Teacher perceptions of the challenges of implementing concrete and conceptual cooperative learning

Ghazi M. Ghaith
American University of Beirut, Lebanon

This article reports the results of a mixed-methods study of the perceptions of a selected group of experienced teachers of English as a foreign language of the challenges and potentials of using various cooperative learning methods, in the context of achieving the communicative and social goals of a modern theme-based curriculum. Participants (N = 18) took part in a three-day refresher in-service program, during which they completed a semantic differential scale and kept journals to record their perceptions of the congruence, cost, difficulty, and importance, as well as to express their views regarding the challenges and potentials of using cooperative learning in their respective classrooms. Results revealed that the participants tended to perceive the more concrete Jigsaw cooperative learning methods and the cooperative learning Structural approach to be more congruent to their practices, less costly, and easier to implement; although equally important, to the more conceptual methods of Group investigation, Learning together, and Creative controversy. Likewise, the study showed that all cooperative learning methods and strategies are valued, despite implementation challenges related to teacher knowledge, proper implementation, curriculum alignment and crowdedness, time on task, and school policy.

Introduction

Cooperative learning is currently acknowledged as an effective pedagogy in achieving the cognitive and non-cognitive outcomes of schooling world-wide. Empirical evidence from independent studies and the research programs implemented by the proponents of cooperative learning have validated it as a proven pedagogy (Johnson, Johnson, Roseth, & Shin, 2014; Slavin, 2013). Baloche and Brody (2017) further explicated that cooperative learning "has the potential to effect positively students' achievement, motivation for learning, intergroup relations, critical and creative thinking, problem-solving, and a host of other well-researched outcomes" (p.1). Furthermore, cooperative learning is supported by a number of psycho-social theoretical frameworks such as the motivational, cognitive developmental/ elaboration, social cohesion/cognitive, social interdependence, and the behavioural as well as the social constructivist theories of teaching and learning (Johnson & Johnson, 2015; Slavin, 2014). Cooperative learning is also proclaimed as an instructional framework in the context of educational reforms and modernising educational systems in many countries throughout the world, given that it addresses universal curricular, cognitive and social goals (Sharan, 2010).

Yet, despite proven efficacy, theoretical relevance, and policy support, cooperative learning implementation has been a challenge and is not as widespread in classroom practice as expected (Baloche & Brody, 2017; Buchs, Fillipou, Pulfrey & Volpe, 2017). Several researchers have attributed the difficulties of cooperative learning implementation to numerous factors, including mismatch between teachers' beliefs and cooperative

learning orientations (Brody, 1998), cultural constraints (Sharan, 2010), proper implementation of cooperative learning principles (Antil, et. al, 1998; Koutselini, 2009), willingness to transfer teacher responsibility and authority (Baines, Rubie-Davies & Blatchford, 2009; Blatchford, et. al, 2003), changing teachers' roles (Baines, et. al, 2009; Cohen, 1994), and alignment with curriculum (Koutselini, 2009). Class preparation time and assessment also emerge as implementation constraints as respectively reported by (Gillies & Boyle, 2010) and (Cohen (1994; Topping, et. al, 2017).

The preceding line of research into cooperative learning implementation difficulties reflects genuine interest and spirited efforts to facilitate the use of a theoretically-sound and proven pedagogy. However, a methodological concern stems from the apparent general conceptualisation of cooperative learning in some of the preceding studies as "an instructional method that allows students to work in structured groups" (Buchs et al, 2017, p. 1), without taking into consideration important differences in a "diversified body of methods of instruction" generated by cooperative learning pedagogy (Sharan, 2010, p. 301). For instance, while Hennessey and Dionigi (2013) considered the various cooperative learning approaches to be "slightly different" (p. 52). Johnson, Johnson and Stanne (2000) maintained that the cooperative learning methods "may be placed on a continuum from very concrete and prescribed to very conceptual and flexible" whereby the "more direct (concrete) cooperative learning methods consist of very specific and well-defined techniques that teachers can learn in a few minutes and apply immediately" (p. 2). Meanwhile, "the more conceptual cooperative learning methods consist of conceptual frameworks teachers learn and use as a template to restructure current lessons and activities into cooperative ones" (p. 2). Furthermore, Johnson, Johnson, and Stanne, (2000) explained that the more direct methods tend to be easy to learn, require less time, and tend to be easily implemented and discontinued when interest wanes.

Conversely, the more conceptual methods tend to be difficult to learn and use initially, may be used in lessons, are difficult to discontinue, and are highly adaptable to changing conditions. Along similar lines, Slavin (1995) identified "some important differences" even between the *Original Jigsaw* method and its *Jigsaw II* adaptation with regard to needed time, material preparation and assessment procedures (p.126). Consequently, we reasoned that it is important to investigate the interplay between the dynamics of the various cooperative learning methods and the difficulties of their implementation, taking into consideration the role of contextual cultural and circumstantial factors as possible determinants of the difficulties of implementing cooperative learning in various international educational settings, as suggested by Sharan (2010). Furthermore, our study is premised on the assumption that professional development is important in the implementation of a theme-based English as a foreign language curriculum and that the study participants can be co-researchers whose activities can be used as a basis for shared research findings.

