International Association for the Study of Cooperation in Education

IASCE

TABLE OF CONTENTS

Dear Colleagues,

IASCE is pleased to bring you the second member newsletter of 2016. In our last newsletter, we included a call for nominations for new board members. Elections are now complete and we are pleased to welcome Laurie Stevahn as a "new" board member. Laurie was a member of the board a few years ago and decided that it was a good time to rejoin. Those of you who attended Odense will remember that Laurie interviewed Morton Deutsch in preparation for the IASCE Awards Reception and introduced David and Roger Johnson at the reception. (The complete interview with Morton Deutsch is available on the IASCE website.) For those who would like to know more about Laurie and other board members, contact information and biographical sketches—as well as the IASCE document "Purpose, Responsibilities, and Roles of the Board of Directors"—are available on our website. Our next call for board-member nominations will be in early 2018; we encourage our members to consider this opportunity for service to the field.

While we welcome Laurie Stevahn, we say goodbye to Christine Lee Kim Eng, who will be leaving the board after serving for sixteen years. Long-term IASCE members will remember our Singapore conference in 2004. It was Christine's tireless work—with institutional support for National Institute of Education (NIE) and Christine's network of committed and talented colleagues—that made our first Asian conference possible and successful. During the Singapore conference, Christine networked with Japanese delegates and became interested in Lesson Study. From her position at NIE—where she has served in a variety of administrative roles for almost 20 years and founded the Curriculum, Teaching and Learning Academic Group—Christine has pioneered and supported what has become a very successful implementation of Lesson Study in Singapore. She is currently the president of World Association of Lesson Studies (WALS) which represents members from 33 countries. An article by Christine, about Lesson Study in Singapore, is included in *Collaborative Learning: Developments in Research and Practice* which is reviewed in this issue of our newsletter. We also announce that Maureen Breeze is stepping aside as Co-president; fortunately she will remain on the board. We first met Maureen in Toronto in 1999 and, as is typical of Maureen, she soon developed a plan to bring IASCE to the UK. Both our 2002 and 2013 UK conferences benefitted greatly from Maureen's extraordinary abilities as a planner and as a connector—as have many additional initiatives that IASCE has developed over the past decade. We are pleased that Celeste Brody has stepped forward to serve as Co-president, a job that she knows and does well.

In this issue, we include a variety of features that describe and highlight work from multiple continents and contexts. As always we include abstracts, and these remind us that applications of the use of cooperation in education continue to expand and continue to fascinate both practitioners and researchers. Contributors to this issue of the *Members' Column* examine the challenges and opportunities of culturally diverse classrooms in India and Italy. We are given a brief view of music education in Myanmar through board member Rich Cangro's description of his recent trip; we learn about a series of investigations that Kate Ferguson-Patrick and board member Wendy Jolliffe have been pursuing, both individually and collaboratively, over the past several years. As part of a project they are planning, Wendy and Kate invite readers to contact them with ideas for case studies about cooperative-learning implementation. This issue also includes an announcement of the upcoming IAIE (International Association for Intercultural Education) Conference in Budapest which will include an extensive cooperative-learning strand that has been organized by board member Yael Sharan. Each newsletter feature represents work that involves either board members, IASCE members, or both. Collectively they remind us that our field remains one of dynamic and varied interests and that IASCE continues its vigorous support for the study of cooperation in education.

As we complete work on this issue of our newsletter, we are already planning the third issue and continuing to work on several additional projects. In January, we sent IASCE members a call for abstracts for an upcoming cooperative-learning themed issue of the *Journal of Education for Teaching*. We are pleased to announce that we received over 30 abstracts and are looking forward to reading article drafts from over 20 authors. We anticipate publication in mid-2017. As a board, we are discussing possible locations for future conferences and we encourage our members to review our *Guidelines for Co-sponsored Conferences* (available from the "Events" page of our website) and to consider partnership possibilities.

As always, we encourage you to contact us—to share your own projects, to discuss partnership possibilities, and to share ideas about how IASCE might grow and expand its support for the study of cooperation in education.

Thank you for being a member of IASCE.

Lynda Baloche

Lynda Baloche
IASCE Co-president

Writing for This Newsletter

There are so many things happening world-wide related to cooperative learning! Help others find out about them by writing articles or short news items for inclusion in this newsletter, and by submitting abstracts of published work for inclusion in the *From the Journals* section of the newsletter. Short pieces (1000 words or less) are preferred.

The newsletter appears three times a year. Please email submissions or questions about them to the editor of the IASCE Newsletter, Jill Clark at jilliandc@gmail.com . Put "IASCE Newsletter" on the subject line of the email, please.

Thank you for your submissions.

Collaborative Learning: Developments in Research and Practice
Reviewed by Lynda Baloche

Collaborative Learning: Developments in Research and Practice (2015), edited by IASCE board member Robyn Gillies, is part of Nova Publisher's Education in a Competitive and Globalizing World series. The titles and authors of the 16 chapters are listed in the accompanying table. Given the length of the volume and number of chapters, I will not comment on each separately. I found that I was able to access most of the abstracts by typing the complete title of the chapter into my Google search bar and I would suggest that approach to learn more about chapters that are of particular interest.

While the title of this volume is *collaborative* learning, the contents explore cooperative learning, peer learning, peer collaboration, and collaborative learning. I noticed that the authors often described how approaches differed, but their characterizations and distinctions didn't always agree. This is not uncommon.

What I found most valuable in this volume were many excellent discussions of relevant literature and research. Given that all the chapters are about students working together to learn, one might think that there would be significant overlap in these discussions. While this is somewhat true, there is also noticeable diversity of theoretical groundings and impressive depth within individual chapters. The chapters by Gillies and the Johnsons provide significant historical context. In "Developments in Collaborative Learning," Gillies contextualizes the work of researchers such as Allport, Lewin, Moreno, Lippitt, White, Deutsch, and Festinger as building blocks for the extensive research of the past 30 years. Her approach is both succinct and helpful. The Johnsons' chapter, "Theoretical Approaches to Cooperative Learning" examines four major theoretical orientations to cooperative learning. The distinction between meta-theories, middle-range theories, and micro-level theories, coupled with the theoretical orientations, serve as a framework to discuss and contextualize research in the field. This is useful background for reading the subsequent chapters plus other work in the field. Readers may recall that Robert Slavin (2015), in the article "Cooperative Learning in Elementary Schools" published in *Education 3-13: International Journal of Primary, Elementary and Early Years 43*(1), also identified theoretical perspectives to cooperative learning and analyzed research related to each perspective. The Johnsons' chapter and Slavin's article make interesting comparative reading. Many chapters include excellent literature reviews that link specific disciplines and contexts to the study of cooperation. Three that stood out for me were Trickey and Topping's discussion of Philosophy for Children, Lee's discussion of Lesson Study, and Rutherford et al.'s discussion of Web 2.0 technologies.

As I read this volume, I made many notes and highlighted much of interest, and I also worried about writing a review of such an extensive and varied work. I noted many recurring themes and enjoyed how individual authors identified and analyzed their investigations in relation to these themes. For this review I have decided to focus in two areas: First, ideas about learners--how student talk supports learning. Second, ideas about teachers—how they learn and use cooperation in education, how they make their decisions, their commitment to cooperative pedagogies, and their interactions with students. While these foci will necessarily miss many of the subtle themes and ideas in this volume they will hopefully provide readers with a view of the breadth of its contents.

Student Talk

In the first page of her preface, Robyn Gillies discusses the use of collaboration as a pedagogical practice that supports socialization and learning. I thought it was instructive that Robyn listed socialization first and, indeed, considerable material in this volume examines students' talk and interactions and investigations of achievement are often viewed in relation to these behaviors.

The Webb et al. chapter "Student Participation, Teacher Instructional Practices, and the Development of Mathematical Understanding in the Elementary Classroom," includes an impressive, targeted research review and shares both excerpts of student talk and student work samples. Webb emphasizes that (a) the degree to which students both explain their own ideas and engage with other students' ideas affects learning outcomes; (b) the particular kinds of explanations and engagement matter—i.e., giving explanations that are both correct and detailed support achievement more than giving explanations that are ambiguous or incomplete; and (c) high levels of engagement, such as adding details to another's ideas and challenging an idea with reasons, are more beneficial than lower-level responses such as repeating and summarizing.

