

## INTERNATIONAL ASSOCIATION FOR THE STUDY OF COOPERATION IN EDUCATION

Newsletter - Volume 28 - Number 3 - December 2009

**IASCE Newsletter Volume 28 Number 3** 

December 2009

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December 2009

Dear Colleagues,

IASCE is pleased to bring you the final member newsletter of 2009. With this newsletter, we introduce our incoming editor, Lalita Agashe from Pune, India, and we thank our outgoing editor, George Jacobs from Singapore. Both are members of the IASCE Board. I encourage newsletter readers to contact Lalita at <a href="mailto:lalitaagashe@gmail.com">lalitaagashe@gmail.com</a> to tell her what newsletter features you have found particularly useful plus to share any ideas you might have for improving the newsletter.

In this issue, George, Christine Kim-Eng Lee and Rachel Lotan have provided abstracts from many studies linked with cooperative learning. Cooperative learning is so robust that teachers and researchers continue to pursue interesting questions in varied settings around the world. As is often the case, the abstracts in this newsletter reflect this variety and robustness. In this issue, researchers study "subjects" who range from pre-school children to professionals finishing doctoral degrees and content that ranges from creative movement to engineering and research design. One theme that struck me in this particular collection of abstracts was the potential for subtle manipulation of resources. Brown et. al., for instance, suggest that providing students with incomplete resources and data sets may actually increase social capital, while Buchs and Butera suggest that supplying students with complementary, rather than identical, resources may positively effect perceptions of partner competence.

Also in this issue, we hear from and about several board members: Yael Sharan reports on a recent gathering in Torino that was hosted by Pasi Sahlberg in conjunction with the European Training Foundation; Laurie Stevahn interviews Robyn Gillies; Rich Cangro provides a historical overview of preparation for musical ensemble playing and discusses the value of cooperative learning for developing independent musicians. Rich reminds us that carefully structured interdependence and working together prepares people for high-quality critical and

The IASCE Newsletter is published 3 times a year: winter-spring (January-April); spring-summer (May-September) and fall-winter (October-December) by the IASCE Board of Directors. To learn how to become a member of IASCE please see page 18.

How to Subscribe to the CL List

Want to dialogue with others about your use of CL? Not receiving enough email (hahaha)? Then, you might wish to join the CL List, an internet discussion group about cooperative learning. Well-known CL experts as well as "just folks" belong.

Currently, the CL List isn't a busy group, but when discussions do take place, they are often enlightening. Furthermore, you can receive updates on CL related events.

To subscribe, send an email to <u>CL\_List-subscribe</u> <u>@yahoogroups.com</u>.
You should very quickly receive an email reply with simple instructions. If that fails, just send an email to <u>george@vegetarian-society.org</u> and he will do what's necessary.

Talk to you soon!

creative thinking and productive future work, whether it be with others or alone.

Finally, in this issue, we have two important announcements. We are delighted that we have plans and dates for our 2010 conference in Brisbane, Australia, and we are grateful to board member Robyn Gillies and to the University of Queensland, Australia for hosting this event. In conjunction with the Brisbane conference, we are seeking nominations for the IASCE Achievement Awards and the IASCE Elizabeth Cohen Award for Outstanding Thesis/Dissertation. Please consider both the Brisbane conference and the IASCE Awards as an opportunity to consider: a) what work you might share with the international community; b) whose work has been most powerful for you in the field; and c) who, among emerging scholars, might be recognized for their early work and potential.

As always, we hope you find the IASCE newsletter helpful and interesting. Our conferences, newsletters, and website are supported by your membership dues. Thank you for your support.

Lynda Baloche Co-president IASCE

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#### Belgium Conference – September, 2010

The Centre for Diversity and Learning at the University of Ghent, Belgium is planning an international conference on Learning for Diversity: Creating Powerful Cooperative Learning Environments. It is planned for September 16-17, 2010. More information will be available soon on their website: www.diversiteitenleren.be.

#### **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, Lalita Agashe, at lalitaagashe@gmail.com. Put "IASCE Newsletter" on the Subject line of the email, please. Thank you for your submissions.

#### Call for Nominations for the 2010 IASCE Awards

Are you a professional working within the field of cooperative learning or related field? Then you may know of a worthy recipient and wish to nominate them for one of these awards. There are two categories: the IASCE Achievement Awards and the IASCE Elizabeth Cohen Award for Outstanding Thesis/Dissertation.

#### 1. The IASCE Achievement Awards

The IASCE Achievement Awards are intended to recognize individuals or groups who have made outstanding contributions to the field of cooperative learning.