The present study aimed to investigate the perceptions of a group of EFL teachers of the difficulties involved in using various cooperative learning methods in their classrooms in Lebanon. Specifically, the study examined the extent to which the participants perceive the various "very concrete" as well as the "very conceptual" cooperative learning methods as described by Johnson, Johnson and Stanne, (2000) to be congruent, costly, difficult,

and important to their work in the context of achieving the goals of an educational reform aiming to achieve social cohesion and language proficiency. In addition, the study examined the implementation problems and prospects of the various cooperative learning methods under investigation.

Cooperative learning

Method	Author	Concrete or conceptual	Description
The Structural Approach	Kagan (1985)	Concrete	Students use a variety of generic and content-free ways of managing classroom interaction called 'structures for team building, communication, mastery learning, and critical thinking'.
Student Teams Achievement divisions	Slavin (1995)	Concrete	Students work in heterogeneous groups to learn grammar rules and mechanics as they listen to a teacher presentation, complete team study worksheets, take individual quizzes, and recognise their team achievement.
Original Jigsaw	Aronson et al. (1978)	Concrete	Students work in heterogeneous groups to read and report a different section of a narrative text. Individual quizzes are given on material reported about the entire text under study.
Jigsaw II	Slavin (1986; 1995)	Concrete	Students read randomly assigned topics in their "expert" groups and return to their home teams to teach their teammates. Individual quizzes covering all topics are given to each member and the team average is computed to determine the winning teams.
Learning Together	Johnson and Johnson (1999)	Conceptual	Students work together in small groups according to the principles of heterogeneous grouping, positive interdependence, individual accountability, social/collaborative skills, and group processing.
Group Investigation	Sharan and Sharan (1992)	Conceptual	Students divide work among group members who plan and carry out investigations, complete individual specific tasks, and then reconvene to discuss their work, coordinate the various tasks, and present a final group project.
Creative Controversy	Johnson and Johnson (1995)	Conceptual	Students reach agreements in academic controversies through deliberate discourse and discussion of the advantages and disadvantages of alternative solutions.

Figure 1: Typology of cooperative learning methods

In the present study, we concurred with the view that the various cooperative learning approaches differ in some significant ways that may impact upon difficulties of implementation in diverse cultural and educational contexts. Likewise, we excluded the unstructured peer and group work activities, cooperative learning methods that require major curricular modifications, or those that focus on specific subjects such as *Cooperative*

Integrated Reading and Composition (CIRC, Madden, Slavin & Stevens, 1986), *Complex Instruction* (CI, Cohen, 1994), and *Team Accelerated Instruction* (TAI, Slavin, Leavey & Madden, 1986). Therefore, we focused on the major generic cooperative learning approaches and methods presented in Figure 1, based on the assumption that they represent the range of concrete and conceptual methods, have received most attention, and do not require curriculum change.

Methods

Participants and study context

Data were gathered from a cluster random sample of eighteen EFL teachers (N = 18) selected from the six districts of the Republic of Lebanon to participate in a refresher workshop in cooperative learning. All of the participants are coordinators in their respective schools with considerable teaching experience - an average of 8.65 years (SD = 6.72), and a range of 12 years. The sample included 14 female and 4 male teachers who all hold bachelor degrees in English and have participated in comprehensive in-service professional development programs on the applications of cooperative learning in the context of implementing a new EFL theme-based curriculum.

The study context is characterised by an educational reform that aims to build national cohesion and equip youth with the requisite competencies for academic success and employability. Engaging students in active learning and promoting social cohesion, conflict resolution, and harmonious coexistence are also emphasised. English is valued due to historical and cultural reasons and given its increasing vitality in the domains of commerce, education, and technology. The adopted EFL curriculum implemented by the study participants focuses on academic and social communication and stresses the importance of openness to other cultures and harmonious living in diverse national and international contexts. The curriculum proclaims cooperative learning as a framework for teaching and learning based on the assumption that cooperative learning constitutes an effective and appropriate mechanism for achieving the cognitive and non-cognitive outcomes of the reform.

Procedures

The study participants were delegated to participate in a three-day workshop whose objectives focused on consolidating the participants' knowledge of the procedures of the cooperative learning methods they already know, as well as introducing the cooperative learning methods of Creative Controversy and explicating the difference between the Original Jigsaw method and Jigsaw II on the one hand, and between debate and Group Investigation on the other. The workshop conduct was based on the principle of using cooperative learning to teach cooperative learning. Specifically, the Inside-Outside Circle cooperative learning structure was first used as an ice breaker and a mechanism to exchange pre-workshop definitions of cooperative learning. The participants were then randomly assigned to groups of four members each and used the Think-Pair-Share structure, Original Jigsaw, and the Mood Understand Recite Detect Elaborate Review

structure to respectively develop and share a group definition of cooperative learning, discuss the elements of cooperative learning (heterogeneous grouping, positive interdependence, individual accountability, social skills, group processing), and learn about the various types of positive interdependence (goal, resource, identity, outside enemy, etc.). In addition, the participants were provided with many examples of team building and communication cooperative learning structures as well as the Student Teams Achievement Divisions, Original Jigsaw, Jigsaw II, Learning Together, Creative Controversy, and Group Investigation lesson plan templates. The participants reflected on the possible applications of these structures and templates in their classrooms, following which they used the procedures of the Group Investigation method to design, demonstrate, and get feedback on the samples of the lesson plans they developed in groups using the various cooperative learning methods covered in the workshop.