Trickey and Topping's chapter "Collaboration Using Philosophy for Children" examines dialogue where children build on each other's views and develop understanding through reasoned and caring argument. The authors contrast this type of dialogue to conversations where individuals share personal views without justification and reasoning. Their research suggests that the students' cognitive gains, related to the careful development of collaborative dialogue, were sustainable for at least two years after students regularly participated in such inquiries. Buchs and Butera's chapter "Cooperative Learning and Social Skills Development" also investigates the conditions for productive student talk, in dyads and groups ranging from elementary age through university. They emphasize that, to mitigate the negative consequences of social comparisons, students of all ages need to (a) directly learn social skills that are relevant to their task and (b) understand why they are being asked to cooperate. Gillies' chapter "Academic Talk in the Collaborative Classroom" references the concept of Accountable Talk which she describes as students learning "that they are accountable to the learning community, accountable to standards of reasoning, and accountable to knowledge" (p. 145).

Teacher Learning and Implementation

Of perennial interest in the quest to maximize the power of cooperation in education are questions of how best to facilitate teacher learning and implementation. Several chapters examine this challenge from differing perspectives.

Jolliffe's "Developing Cooperative Learning Pedagogy in Initial Teacher Education" investigates the challenges pre-service teachers face in learning cooperative learning and the challenges faculty face in supporting their early implementation efforts. She examines students' views of cooperative learning, what they implement, and what barriers they encounter. Results suggest that while pre-service teachers are positive about cooperative learning and report they "had used it," most had in reality utilized only informal pair work.

Kutnick, in "Developing Effective Group Work in Classrooms: A Relational Approach within a Culturally Appropriate Pedagogy" states that "overall, comparisons of small and large-scale studies of co-operative, collaborative and relational approaches identify that all approaches rely on the role of teachers—who are unlikely to fully implement the approaches that researchers have designed" (p. 125). This statement is similar to Jolliffe's findings. As partial remedy, Kutnick advocates a culturally adaptive "relational approach" and emphasizes that relational development is not facilitated by simply seating children next to one another or assigning them joint tasks. Instead, it must be "developed systematically, by the whole class, before students can be expected to engage in effective group work" (p. 132). While the Kutnick chapter includes an extensive and helpful literature review, I was left with the feeling that, in general, he characterizes cooperative approaches as lacking emphases on community building and the skill development that students need to be effective group participants. I view the literature differently; however, as many have noted, implementation sometimes diverges from the best practices described in the literature. In Rutherford et al. "Assessing the Potential of Web 2.0 Technologies for Supporting Collaborative Learning in Higher Education in Formal and Informal Learning Environments" the authors state that when using Web 2.0 technologies without

> communities of enquiry, or some degree of scaffolding, it is unlikely that collaborative learning will occur spontaneously. The key requirement, therefore, is to ensure that the community of enquiry is developed early on in the student life cycle, and that students do feel part of this community and do see the benefits of supporting each other's learning. (p. 287).

This statement seems to echo both (a) Kutnick's emphasis on the relational approach and (b) Buchs' and Butera's concept of the cooperative nudge.

Several chapters examine conditions that encourage quality implementation of cooperative approaches. Lee, in "Developing Communities of Practice in Cooperative Learning (CoPCL) through Lesson Study" provides a detailed examination using Lesson Study with in-service teachers to support the implementation of cooperative learning. She suggests that Lesson Study has (a) considerable power to build a collaborative learning culture amongst teachers and (b) provides space for an intersection of teachers' "native ideas and reform ideas from which new meanings and understandings emerge and knowledge building occurs" (p. 170). Lee emphasizes that, to be effective, Lesson Study requires long-term commitment and appropriate support within a school. Rubie-Davies, in "Creating a Classroom Community: Beliefs and Practices of High Expectation Teachers" notes

that in classrooms with high-expectations teachers, students (a) are more likely to work together and support each other; (b) complete more group-based tasks; (c) are given more autonomy, challenging work, and clear learning goals; (d) sit and work with different students; and (e) experience a more positive learning environment. She notes that these characteristics of high expectations contribute to the creation of a classroom community. She drew upon this information to design an intervention that encouraged teachers to, among other things, utilize more flexible groupings instead of the ability groupings that had been normative in their settings.

As the title itself indicates, Cockerill and Thurston, in "Improving Fidelity to Treatment during Randomised Controlled Trials in Schools by Engaging Teachers in the Design Process during a Developmental Study" suggest that teachers are more likely to implement a pedagogical approach if they are involved in the decision-making processes about the pedagogical intervention. Agashe in "Creating and Strengthening a Positive Mindset for Cooperative Learning through the S3 Model of Yoga and Spirituality" suggests that the practices of the 3S model might not only serve to relieve the types of stress and anxieties that often accompany change and challenge, but might also serve to heighten teachers' collaborative mindset.

Teacher and Student Learning and Interaction

Ultimately cooperative approaches may be best understood and advanced through (a) examinations of how students interact and learn with each other; (b) what decisions teachers make to structure, facilitate, and extend these interactions to maximize their value; and (c) what "evidence" teachers use to measure the effectiveness of their pedagogical decisions and the quality of student interactions and learning.

Howe, in "Monitoring Student Collaboration in Classroom Contexts: Towards a Process-Oriented Approach," investigates what criteria and evidence teachers use to determine if students are benefiting from their work together. She notes that what students achieve together—co-constructions—are often used as evidence for efficacy of the pedagogical approach and student learning. I am willing to predict that many of us have done just that. However, Howe suggests that this is unreliable evidence of what individual students are learning and that the *process* of students' collaborative work is a better indicator than *product*. Howe (a) emphasizes the need for contrasting perspectives in cooperative work, (b) suggests that the impact of exchanges based on differing perspectives tends to be lessened when teachers intervene, and (c) highlights the need for quality observation tools. Howe also emphasizes that learning requires more than interaction (Madeleine Hunter would be pleased) and continues after the interaction. Considering the benefits of thinking that continues after a "lesson," she questions the value of practices such as short quizzes and one-minute papers which, she suggests, tend to signal closure to ideas rather than signaling the value of further thinking. This last point is, I think, related to the Zeigarnik effect and the critical importance of "incubation" in the creative process; it has implications for how teachers focus both formative assessment and reflection and group processing with students.

Additional chapters address the importance of focusing on the learning experience and "evidence." In "Cooperative Behaviour and Reading Comprehension Strategy Use in Small Group Reading Activities" van Kraayenoord and Muspratt describe a teacher who embraced an evidence-based approach to cooperative work and was able to develop a highly scaffolded learning experience and made effective use of cooperative learning techniques to promote comprehension. The authors emphasize that responding to observations and evidence—not attachment to specific strategies—is key. Similarly, (a) Pons and Serrano in "Cooperative Learning in University Education: An Analysis of the Effects of the Relationships of Collaboration, Cooperation and Peer-Tutoring upon Academic Performance" note that the type of cooperative configuration chosen needs to match the materials and the learning goals; and (b) Rutherford et al., emphasize that Web 2.0 tools need to be approached thoughtfully with attention paid to pedagogy—with an emphasis on collaboration and learning—rather than simply a desire to utilize a particular tool.

In this volume it is Webb who speaks most directly to the interplay amongst students and teachers. Teachers establish norms, assign roles, and determine what level of student thinking and talk will be elicited by how they design learning opportunities. Teachers also monitor student work. When students are working together, teachers decide how they will monitor, respond, and intervene. When teachers support learning by (a) asking probing and clarifying questions, (b) asking students to paraphrase, (c) encouraging students to compare and contrast ideas and opinions, and (d) most importantly, following up on initial student responses, students

continue to explain and probe—even without the teacher present. It is these student behaviors—learned and supported by teacher planning, teaching, monitoring, and intervening—that affect learning.