Consideration will be given to a variety of contributions within three categories: (a) research, (b) the production of original materials, and (c) service to organizations and structures that enhance cooperation in education and extend high-quality practices in cooperative learning. Individuals may be nominated for one or more categories.

#### 2. The IASCE Elizabeth Cohen Award for Outstanding Thesis/Dissertation

This award recognizes researchers in the early stages of their career, who demonstrate strong potential for contributions to the field of cooperative learning and education through the completion of a recent thesis or dissertation for the master's or doctorate degree.

Further details and nomination forms can be found on the IASCE website (iasce.net). The closing date is 30 April 2010 and award recipients will be notified by mid June 2010. Our next international conference, to be held in Brisbane, Australia in November 2010, is when we will publically announce the award recipients. Award recipients will be invited to the conference to receive the award in the form of a certificate and while at the conference they will be provided with an opportunity to present their work at an appropriate venue.

Names of award recipients and their projects will also be posted on the IASCE website and announced in the Newsletter.

The 2008 Elizabeth Cohen Award was presented to Julia Tsu-chia Hsu from Taiwan, for her thesis for the doctorate in education at the University of Durham UK, *A Cooperative Task-Based Learning Appropriate to Motivating Low-Achieving Readers of English in a Taiwanese University.* The purpose of the work was to improve the conditions under which university students are expected to learn and how to improve Julia's own practice in the teaching of a second language (English). Further details can be found on the IASCE website.

#### Next IASCE Conference November 25-27, 2010 In Brisbane, Australia

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IASCE, the International Association for the Study of Cooperation In Education, is happy to announce that we will be holding our next conference at The University of Queensland, Brisbane, Australia, from 25-27 November, 2010.

The theme for the conference is:
Cooperative Learning:
Pedagogy, Policy, and
Practice. A call for paper presentations and workshops will be made early next year.

Registrations will open in March, 2010.

The conference email is: lasceconference@q.edu.au and the website is <a href="http://www.uq.edu.au/">http://www.uq.edu.au/</a> education/

Please stay tuned to this Newsletter and the IASCE website – www.iasce.net – for updates.

### MEET THE IASCE BOARD Robyn Gillies

by Laurie Stevahn

In this second interview of IASCE Board members, Laurie Stevahn invites us to get to know Dr. Robyn Gillies, Professor of Education at the University of Queensland in Brisbane, Australia. In addition to serving on the Board, Robyn is coordinating the



upcoming IASCE conference on *Cooperative Learning: Pedagogy, Policy and Practice*, that will take place November 25-27, 2010, at the University of Queensland, School of Education, St. Lucia Campus in Brisbane (for details see <a href="http://www.iasce.net/">http://www.iasce.net/</a> or contact iasceconference@uq.edu.au).

Robyn is distinguished in the field of cooperative learning as both researcher and practitioner. She has published widely on that topic and frequently presents at professional conferences around the world, including two recent conferences co-sponsored by the International Association for Intercultural Education (IAIE) and the IASCE in Turin, Italy (2008), and Athens, Greece (2009). Honors include receiving the 2006 American Educational Research Association (AERA) Outstanding Contribution Award presented by the special-interest group on Cooperative Learning: Theory, Research, and Practice. Robyn recently shared reflections on her journey with cooperative learning. Here are her insights, concerns, and hopes for the future.

 What initially attracted you to the field of cooperative learning?

I was working as a school counselor and was following three developmentally delayed children from an early intervention unit who had been integrated into a Year 1 classroom. These three children were intellectually impaired with delayed speech and language and also had difficulties with mobility and personal management. When I visited their new classroom placement, I watched how their two teachers (responsible for 50 children total) prepared all of the children to work in three-person groups to complete an activity based on a story that had been read to the class. The three children that I was following were placed in different groups. Each group was to paint one picture to represent the story. To ensure that all the children participated, the teachers divided the group task into three parts and group members each contributed their part to complete the whole. I literally was blown away as I observed the activity that unfolded before my eyes. All of the children settled into their groups with ease. All chattered amongst themselves as they shared one piece of paper, one paint brush, and one set

of paints. The activity continued for about 30 minutes before each group was asked to present its painting to the class. The three children I was following stood up along with their teammates and readily pointed out and talked about different features of their jointly-constructed painting—no hesitations! I knew that I had seen something that I could not explain, and that triggered my investigations into CL and what makes it work.