Data collection and analysis

The present study employed a mixed-methods research design. The participants first completed a demographic questionnaire that included questions on gender, teaching experience, and the level at which they teach. In addition, we devised and administered a 1-5 semantic differential scale using Guskey's (1988) theoretical constructs to assess the participants' perceptions of the congruence, cost, difficulty and importance of using the various cooperative learning methods in their classrooms. The instrument used to complete the semantic differential scale consisted of 4 questions with bipolar adjectives presented in a Likert-style 1-5 scale intended to report participants' perceptions of the cooperative learning methods under study. In addition, the instrument included an open-ended reflection question intended to prompt the respondents to reflect on the implementation problems and prospects of the targeted cooperative learning methods (see Appendix). The participants completed the study instrument anonymously in English during the workshop, conducted from 17-19 March 2017, by responding to each cooperative learning method immediately after the method had been introduced and discussed.

Descriptive statistics (means and standard deviations) of responses for each item of the sematic differential scale were computed and a mean rank order was developed for the cooperative learning methods under study in order to determine which methods were perceived as congruent, less costly, easy to implement, and important. Meanwhile, qualitative data were analysed by identifying the units of meaning in the participants' written responses and categorising them by the methods under study and according to the emerging categories of usefulness, importance, and the implementation challenges for each method. All the 18 respondents were given the codes of "R1 for respondent 1" through "R18 for respondent 18" so as to maintain their anonymity in reporting the findings.

Results

Quantitative results

Table 1 reports descriptive statistics and a rank order of the mean scores of the participants' responses to the question regarding the congruence of the various cooperative learning methods to their teaching practices

Table 1: Descriptive statistics on the congruence of cooperative learning methods

Method	N	Range	Mean	SD
Original Jigsaw	18	2.00-5.00	3.38	.97
Jigsaw II	18	2.00-5.00	3.33	1.02
Think Pair/Square	18	1.00-5.00	3.16	1.09
Creative Controversy	17	1.00-5.00	3.05	.96
Group Investigation	17	1.00-5.00	2.94	1.08
Student Teams Achievement divisions	18	2.00-5.00	2.83	.85
Learning Together	17	1.00-5.00	2.76	.97
Valid N	16			

Table 1 reveals that the participants perceived the Original Jigsaw, the Jigsaw II, and the Think Pair Share/Square structures to be the most similar to their practices, followed by the Creative Controversy and the Group Investigation methods. Conversely, the Student Teams Achievement Divisions and Learning Together methods were perceived to be the most different. These findings underscore the role of teachers' knowledge of cooperative learning as a possible determinant of implementation as suggested by Hennessey and Dionigi (2013). The study participants know the procedures of the Jigsaw methods and those of the cooperative learning structural approach. This may have facilitated their use of these methods in their respective classrooms. Likewise, the debate and the group projects teaching methods are also familiar practices in the context of the present study, which may have prompted the participants to perceive the Creative Controversy and the Group Investigation methods to be somewhat similar to their practices as well.

However, although the participants know the Student Teams Achievement Divisions procedures, they perceived this method to be relatively different from their practices. This suggests that teachers' knowledge of cooperative learning may not be the only determinant of implementation. Rather, cooperative learning implementation is more likely to be impacted by other curricular and school contextual factors as well, particularly alignment with the curriculum as suggested by (Koutselini, 2009). The Student Teams Achievement Divisions method is most suitable for teaching grammar and language rules and mechanics, which is not a primary focus in the integrated theme-based approach to language teaching and learning proclaimed in the context of the present study. Likewise, structuring the cooperative learning elements required in the Learning Together method may discourage teachers from using this method particularly in school settings characterised by crowded curricula, small classrooms, and limited instructional time.

Table 2 reports descriptive statistics and a rank order of the mean scores of the participants responses to the question regarding the need for extra work in order to implement the cooperative learning methods in their teaching.

Table 2: Descriptive statistics on lack of need for extra work

Method	N	Range	Mean	SD
Think Pair Share/Square	18	2.00-5.00	3.77	1.00
Original Jigsaw	18	2.00-5.00	3.44	.85
Jigsaw II	18	2.00-5.00	3.27	.89
Group Investigation	17	1.00-5.00	3.17	1.13
Creative Controversy	17	1.00-5.00	3.11	1.16
Learning Together	17	1.00-5.00	2.83	.89
Student Teams Achievement divisions	18	1.00-5.00	2.83	1.04
Valid N	16			

Table 2 shows that the participants considered that the Think Pair Share/ Square structures and the cooperative learning methods of the Original Jigsaw and the Jigsaw II method can be implemented without much extra work. This is because the structures can be used to discuss any content matter and the Jigsaw methods can be implemented without changing the curriculum, by dividing written texts into manageable reading selections to be read and discussed. The participants also perceived that implementation of the Group Investigation, Creative Controversy, Learning Together, and the Student Teams Achievement Divisions methods needed some extra work, perhaps because teachers need to support students' investigation in Group Investigation, play a role in the Creative Controversy process, and monitor group interactions in the Learning Together method by using observation tools and keeping anecdotal records of class interaction. Likewise, the Student Teams Achievement Divisions method requires the preparation of worksheets, quizzes, and answer sheets as well as the computation of improvement points and team recognition awards.