Working with peers in small groups to learn is not about small-group autonomy; neither is it about clever strategies chosen by the teacher to encourage student talk and right answers. It is about careful planning for cooperation and community that both precedes "the lesson" and continues after it. It is about teachers determining what kinds of evidence they need to gather to gauge the quality of students' interaction and learning and then utilizing this evidence to inform their planning decisions. Successful group work requires both engaged students and an engaged teacher. Teachers wishing to maximize the power of cooperation in their classrooms would be wise to (a) directly teach a variety of interpersonal and small-group learning skills that students need to be successful in their interactions; (b) learn a variety of strategies for observing, monitoring, and intervening; and (c) take the time to ensure that students reflect on both their learning and their interactions—and do so in a way that signals not closure but continuation. Teachers wishing to maximize their professional self-efficacy would be wise to take advantage of collegial support to plan, problem solve, and share successes. (I know from personal experience that, when such support is not available within a school, identifying just one critical friend and making a commitment to work with that friend—eye-to-eye, by phone, or using a web -based technology—can make all the difference.) Teachers also need to recognize that, when facilitating students learning together, much of what matters cannot be scripted and planned—and this can be both overwhelming and exhilarating. Trickey and Topping quote Joanna Haynes, who has observed that teachers tend to "describe some initial fear of the open space of unscripted teaching, followed by a sense of release and excitement as they learn the role of . . . facilitator, listening to children's thinking and responding in the moment" (p. 231 in the current volume). Experiencing and conveying this excitement is key to learning and commitment—for both teachers and students.

In this review, I have tried to provide a glimpse of a few ideas I found particularly engaging; another reader's view might be quite different—and that I think is a measure of a work's value. *Collaborative Learning: Developments in Research and Practice* has much to offer the reader. The depth and breadth of the contributions speak well to Editor Robyn Gillies' knowledge of the field and to her professional reputation; they also speak to the vitality of the field that continues to attract dedicated researchers and varied perspectives. I would like to thank both Robyn and the 25 authors who shared their work.

---

1. In *Originals*, which is examined briefly in this issue's Serendipity column, Adam Grant shares research about how, when we describe our feelings, we may impact what happens next. For instance, if before making a speech people describe themselves as "nervous" and needing to "calm down," they will tend to speak less well than if they describe themselves as "excited." It seems reasonable that the same would be true for teachers and that teachers can learn to use language to describe themselves—and their students—that contribute to positive outcomes.

Collaborative Learning: Developments in Research and Practice
Chapter Titles and Authors

Chapter 1—"Developments in Collaborative Learning"
Robyn M. Gillies, University of Queensland, Brisbane, Australia

Chapter 2—"Theoretical Approaches to Cooperative Learning"
David W. Johnson and Roger T. Johnson, University of Minnesota, Minnesota, USA

Chapter 3—"Student Participation, Teacher Instructional Practices, and the Development of Mathematical Understanding in the Elementary Classroom"
Noreen M. Webb, Megan L. Franke, Marsha Ing, Angela C. Turrou, and Nicholas Johnson, University of California, Los Angeles, USA, and University of California, Riverside, USA

Chapter 4—"Collaboration Using Philosophy for Children"
Steven Trickey and Keith Topping, American University, Washington DC, USA, and University of Dundee, Dundee, Scotland

Collaborative Learning: Developments in Research and Practice

Chapter 5—"Monitoring Student Collaboration in Classroom Contexts: Towards a Process-Oriented Approach"
Christine Howe, University of Cambridge, United Kingdom

Chapter 6—"Creating a Classroom Community: Beliefs and Practices of High Expectation Teachers"
Christine M. Rubie-Davies, University of Auckland, Auckland, New Zealand

Chapter 7-- "Developing Effective Group Work in Classrooms: A Rrelational Approach within a Culturally Appropriate Pedagogy"
Peter Kutnick, Faculty of Education, University of Hong Kong, Hong Kong

Chapter 8—"Academic Talk in the Collaborative Classroom"
Robyn M. Gillies, University of Queensland, Brisbane, Australia

Chapter 9—"Developing Communities of Practice in Cooperative Learning (CoPCL) through Lesson Study"
Christine Lee, National Institute of Education, Singapore

Chapter 10—"Developing Cooperative Learning Pedagogy in Initial Teacher Education"
Wendy Jolliffe, University of Hull, Hull, United Kingdom

Chapter 11—"Cooperative Learning and Social Skills Development"
Céline Buchs and Fabrizio Butera, University of Geneva, Geneva, Switzerland, and University of Lausanne, Lausanne, Switzerland

Chapter 12—"Improving Fidelity to Treatment during Randomised Controlled Trials in Schools by Engaging Teachers in the Design Process during a Developmental Study"
Maria Cockerill and Allen Thurston, Queen's University, Belfast, Northern Ireland

Chapter 13—"Cooperative Behaviour and Reading Comprehension Strategy Use in Small Group Reading Activities"
Christina E. van Kraayenoord and Sandy Muspratt, The University of Queensland, Brisbane, Australia

Chapter 14—"Assessing the Potential of Web 2.0 Technologies for Supporting Collaborative Learning in Higher Education in Formal and Informal Learning Environments"
Stephen M. Rutherford, Sumit L. Mistry, and Jonathan L. Scott, Cardiff University, Wales, United Kingdom

Chapter 15—"Cooperative Learning in University Education: An Analysis of the Effects of the Relationships of Collaboration, Cooperation and Peer-Tutoring upon Academic Performance"
Rosa Maria Pons and José Manuel Serrano, University of Murcia, Murcia, Spain

Chapter 16—"Creating and Strengthening a Positive Mindset for Cooperative Learning through the S3 Model of Yoga and Spirituality"
Lalita Agashe, Maharshi Vinod Research Foundation, Pune, India

IASCE MEMBERS' COLUMN

Coordinator: Yael Sharan

Lalita Agashe, IASCE board member, initiated a virtual conversation with IASCE members Daniela Pavan and Usha Borkar, to discuss their unique backgrounds and experiences in connection with the role CL plays in the cultural diversity of classrooms in their respective countries: Lalita and Usha live in India, Daniela lives in Italy. As you read their conversation think of how their experiences and views relate to yours, in your country.

Lalita - Before we deal with what CL can contribute to the culturally diverse classroom, let's describe a bit the kind of cultural diversity we see around us. In our experience, what are the main problems in teaching, learning and in education in general that arise from cultural diversity?

To open the conversation, I'll describe the unique situation in India, where there are vast cultural differences in languages, (India has 22 official languages and 150 additional languages that have sizable speaking populations), regions, traditions and customs, socioeconomic status - all rooted in the various values, beliefs and attitudes that people hold. On the one hand, in a cosmopolitan city like Mumbai, or even in Pune, where I live, people are quite comfortable existing in this cultural diversity. In fact people in such cities not only adopt elements of each other's culture but are also happy being a part of each other's culture. Yet too often people are not aware that cultural differences can also lead to misunderstandings and misperceptions that further lead to considerable tension and problems in dealing with other people. Due to large internal migrations classrooms are often linguistically heterogeneous. I have worked with many illiterate parents, who have migrated to a new area where the language and culture are different from that of the child's first school, and wrongly assume that they cannot support their child's learning in school in any manner.

Daniela - When I think of intercultural differences in my secondary school classrooms I see differences in nationality, social level, economic level, and I also see gender differences. Gender differences are evident in several ways: the way male and female students express their feelings, the different expectations teachers and parents have of boys and girls, and the different ways teachers and parents communicate praise and disapproval.

Differences in nationality have been playing a role in Italian education as of the 1990s because Italy has become a place to which many refugees flee from world conflicts (e.g. in Morocco, Albania, the former Yugoslavia, and now Syria, Libya and the Middle East).

The differences between immigrants and native Italians are evident in many areas: the interpretation of nonverbal behaviour, the different tastes in food, various personal reactions to body odors, different religious customs, and, lately, the belief that I mmigrants take jobs away from native Italians. As a result immigrant children are often rejected by their school mates, who may be influenced by prejudicial views they hear at home.

Usha - Providing a learning environment suitable for students from different social, cultural, and linguistic backgrounds is indeed a challenging task for Indian teachers. Conflicts among students might emerge due to a lack of understanding of one another's cultures. When learning in cooperative groups students tend to form groups with those with whom they share similar backgrounds and interests. It is always a challenge for a teacher to develop students' understanding and appreciation of one another's culture.

Daniela mentioned the diversity in nationalities. In India the intra-diversity is extreme, and diversity in nationality is less common. I also reiterate what Lalita said about existing cultural diversity in India; its impact is felt in educational institutions from the level of policy making to daily transactions. CL procedures offered at frequent intervals provide opportunities for good quality interaction among culturally diverse group members. They also succeed in reducing prejudice and developing better understanding of one another's culture.