2. What key issues, opportunities, or accomplishments in cooperative learning have occurred in your region of the world?

I am fortunate to have been awarded a number of Australian Research Council Grants which have allowed me to partner with teachers to investigate aspects of CL, how it may be used to facilitate learning across diverse school contexts and settings (elementary through high school), and how teachers can be assisted to implement it in their classrooms. Recently I've been investigating how CL can be used for inquiry-based learning in science and how teachers who implement it can be trained to promote discussion through the use of different approaches to questioning. School systems aim to promote higher-level thinking and learning, but few provide guidelines on how this may be achieved. I believe that my research in the use of CL and the additive benefits that students attain from being trained to ask questions and provide reasons and justifications for their answers is helping to provide insights on feasible instructional strategies for accomplishing that purpose.

3. What most concerns you about the future of cooperative learning around the world?

I worry that teachers and researchers may think that we know all we need to know about CL and wonder why we should continue to investigate its effects on student learning. I'm particularly interested in knowing why CL works and how we can use it to continue to promote student adjustment, socialization, and learning across various age levels and subject domains.

4. What questions, problems, or paths do you believe warrant attention in cooperative learning theory, research, and practice?

I am interested in issues relevant to how CL can be used in different social-cultural settings, how it may need to be adapted, and what the adaptations may look like. There also are issues relevant to theory and the contributions that theoretical positions from other disciplines may make to enhancing current understanding of CL. I look forward to examining issues such as these as I continue to conduct research on cooperative learning in the future..

#### Two Thought Provoking Days at the European Training Foundation in Torino Yael Sharan

There are well known conflicting pulls in education: on the one hand educators wish to encourage pupils to be innovative and to develop the ability to problem-solve in all areas of the curriculum. That wish is in conflict with the expectation that educators invest time and energy in boosting standards in the "three Rs," and the criteria that determine success or failure for schools and teachers are generally based on formal tests, not on indicators that reflect pupils' creativity.

#### Day 1.

These issues were part of a stimulating day-long discussion among 13 educators from various European countries at the European Training Foundation's (ETF) Roundtable on Teaching for Creativity and Innovation, held this past November in Torino, Italy. This was a culminating event of the European year of creativity and innovation in education, which explored ways of making Europe a more dynamic and knowledge-based region. IASCE Board member Pasi Sahlberg, at the time on the ETF staff, hosted the meeting, and announced it would be conducted as an open forum without a fixed agenda. Participants had been asked to prepare a short statement on what can be done in their respective fields to make our education systems more compatible with creativity, innovation, the use of imagination, and change. The roundtable discussion alternated between whole group and small group exchanges, the latter serving to refocus the discussion from time to time. We ended with a few minutes of individual reflection on personal conclusions from the day, though no formal conclusions were expected.

The ideas that emerged from the discussion were as varied as the participants' backgrounds; there were university professors, psychologists, economists, teacher trainers, educational analysts, and independent consultants. Although everyone had a different point of departure, there was a clear common thread that connected their comments. All were interested in exploring ways to make schools more effective, relevant and authentic, and to promote conditions that would create effective communication and collaboration among learners.

Interspersed with the analyses of what constitutes education for innovation and change were descriptions of actual experiences. One educator described a high school investigation project he conducted that resulted in a plan that actually influenced local government policy. (I was reminded of similar projects such as those conducted in the U.S.A. in the 1950s, in the U.K. in the 1970s, and more recently in Slavin's Roots and Wings program.) A professor of evolutionary biology described how he teaches by leading discussions in a Socratic manner. It was not hard for the few of us with a cooperative learning to feel at home; the discussion reinforced our belief in the contribution that CL makes to structuring effective communication and collaboration in any learning situation.

A striking feature of the discussion was the melding of emotional, ethical, and humanist elements with the more easily quantifiable elements of testing and academic and policy goals.

Words like "respect," "co-existence," "compassion," and "caring," were intertwined with discussion of the role of PISA, policy, critical thinking, political will, and so on. Participants were not just idealistic but also realistic and rounded out the day with a discussion of the main reasons the sought after changes aren't happening as quickly or as thoroughly as one would wish. Society's expectations, teachers' beliefs, the conflicting aims that pull schools in opposing directs, as mentioned above, were among the reasons cited.

#### TWO THOUGHT PROVOKING DAYS continued

Throughout the day, people talked and listened with deep concern for ways to establish sustainable innovations that would lead to an emphasis on knowledge and not on information alone we all went away uplifted by the many new and renewed ideas, inspired to continue working towards change.

#### Day 2.

The second day at ETF was more structured, yet also allowed for discussion. The participants were authors who contributed to a special volume of the European Journal of Education, for which Pasi Sahlberg served as guest editor, and focuses on the theme: "Education for change, sustainability and social gains" (June, 2010). Many of the contributors work at ETF, and conduct various educational projects in developing countries in Europe, with an emphasis on vocational training.