Table 3 reports descriptive statistics and a rank order of the mean scores of the participants' responses to the question regarding the difficulty level of using the various cooperative learning methods in their teaching.

Table 3: Descriptive statistics on ease of implementation

Method	N	Range	Mean	SD
Original Jigsaw	18	2.00-5.00	3.38	.97
Jigsaw II	18	2.00-5.00	3.33	1.02
Think Pair Share/Square	18	1.00-5.00	3.16	1.09
Creative Controversy	17	1.00-5.00	3.05	.96
Group Investigation	17	1.00-5.00	2.94	1.08
Student Teams Achievement divisions	18	2.00-5.00	2.83	.85
Learning Together	17	1.00-5.00	2.76	.07
Valid N	16			

Table 3 shows that the participants perceived the cooperative learning methods of the Original Jigsaw, the Jigsaw II, and the Think Pair Share/Square structures to be the easiest to implement, followed by the Creative Controversy, the Group Investigation, Student Teams Achievement Divisions, and the Learning Together methods. One possible explanation of these findings is that the Original Jigsaw and the Jigsaw II methods are more familiar to the participants than other methods, and the Think Pair Share/Square structures are relatively simple, straight-forward, and content-free ways of managing classroom interaction that can be applied without much need for preparation. Likewise, although the Creative Controversy method is new to the participants, it was perceived to be relatively easy to implement given that it is similar to the familiar debate method. On the other hand, the teachers' role in the Group Investigation method entails structuring the elements of cooperative learning and supporting investigation, whereas as Student Teams Achievement Divisions implementation requires preparation of worksheets, quizzes, and answer keys to determine improvement points and group rewards. Similarly, implementation of the Learning Together method requires careful planning and structuring positive independence among learners, ensuring individual accountability, and doing group processing at the personal and group level. Furthermore, it entails addressing cognitive and social skills objectives in every lesson, which may not be easy to observe and evaluate.

Table 4 reports descriptive statistics and a rank order of the mean scores of the participants' responses to the question regarding the importance of using the various cooperative learning methods in their teaching.

Table 4: Descriptive statistics on importance of use

Method	N	Range	Mean	SD
Creative Controversy	18	2.00-5.00	3.38	.97
Think Pair Share/Square	18	2.00-5.00	3.33	1.02
Group Investigation	18	1.00-5.00	3.16	1.09
Original Jigsaw	17	1.00-5.00	3.05	.96
Jigsaw II	17	1.00-5.00	2.94	1.08
Learning Together	18	2.00-5.00	2.83	.85
Student Teams Achievement Divisions	17	1.00-5.00	2.76	.07
Valid N	16			

Table 4 shows that the participants generally considered all the cooperative learning methods to be important in their teaching. This suggests that active learning is valued in the context of the present study and the participating teachers appreciate maximising classroom interaction in their classes and involving students as active agents in the learning process rather than being passive recipients of information. This is especially so given the Creative Controversy method received the highest rating in the importance of use, followed by the Think Pair Share/Square structures and the Group Investigation method which encourages debate, communication, researching, and reporting of information. It should also be noted that all the other cooperative learning methods of the Original Jigsaw, Jigsaw II, Learning Together, and Student Teams Achievement Divisions

were also considered important for teachers, given that that they promote active communication and meaningful interaction among learners.

Qualitative results

Think-Pair Share/Square structures

A total of 10 out of the 18 respondents (55.6%) expressed positive views regarding the use of the Think-Pair Share/Square Structures in their classes. For instance, R2, and R9, respectively remarked that "The Think/Pair/Share structures can be easily implemented in my classroom." and that "These structures can be easily applied since they are not time-consuming". R17 also agreed and reported that "These structures can be easily implemented in my school and we are using them already in our classrooms."

Likewise, several respondents praised the cooperative learning structural approach as an effective and useful way to engage all learners as illustrated in the following excerpts:

R4:   The think/pair share or think pair square structures are efficient structures to engage all students inside a classroom.
R3:   I use these structures on a daily basis and students are very involved.
R4:   The think/pair share or think pair/square is an efficient structure to engage all students inside a classroom.
R12:   These structures engage students and make them productive participants in the classroom rather than passive recipients.

It should also be noted that many participants considered that the Think Pair Share/Square structures encourage students to think and share ideas. This particular point is illustrated in the following excerpts:

R5:   The think pair and share structures open new ways of thinking skills to students.
R9:   They (structures) are workable because they can involve all students and encourage them to think.
R12:   It (Think Pair Share/Square) allows students to think about the exercises and share concepts.

Along similar lines, R5 indicated that the structures "Raise self-confidence" and "Motivate students to solve problems by themselves".

However, 12 (66.7%) of the respondents expressed concerns about issues related to classroom management, class size, and time needed to use the cooperative learning structural approach properly in their classes as shown in the following excerpts:

R1:   It is crucial to know how to have classroom management.
R10:   Problems: Classroom management.

