Cooperative Learning for Academic and Social Gains: valued pedagogy, problematic practice

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Introduction

What is it about cooperative learning (CL) that causes it to continuously spread worldwide? Several factors come to mind. First, cooperative learning procedures combine and promote academic and social skills, two universal educational goals. Secondly, the increasing diversity in classrooms everywhere incites teachers to turn to the large body of CL methods and procedures as the most flexible modes of instruction for the culturally diverse classroom. Moreover, CL practice is consistently supported by research, which leads to ongoing renewed examination of its effectiveness and constant revision and refinement of theory and cooperative procedures. CL researchers and practitioners also offer a wealth of books, guidebooks, and teacher training programmes. Wherever teachers seek ways to enhance students' involvement in their learning and refine their ability to create an interactive and nurturing learning environment, they draw on the power of cooperative learning. It is therefore no surprise that a growing number of ministries of education that wish to modernise their country's education adopt CL as a major component of their policy.

Yet translating the promise of CL into practice is more complicated than believed at first, and does not always guarantee that its desired goals are achieved. Such was the case described in a recent study conducted in Vietnam by Phuong-Mai Nguyen (2008) that examined the application of group learning strategies in a Confucian cultural context in secondary schools. In a short opening vignette we read how an English teacher from America handed out 'some English exercise' to a class of 54 students and asked them to work in groups. Some girls did not want to sit with boys; students took a very long time to organise groups, etc. One can imagine the ensuing chaos, which could be expected in any class where students were not sufficiently prepared and where presumably the task was not designed in accordance with their level of experience with cooperative behaviour.

Cultural factors. This story illustrates constraints to successful implementation rooted in ancient and firm traditions in a host culture that are not always compatible with certain CL activities. Evidently the students in the Vietnamese classroom felt uncomfortable in an unstructured learning situation with vague objectives and no clear timetable. Having grown up in a society with what Hofstede (1986) calls a low tolerance of uncertainty, they prefer structured learning situations with precise objectives, detailed assignments and strict time frames. Learning in small cooperative groups may have been perceived as too loose a structure and the teacher's guidance may not always have been clear enough in the eyes of these students. A recent study conducted in Hong Kong on student teachers' perceptions of learning together sheds further light on the similarities and differences

between the basic elements of CL and Chinese culture and how they may benefit one another (Chan, 2003).

Whereas cultural factors are of paramount significance in the implementation of CL, most intriguing are the constraints rooted in CL itself, or to be more exact, in what CL has become, and in how teachers perceive it and prepare to use it. In this article I will focus on what has happened to CL on the way to fame. Together with its thoroughly documented benefits there are misperceptions that result in inadequate implementation, not only in countries that are new to CL, but wherever it is practised. Identifying these may help to make sense of the mishaps and to establish conditions that will lead to better implementation.

What is CL? Before beginning our exploration, let us clarify what we mean by CL. It is a pedagogy that generates a diversified body of methods of instruction which organise students 'to work in groups toward a common goal or outcome, or share a common problem or task in such a way that they can only succeed in completing the work through behaviour that demonstrates interdependence, while holding individual contributions and efforts accountable' (Brody & Davidson, 1998, p. 8).

I will return to discuss the essence of CL, but will first offer a brief review of the theoretical roots of the above definition and will then highlight several key factors that stand in the way of effective and sustainable implementation. To conclude, I will discuss CL's role in today's intercultural classroom.

Theories Underlying Cooperative Learning

The idea that one can learn best with another is by no means new. Cooperative learning as a strategy to help people to learn together and to come together to learn has roots in several sources, some of which are outlined below.

Dewey, Lewin, and Deutsch. Cooperative learning as we know it today is directly influenced by philosophers and psychologists who focused on the process of learning rather than on its content. First and foremost was John Dewey, a central figure in what was known in the 1930s and 40s as 'progressive education.' Dewey sought educational means to avoid teaching mere dead facts and to encourage students to be active, responsible citizens in a democratic society. He believed that the skills and knowledge students learn in school should be integrated fully into their lives as citizens and as human beings. His philosophy led to the development of procedures for cooperative planning and inquiry in small groups, based on what students were interested in learning. These procedures involved students in the cooperative planning of all academic subjects and were also applied to seeking solutions to social problems that arose in their classes and in the school. It was an effective way of activating students and preparing them for responsible participation as adults to deal with society's problems.

