psychologists, Kurt Lewin and Morton Deutsch, and their research into cooperation and competition in work environments. It is notable that many of the early innovators in cooperative learning were also psychologists, including Elliot Aronson (the originator of jigsaw tasks), Robert Slavin, and brothers David and Roger Johnson, who were the first to describe the principles and theory of cooperative learning (in 1975).

Cooperative learning also has important sociohistorical origins. During the 1960s, desegregation (the integration of black and white children from previously segregated schools) was causing tension in parts of the USA. Cooperative learning was introduced in a number of contexts to help reduce these challenges and to get learners to work together more effectively.

Since the early 1970s, cooperative learning has been extensively researched, with over 1,200 studies conducted on it. Both John Hattie's and Robert Marzano's extensive meta-analyses report consistently large 'effect sizes' for cooperative learning, indicating that it can be effective in a wide range of contexts. However, it is important to note, firstly, that these



effect sizes depend on what cooperative learning is being compared to, and secondly, that the majority of this research has been conducted in the USA.

## Two core principles of cooperative learning

Underpinning cooperative learning are two core principles that are common to the writings of leading authors on the topic, principles that should be applied whenever learners work together in pairs or groups:

- **Positive interdependence:** For an activity to be truly cooperative, group members must work as a team towards a shared goal, not in competition with each other, so that they sink or swim together.
- **Individual accountability:** Group success depends on contributions from all group members, making each learner accountable, both for their own learning, and for contributing to the group as required.

‘Success’ may be interpreted in many ways, including completion of a task, answering a review question, or success in a class quiz, taken individually after the team has prepared together. These two principles put collaboration at the heart of cooperative learning, although this does not make it synonymous with *collaborative learning*, a term usually used to refer simply to the use of pairwork and groupwork, while *cooperative learning* involves these more specific principles, as well as a number of recommendations for pairwork and groupwork, which are outlined below.

## Past influence on CLT

Cooperative learning has already had a significant, albeit rarely acknowledged, impact on CLT. Aside from a key premise shared by both – that interaction between learners is central to the learning process – many activity types typically associated with CLT or task-based learning actually originated in cooperative learning in the early 1970s. These include jigsaw reading and communication tasks, and information-gap activities such as ‘Describe and draw’ (called ‘Match mine’ in cooperative learning), as well as more creative interaction patterns (eg ‘Inside–outside circles’, in which the students stand in two rotating rings facing each other) and the extensive use of peer consultation (eg ‘Think–pair–share’). However, while CLT inherited all these activities from cooperative learning, it seems that the core principles of positive interdependence and individual accountability were overlooked.

## What it can offer CLT today

As CLT continues to spread worldwide, especially in secondary and primary education, it faces the challenges of adapting to large classes of young learners within state school systems. Chief among these challenges are the questions of how to differentiate (cater for all levels) in large mixed-ability classes, how to stop certain learners from dominating groupwork, and how to encourage communicative interaction when preparing learners for exams that tend to prioritise knowledge rather than communicative skills. Because cooperative learning was developed in secondary and primary classrooms, it can potentially help with all of these. Let’s look at them one by one:

### 1 Differentiation in large mixed-ability classes

Many writers on cooperative learning have specific recommendations for groupwork. They suggest that we establish ‘home groups’ of (ideally) four learners, which are mixed in ability, sex and other characteristics, choosing the learners for each of these heterogeneous groups carefully. Within these home groups, pairwork is also possible. Spencer and Miguel Kagan recommend seating the highest achiever (with the highest proficiency in English) next to the third highest, and seating the remaining two (the second highest and the lowest achievers) together. This interaction pattern provides useful peer-tutoring and scaffolding for the weaker member in each pair, while minimising the ability gap both within and between pairs, so as not to cause frustration for more impatient high achievers.

However, both to provide variety and to prevent higher achievers from feeling like classroom assistants, we can also put learners into ‘expert groups’, which are same-ability groups chosen for specific activities. Just as for home groups, the members of each expert group should be selected carefully, so that the higher achievers sit together, the mid achievers together and the lower achievers together. Different groups can be given either different materials on the same topic, or simply different expectations. For example, if we are doing a jigsaw activity in which the learners first read different texts on a similar topic and then share the contents with each other, we can do the initial reading stage in expert groups, giving the longest or most complex text to the highest-proficiency group and the easiest text to the lowest-proficiency group. After they have worked together to understand their texts, they return to their home groups to share what they have learnt, leading to meaningful communication and peer-tutoring.

An example of different expectations might involve using the same gap-fill exercise with all the groups, but challenging the strongest group to complete *all* the items in the exercise, while the weakest group is asked to focus on the first five items only. We can then provide different levels of support and challenge as we monitor the different groups.

Most writers on cooperative learning generally recommend keeping home groups together for one term, and then changing composition to provide variety. This combination of stable home groups and regular use of expert groups can keep the learners engaged and working well together, without the need for too many extra materials or the exhausting challenges that giving different tasks to different groups can often bring. Importantly, because the learners get used to these groups, they evolve into their individual roles within the group, reducing conflict and increasing the value of peer-support and tuition, which are perhaps the most effective tools of all for differentiation.