R4:   It (Think Pair Share/Square) requires a lot of time and if not perfectly structured and monitored with specific time, it will cause chaos in class.

R11:   Maybe it (Think Pair Share/Square) takes time more than other structures.

Along similar lines, R5 expressed concern about "Discipline problems" and R13 about "noise". Other concerns were related to the level of learners and their ability to follow directions as illustrated in the following examples:

R5:   Low-achievers don't have the ability to think/pair/share.

R6:   Due to different academic levels in the same classroom it is sometimes difficult to engage all in the assigned groups as some have difficulties interacting with each other (limited reasoning).

R14:   I can say it depends on the students' ability to follow the instructions.

Student Teams Achievement divisions

Seven participants (38.8%) praised Student Teams Achievement Divisions as an effective student-centred method that can be implemented easily, involves learners, and enables them to share ideas as illustrated in the following excerpts:

R2:   Student Teams Achievement Divisions is very effective and applicable in my classroom.

R10:   It (Student Teams Achievement Divisions) is effective and beneficial.

R12:   It's beneficial to use this structure (Student Teams Achievement Divisions) in grammar and dictation lessons.

R2:   The steps of the process (Student Teams Achievement Divisions) are clear.

R10:   It can be implemented easily.

R5:   The Student Teams Achievement Divisions method involves the learners in the teaching-learning process in a student-centred class.

R6:   It (Student Teams Achievement Divisions) allows students to share ideas and communicate.

Many respondents also considered that the Student Teams Achievement Divisions method enables learners to achieve the targeted learning outcomes, creates a team spirit, acquaints students with the grading system, and helps them learn from each other in an enjoyable manner as evident in the following quotes:

R2:   The steps of the Student Teams Achievement Divisions process are clear and that can help the student achieve the learning outcomes at the end of the session.

R3:   I like the team spirit it (Student Teams Achievement Divisions) creates.

R5:   Students learn from each other in Student Teams Achievement Divisions.

R5:   Students are more acquainted with the grading system.

R10:   Students might enjoy it (Student Teams Achievement Divisions) a lot.

However, 14 respondents (77.7%) expressed concerns about the applications of Student Teams Achievement Divisions in their teaching, particularly in large classes. These concerns centred on classroom management, limited application to all aspects of language learning, needed time, and demands from teacher as illustrated in the following excerpts:

R1: One must have classroom management skills to implement Student Teams Achievement Divisions properly.

R5: Not applicable in all language fields.

R15: I don't think Student Teams Achievement Divisions would be a very effective method for teaching literature.

R3: Time-consuming, as worksheets and answer keys need to be prepared.

R16: It is an extra work for the teacher for she has to prepare and correct the individual quizzes.

Many respondents also expressed concerns with regards to the difficulty involved in following up on learners' work, seriousness, cheating, and noise. For instance R10 indicated that the "The teacher might find it more difficult to follow up with each group", whereas R5 mentioned "Cheating" as a concern which was also expressed by R8: "If I give the students the answer key to check for themselves, maybe they are going to cheat for their own team". Along similar lines, R3 indicated that "Some students don't take their roles seriously and let the team down". Likewise, R12 stated that "applying this structure (Student Teams Achievement Divisions) with students of different (and weak) levels makes it difficult to communicate the message".

Original Jigsaw

Ten respondents (55.6%) were positive about using the Original Jigsaw in their classes and considered it an effective, active, student-centred and an enjoyable method that encourages communication and social skills as well as providing opportunities for more reading as illustrated below:

R2: I think it (Original Jigsaw) is a very effective approach to apply it in my classroom.

R4: Perfect for solving problems and discussions.

R16: It (Original Jigsaw) is an easy and beneficial method. I use it in my class especially when it comes to reading a passage.

R3: I use this method regularly and students enjoy it.

R9: It is highly interesting and workable.

R14: It helps cooperating in the classroom.

R7: Students read more.

However, 8 (44.4%) of the respondents noted that the implementation of the Original Jigsaw method requires time, is demanding, needs discipline, noisy, and students may not take it seriously as shown in the following sample excerpts:

R3: Time-consuming like Student Teams Achievement Division.

R17:   It needs extra time to be implemented.
R17:   It needs extra handouts from the teacher.
R5:   Problems: discipline, noise.
R9:   It might be a little bit noisy since students will be busy discussing their
        ideas or sharing the information they know.
R3:   Some students are not motivated to take their roles seriously.

It should also be noted that while R5 found the Original Jigsaw method to be "relevant just for reading comprehension", R12 agreed that this method is "not applicable in every single subject" and "does not consider students' different levels and attitudes".

Jigsaw II

Half of the participants (n = 9, 50.0%) expressed favourable views about the Jigsaw II method and considered it important and efficient in reading as well as in sharing ideas and encouraging cooperation among students as illustrated in the following excerpts:

R1:   This (Jigsaw II) is a very important method.
R5:   Important and efficient in teaching comprehension, mainly long texts.
R9:   I like it (Jigsaw II) because it involves reading and sharing ideas,
        interpretations and discussions about the content of the reading.
R5:   Students work on explain to each other and cooperate ... Students learn to
        listen to each other and appreciate the other.
R15:   From Jigsaw II, students are likely to appreciate and see the benefit of
        working to help each other succeed.