A prominent social psychologist who contributed to the shaping of cooperative learning was Kurt Lewin who laid the foundation for the group dynamics movement and organisational psychology. Lewin's ideas and methods formed a basis to design effective relationships within groups, thus improving how people in groups relate to one another while carrying out group goals. Like Dewey, Lewin believed that learning was more effective when it was an active rather than a passive process, and was pursued in collaboration. The practical link between Dewey's and Lewin's theories and their application to classrooms was forged by Herbert Thelen at the University of Chicago. He developed a systematic inquiry strategy for students

learning together in small groups which combined the view of learning as the conduct of inquiry by cooperative small groups with the principles of effective group management, so that groups would successfully solve problems and make decisions based on all members' contributions and views (Sharan & Sharan, 1992; Thelen, 1981).

Another significant 'parent' of CL was the social psychologist Morton Deutsch, a student of Lewin, who studied cooperation and conflict, spurred by his belief that cooperation would help to establish interpersonal trust and maintain stable relationships amongst individuals and groups. Deutsch conceptualised what became the fundamental principle of CL: positive social interdependence which promotes a situation in which each student in the group is responsible for contributing to the learning of all members, and is in turn enriched by others. Students share their resources, provide mutual support, and celebrate their joint success. The way positive interdependence is structured guides the way people interact in a group and influences the outcomes of their interaction (Johnson, Johnson, & Holubec, 1998).

Scope of CL Research. In the 1970s, the work of many pioneering educational researchers centred on cooperative learning as we know it today. Thus began a steady stream of studies which established its effectiveness in all aspects of classroom life: academic achievement, social interaction, cognitive processes, motivation, and school organisation. Research studies continue to address these issues as well as the similarities and differences between methods; students' and teachers' perceptions of cooperative learning; the effects of cooperative learning procedures and methods on inclusion, self esteem, group composition and size, group discussion, task structure, helping behaviour, etc. As research into the varied aspects of CL practice continues, many issues are revisited, continually enriching our understanding of the field.

Studies of students' perceptions. A case in point is the evaluation of student comments on their participation in an experiment. Students' perceptions of CL provide a vital source for identifying features that teachers and policy makers may not notice from their vantage point.

As part of a two year project in Israel that introduced CL methods in all grade levels and subject areas in three schools (Sharan & Hertz-Lazarowitz, 1981) students were asked to write a letter to the research team in which they were free to say how they felt about their experience. Analysis of their comments highlights their feeling of greater autonomy and confidence in learning, as well as their observations that their social relations improved as a result of working together in heterogeneous groups. Most students wrote that learning was more interesting in groups and that they appreciated the mutual help. Some mentioned their dissatisfaction with students who tried to dominate group discussions and with 'social loafers.'

Students' perspectives on CL were also documented by Cowie & Rudduck (1988) in their four-year cooperative group project in England, and led to multidimensional insight into what students think of CL. Some students saw no value in group work; a larger share saw partial value in it, especially in the 'safety of small groups and the confidence which they gained from sharing ideas' (ibid. p.65). Those students who valued group work were those who by and large had had prior experience in this approach to learning and stated that they believed CL could be integrated into all content areas.

In a more recent experiment, which introduced the CL 'group investigation' method to Singapore schools, an analysis of 900 written statements by participating students showed that two thirds of those in the experimental group had a positive view of the change in learning strategies and in the teacher's role (Tan, Sharan, & Lee, 2006). The experiment offered these students their first exposure to any form of CL and their reactions were therefore particularly illuminating. Additional studies of students' understanding of CL are reviewed in the chapter summarising and criticising up-to-date research in CL (ibid. pp. 25–47).

Comprehensive summaries of the latest research by Johnson & Johnson (2002; 2009) and Slavin (1995), and new ways of looking at the theoretical underpinnings of CL (Slavin, in press) emphasise the connection between CL theory and practice and serve to guide decisions about what to take into account when implementing CL. As our analysis unfolds, studies that shed light on the gap between CL promise and practice will be cited.

The Gap between the Promise of CL and its Implementation

The benefit of CL as a driver of educational reform is often followed by a frustrating reality: once the formal training programme ends, CL is often abandoned, or at best, practice is significantly reduced. Although all change projects are plagued by this development, factors that are specific to CL and to teachers' attitudes and preparation for CL play a part and may help to explain the gap between the promise of CL and its implementation.