### 2 Preventing certain learners from dominating in groupwork

Most teachers have experienced the familiar sight of a group of six or eight learners in which one – often the strongest – completes the worksheet for an activity, while most of the others just watch, and one or two can barely see the worksheet. The solution to this problem, according to cooperative learning, is to keep the groups small, with four generally seen as the optimum



group size. This encourages more interaction, but doesn't guarantee it. So if there is still a danger of one learner dominating, you could do one of two things: Within their home groups of four (see above), you could get them to do the activity first in pairs, and then to check their answer as a whole group, which greatly increases the likelihood of all the learners participating. Alternatively, try using a 'pass the pen' micro-strategy, in which each group member can only write a maximum of one sentence (or one answer) before they must pass the pen to the next member of the group. The others can give suggestions, even dictate the answer, but they cannot touch the pen. This encourages more peer-tuition and more communication.

### 3 Encouraging communication when exams are knowledge-focused

'Strong' communicative approaches, such as task-based learning, often argue that only activities with real world, meaningful outcomes are appropriate for language learning. The theory is that if it's not something we do 'outside' the classroom in a target-language community, it's not likely to lead to useful language acquisition. Aside from whether this is true or not (and it may not be, as Michael Swan suggests), many experienced primary and secondary teachers often find it difficult to justify such tasks when their curriculum and exams are dominated by so much explicit language *knowledge*. However, because cooperative learning was developed for secondary and primary classrooms, it tends to reflect the realities of such classrooms, and offers a number of strategies to help us to respond to such demanding curricula and prepare our learners for traditional tests in ways that can encourage cooperation and communication.

One example of this is Robert Slavin's 'Student Team Achievement Division' (STAD, for short), in which the learners work on coursebook or worksheet activities in teams, to prepare for individual assessment. Although they take the test individually, each team receives a combined (aggregate) group score. Learners quickly learn that every team member needs to understand the lesson content in order to succeed in the test, so peer-teaching increases greatly during the groupwork stage, and peer-teaching always involves meaningful communication. While this communication is likely to be partly in the learners' first language, it will also encourage them to 'translanguage' – blending the resources from different languages flexibly – as they discuss the questions and explain the concepts and words to each other. As such, STAD provides a good example of a task type that is useful to learners and teachers, acknowledging the realities of *their* world (where the curriculum and exams are very real phenomena), even though it doesn't necessarily replicate the world outside, as is necessary for a 'real-world task'.

Other assessment-oriented strategies in cooperative learning include the use of co-op flashcards (the learners prepare 'fact cards' on important concepts or grammar rules, and then use them to test their partner or group regularly when preparing for exams) and random nomination strategies to assess learning outcomes at the end of a lesson, as recommended by Spencer Kagan.



I would like to finish this article with a warning – nothing in teaching always works, and that includes cooperative learning.

Despite the impressive effect sizes reported by Hattie and Marzano, and the fact that there is evidence that cooperative learning works in English language classrooms (see Steven McCafferty *et al*), there are also studies that report little or no positive effect for cooperative learning. For this reason, we, as experts on our own learners and contexts, must always be critical of any method that is proposed to us, asking questions such as: *Will it work in my classroom? What problems might occur? How can I make it compatible with my classroom layout or my coursebook?* Such a critical approach doesn't just guard against complacency; it also fine-tunes your own skills as a reflective practitioner.

It is a good idea to introduce any changes gradually, trying them out with a 'favourite' class first, and getting feedback from the learners or colleagues (through peer-observation) before making adaptations and trying it out with other classes.

While cooperative learning offers two useful principles, a number of creative ideas for activities, and clear guidelines for groupwork and pairwork that may help teachers in a range of challenging circumstances around the world, it should not be considered a magic panacea. Think of it, rather, as a useful approach, from which we, as critical communicative practitioners, can – and should – take those elements that work for *us* and are appropriate for *our* circumstances. ■

Aronson, E. Blaney, N. Stephan, C. Sikes, J and Snapp, M *The Jigsaw Classroom* Sage 1978

Dewey, J *Democracy and Education* MacMillan 1916

Hattie, J *Visible Learning: A Synthesis of over 800 Meta-Analyses Relating to Achievement* Routledge 2009

Johnson, D W and Johnson, R T *Learning Together and Alone* Prentice-Hall 1975

Kagan, S 'The Structural Approach to Cooperative Learning' *Educational Leadership* 47 (4) 1989

Kagan, S and Kagan, M *Kagan Cooperative Learning* Kagan 2009

Lewin, K 'When facing danger' In Lewin, K *Resolving Social Conflicts and Field Theory in Social Science* American Psychological Association 1939

McCafferty, S G, Jacobs, G M and DaSilva Iddings, A C *Cooperative Learning and Second Language Teaching* CUP 2006

Marzano, R A *Theory-based Meta-Analysis of the Research on Instruction* Mid-continent Regional Educational Laboratory 1998

Slavin, R *Using Student Team Learning* (revised edn) Johns Hopkins University 1980

Swan, M 'Legislation by hypothesis: The case of task-based instruction' *Applied Linguistics* 26 (3) 2005



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