Respondents also considered the Jigsaw II method to be enjoyable, possibly useful for special needs students, and effective in providing opportunities for speaking. The ensuing quotes indicate these points:

R3:   I plan to use this (Jigsaw II) structure. I'm sure my students will enjoy it
        because most of them are kinesthetic learners.
R6:   It could be effective with ADD and ADHD students as they need to
        move around.
R5:   It (Jigsaw II) gives opportunities of speaking to students.

However, 11 respondents (61.1%) highlighted some concerns about using the Jigsaw II method in their classes. These concerns centred on the role of the teacher who needs to carefully monitor the noise level, possess classroom management skills, and must prepare several worksheets in order to ensure that learners remain on task. To illustrate:

R1:   It (Jigsaw II) needs classroom management ... Needs several worksheets
        to ensure that the students remain on task.
R9:   The noise level should be carefully monitored by the teacher.

Other respondents considered that using the Jigsaw II method is time consuming and can be problematic when it comes to assessment as illustrated in the following excerpts:

R3: It (Jigsaw II) will take more time for students to complete a concept, as they have to read, then share in expert groups, return to home group and share again.

R8: It (Jigsaw II) may take a lot of time to implement.

R4: The achievement of the team depends on how every team member is good at explaining his/her part. What if one weak student couldn't explain his/her part properly? This will affect the result of the whole team and they won't be able to understand this part of the lesson.

R5: Any misunderstanding from a member of the group will result in a low grade for the whole group.

Learning Together

Eight (44.4%) of the participants were rather positive about the prospects of using the Learning Together model of cooperative learning in their classes and considered it an effective, important, and beneficial method, particularly for low achievers and for improving learners' social skills. To illustrate:

R2: The Learning Together model is a very effective method.

R16: I apply it (Learning Together) in my class from time to time. It is beneficial for low-achievers because this method is based on peer learning.

R2: The Learning Together model is a very effective method that focuses on both academic and social skills within a group.

R1: This nevertheless should be done so that students are exposed to learning with different people.

R5: So important for building up tolerance among students of different levels and backgrounds.

R15: This method could be an important one to use since it helps the students to work together and learn from each other.

R9: Very interesting! I love the idea of positive interdependence.

However, 5 respondents (27.8%) considered the LT model to be difficult, not applicable and needing classroom management skills in order to be implemented, as illustrated in the following quotes:

R2: I think it is a more complex model than other processes or ways of teaching.

R7: It is not that easy.

R8: Not applicable.

Group Investigation

Thirteen respondents (72.2%) considered the Group Investigation as a good teaching method because it makes students cooperative, responsible, and accountable for their learning, as shown in the following excerpts:

R5:   Students learn to be organised and responsible.
R12:   This method is very useful. It makes students responsible, cooperative, and it allows them to be positive and trust each other.
R15:   The presentation at the end of this method makes each student accountable to the learning experience.

In particular, the participants praised the Group Investigation dynamics of assigning roles and tasks and promoting research skills. This point is illustrated in the following quotes:

R2:   I think assigning the roles in the group work is very important. And this process is effective.
R6:   It is an important approach which we have to use in projects, as we divide tasks among others.
R9:   It helps students do a research together and there is no free-ride!
R15:   This approach is very important for the students to use. Not only does it facilitate proper group learning, but it also ensures that each student has a role ... Moreover, the group will have to fill out a form where they need to state how they will divide the work and what their resources are. This is a very important record to keep for both, the teacher and the group members, to know what each participant is responsible for.
R5:   Students learn being eclectic and selective in using information ... Important for fostering investigation skills and researching.
R9:   It helps students do research together.

Yet, 5 respondents (27.8%) expressed concern about students not completing their tasks and the time needed to complete all the steps of the steps of the Group Investigation method:

R1:   Teacher must ensure that all students are working equally.
R3:   Some students put the group down when they don't complete their task.
R3:   Group investigation takes quite a long time to be completed.
R16:   It needs extra work and time for the teacher needs to check resources.

A few other respondents also expressed concerns related to crowded curricula and needed resources:

R1:   Need to teach students about research tools, which takes time out of teaching literature.
R3:   We do group investigations, however not very frequently due to lack of time and crowded curriculum.

R3:   Lack or limited resources can be a problem at times.
R3:   Classroom size can be a problem.

Creative *Controversy*

Ten respondents (50.0%) considered that the Creative Controversy method enables learners to develop perspective as well as promote communication and tolerance among them, as illustrated in the following excerpts:

R2:   Students will develop perspective taking, learn tolerance, and accept others' viewpoints.
R5:   It (Creative Controversy) is important for exchanging ideas and perspectives.
R15: Not only will the students know how to understand one side of the debate or problem, but they will get a chance to argue for the other side too.

Along similar lines, many participants remarked that the Creative Controversy method promotes social skills, attentive listening, and critical thinking, as illustrated in the following excerpts:

R4:   Creative controversy promotes social skills and learners listen carefully to each other.
R5:   Crucial for debating and building up critical thinking and investigation skills.
R9:   It's totally new and innovative.