Lalita – That leads us to the next part of our conversation – sharing some relevant experiences that have helped us understand the role CL can play in classrooms in dealing with the challenges and problems created by cultural differences.

I remember how my students in a tertiary research methodology class benefited considerably from CL activities. Students came from different Indian cultures, which caused frequent bickering and strife among some of them, due to misunderstandings and beliefs about status differences and, naturally, a refusal to sit in a group with someone from a different cultural background. Through careful and incremental use of CL structures they were able to perceive that the differences in their language, traditions, customs, and whether they came from an urban or rural background, did not truly change their status in the classroom; in fact at times their specific backgrounds helped other group members understand and carry out their work in a better way. In the end, steady use of CL activities and in various group compositions helped students

communicate comfortably with classmates, teachers and strangers of varied cultural and economic backgrounds, with whom they would have normally been very uncomfortable.

Daniela - I believe and I have experienced that CL is a wonderful and powerful approach. In my opinion CL has evolved in recent years from being a teaching and learning methodology to becoming a wider and richer educational movement that respects cultural and educational diversity and aims for greater social justice and opportunity as well as a vision for life. This has led me to reflect on the teaching profession as an expression of civic participation, which aims to build a democratic, equitable and sustainable future for the planet and its inhabitants.

I would like to relate two important experiences: one as teacher and another as a parent in the school that my son attends. In my school 30% of the pupils come from other countries (Africa, China, Slavic countries). We know that it is very important for students to learn a new language. It is also helpful for parents to do so along with the child to help him or her cope with the problem of learning two languages at the same time (the language of school friends and the language of the family), which is disorienting. Many studies show how the child's conflict with the mother figure in particular can lead to feelings of hatred towards the school, and consequently produce strategies of avoidance and scarce participation in class activities; while, on the other hand, the dependence on the same mother figure represents a sign of immaturity and loneliness that also results in an unsatisfactory attitude towards school (Birch & Ladd[1]). Teachers in my school have promoted a language training program for mothers, based on cooperative activities, because we believe it is necessary to have at least one parent able share the experience of expressing feelings, needs and relationships in the new language. We organize CL structures that facilitate the development of communicative and linguistic autonomy through storytelling. Learning in small groups allows the mothers to learn at a comfortable pace, talk about their problems and share solutions in an accepting and encouraging environment. (I will present this project in the CL strand at the IAIE conference in Budapest in September.)

The second experience takes place in my district, where many immigrants live. Native Italians often have problems communicating with these new people. A few neighbors have promoted two kinds of gatherings: one is a meeting of immigrants and native Italians to cook

and eat together (Intercultural Cooking at homes); the other is an Educational Tea, during which parents of children in the same class speak about educational problems. In the cooking activity mothers of 3 or 5 families get together in one kitchen to cook dishes from their respective countries, after which all family members come to eat together. This activity may not be a strictly "cooperative" one, but more a collaborative one, by which families (particularly mothers) create knowledge of one aspect of one another's culture. The Educational Tea is more structured: teachers organize the conversations between parents by facilitating various structures, such as Mix-Freeze-Pair and Think, Pair, Share. Both these volunteer initiatives culminate in a big party in which we play, sing, and talk together. We have been doing this for five years and last May we had one thousand people at the "Event of May," where all associations, families, and schools in the district meet and share their experiences.

Usha - As practitioner of CL, I, too, have had several notable experiences in the last 10 years. Every time I read or reflect on similar experiences I'm amazed and am left with the feeling that in India the merits of this teaching and learning approach have not been exploited to their fullest.

I teach in a college of education designated as a Linguistic Minority Institution*. In my state, Maharashtra, the majority language is Marathi and due to the fact that 50% of the student body speaks Gujarati, they are considered a minority. The linguistic majority often feels superior and privileged, which results in intense rivalry among students. I remember that in 2008, when I was relatively new to CL, majority students were severely ridiculing the minority students and putting down their achievements and performance. At this junction I thought of facilitating short term CL activities in my classroom to help reduce the differences among the students. To start with there was tremendous protest by the minority students for having grouped them with non-minority students. But with the support of my principal and colleagues, I relentlessly continued using CL. As the non-cooperative students started realizing, or, should I say, experiencing, the benefits of CL as a learning strategy, and as a teaching strategy they could use in their own classrooms, they truly interacted in every session. At the end of the year the students themselves had stopped differentiating among themselves. The entire experiment was such a success that from then on CL has been an integral part of our institution.
I am also in charge of helping students with on-campus

discipline problems. As of 2015 our teacher training program is a 2 year one, so we shall have senior and junior students in the college. This again will be a unique situation for me. I wonder if that will give rise to new conflicts. Whatever the situation, I have come to realize that CL is an extremely powerful tool that can be used to steadily and surely reduce conflict.

[1]Birch, S.H., & Ladd, G.W. (1997). The teacher–child relationship and children's early school adjustment. *Journal of School Psychology*, *35*, 61–79.

*The Ministry of Minority Affairs provides scholastic scholarships for linguistic minority communities.

Lalita Agashe is an IASCE board member and is a teacher educator for CL for school and college teachers in various colleges in Pune, Maharashtra, India. She combines CL with yoga and spirituality, and various dimensions of self-awareness, to help infuse cooperation in classrooms, staffrooms and with parents, as well as to help develop cooperation among people in general. To find out more about her work write to lalitaagashe@gmail.com.

Daniela Pavan is a secondary school teacher and an educational psychologist working in schools, juvenile prisons and with adults. In 2001 she founded Scintille.it, a teacher and principal training organization based on CL principles. Daniela is also a trainer, supervisor and psychotherapist. She has written four books and a number of articles on the applications of CL. To find out more about her work write to dapan@alice.it

Usha Borkar is a teacher educator at the middle school and high school levels in the educational system and through NGOs. She also teaches post graduate courses in education and is a mentor of doctoral candidates in education. Usha received the IASCE Dissertation Award at the 2013 IASCE conference at the University of Hull, Scarborough, England. To find out more about her work write to uaborkar@yahoo.com

Supporting Pre-service Teachers: Perspectives from England and Australia
Wendy Jolliffe & Kate Ferguson-Patrick

At the IASCE conference in 2010 in Brisbane, the beginnings of what has proved to be a fruitful partnership were formed between Wendy, from the University of Hull in England, and Kate, based at the University of Newcastle (UoN) in Australia. Kate was completing her doctorate at the time and Wendy had recently completed hers. Both were examining effective professional development for cooperative learning (CL). This article explores the nature of each of their research and the benefits of cross-cultural comparisons to help illuminate the impact of professional development for in-service and pre-service teachers.

Wendy's doctorate focused on in-service professional development and took the form of a case study of the implementation of CL in a networked learning community of ten schools in the north of England. How successful use came about in a context of national educational prescription, in which CL has played little part, was a key driver for the research. Results indicated this had been achieved largely due to the nature of the network, which was described as a 'genuine partnership' by one head teacher, and in particular the close working relationships of facilitators in each school whose role was to support staff in implementing and developing CL. The Facilitators' group provided a wealth of resources, including a handbook for staff, support for in-house training, and importantly visits to each other's schools to observe good practice. This is turn was cascaded to staff in schools. Without such an effective network, CL would not have flourished, or even have begun. It provided independence and in challenging circumstances a clear drive to find something 'different'; some way to not just impact on academic standards, but as the head teachers commented, to impact on communities (for further details, see Jolliffe, 2011, 2015a)

More recently, Wendy's research has focused on the impact of working with pre-service teachers to develop their understanding of CL and how this has transferred to their practice in the classroom (Jolliffe, 2015b). Research over five years has demonstrated successes, however the many demands on student teachers and the barriers of working in schools where cooperative learning is largely undeveloped, show that although students were universally positive about the use of cooperative learning as a particularly inclusive strategy, only a small proportion were able to develop this extensively. Those that have been successful, demonstrate that certain

factors have been influential. These include learning about CL through experiencing it, observing CL in classrooms and developing a deeper understanding by selecting CL for their final dissertations.