Rich variety of methods. CL is constantly evolving and expanding; new models and procedures, anchored in research findings, are added all the time. Teacher educators for CL today can 'shop' in a 'cooperative learning supermarket' full of tempting 'products'. It is now understood that all cooperative learning methods and procedures have their place. Could it be that the rich variety of methods and models may be a source of confusion that leads to a lack of understanding of the differences between approaches and thereby become a constraint to successful implementation? Understanding the differences in approaches is crucial to enable teachers to choose the method or procedure that is best suited to their classrooms. Several attempts to categorise CL methods may guide us in this complexity. The tentative taxonomy presented by Sharan (2002) divides the most researched CL methods into three sub-groups, each of which emphasises a different blend of skills:

1. Models that emphasise mastery of knowledge and motivation (STAD, CIRC, Jigsaw);
2. Models that emphasise social skills and interpersonal communication (Learning Together);
3. Models that include the above and emphasise long-term intellectual inquiry, intrinsic motivation and equal status interaction (Complex Instruction and Group Investigation).

Another way of differentiating between CL methods is by looking at the type of learning they promote (Slavin, 2000). There are group study methods, such as STAD, JIGSAW and Learning Together, in which students primarily work together to help one another master a relatively well-defined body of information or skills. A second group is often called project-based learning and involves problem-solving

in groups where group members write a report and design an experiment or other product that reflects the resolution of the problem. Complex Instruction and Group Investigation belong to this group.

A helpful 'map' to CL methods and approaches is Brody and Davidson's list (1998) of the common and different attributes of major cooperative learning approaches. All methods and approaches are based on a task or learning activity that is suitable for group work and enables:

— Small-group student interaction focused on the learning activity.
— Mutually helpful behaviour among students.
— Interdependence in working together.
— Individual accountability and responsibility for group work outcomes.

The differences lie mainly in the way the above features are combined and carried out and the degree to which methods deal with students' varying competencies and status in the classroom. Choosing a CL method or procedure calls for teachers to coordinate the requirements of the method or procedure, the degree of their students' skills in working in groups and readiness to assume responsibility for their learning, and the teacher's readiness to offer as much or as little structure and direction as required. As early as the 1970s, as the major models were being developed, it became clear that although they differed, they were not mutually exclusive. They can be seen as constituting a continuum based on the degrees of freedom they afford group members in choosing what and how they will learn and the concomitant degrees of structure and direction the teacher must provide.

Having emphasised the wealth of methods and procedures available to teachers, we realise that most learn only one, or at the most two approaches to CL, and that in practice many modify the method or procedures they learned and create their own versions. This brings up another possible aspect of the challenge of implementation. The modification of procedures is welcome evidence of teachers' autonomy and creativity if it is in keeping with CL principles. If the basic principles of CL have not been internalised the resulting modifications may be far removed from authentic CL procedure, leading to mounting frustration and disappointment (Antil *et al.*, 1998; Koutselini, 2008/2009).

Specific methods vs. CL as a whole. A related difficulty is a certain degree of confusion between specific methods and the pedagogy as a whole, as found in some studies on the implementation of CL. Returning to the Vietnamese study, Phuong Mai Nguyen writes that 'Johnson and Johnson's theory of CL . . . dominates Vietnamese literature' (2008, p. 28). Nevertheless, in her analysis of the implementation of this specific approach to CL she generalises about CL as a whole even though she states that it is made up of 'diverse practical procedures, structures, and principles for instructors' (p. 206).

We find this in Jacob's book, *Cooperative Learning in Context* (1999). Jacob based her study on two specific CL methods (TGT and Learning Together), but her conclusions refer to CL as a whole, even though she, too, recognises CL as 'a diverse group of instructional methods' (p. 13).

In both cases readers may be misled to think that all methods are the same. As the above taxonomy points out, cooperative learning methods vary in their goals and emphasise different skills. Therefore we cannot expect studies of each and every method to result in identical effects. Research results about the effects of how

one model is implemented in a particular context do not necessarily apply to each and every method of CL. Had another method or procedure been used in the same context with similar or different effects it would then be reasonable to reach generalised conclusions about CL.

CL's 'celebrity' status. In addition to the tendency to view CL as an undifferentiated whole, the very fact of its 'celebrity' status may lead teachers to perceive it as a 'thing,' an entity, with magic properties. This may in part account for the fact that a CL method is often imported as a whole package without examining how it suits the particular context of the 'new' country or school.