However, 7 participants (38.9%) considered Creative Controversy implementation to be demanding, needing classroom management, and could be problematic for learners to debate issues and reach consensus:

R15: This activity (Creative Controversy) requires planning and organisation from the teacher.
R16: It needs a lot of hard work from both students as well as teachers.
R18: This teaching technique (Creative Controversy) requires so much focus and also cannot be implemented unless students adopt a higher degree of thinking.
R1:   Hard to get students to keep their voices at a classroom level because debates tend to get very competitive.
R9:   It might be challenging since we are not used to taking the other's points of view and defending it.

Conclusion

The findings of the present study highlight the participants' perceptions of the congruence, cost, difficulty, and importance of using the range of cooperative learning methods and approaches in teaching EFL in the context of an educational reform aiming

for learning English for social and academic communication, as well as building social cohesion and harmonious co-existence in a diverse society. In general, the study findings corroborate those by other researchers into cooperative learning implementation challenges, particularly with regard to the need for proper implementation, knowledge of cooperative learning procedures, and classroom management skills as well as the contextual variables of crowded curricula, noise, time on task, and school support and subjective norms. Specifically, the findings suggest the following aspects of high interest.

First, implementation of cooperative learning seems to be impacted by the complex interplay of a number of factors, including teachers' knowledge of its procedures, curriculum alignment, and school policy. The present study revealed that the Original Jigsaw, Jigsaw II, and the Think-Pair-Share/Square structures were the most congruent with the current practices of the study participants, given that they are already familiar with these cooperative learning methods. Yet, although familiar with the Student Teams Achievement Divisions and the Learning Together methods, the participants did not perceive these methods to be similar to their classroom practices, given that Student Teams Achievement Divisions is not aligned with their curriculum, and the Learning Together requires teacher effort, know how, and time and resources not fully supported by school policy.

Second, cooperative learning is valued as an important pedagogy for achieving communicative competence and social cohesion. All of the cooperative learning methods addressed in the present study received a high score of above 4 on the importance 1-5 semantic differential scale, except Student Teams Achievement Divisions (3.7), given its limited alignment with proclaimed curriculum. This underscores the role of the curriculum and its desired learning outcomes as important factors in the perception and applications of cooperative learning as a proven student-centred pedagogy. In fact, although a new method in the context of the present study, the Creative Controversy method was considered to be the most important, as it encourages communication and perspective taking, followed by the Think-Pair-Share/Square structures, Group Investigation, as well as the Jigsaw and the Learning Together which all provide equal opportunities for class participation and active language use, in a supportive and democratic environment conducive for language acquisition and psycho-social adjustment.

Third, the cost and difficulties of cooperative learning implementation as well as its attractive pedagogical aspects seem to be regulated by the specific characteristics of the individual cooperative learning methods. The participants perceived the concrete Think-Pair-Share/Square structures and the Jigsaw methods to be the least costly and difficult to implement, in comparison with the Student Teams Achievement Divisions and the more conceptual Learning Together method. The structures are content-free ways of managing classroom interaction and be used in any lesson without curricular modification and with no, or minimal, material preparation. Likewise, materials can be prepared in a relatively easy manner in the Jigsaw II method and it could save time if the Original Jigsaw method is applied without the expert group discussion step. Conversely, Student Teams Achievement Divisions requires preparation of worksheets, quizzes, answer keys, and team recognition forms, and Learning Together entails the teacher roles of specifying

academic and social objectives, deciding on group size, planning material, structuring positive interdependence, arranging individual accountability, monitoring performance, and doing group processing. As for the attractive cooperative learning pedagogical aspects, the participants particularly praised team competition in Student Teams Achievement Divisions, expert discussion in Jigsaw II, positive interdependence in Learning Together, individual accountability and presentation in Group Investigation.

The pedagogical implications of the preceding findings underscore the importance of aligning the content and practices of professional development programs with the curriculum goals and objectives to be achieved by the participants in these programs. As such, it is recommended that planners of in-service and pre-service programs identify and focus on the cooperative learning methods that serve the curriculum goals and objectives to be targeted by the program participants, so as to save resources and ensure better chances of cooperative learning implementation. This is particularly important in the context of national reforms and large scale professional development initiatives, in educational contexts characterised by limited material and human resources. Further research is also recommended to investigate the teacher-related and context-specific factors that impact cooperative learning implementation in various international and cultural settings.

References

Antil, L. R., Jenkins, J. R., Wayne, S. K. & Vadsay, P. F. (1998). Cooperative learning: Prevalence, conceptualization, and the relationship between research and practice. *American Educational Research Journal*, 35(3), 419-454. https://doi.org/10.3102/00028312035003419

Aronson, E., Blaney, N., Sikes, J., Stephan, C. & Snapp, M. (1978). *The jigsaw classroom.* Beverly Hills, CA: SAGE.