Kate's doctorate was designed to investigate how early career teachers could be supported in their first three years of teaching to develop and improve their pedagogy, specifically by using a focus on CL. The action research study design was chosen as an approach that allowed teachers to focus on improvement in aspects of their teaching in an attempt to enable them to continue with this approach later in their career. Four early career teachers explored how they could make changes to their pedagogy through support in a collegial professional learning environment. Kate provided professional learning in CL and supported teachers while they reflected in action and made changes in their classroom as a result of this reflection and professional learning (Ferguson-Patrick, 2011). The research design incorporated collegial group meetings to enable early career teachers to reflect on their own pedagogy as well as share successes and difficulties with others who were embarking on a similar journey. The action research case study approach provided the flexibility to allow the participants to influence the direction of the study and to clarify emerging themes. Kate was able to capture and describe the emergence of a democracy stance (Ferguson-Patrick, 2014) in these developing cooperative classrooms and this provided an additional focus to the research.

Kate's recent publication from this thesis (Ferguson-Patrick, 2016) explores the impact of high stakes testing on this pedagogy and her future research interests are how CL, as a well-researched pedagogy, can support early career teachers' inclusive practice for a globalised world. She is also exploring the links between CL and Global Education (GE) with her research team at the UoN (see global-education.net) and is a co-editor of a book on international perspectives on GE (Reynolds et al, 2015).

The potential for closer collaboration soon became apparent. A recent visit to England by Kate to work with Wendy has also proved fruitful in exploring joint research and has led to a proposed joint publication entitled: Cooperative Learning: A 21st century pedagogy for a globalised world. One of the key features will be the inclusion of international case studies to illustrate the factors that may support or inhibit the development of CL in each country. Whilst collaborative classrooms are the fundamental basis for twenty first century learning skills, how this might be achieved is a key focus for teachers across the world. Kate and Wendy would like to request contributions of case studies from the members of IASCE to support this publication. If you would like to find out more, please contact either:

Wendy Jolliffe: w.m.jolliffe@hull.ac.uk or
Kate Ferguson-Patrick: kate.fergusonpatrick@newcastle.edu.au

References

Ferguson-Patrick, S. K. (2011). Professional development of early career teachers: A pedagogical focus on cooperative learning. *Issues in Educational Research, 21(*2), 109-129.

Ferguson-Patrick, S. K. (2014). Cooperative Learning: 'Democracy Stance' in early career teachers. In *LICE-2014 Proceedings* (pp. 221-226). London, UK: Infonomics Society.

Ferguson-Patrick, K., Reynolds, R. M., Bradbery, D., Brown, J., Carroll, K., Donnelly, D., & Macqueen, S. (Eds.). (2015). *Contesting and constructing international perspectives in Global Education*. Rotterdam, Netherlands: SENSE Publishers. http://tinyurl.com/och8a2d

Ferguson-Patrick, K. (2016). The importance of teacher role in cooperative learning: The effects of high-stakes testing on pedagogical approaches of early career teachers in primary schools. *Education 3-13*, 1-13.

Jolliffe, W. (2015). Bridging the gap: Teachers cooperating together to implement cooperative learning. *Education 3-13, 43* (1), 56- 69.

Serendipity
Lynda Baloche

Grant, A. (2016). *Originals: How Non-Conformists Move the World*. New York, NY. Viking.
Adam Grant is a Professor at the Wharton School of Business (USA). His exploration of creativity and originality is far reaching, with 50 pages of notes and references most of which he has gleaned from research in business and social psychology. Grant tries to dispel the image of original thinkers as solitary mavericks, instead viewing them as skilled communicators and collaborators. He analyzes what innovators do to develop ideas and get others to listen to them; he examines how leaders and groups foster idea generation and implementation and how they stifle it. As I read, I made many connections to cooperative learning—for instance, the importance of (a) teaching interpersonal and small-group learning skills, (b) equitable participation, (c) heterogeneity in work groups, and (d) time. I would like to comment briefly on time.

Grant examines the importance of procrastination and makes an interesting link to the Zeigarnik Effect. (Bluma Zeigarnik, a student of both Lewin and Vygotsky, discovered that people remember uncompleted or interrupted tasks more clearly than completed tasks.) Grant suggests that procrastination is useful precisely *because* it causes us to delay task completion, allowing our minds to continue to work on the task while we do "other things." He provides evidence that this delay results in higher quality work. This caused me to think about the effects of the regular and repeated use of short, time-limited, highly structured group tasks and suggested the need for students to interact for longer periods of time with more complex work. It caused me to reflect on Robert Bales (1970) and the importance of both task and maintenance skills. I wondered if one reason maintenance skills might be so important to cooperation is that they provide groups with productive "delays" and breaks from their task focus.

Grant examines time in many other ways. For instance, he suggests that when groups start their work they shouldn't initially make a plan, but rather take time (he suggests about 20 minutes for a task that might require one hour) to talk and investigate the task before planning how to proceed. He cautions against thinking that working together means "everybody must agree" and emphasizes the value of encouraging differing ideas and perspectives. He emphasizes the importance of (a) reflection as well as action, (b) feedback, and (c) examining both ideas and ways of working.

2016 IAIE conference: Mobilities, Transitions,
Transformations
Intercultural Education at the Crossroads
September 5 - 9
Budapest, Hungary

The 2016 IAIE conference will take place in Budapest and is jointly organised by the International Association for Intercultural Education (IAIE), the Institute for Intercultural Education (IIPE) at the Faculty of Education and Psychology at Eötvös University, Budapest, Hungary, in cooperation with the International Association for Cooperation in Education (IASCE), the Tom Lantos Institute, and the University of Western Macedonia.

For more details: iaiebudapest2016.hu

IAIE 2016 annual conference

mobilities, transitions, transformations: intercultural education at the crossroads

Eötvös Loránd University
Budapest, Hungary

september 5 - 9, 2016

Reflections of Teaching and Learning Music in Myanmar: Blossoming Cooperation
Richard Cangro, Ph.D.
IASCE Board member

One day a colleague asked "Do you want to go to Burma?" I said "Of course", and six months later I went and taught in Burma.

Some background first. My colleague is from Burma and has worked with my university to host teachers from a private school in Burma who are in-residence for a month to take graduate level courses. These K-12 teachers come once a year as a result of a Memorandum of Understanding between our two institutions. It is an investment by the private school to improve their educational system since their country has opened itself up as a new democracy. Elections were held on the day of my arrival to turn control of the country's government from military rule to democratic rule. There is a long history of brutal conditions in Myanmar, formerly known as Burma (and used interchangeably), but the people have finally prevailed. There was nothing but generosity, humbleness, and hospitality beginning on the day of my arrival. It could have been a very scary experience.

The purpose of my trip was to present some ideas on 21st century teaching and learning in music education as well as to observe teaching and learning in their classes. I am the first music educator to formally come to this country and present professional development as far as I know. I spent the first week in Yangon and then flew up to Mandalay for week two. Both places are unique and wonderfully diverse: as you can imagine scooters, street food vendors, people, and pagodas everywhere you turn. The schools I taught in were part of a national network of K-12 schools, the largest school system in the country. These schools were established by a pioneering and brilliant gentleman who is dedicated to improving conditions in his country through education. He is the owner of a car manufacturing company and has invested heavily in creating progressive, state of the art schools for anyone who can afford to attend. There is a long waiting list to enter these schools. They can't be built fast enough!

One of the wonderful aspects of his vision is to enable students to work collaboratively in their classes. One elementary school I visited had some colorful classrooms that were designed for optimal group learning through preferred modes of lying, sitting, or standing. Though I was there to provide some ideas for 21st century music learning, some of their accomplishments were already ahead of many schools I have seen in my own country.