This perception is understandable, since the pervasive research support for CL may be one of the reasons for teachers' and education ministries' initial confidence that it is indeed a successful pedagogy. How can one argue with the documented effects on academic achievement and social relationships of Jigsaw or STAD, Complex Instruction or Group Investigation? Teachers and teacher educators may 'buy into' a model and bring it to their classrooms as a finished product, expecting instant success. They may think that they have to reproduce a method or model as is, and feel that they are not 'allowed' to modify it in light of the reality of their particular classroom. It is almost as if CL were viewed as a commodity, like a car. Drivers normally do not take the trouble to find out how the car works and are happy to have it start once they turn the key, without much thought of what goes into making that happen. And it would not dawn on us to remove or change parts before starting the car.

But CL as a whole and the different models in particular are not commodities to be bought and used as is. To extend the metaphor, CL models and methods have been extensively 'test driven' by their developers before they are put up 'for sale.' All developers and teacher educators for CL know that simply placing students in groups and telling them to work together will not succeed without careful, gradual, and appropriate preparation.

Many teacher educators for CL have explicitly written about how to prepare students for the social interaction and learning behaviours required to work in groups (Baloche, 1998; Brody, 2009; Gillies, 2007; Jacobs, Power & Loh, 2002) and how to progress from short term learning assignments that require minimal interaction to more complex ones (Sharan & Sharan, 1992). Extremely helpful are the over 200 widely known short term, content free cooperative structures which aid in the implementation of CL (Kagan & Kagan, 2008). It remains a puzzle why some teachers implement CL models or activities without heeding the need to gradually lay the groundwork for successful social interaction and cooperative behaviours, as is universally recommended.

CL's celebrity status may be one of the reasons why teachers rush into it and overlook the need to prepare themselves as well as their students. They may be enthusiastic and hopeful about its promises, like the teacher whose misadventure in Vietnam is described above. As confused as the students were, we can fully sympathise with the teacher, who may have thought 'this is great, I can get my students talking right away,' without carefully considering how difficult it can be to get students to cooperate (Sharan, Gobel, & Sim, 2006).

Teaching as 'transmission.' Another path in the search to explain the anomalies of CL implementation leads to an insight inspired by Brody's discussion (1998) of three types of teacher's beliefs about CL and pedagogy: transmission, transaction and transformation. As the term suggests, the transmission orientation

sees teaching as the transmission of prescribed bodies of knowledge. A transaction orientation is more compatible with CL, as it lends itself to problem-solving through dialogue between teacher and pupils and is open to students contributing their knowledge to the learning process. The transformation orientation expands the transaction orientation to increase students' control over their learning and to enhance their self-motivation and self-direction, with the teacher acting as co-learner.

Often teachers who do not set the stage for cooperation before implementing a model or technique retain the 'transmission' view of teaching, the most traditional of the three. Those who hold this view may see in CL a collection of promising techniques to achieve narrow academic goals which are largely teacher directed. They overlook its theoretical foundations and principles and do not seek to develop or enhance students' interpersonal learning skills. This perception of teaching does not require any significant change in the teacher's role as the central transmitter of facts, concepts and skills. Content is relatively fixed and there is little room for students to contribute to or expand learning as a result of group interaction.

Evidence that this view of the teacher's role is common comes from an analysis of the metaphorical conceptions of learning offered by experienced teachers who were asked to discuss in small groups their tacit theories about learning (Martínez, Sauleda, & Huber, 2001). The results showed that most teachers shared traditional metaphors which depict teaching and learning as transmission of knowledge; a smaller group of teachers used constructivist metaphors. Only a minority seemed to perceive teaching and learning as a social process.

The 'transmission' concept of teaching may be suitable when introducing CL to a classroom through teacher-directed structured short term activities, but if it does not evolve and encourage the creation of knowledge by students it is simply missing the point of CL. This is borne out by Cowie and Rudduck (1988) who interviewed 162 teachers from English schools that represented a range of social and educational environments. They found that teachers fell into four broad categories in their use of CL: non-users, occasional users, divisive users (who used CL for some pupils but not all), and committed users. The latter group was teachers who did not view knowledge as a set of certainties that only the teacher possesses, but as 'something which can be, at least in part, constructed and criticized by the group' (ibid. p. 58); they saw teaching as transformation, not as transmission. Ultimately, CL creates conditions that allow students to pursue learning goals together with their group mates and invites them to raise questions that they are interested in answering and to contribute their knowledge to achieve these goals. CL methods also enable students to work together to combine information from a variety of sources into a meaningful whole, thus leading to the creation of knowledge that is rarely anticipated in a teacher-centred lesson.