The day was broken up into four sessions. In each session two authors presented the gist of their articles, followed by an ETF discussant, who had read the papers beforehand. At the end of each session the floor was opened to comments and questions from the audience. A few articles dealt with issues such as the contribution of vocational training to the development of human capital, cultural constraints in training, and quality assurance in vocational training. Pasi Sahlberg and David Oldroyd talked about pedagogy for economic competitiveness and sustainable development. They maintain that education for both require similar open minds, creative skills, and teaching methods that prepare students for the transformations and innovations ahead. A provocative issue was raised by one contributor: can creativity be measured and could that help human capital development? My contribution was the need for policy makers to understand the gap between the promise and practice of cooperative learning.

A most intriguing presentation, by Stephen Murgatroyd of Canada, was about "wicked problems" and the work of the school. Wicked problems are difficult or impossible to solve because of incomplete, contradictory, and changing requirements that are often difficult to recognize. Often the effort to solve one aspect of a wicked problem may reveal or create other problems. A prime example is the problem of climate change, and Murgatroyd adds that schools, too, fall into this category. He advocates problem-based learning, among other ideas, for the needed transformation of schools so they can meet the needs of the 21<sup>st</sup> century.

The second day also did not aim at reaching any specific conclusions, yet these were two extremely stimulating days, which left us all inspired to do even more to bring about sustainable change in schools. Needless to say ETF hospitality and the view of the snow-capped Alps, which some of you may remember from the conference in January 2008, completed this unusual experience.

### **Contributors George Jacobs, Christine Kim-Eng Lee and Rachel Lotan**

Brown, S. [shanebrown@wsu.edu], Flick, L. & Fiez, T. (2009). An investigation of the presence and development of social capital in an Electrical Engineering laboratory. *Journal of Engineering Education, 98* (1), 93-102.

Social capital consists of resources embedded in social networks that are purposefully mobilized through personal interactions. This project examined the factors that affected the development of social capital in an electrical and computer engineering laboratory. Data were collected through participant observation over the course of a term, interviews with students, and a survey. Interview and observational data were analyzed to determine themes or patterns in behaviors and actions that indicated the presence of social capital and affected the development of social capital in this setting. The open-ended nature of the laboratory assignments and the complexity of a learning tool called TekBot(TM) required students to access information. The lack of relevant information from the teaching assistants, internet, and laboratory assignment handouts required students to mobilize information from each other to succeed. Multiple methods of data collection validate the result that specific factors encouraged the development of social capital in this laboratory.

Buchs, C.& Butera, F. (2009). Is a partner's competence threatening during dyadic cooperative work? It depends on resource interdependence. *European Journal of Psychology of Education*, 24(2), 145-154.

Previous studies with university students have shown that resource interdependence during cooperative dyadic work on texts produces two different dynamics in student interaction and learning. Working on complementary information produces positive interactions, but a good quality information transmission is needed to foster student learning. Working on identical information produces a confrontation of viewpoints but also encourages a threatening social comparison of competence, which can be detrimental for learning. The aim of present study is to test the moderating role of a partner's competence in two peer-learning methods by manipulating a partner's competence through a confederate. Results indicate that a partner's competence is beneficial when students work on complementary information while it is detrimental when students work on identical information.

Casey, A., Dyson, B., Campbell, A. (2009). Action research in physical education: Focusing beyond myself through cooperative learning. *Educational Action Research*; 17(3), 407-423.

This paper reports on the pedagogical changes that I experienced as a teacher engaged in an action research project in which I designed and implemented an indirect, developmentally appropriate and child -centred approach to my teaching. There have been repeated calls to expunge--or at least rationalise--the use of traditional, teacher-led practice in physical education. Yet despite the advocacy of many leading academics there is little evidence that such a change of approach is occurring. In my role as teacher-as-researcher I sought to implement a new pedagogical approach, in the form of cooperative learning, and bring about a positive change in the form of enhanced pupil learning. Data collection included a reflective journal, post-teaching reflective analysis, pupil questionnaires, student interviews, document analysis, and non-participant observations. The research team analysed the data using inductive analysis and constant comparison. Six themes emerged from the data: teaching and learning, reflections on cooperation, performance, time, teacher change, and social interaction. The paper argues that cooperative learning allowed me to place social and academic learning goals on an even footing, which in turn placed a focus on pupils' understanding and improvement of skills in athletics alongside their interpersonal development.