The focus of my visit was to present ideas of effective music teaching and learning, as well as provide direction in applying cooperative learning in music education. Teachers from the network of schools in each respective region attended for a week of professional development. Each day I would teach in the morning, followed by lunch, then as a group we would observe one educator teach a music class. Following the class, we would reflect on and discuss the lesson. It was a wonderful time for me to assess their understanding of our morning professional development, as well as to listen to the other teachers reflect and contribute to improving the lesson. It was a wonderfully collaborative environment with these teachers! Though I was the instructor, the participants were freely contributing ideas and the teacher was open to discussion. Teachers helping teachers for the betterment of their students with a new professional learning community (PLC) established as a result of this visit. What a wonderful thing! (For more information on PLC, see DuFour, 2006)

In our time of professional development, we covered a great many things; lesson planning, curricular development, assessing learning, activities for developing performing, listening, analyzing, describing, creating, notating, and moving to music. Threaded throughout all of these topics was Cooperative Learning (CL). We learned through CL activities about how to get students to learn music through collaborating and cooperating on tasks. I used several different CL strategies in my teaching because although I trusted they understood English well enough to comprehend my presentation, in reality that was not the case. They listened politely as I struggled not to go too fast in my presentations and appeared to 'get it'. In my experience frequently checking for understanding, especially when English is a second language, is prudent. Each time I did check for understanding, a faithful assistant would speak to them in Burmese just to make sure they understood things as I smiled and nodded. At times I wondered if I was really getting through. As we did activities and I would look over their shoulders, it was apparent to me that some things were not clear. I was concerned about my effectiveness.

When activities involved cooperation and collaboration, whether it was a writing activity, or a group teaching activity, I was gleefully satisfied with the level of comprehension. As a result of letting the teachers work together and verbally process in their native language, growth and conceptual understanding was evident. The ultimate evidence of conceptual understanding came when the teachers demonstrated their understanding through teaching their class. Early in the week, music classes were in typical rote fashion – teacher speaks, students listen attentively, and follow directions dutifully. Direct instruction and rote learning was the teaching style. However, each day of the week became a continuum of progression from teacher-led activities to student-centered activities. CL was blossoming before my very eyes! The teacher would provide directions, sometimes model the outcome, then let students complete a task in groups while the teacher facilitated and assisted students. It was textbook CL strategies and I was very pleased.

This was a very successful trip in my eyes. I witnessed the power of verbal processing in a professional learning setting through the use of the participants' native language to build conceptual development. Though this seems common sense for effective professional development providers, it is not often the case that we immediately get to see the teachers' understanding as evidenced by student learning and engagement. I truly look forward to going back to Myanmar. They are building a conference center in Mandalay and I hope to one day attend an IASCE conference there.

Reference
DuFour, R., DuFour, R., Eaker, R., & Many, T. (2010). *Learning by doing: A handbook for professional learning communities at work.* Bloomington, IN: Solution Tree Press.

From the Journals
Contributors: Jill Clark, George Jacobs, Lalita Agashe and Yael Sharan

Amara, S., Macedo, J., Bendella, F., & Santos, A. (2016). Group formation in mobile computer supported collaborative learning contexts: A systematic literature review. *Journal of Educational Technology & Society, 19*(2), 258-273.

Learners are becoming increasingly diverse. They may have much personal, social, cultural, psychological, and cognitive diversity. Forming suitable learning groups represents, therefore, a hard and time-consuming task. In Mobile Computer Supported Collaborative Learning (MCSCL) environments, this task is more difficult. Instructors need to consider many more issues, such as the rapid change of mobile learners' context, their direct and natural interaction, and the characteristics of mobile devices and networks. This paper presents a systematic literature review (SLR) that examines the relevant solutions for the problem of group formation in MCSCL environments. In the context of this SLR, an initial list of 178 papers was reviewed. After careful analysis of each paper using specific selection criteria and a quality assessment method, a final list of 12 relevant studies was filtered and used to answer the research questions. The findings revealed that: (a) there is a lack of approaches addressing the group formation problem in MCSCL environments; (b) the most proposed solutions do not allow instructors to customize the grouping process; (c) there is no useful solutions to automatically capture and evaluate many of learners' behaviours and context information; (d) the majority of approaches do not support a dynamic formation of learning groups; (e) the majority of approaches do not provide descriptions about the implemented grouping algorithms nor about the evaluation methods. Extracted and synthesized data from the selected studies is discussed in this paper, together with current research gaps and recommendations for further work.

Cen, L., Ruta, D., Powell, L., Hirsch, B., & Ng, J. (2016). Quantitative approach to collaborative learning: Performance prediction, individual assessment, and group composition. *International Journal of Computer-Supported Collaborative Learning, 11*(2), 187-225. doi: 10.1007/s11412-016-9234-6

The benefits of collaborative learning, although widely reported, lack the quantitative rigor and detailed insight into the dynamics of interactions within the group, while individual contributions and their impacts on group members and their collaborative work remain hidden behind joint group assessment. To bridge this gap we intend to address three important aspects of collaborative learning focused on quantitative evaluation and prediction of group performance. First, we use machine learning techniques to predict group performance based on the data of member interactions and thereby identify whether, and to what extent, the group's performance is driven by specific patterns of learning and interaction. Specifically, we explore the application of Extreme Learning Machine and Classification and Regression Trees to assess the predictability of group academic performance from live interaction data. Second, we propose a comparative model to unscramble individual student performances within the group. These performances are then used further in a generative mixture model of group grading as an explicit combination of isolated individual student grade expectations and compared against the actual group performances to define what we coined as collaboration synergy - directly measuring the improvements of collaborative learning. Finally the impact of group composition of gender and skills on learning performance and collaboration synergy is evaluated. The analysis indicates a high level of predictability of group performance based solely on the style and mechanics of collaboration and quantitatively supports the claim that heterogeneous groups with the diversity of skills and genders benefit more from collaborative learning than homogeneous groups.

Chikh, A., & Hank, S. (2016). Towards a cooperative learning approach using intelligence based learners grouping: *Computer Applications in Engineering Education, 24*(4), 639-650. doi: 10.1002/cae.21739

Grouping learners in cooperative learning can help interaction and discussion among learners. However two main problems must be settled so as to group learners. The first is how to build the learner model, which describes the attributes of learners. The second is which technique would be appropriate for learners grouping according to the selected learner model. This paper aims to propose a novel cooperative learning approach using a multiple-intelligence based learners grouping technique. This contribution is three fold: (1) a

conceptual model of learners' intelligence, (2) a pre-learning process that aims at: (a) acquiring knowledge of individual learners' intelligence according to the conceptual model of learners' intelligence; (b) grouping the learners into balanced groups based on this intelligence; and (c) calculating knowledge of collective intelligence, useful for cooperative learning during the learning process, and (3) a framework architecture, in order to support the new cooperative learning approach and demonstrate its feasibility.

Earp, J., Dagnino, F., Kiili, K., Kiili, C., Tuomi, P., & Whitton, N. (2013). Learner collaboration in digital game making: An emerging trend. In D. Parmigiani, V. Pennazio, & A. Traverso. (Eds.). *Learning & Teaching with Media & Technology* (pp. 439-447). Genoa, Italy: Association for Teacher Education in Europe.

Twenty-First Century skills like creativity, problem solving and collaboration are acknowledged as fundamental in the technology-driven knowledge society. Increasingly, education is being called on to support the development of such skills from the earliest years. This paper examines a promising methodology for this purpose, Learners' Digital Game Building (LDGB) and more specifically the design and construction of digital games by learners working together in collaboration. Advocates of Game-Based Learning (GBL) have long espoused its wide-scale adoption as a pillar of modern, learner-centred education. LDGB takes this a step further: when students design and make games rather than just play them, they invest themselves holistically in the learning process. The authors believe that setting LDGB within an explicitly collaborative framework will not only enhance educational affordances, but will also prove an effective way to nurture learners' capacity to collaborate fruitfully, which itself is a key Twenty-First Century Skill. The paper discusses the theoretical basis for LDGB and describes its actuation in a European research project called MAGICAL. The project aims to generate tools, resources and teacher know-how for implementing collaborative LDGB activities, and to verify the validity and applicability of the methodology in primary and lower secondary school.

Ferguson-Patrick, K. (2016). The importance of teacher role in cooperative learning: The effects of high-stakes testing on pedagogical approaches of early career teachers in primary schools. *Education 3-13*, 1-13. doi: 10.1080/03004279.2016.1189946

Cooperative learning (CL) has a strong research base, but it is underutilised. This can be explained by teachers' reluctance to experiment with pedagogies in an environment increasingly focused on high-stakes testing. Early career teachers (ECTs) need support to be innovative practitioners, particularly with such a complex one as CL. The teacher's role is crucial in order to scaffold the students' participation in the primary classroom in order to improve their learning and it is teachers' pedagogical practices that help to develop these collaborative work habits. This paper explores ECTs responses relating to their role in CL instruction.