Baloche, L. & Brody, C. M. (2017). Cooperative learning: Exploring challenges, crafting innovations. *Journal of Education for Teaching*, 43(3), 274-283. https://doi.org/10.1080/02607476.2017.1319513

Baines, E., Rubie-Davies, C. & Blatchford, P. (2009). Improving pupil group work interaction and dialogue in primary classrooms: Results from a year-long intervention study. *Cambridge Journal of Education*, 39(1), 95-117. https://doi.org/10.1080/03057640802701960

Blatchford, P., Kutnick, P., Baines, E. & Galton, M. (2003). Towards a social pedagogy of classroom group work. *International Journal of Educational Research,* 39(1-2), 153-172. https://doi.org/10.1016/S0883-0355(03)00078-8

Brody, C. (1998). The significance of teacher beliefs for professional development and cooperative learning. In C. Brody & N. Davidson (Eds.), *Professional development for cooperative learning: Issues and approaches* (pp.25-48). Albany: State University of New York Press.

Buchs, C., Filippou, D. Pulfrey, C. & Volpé, Y. (2017). Challenges for cooperative learning implementation: Reports from elementary school teachers. *Journal of Education for Teaching*, 43(3), 296-306. https://doi.org/10.1080/02607476.2017.1321673

Cohen, E. (1994). *Designing group work: Strategies for the heterogeneous classroom.* 2nd ed. New York: Teachers College Press.

Gillies, R. M. & Boyle, M. (2010). Teachers' reflections on cooperative learning: Issues of implementation. *Teaching and Teacher Education*, 26(4), 933-940. https://doi.org/10.1016/j.tate.2009.10.034

Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 4(1), 63-69. https://doi.org/10.1016/0742-051X(88)90025-X

Hennessey, A. & Dionigi, R. A. (2013). Implementing cooperative learning in Australian primary schools: Generalist teachers' perspectives. *Issues in Educational Research*, 23(1), 52-68. http://iier.org.au/iier23/hennessey.pdf

Johnson, D. W. & Johnson, R. T. (1999). *Learning together and alone: Cooperative, competitive, and individualistic learning.* Boston: Allyn & Bacon.

Johnson, D. W. & Johnson, R. T. (2015). Theoretical approaches to cooperative learning. In R. Gillies (Ed.), *Collaborative learning: Developments in research and practice* (pp. 17-46). New York: Nova.

Johnson, D. W. & Johnson, R. T. (1995). *Creative controversy: Intellectual challenge in the classroom.* Edina, MN: Interaction Book Company.

Johnson, D. W., Johnson, R. T., Roseth, C. & Shin, T. S. (2014). The relationship between motivation and achievement in interdependent situations. *Journal of Applied Social Psychology*, 44(9), 622-633. https://doi.org/10.1111/jasp.12280

Johnson, D. W., Johnson, R. T. & Stanne, M. B. (2000). *Cooperative learning methods: A meta-analysis.* https://jamyang.wikispaces.com/file/view/Cooperative+Learning+Methods.doc

Kagan, S. (1985). *Cooperative learning resources for teachers.* Riverside, CA: University of California at Riverside.

Koutselini, M. (2009). Teacher misconceptions and understanding of cooperative learning: An intervention study. *Journal of Classroom Interaction*, 43(2), 34-44. http://www.jstor.org/stable/23869676

Madden, N. H., Slavin, R. & Stevens, R. (1986). *Cooperative integrated reading and composition: Teachers manual.* Fredonia, NY: State University of New York College at Fredonia.

Sharan, Y. (2010). Cooperative learning for academic and social gains: Valued pedagogy, problematic practice. *European Journal of Education, Research Development and Policy*, 45(2), 300-313. https://doi.org/10.1111/j.1465-3435.2010.01430.x

Sharan, S. & Sharan, Y. (1992). *Group investigation: Expanding cooperative learning.* New York: Teachers College Press.

Slavin, R. E. (1995). *Cooperative learning theory, research, and practice.* Massachusetts: Simon & Schuster, Inc.

Slavin, R. E. (2013). Cooperative learning and achievement: Theory and research. In W. Reynolds, G. Miller & I. Weiner (Eds.), *Handbook of psychology*, vol. 7, 2nd ed. (pp.199-212). Hoboken, NJ: Wiley.

Slavin, R. E. (2014). Cooperative learning in elementary schools. *Education 3-13: International Journal of Primary, Elementary and Early Years Education*, 43(1), 5-14. https://doi.org/10.1080/03004279.2015.963370

Slavin, R. E., Leavey, M. & Madden, N. (1986). *Team accelerated instruction: Mathematics.* Watertown: Charles Bridge.

Topping, K. J., Buchs, C., Duran, D. & Van Keer, H. (2017). *Effective peer learning: From principles to practical implementation*. London and New York: Routledge.

Appendix: Cooperative learning

Cooperative learning: Think Pair Share /Square structures						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Student Teams Achievement divisions						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Original Jigsaw						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Jigsaw II						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Learning Together						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Group Investigation						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Cooperative learning: Creative Controversy						
Very different	1	2	3	4	5	Very similar
A lot of extra work	1	2	3	4	5	No extra work
Very easy	1	2	3	4	5	Very difficult
Unimportant	1	2	3	4	5	Extremely important
Reflection: What are the problems and prospects of implementation in your teaching?						

Ghazi Ghaith is Professor of Teaching English as a Foreign Language (TEFL) at the American University of Beirut, Lebanon. His research focuses on the applications of cooperative learning in language teaching and teacher education as well as on reading and writing.
Email: gghaith@aub.edu.lb