Teacher preparation for CL. No doubt preparation of teachers for CL is crucial to successful implementation. The marked change in the teacher's role in CL and in the type of interaction between teacher and students requires time, commitment, repeated practice, and a network of support, encouragement, and feedback. This issue has also been studied and written about extensively; it is understood that implementing cooperative learning methods requires teachers to learn new behaviours and attitudes towards learning, not just new teaching techniques.

To this end teachers are prepared for CL in experiential workshops that include systematic, continuous reflection on the experience. Training programmes enable teachers to experience first hand the difference between unstructured group work and cooperative learning. Although they may vary in emphasis and in the order in which they present CL methods and procedures, all experiential programmes devote time to raising awareness of what the experience means to teachers personally and professionally (Cohen, Brody, & Sapon-Shevin, 2004). Many teachers view CL with a 'deeply embedded conviction that academic learning is an individual activity and that interaction is mainly about social benefits' (Cowie & Rudduck, 1988, p. 60). Teachers are more likely to modify this belief after they themselves take part in learning activities that combine academic and social dimensions and experience directly how the two dimensions reinforce one another. A recent study involving participatory inservice training for CL of secondary school teachers in Cyprus offers fresh support for this approach and concludes that 'learning *from* cooperative learning' causes a shift towards positive attitudes, which 'learning *about* cooperative learning' alone cannot achieve (Koutselini, 2008/2009).

Reflection. Perhaps it is unfair to expect teachers to reflect on their behaviour, adjust their actions in reaction to what is going on in the classroom, and at the same time monitor students' cooperative behaviour and learning, be aware of individual students' needs, and modify an activity on the spot according to needs that arise unexpectedly. Yet that is exactly what characterises a competent teacher. The process of reflection supports teachers' ability to juggle with these multiple tasks that are central to their professional development in general, and crucial for dealing with the complexity of the CL classroom in particular.

Why is reflection important to direct and control teachers' practice and help them to decide if they are carrying out an authentic CL activity? Through reflection, people can develop awareness of their fundamental beliefs about CL and how to carry it out. Reflection also informs practice. By reflecting on what one does and on students' reactions, the teacher is better equipped to make considered choices among those actions that are best suited to classroom reality. Finally, reflection also facilitates the transformation of practice: teachers weigh the effects of their experience in the classroom and, with the help of the resulting conclusions, plan how to change their behaviours and actions accordingly. They become accustomed to using their thoughts about what goes on in the classroom as a vehicle for learning from and about their practice.

'Core reflection.' Seeking to make the process of reflection more effective, Korthagen and Vasalos (2005) expanded the traditional models (Kolb & Fry, 1975; Slavin, 2000) and created a model of 'core reflection' that delves deeper into teachers' core beliefs about their teaching and about themselves. At first, the process is mediated by a supervisor and, while based on what happened in a concrete situation, it also explores the dimensions of 'wanting, feeling, thinking and doing.' Teachers become practised in asking themselves what they feel in a situation, what they think the pupils want, what they think the pupils feel, etc. 'Core reflection' balances the rational analysis and conceptualisation that are traditionally stressed in reflection with the growing awareness of the less rational factors that play an important part in teachers' behaviour. It enables teachers to exercise the kind of judgments Hargreaves (2007) prescribes as informed by objective evidence and subjective experience and intuition that are a necessary part of teachers' continuous professional learning.

An appealing element of 'core reflection' is its emphasis on strengthening teachers' core qualities, i.e. their positive personal strengths. Teachers learn to take a step back and become aware of the fact that they have a choice whether or not to allow a variety of limiting factors of the problematic situation to determine their behaviour. This awareness frees them to activate their personal strengths in their work. Teachers who make a habit of this process may be less prone to blaming CL procedures for the problems that arise in its implementation. They may be more open to examining what and how they went about implementing it and how they, as individuals, contributed to its failure. They will also go on to examine the personal strengths they can contribute to its success. As Korthagen and Vasalov point out, the shift from a less central role in teaching to one that is more of a guiding role — such as CL calls for — is easier when teachers become competent in 'core reflection.' It seems safe to assume that they would then be more comfortable in developing the self-directing capacities in their students that are needed to work effectively in groups.