Cheng, K. W. K. (2009). The effect of web-based collaborative learning methods to the account courses in technical education. *College Student Journal*, *43*(3), 755-765.

This study mainly explored the effect of applying web-based collaborative learning instruction to the accounting curriculum on student's problem-solving attitudes in Technical Education. The research findings and proposed suggestions would serve as a reference for the development of accounting-related curricula and teaching strategies. To achieve the above objective, students of two classes in a technical College were selected as research subjects. Students in the first-year class of the 4-year hotel management program were assigned to the experimental group 1, which were treated with "web-based collaborative method", and students in the first-year class of the 4-year leisure recreation tourism program were assigned to the comparison group, with "the traditional lecturing method" adopted. The result showed that the difference between the two classes reached the significance level, and the problem-solving attitudes of the experimental 1 was significantly better than that of the comparison group.

Cihak, D. F., Kirk, E. R., & Boon, R. T. (2009). Effects of classwide positive peer "tootling" to reduce the disruptive classroom behaviors of elementary students with and without disabilities. *Journal of Behavioral Education*, 18(4), 267-278.

The purpose of this study was to examine the use of a classwide positive peer reporting intervention known as "tootling" in conjunction with a group contingency procedure to reduce the number of disruptive behaviors in a third-grade inclusive classroom. Nineteen elementary students including four students with disabilities (i.e., specific learning disabilities and/or attention deficit hyperactivity disorder) were taught how to report their classmates' positive behaviors using the "tootling" intervention. Results indicated that the use of the "tootling" intervention in combination with a group contingency procedure decreased students' disruptive classroom behaviors, establishing a functional relation. Limitations of the study, implications for using tootling as a classwide positive behavior support, and future research questions are discussed.

DaRos-Voseles, D. A., Onwuegbuzie, A. J., Collins, K. M. T., & Jiao, Q. G. (2008). The role of self-perception in predicting the performance of graduate-level cooperative groups in research methodology courses. *The Journal of Faculty Development, 22*(3), 209-213.

This article examines the role that self-perception plays in predicting academic performance of cooperative learning groups in graduate-level research methodology courses. A total of 29 groups (n = 102 students) are examined. A series of multiple regression analyses reveals that the groups attaining the lowest scores on the article critique assignment, the major requirement of the methodology course, tended to report the lowest levels of perceived job competence and perceived self-worth, the highest levels of perceived creativity, the greatest variation with respect to perceived scholastic competence and perceived humor, and the least variation with respect to perceived social acceptability. These six variables have explained 75.8% (adjusted R^sup  $2^{\circ}$  = 69.2%) of the variation in article critique scores, which indicate an extremely large effect size. Thus, self-perception appears to be a very powerful predictor of performance of cooperative learning groups involving graduate students.

Davies, W. M. (2009). Groupwork as a form of assessment: Common problems and recommended solutions. *Higher Education*, *58*(4), 563-584.

This paper reviews some of the literature on the use of groupwork as a form of assessment in tertiary institutions. It outlines the considerable advantages of groupwork but also its systemic associated problems. In discussing the problems, the paper considers issues such as "free riding" and the "sucker effect", issues associated with ethnic mix in groups, and the social dilemma problem--in which students face conflicting demands between altruism and self-interest. The paper then outlines several models of

#### FROM THE JOURNALS continued

effective groupwork and makes suggestions for implementing groupwork tasks. The paper also looks at the key assessment tasks which are commonly employed--namely, additive, conjunctive, disjunctive and discretionary tasks--and assesses which are most suited to groupwork. The paper considers the related issues of task complexity, recognition for effort, and strategies for minimising issues concerning group size. The paper also briefly considers strategies for implementing incentives for groupwork members, and outlines the issue of penalties for unproductive group members. The paper concludes by providing recommendations for how to maximise the advantages of groupwork while trying to minimise the disadvantages.

Esmonde, I. (2009). Ideas and identities: Supporting equity in cooperative mathematics learning. *Review of Educational Research*, 79(2), 1008-1043.

DOI: 10.3102/0034654309332562

This review considers research related to mathematics education and cooperative learning, and it discusses how teachers might assist students in cooperative groups to provide equitable opportunities to learn. In this context, equity is defined as the fair distribution of opportunities to learn, and the argument is that identity-related processes are just as central to mathematical development as content learning. The link is thus considered between classroom social ecologies, the interactions and positional identities that these social ecologies make available, and student learning. The article closes by considering unresolved questions in the field and proposing directions for future research.