Fernandez-Rio, J. (2016). Implementing Cooperative Learning: A proposal. *Journal of Physical Education, Recreation & Dance, 87*(5), 5-6. doi:10.1080/07303084.2016.1156992

This article describes the design and use of the "cooperative learning cycle," which is rooted in the ideas of cooperative learning and adventure education. The cycle has three phases that help educators and their students to understand, learn and apply cooperative learning skills.

Foldnes, N. (2016). The flipped classroom and cooperative learning: Evidence from a randomised experiment. *Active Learning in Higher Education 17*(1), 39-49. doi: 10.1177/1469787415616726

This article describes a study which compares the effectiveness of the flipped classroom relative to the traditional lecture-based classroom. We investigated two implementations of the flipped classroom. The first implementation did not actively encourage cooperative learning, with students progressing through the course at their own pace. With this implementation, student examination scores did not differ between the lecture classes and the flipped classroom. The second implementation was organised with cooperative learning activities. In a randomised control-group pretest-posttest experiment, student scores on a post-test and on the final

examination were significantly higher for the flipped classroom group than for the control group receiving traditional lectures. This demonstrates that the classroom flip, if properly implemented with cooperative learning, can lead to increased academic performance.

Fung, D. C-L., To, H., & Leung, K. (2016). The influence of collaborative group work on students' development of critical thinking: The teacher's role in facilitating group discussions. *Pedagogies: An International Journal, 11*(2), 146-166. doi: 10.1080/1554480X.2016.1159965

The objective of this study was to determine whether the incorporation of group work in a teaching intervention can effectively foster students' critical thinking skills. Building upon Kuhn's critical thinking model, the research involved comparison of pre-test and post-test results for 140 secondary four (10th grade) students in Hong Kong on two measures of critical thinking ability and investigation of their engagement in argumentative dialogues. The findings illustrate the efficacy of group work, relative to whole-class instruction, in helping students develop critical thinking. In addition, the findings highlight the efficacious role of the teacher in breaking the deadlocks that may arise during small-group debates.

Fung, D., & Lui, W-M. (2016). Individual to collaborative: Guided group work and the role of teachers in junior secondary science classrooms. *International Journal of Science Education, 38*(7), 1057-1076. doi:10.1080/09500693.2016.1177777

This paper, through discussion of a teaching intervention at two secondary schools in Hong Kong, demonstrates the learning advancement brought about by group work and dissects the facilitating role of teachers in collaborative discussions. One-hundred and fifty-two Secondary Two (Grade 8) students were divided into three pedagogical groups, namely 'whole-class teaching', 'self-directed group work' and 'teacher-supported group work' groups, and engaged in peer-review, team debate, group presentation and reflection tasks related to a junior secondary science topic (i.e. current electricity). Pre- and post-tests were performed to evaluate students' scientific conceptions, alongside collected written responses and audio-recorded discussions. The results indicate that students achieved greater cognitive growth when they engaged in cooperative learning activities, the interactive and multi-sided argumentative nature of which is considered to apply particularly well to science education and Vygotsky's zone of proximal development framework. Group work learning is also found to be most effective when teachers play a role in navigating students during the joint construction of conceptual knowledge.

Fuster-Parra, P., García-Mas, A., Cantallops, J., Ponseti, F. J., & Luo, Y. (2016). Ranking features on psychological dynamics of cooperative team work through Bayesian networks. *Symmetry, 8*(5), 34. doi:10.3390/sym8050034

The aim of this study is to rank some features that characterize the psychological dynamics of cooperative team work in order to determine priorities for interventions and formation: leading positive feedback, cooperative manager and collaborative manager features. From a dataset of 20 cooperative sport teams (403 soccer players), the characteristics of the prototypical sports teams are studied using an average Bayesian network (BN) and two special types of BNs, the Bayesian classifiers: naive Bayes (NB) and tree augmented naive Bayes (TAN). BNs are selected as they are able to produce probability estimates rather than predictions. BN results show that the antecessors (the "top" features ranked) are the team members' expectations and their attraction to the social aspects of the task. The main node is formed by the cooperative behaviors, the consequences ranked at the BN bottom (ratified by the TAN trees and the instantiations made), the roles assigned to the members and their survival inside the same team. These results should help managers to determine contents and priorities when they have to face team-building actions.

Galyon, C. E., Heaton, E. C., T., Best, T. L., & Williams, R. L. (2016). Comparison of group cohesion, class participation, and exam performance in live and online classes. *Social Psychology of Education: An International Journal, 19*(1), 61-76. doi:http://dx.doi.org/10.1007/s11218-015-9321-y

Though class participation and group cohesion have shown some potential to promote student performance in conventional classrooms, their efficacy has not yet been demonstrated in an online-class setting. Group cohesion, defined as member attraction to and self-identification with a group, is thought to promote positive interdependence and the success of the group's members. The current study sought to determine if group cohesion is significantly affected by the change of course setting from a live classroom to an asynchronous online-hybrid class in which students met in person only for course exams and otherwise interacted with each other through an online discussion board. Because peer interaction appears vital for the development of cohesion, we examined the relationship between participation in class discussion and students' self-reported group cohesion and exam performance. With one exception, course requirements and materials were identical between the two class sections: students in the online-hybrid course completed homework assignments, whereas students in the live section were simply encouraged to do the same. Despite the advantage conferred by mandatory homework assignments, the findings heavily favored the conventional live classroom with respect to exam performance and self-reported group cohesion. Participation in class discussion was high in both class sections. The results indicated that both student performance and group cohesion were significantly lower in the hybrid classes.

Green, R. A., Cates, T., White, L., & Farchione, D. (2016). Do collaborative practical tests encourage student-centered active learning of gross anatomy? *Anatomical Sciences Education, 9*(3), 231-237. doi:http://dx.doi.org/10.1002/ase.1564

Benefits of collaborative testing have been identified in many disciplines. This study sought to determine whether collaborative practical tests encouraged active learning of anatomy. A gross anatomy course included a collaborative component in four practical tests. Two hundred and seven students initially completed the test as individuals and then worked as a team to complete the same test again immediately afterwards. The relationship between mean individual, team, and difference (between team and individual) test scores to overall performance on the final examination (representing overall learning in the course) was examined using regression analysis. The overall mark in the course increased by 9% with a decreased failure rate. There was a strong relationship between individual score and final examination mark ($P < 0.001$) but no relationship for team score ($P = 0.095$). A longitudinal analysis showed that the test difference scores increased after Test 1 which may be indicative of social loafing and this was confirmed by a significant negative relationship between difference score on Test 4 (indicating a weaker student) and final examination mark ($P < 0.001$). It appeared that for this cohort, there was little peer-to-peer learning occurring during the collaborative testing and that weaker students gained the benefit from team marks without significant active learning taking place. This negative outcome may be due to insufficient encouragement of the active learning strategies that were expected to occur during the collaborative testing process. An improved understanding of the efficacy of collaborative assessment could be achieved through the inclusion of questionnaire based data to allow a better interpretation of learning outcomes.

Kiili, C., Laurinen, L., Marttunen, M., & Leu, D. (2012). Working on understanding during collaborative online reading. *Journal of Literacy Research, 44*(4), 448-483. doi: 10.1177/1086296X12457166

This study examines how students in Finland (16-18 years of age) constructed meaning and knowledge in a collaborative online reading situation. Student pairs (n=19) were asked to write a joint essay on a controversial issue. First, the pairs discussed the topic freely to activate their prior knowledge. Next, they gathered source material on the Internet. Finally, they composed a joint essay. The data were collected using an interaction approach to verbal protocol data, along with video screen captures. In the analysis, three units were employed: episodes (n=562) for describing online reading practices; utterances (n=944) for identifying collaborative reading strategies; and collaborative reading patterns (n=435) for clarifying how the student pairs constructed meaning and knowledge. Collaborative reading patterns were categorized according to a four-part model. A hierarchical

cluster analysis was conducted to identify students' collaborative reading profiles. Five collaborative reading profiles emerged: co-constructers (two pairs), collaborators (two pairs), blenders (six pairs), individually oriented readers (four pairs), and silent readers (five pairs). Overall, it appeared that some students were capable of working in pairs, whereas others had a stronger preference for working alone. Collaborative profiles might offer teachers both an evaluative and an instructional tool to support collaborative interaction in their classrooms.