Design of the CL Task

To conclude this admittedly incomplete exploration of the complex and perhaps contradictory factors that influence the smooth transition from the appreciation of CL to successful and sustainable implementation let us examine what is on the 'tray' that CL offers teachers and students. CL grew out of three major theoretical underpinnings (educational, social and organisational psychology), distilled into one major principle — positive interdependence — from which the major CL components of individual accountability and responsibility and concomitant social behaviours derive, all activated by the design of the learning task (Fig. 1). Positive

Educational, social and organisational psychology

Distilled into the

Principle of positive interdependence

That serves as an anchor for

Major CL components and behaviours

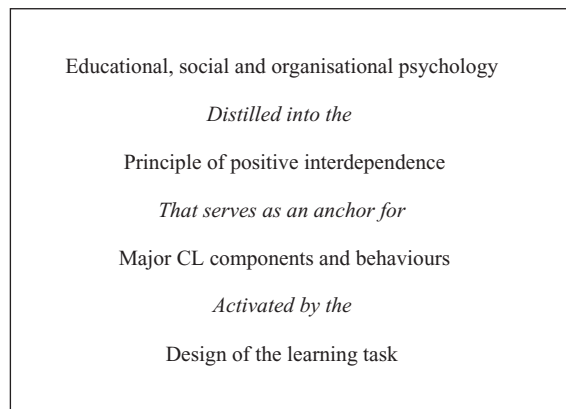*Activated by the*

Design of the learning task

FIGURE 1. Essential elements of cooperative learning

interdependence is the one constant principle, or rule, that serves as an anchor for the design of all methods. It generates three main components:

— the mutual responsibility group members develop for contributing to the search and acquisition of knowledge to accomplish the group's learning goal;

— individual accountability, which is the responsibility each group member develops for completing his or her share of the learning task;
— the help group members offer one another in the process of learning together.

'Group-worthy task.' The structure of the task assigned to students is vital to the successful implementation of the particular blend of components in any given model or procedure. Although there are many factors to take into account when designing a CL lesson or task, such as cultural factors, the degree to which students and teachers are prepared, group size and composition, how much time is available, etc., there are some basic guidelines that ensure a 'group-worthy task' (Lotan, 2003; Sharan & Sharan, 1992):

— A clearly stated group goal that justifies two or more students learning together, formulated as a question that generates more than one answer and/or has more than one resource for the answer.
— Directions that activate positive interdependence, dividing the task so that each student has a distinct part in the search for the answer and/or in researching a source and can actively contribute to the completion of the task.
— Directions geared to the level of interpersonal skills group members have acquired and are comfortable with.
— Clear information about criteria for the evaluation of the learning content.

The importance of these guidelines for task design cut across content areas, as we learn from many studies, including a recent one that explored the nature of a cooperative task for the study of mathematics (Berry & Sahlberg, 2006). Among the findings of this study was that most of the tasks and exercises that teachers designed or were found in textbooks and other materials did not necessarily challenge a small group to work together towards a common goal; they do not provide an authentic reason for students to work together. Ultimately, creating authentic CL relies on judicious adherence to the above guidelines for task design, overlooked by many teachers, even by those familiar with CL. The benefits of a clearly structured task were borne out most recently by a study that focused on the effects of structured and unstructured cooperating groups on students' discourse and learning in heterogeneous groups, which showed that structured cooperating groups were the more effective (Gillies, 2008). Such tasks also facilitate teachers' use of the mediated-learning behaviours that enhance students' understanding of content (Gillies & Boyle, 2008).

In addition to including the above elements in the task design, teachers are also responsible for the ongoing monitoring of how the groups function and, once the task is completed, for guiding groups in the process of reflection on how they worked together to achieve their goal and how they can improve the way to do this. As Miel (1952), a follower of Dewey, states in her pioneering study of the challenges and successes that students and teachers faced in their attempts to carry out cooperative procedures in every facet of classroom life, students learn cooperative procedures 'through use and for use.' Based on three years of detailed observations and documentation in classrooms in 75 schools across the US, Miel and her associates concluded that, although groups may experience failure while learning

to work together cooperatively, teachers and students 'have at hand a method of examining the difficulty, of finding better solutions; in short, a new opportunity to learn lessons in cooperation' (ibid. p. 498). Reflection on the process of learning together and attention to all the features of the cooperative task create and strengthen this opportunity.