Goudas, M. & Magotsiou, E. (2009). The effects of a cooperative Physical Education program on students' social skills. *Journal of Applied Sport Psychology*, *21*(3), 356-364

The present study examined the effect of a cooperative physical education program on students' social skills and attitudes toward group work. Four sixth grade classes were assigned either in an experimental (n = 57) or in a control group (n = 57). The experimental classes received a cooperative learning program. Students completed self- and peer forms of the Multisource Assessment of Children's Social Competence (Junttila, Voeten, Kaukiainen, & Vauras, 2006) and the Feelings Toward Group Work scales (Cantwell & Andrews, 2002) before and after the program. Results showed gains of the experimental classes on social skills and on preferences for group work.

Hornby, G. (2009). The effectiveness of cooperative learning with trainee teachers. *Journal of Education for Teaching*, 35(2), 161-168.

A plethora of research studies has found cooperative learning to be effective in promoting academic achievement with students of all ages. It has been suggested that key elements of cooperative learning are individual accountability and positive interdependence. Forty-four final-year teacher trainees participated in a study which compared the effectiveness of a two-hour workshop on cooperative learning with and without these two key elements. A multi-choice test focusing on what students had learned and a post-workshop questionnaire focusing on the students' experiences of and attitudes towards cooperative learning were used to evaluate the impact of the workshop. Results indicate that academic learning was greater in the experimental group, in which individual accountability and positive interdependence were structured into the activity. They also indicate that the inclusion of these two elements did not significantly affect students' experiences of the workshop or their attitudes towards cooperative learning. These findings support the suggestion that to achieve optimum effectiveness, individual accountability and positive interdependence should be built into cooperative learning activities.

Johnson, T. E., & O'Connor, D. L. (2008). Measuring team shared understanding using the Analysis-Constructed Shared Mental Model Methodology. *Performance Improvement Quarterly, 21*(3), 113-134.

Teams are an essential part of successful performance in learning and work environments. Analysis-constructed shared mental model (ACSMM) methodology is a set of techniques where individual mental models are elicited and sharedness is determined not by the individuals who provided their mental models but by an analytical procedure.

This method quickly and easily captures mental models with minimal intervention in a team's activities. ACSMM methodology can be provided as feedback to facilitate team performance. This methodology was designed as a qualitative analysis technique for using individually constructed mental model (ICMM) data in the form of concept maps from each team member, analyzing the ICMM components, and constructing a representation of the team's shared mental model using these data. ACSMMs are used to compare team-shared understanding development over time.

Kapp, E. (2009). Improving student teamwork in a collaborative project-based course. *College Teaching*, 57(3), 139-143.

While collaborative student projects can be effective in improving student learning, the failure of students to work together effectively remains a widely reported problem in collaborative learning. This article describes a team-building intervention designed to improve the students' abilities to work together in teams successfully. The intervention consisted of an initial team-building workshop with subsequent evaluation and feedback. The results include positive student perceptions of team performance and the overall value of collaborative learning.

Kim, B. S., & Darling, L. F. (2009). Monet, Malaguzzi, and the constructive conversations of preschoolers in a Reggio-inspired classroom. *Early Childhood Education Journal*, *37*(2), 137-145.

This study was conducted in a Reggio inspired child care classroom of 4-year olds where the fundamental principles of Reggio Emilia preschools are interpreted for a Canadian context. Qualitative case study methodology was employed to investigate how social interaction plays a role in young children's learning processes. Drawing on social constructivist views of children's learning and socialization, children's discussions and interactions within a preschool learning group were examined. Examination of children's discourse is valuable not only for understanding individual and group learning experiences but also for illuminating children's agency and their active roles in their own learning. The study focused on the indepth study of six children's activities during a 'Shades of Pink' project. As the project, 'Shades of Pink' unfolded, the children faced cognitive conflict while they were talking about the details of Monet's painting, but worked toward building common understandings. In this study, children are considered to be meaning makers and active participants in their own learning processes. In addition, the relationships between children became a context in which the co-construction of theories, interpretations and various understandings of reality took place. Small group work became a basis for creating unity, a space in which thoughts took shape as well as a way to compare interpretations; with the result that new thoughts and meanings were produced.

Koutselini, M. (2008/2009). Teacher misconceptions and understanding of cooperative learning: An intervention study. *Journal of Classroom Interaction*, *43*(2), 34-44.

The study presents the results of an education interventional during in-service training of secondary school teachers in Cyprus, which led to participants' development. The aim was twofold: first to reveal teachers' conception about cooperative learning and second to help teachers through simulation of cooperative learning to construct the characteristics that differentiate it from traditional group work. The results of the study indicated that: teachers have negative attitudes towards cooperative learning because they do not know how to ensure collaboration, coherence and interaction among members of the group; their attitudes changed gradually during the action research study; and simulation co cooperative learning revealed certain internal and external characteristics for it to lead to learning outcomes of students.