Lirola, M. M. (2016). How to use cooperative learning for assessing students' emotional competences: A practical example at the tertiary level. *PROFILE Issues in Teachers' Professional Development, 18*(2), 153-165. doi: 10.15446/profile.v18n2.52593

Cooperative learning allows students acquisition of competences that are essential for the labour market such as leadership, critical thinking, communication, and so on. For this reason, different cooperative activities were designed in a language subject in English Studies so that students could work in groups and acquire those competences. This article describes some such activities and the emotional competences that students acquire with them. Moreover, a survey was conducted in order to establish students' opinions about the main competences they acquired with the activities designed and their opinion about a cooperative methodology. Students' answers were positive and they were aware of what they had learned.

Silva, H., Lopes, J., Dominguez, C., Carrera, R.P., Morais, E., Nascimento, M., & Morais, M. F. (2016). Fostering critical thinking through peer review between cooperative learning groups. *Revista Lusofona de Educacao, 32*, 31-35.

Educational policies keep stressing the importance of critical thinking skills for promotion of academic success in Higher Education, to facilitate transition into the labour market and to foster lifelong learning. Curricula in Higher Education Institutions gradually meet this necessity, integrating strategies foreseeing the development of critical thought in students. However, at this level, we still commonly found teaching and learning strategies emphasizing a more or less passive knowledge transfer, focusing on the student's ability to memorize Information. Peer review and feedback, allied to cooperative work, are important components of active learning and development of critical thinking skills process. It is therefore important to understand the role and influence of feedback provision in peer review activities between cooperative groups. This study analyses the perceptions and attitudes of 27 students in two Masters Courses on the feedback given in peer review activities (between groups), based on their responses to a survey. Results showed, among other aspects, that collaborative work and feedback exchange between groups fostered the contact with different perspectives towards the same situation, and that its critical analysis allowed the students to enhance different skills, the most referred one being the critical thinking.

Theodoropoulos, A., Antoniou, A., & Lepouras, G. (2016). Students teach students: Alternative teaching in Greek secondary education. *Education and Information Technologies, 21*(2), 373-399. doi:http://dx.doi.org/10.1007/s10639-014-9327-7

The students of a Greek junior high school collaborated to prepare the teaching material of a theoretical Computer Science (CS) course and then shared their understanding with other students. This study investigates two alternative teaching methods (collaborative learning and peer tutoring) and compares the learning results to the traditional learning context. A test was used to measure all participating students' learning results and a questionnaire was distributed to record participant student attitudes towards the alternative teaching conditions. The questionnaire was designed to evaluate each aspect in terms of perceived knowledge, experience, satisfaction, diversity, oddness and interest. The analysis explores potential differences of students' learning results between alternative and traditional teaching and also differences in the two aspects in relation to

students' preferences. Results provide evidence that active-learning methods can promote positive attitudinal shifts and improve skills in creativity, teamwork, collaboration and communication. Students perceived higher levels of learning than with traditional teaching. Finally in terms of students' preferences, the majority wanted to have more courses taught with active-learning methods

Woods-McConney, A., Wosnitza, M., & Sturrock, K. L. (2016). Inquiry and groups: Student interactions in cooperative inquiry-based science. *International Journal of Science Education, 38(*5), 842-860. doi:http://dx.doi.org/10.1080/09500693.2016.1169454

Science education research has recommended cooperative inquiry based science in the primary science context for more than two decades but after more than 20 years, student achievement in science has not substantially improved. This study, through direct observation and analysis, investigated content-related student interactions in an authentic inquiry based primary science class setting. Thirty-one upper primary students were videotaped working in cooperative inquiry based science activities. Cooperative talk and negotiation of the science content was analysed to identify any high-level group interactions. The data show that while all groups have incidences of high-level content-related group interactions, the frequency and duration of these interactions were limited. No specific pattern of preceding events was identified and no episodes of high-level content-related group interactions were immediately preceded by the teacher's interactions with the groups. This in situ study demonstrated that even without any kind of scaffolding, specific skills in knowing how to implement cooperative inquiry based science, high-level content-related group interactions did occur very briefly. Support for teachers to develop their knowledge and skills in facilitating cooperative inquiry based science learning is warranted to ensure that high-level content-related group interactions and the associated conceptual learning are not left to chance in science classrooms.

Yeung, H.C.H. (2015). Literature review of the cooperative learning strategy: Student Team Achievement Division (STAD). *International Journal of Education, 7*(1), 29-43. doi: 10.5296/ije.v7i1.6629

The literature review will include the development of cooperative learning (CL) and in-depth review on one of its derived teaching strategies, Student Team Achievement Division (STAD). It will highlight the emergence of STAD, major issues, debates, and recent investigations regarding its effectiveness, achievability, and practicability. The conclusion of this literature review provides a participative action inquiry into possible interventions. The literature review is highly relevant to the suggested research interest for some of the theoretical and conceptual frameworks and methodologies are searched and based on the existing STAD practice and knowledge in these two decades. The areas include the longitudinal and latitudinal review of relevant conceptual framework and methods, which further refine the newly proposed research questions and enhance their workability and practicability.

IASCE EXECUTIVE BOARD

The IASCE, established in 1979, is the only international, non-profit organization for educators who research and practice cooperative learning in order to promote student academic improvement and democratic social processes.

What does IASCE do?

☆ Supports the development and dissemination of research on cooperative learning, particularly educator research and inquiry that fosters understanding of the effects of context on implementing cooperative learning

☆ Helps organizations develop structures that enhance cooperation in education, working through the inclusion of people of diverse backgrounds in our schools and society

☆ Works with local, national, and international organizations to extend high quality practices of cooperative learning.

☆ Sponsors collaborative conferences and projects that extend the understanding of cooperative learning principles in different settings.

How does IASCE do this?

Through our MEMBERSHIP DUES!

MEMBERSHIP BENEFITS INCLUDE:

Our NEWSLETTER is published three times a year and provides information essential to anyone involved in cooperation in education through:

☆ Research and project reports from the international perspective.

☆ New ideas from leaders in the field.

☆ Reports on the latest research and journal publications.

☆ Book and media reviews.

☆ New resources for CL on the WWW.

☆ Articles by international experts on topics such as cooperative learning and technology, cooperative learning with different ages and populations, teacher education and staff development.

☆ Our international and regional conferences bring together cooperative educators from around the world to share ideas, compare successes, discuss challenges, and review the latest research.

Website

The IASCE website, which is supported by membership dues, offers many links to sites related to cooperative learning and announces opportunities for face-to-face learning with internationally recognized leaders in cooperative learning.

☆ IASCE also offers a membership directory (upon request) for the purposes of networking.

☆ A list of board members, who are veteran experts in the field, to contact for consultation and professional assistance.

☆ Occasional discounts on publications and conferences.

Please visit us on the web at:
www.iasce.net

IASCE

The International Association

for the

Study of Cooperation in Education

ON THE WEB AT **www.iasce.net**

Join the worldwide community of educators, administrators, researchers and staff developers working together to create more effective learning environments for our students and ourselves, through cooperation in education.

Annual Dues

INDICATE TYPE OF MEMBERSHIP
Circle only the box that applies.

Fees are in US Dollars

Types of Memberships	One Year	Two Years	Three Years
Individual Membership receiving newsletter electronically	$30	$50	$70
Institutional or Individual Memberships with newsletters by post	$55	$90	$125

Make checks payable to **IASCE**.
For non-US postage (airmail), please add $10 for each year's subscription.

Check one: ☐ Visa ☐ Mastercard

#: _____

Expiration: _____

Order Total: _____

Signature: _____

To become a member of IASCE, visit our website OR fill out the form below and mail or fax to:

IASCE - Cooperative Learning

Kathryn Markovchick
11 South Road
Readfield, Maine 04355 USA
Phone: 207-685-3171 Fax: 1 (866) 883-9271
office@syntiro.org

Membership form

Surname/Last Name: _____

First Name: _____

Institution: _____

Street: _____

City: _____

State or Province: _____

Zip/Postal code: _____

Country: _____

E-mail: _____

Phone: _____

Fax: _____

www.iasce.net

Check your mailing label for your membership expiration date.

If you receive your copy electronically, we will email your membership expiration date along with your newsletter.

11 South Road
Readfield, Maine 04355
(207) 685-3171
www.iasce.net