CL and the Intercultural Classroom

Despite the challenges of sustainable implementation, CL is a vibrant part of the global education scene. Over the years it has reached out and joined various educational goals, most recently the urgent need to address the reality of the intercultural classroom (Sharan, 2010). As Batelaan (1998) points out, intercultural education should not only be concerned with what to teach but with how students learn. Cooperation and communication skills such as those that CL promotes are particularly needed in an intercultural society. When the classroom is viewed as an intercultural setting, children of various religious, ethnic, and cultural backgrounds are 'no longer regarded as a "problem" or "risk," but as "resources" ' (Portera, 2008, p. 484). CL offers learners the opportunity to harness these differences in the pursuit of learning goals in an environment that shows respect for all contributions to learning and in which learners will be more inclined to value themselves and others.

The vast pool of CL teaching strategies offers teachers in the intercultural classroom ways to actively involve their students' varied backgrounds and learning styles. There are specific CL methods and procedures that enable teachers to assign tasks that delegate learning roles so that each group member has an opportunity to do his or her share, thereby creating conditions that help students of different backgrounds and abilities to gain status and acceptance among their peers (Cohen, 1994; Sharan & Sharan, 1992). With time and practice students and teachers realise that the different interests, backgrounds, values, and abilities of group members are the group's greatest asset and enrich the class's pool of resources to expand knowledge.

Culturally sensitive classroom. A striking feature of the intercultural classroom is that students often need help in finding meaningful connections between the curriculum and their personal worlds. Teachers who take the trouble to learn about their students' varied cultural traditions, linguistic and learning styles, and at the same time integrate CL methods and strategies in their teaching repertoire, can create a culturally sensitive CL classroom where learning is made relevant for all. At the core of this classroom is a sense of community, nurtured by activities that develop interpersonal communication and helping skills required for learning together. This is one important step in the attempt to redress the loss of a sense of community that many immigrants feel in their new countries (Palaiologou, 2007).

Cultural diversity in every subject. By highlighting the contribution that diverse perspectives can make to learning, as with CL strategies that invite multiple and diverse answers, acceptance of diversity can become the norm in every subject. In fact, the traditional scope of a subject may suddenly seem quite narrow. It would be helpful — and even refreshing — for teachers and students to learn about the contributions that different ethnic groups or nationalities have made to their subject areas. They may be familiar with the achievements of select, high-profile individuals from some ethnic groups in some areas, like Michael Jordan in

basketball or Bruce Lee in the martial arts. But there is more to each culture than what is popularised on television or in movies.

It is not necessary to go far afield: a rich and valuable resource for the study of cultural diversity is right there in the classroom. Teachers may make use of students' knowledge to bridge between their worlds and subject matter. For example, students' surnames could be the catalyst for an inquiry into their origins and meanings. Students could then go beyond the classroom to inquire into the origin of street names and eventually expand the study to an investigation of how recent settlers in the area influenced changes in shops, habits, restaurants, etc. (Sharan, 1998). Here is social, geographical and historical content all in one that grows out of the cultural diversity in the classroom, stems naturally from students' reality, and is not added on in separate artificial patches.

Conclusion

When implemented successfully, cooperative learning affords students the experience of learning in an environment where knowledge is not a stilted, externally prescribed and measured product, but a dynamic, creative element that grows out of the interaction between students, however diverse their backgrounds, interests, experiences, and ideas. The unabated flow of research into all aspects of CL and the accumulated lessons from widespread practice provide clear implications for what implementation requires of students' and teachers' preparation. This article has attempted to shed light on some of the challenges that are often encountered in the process, with emphasis on adequate teacher and student preparation and appropriate task design. Whereas CL's firm research base encourages educational policy makers and educators to trust in its promise, it is equally important to be aware of the pitfalls of implementation, which are not always as carefully documented as CL's success. There is need for further research into the factors that impede sustainable implementation and the ways to overcome them. Awareness of these factors may also contribute to policy makers' and educators' considerations of the optimal conditions for sustainable implementation of cooperative learning.

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