#### FROM THE JOURNALS continued

Krause, U-M., Stark, R., & Mandl, H. (2009). The effects of cooperative learning and feedback on elearning in statistics. *Learning & Instruction*, 19(2), 158-170.

This study examined whether cooperative learning and feedback facilitate situated, example-based elearning in the field of statistics. The factors "social context" (individual vs. cooperative) and "feedback intervention" (available vs. not available) were varied; participants were 137 university students. Results showed that the feedback intervention clearly supported learning. Feedback proved especially beneficial for students with little prior knowledge. Cooperation did not promote learning outcomes; however, group performance in the learning phase was superior to individual performance. Also, cooperative learning enhanced perceived performance and perceived competence. Probably, collective efficacy had a halo effect on self-efficacy.

Lynch, A. M., Theodore, L. A., Bray, M. A., & Kehle, T. J. [thomas.kehle@uconn.edu] (2009). A comparison of group-oriented contingencies and randomized reinforcers to improve homework completion and accuracy for students with disabilities. *School Psychology Review, 38*(3), 307-324.

The present study employed an alternating-treatments design to compare the differential effect of group contingencies on the improvement of homework completion and accuracy of students with disabilities in a self-contained fifth-grade classroom. Generally, past investigations have indicated a positive association between homework performance and academic achievement. Relative to their nondisabled peers, students with learning disabilities are more at risk for homework problems. Thus homework assignments are particularly important for students with disabilities to reinforce learning and improve academic achievement. The results suggested that all group contingencies were effective in enhancing overall completion and accuracy, with no substantial differences evidenced by one contingency in particular.

Moreno, R. (2009). <u>Constructing knowledge with an agent-based instructional program: A comparison of cooperative and individual meaning making.</u> *Learning & Instruction*, *19*(5), 433-444.

Participants in the present study were 87 college students who learned about botany using an agent-based instructional program with three different learning approaches: individual, jigsaw, or cooperative learning. Results showed no differences among learning approaches on retention. Students in jigsaw groups reported higher cognitive load during learning than students who learned individually; scored lower on a problem-solving transfer test than students in individual and cooperative learning groups; and were less likely to produce elaborated explanations and co-construct knowledge with their peers than students in cooperative groups. Students in cooperative groups reported higher situational interest than their counterparts. Implications for cooperative and individual meaning making in agent-based instructional programs are discussed and future research directions are suggested.

Molenda, C. F., & Bhavnagri, N. P. (2009). Cooperation through movement education and children's literature. *Early Childhood Education Journal*, *37*(2), 153-159.

This article demonstrates evidence-based practice that integrates movement education with children's literature, in order to promote cooperation among Bengali kindergarteners, from an urban public school in Midwestern USA. First, the authors argue the need for this integration based on limitations of previous scholarship. Second, authors present their developmentally and culturally appropriate conceptual framework based on Bhavnagri and Samuel's research, along with the theory of cooperation and schema development. Third, children's understanding of cooperation concepts (helping, turn taking, sharing, dividing labor, negotiating, coordinating, exchanging information, and perspective taking) embedded in literature are analyzed. Concomitantly, children demonstrated same cooperation sub-skills during four movement activities related to the stories. Fourth, authors reflect that cooperation was successful because activities met Johnson and Johnson's guidelines of high social interactions, high emotional involvement, and effective communication. Finally, the authors recommend that integration of cooperation and movement education is beneficial for educational programs in diverse settings.

Nembhard, D. [dnembhard@psu.edu], Yip, K., & Shtub, A. (2009). Comparing competitive and cooperative strategies for learning project management. *Journal of Engineering Education*, *98*(2), 181-192.

Many organizations use project management to organize and administer resources in time and in place in an effort to optimize costs and meet certain constraints. These constitute cognitive skills acquired through training and experience that have successfully been shown to be trainable through simulation. However, past research on simulation-based project management training focused on individual learning. In this paper, we are interested in investigating whether a competitive or cooperative strategy is more desirable in using simulators for project management training. Several theories suggest that cooperative learning is more beneficial to learning than competitive learning. To investigate this problem, an experiment was set up based on the simulation-based Project Management Trainer (PMT) software. The results suggest that using both PMT cooperative and competitive strategies yield learning in project management. However, cooperative strategies yield better results in the overall outcome.

Onwuegbuzie A. J. (tonyonwuegbuzie@aol.com), Collins K.M.T. (kxc01@uark.edu) and Jiao Q. G. (gerry.jiao@baruch.cuny.edu). (2009). Performance of cooperative learning groups in a postgraduate education research methodology course. *Active Learning in Higher Education*, 10(3), 265-277. DOI: 10.1177/1469787409343190

This study investigated the degree that social interdependence predicted the achievement of 26 cooperative learning groups. Social interdependence was assessed in terms of postgraduate students' individual orientation (that is, cooperative, competitive, and individualistic). Participants were 84 postgraduate students enrolled in an introductory-level education research methodology course.

An all possible subsets multiple regression was used to identify a combination of social interdependence variables that predict achievement. Results indicate that postgraduate students' levels of individualism predict achievement in a research methodology course. Specifically, groups consisting of students with the greatest individualistic orientation tend to produce the article critiques receiving a high evaluation, regardless of how heterogeneous the group is with respect to levels of individualism. This finding adds validity to the theories of active and cooperative learning and to the incremental support towards using cooperative learning groups to promote postgraduate students' active learning in research methodology courses.

Palmer, B., & Howell Major, C. (2008). Using reciprocal peer review to help graduate students develop scholarly writing skills. *The Journal of Faculty Development, 22*(3), 163-169.

We developed an innovative instructional method to actively engage students in writing and critiquing scholarly work. We tested the effectiveness of this pedagogy using a mixed methods research design. Compared to control group peers, students in the experimental classes perceived gains in their own writing, research ability, and motivation to publish.

This article describes research we conducted to determine if a particular pedagogy, reciprocal peer review, changed students' perceptions of the scholarly writing process and their perceptions of themselves as researchers and writers. We were interested in student self perceptions of their own writing not only because of research findings that suggest that student self-efficacy for writing improves changes of success (Faghihi, Rakow & Ethington, 1999; Torrance & Thomas, 2002) but also because our own experiences as teachers and dissertation chairs suggest that many graduate students lack confidence in their writing abilities, motivation for carrying out writing tasks, and skills that come with practice that are necessary for successful completion of a prolonged writing project.

Severiens, S. E., & Schmidt, H. G. (2009). Academic and social integration and study progress in problem based learning. *Higher Education*, *58*(1), 59-69.

The present study explores the effects of problem-based learning (PBL) on social and academic integration and study progress. Three hundred and five first-year students from three different psychology curricula completed a questionnaire on social and academic integration. Effects of a full-fledged PBL environment were compared to (1) effects of a conventional lecture-based learning environment, and (2) effects of a learning environment that combined lectures and other methods aimed at activating students. Lisrel analyses show direct positive effects of the learning environment on study progress: students in PBL obtained more credits compared to students in more conventional curricula. Moreover, the levels of social and academic integration were also higher among students in the PBL curriculum. The links between integration and study progress were less straightforward. Formal social integration positively affected study progress, but informal academic integration was negatively related to study progress.

Shamir, A., Mevarech, Z. R., & Gida, C. (2009). The assessment of meta-cognition in different contexts: Individualized vs. peer assisted learning. *Metacognition and Learning, 4*(1), 47-61.

This study investigated the effectiveness of assessing young children's meta-cognition in different contexts (i.e., individual learning (IL), peer assisted learning (PAL) and self-reports). Additionally, the contributions of declarative and procedural meta-cognition in IL and PAL, TOM and language ability on children's cognitive performance (recalling a series of pictures) were examined. Sixty-four 4-5-year-old children (M=5.14; SD=0.72), randomly selected from two Israeli kindergartens, participated in the study. Children were first asked in an individualized setting to recall a series of nine pictures; they were then asked (self-report) to tell the interviewer how they tried to recall the pictures. Finally, they were asked to assist a peer in recalling the pictures in a PAL situation. All the children's verbal and non-verbal behaviors were coded and analyzed. In addition, the children's language ability and Theory of Mind (TOM) were assessed. The findings indicated significant differences between children's declarative (self-report) and procedural meta-cognitive behavior in IL and PAL. Procedural meta-cognition in PAL and TOM predicted cognitive performance even when procedural meta-cognition in IL, declarative meta-cognition and language ability were controlled for. The findings are discussed in light of recent research on meta-cognition in young children.

van Aalst, J. (2009). Distinguishing knowledge-sharing, knowledge-construction, and knowledge-creation discourses. *International Journal of Computer-Supported Collaborative Learning*, *4*(3), 259-287.

The study reported here sought to obtain the clear articulation of asynchronous computer-mediated discourse needed for Carl Bereiter and Marlene Scardamalia's knowledge-creation model. Distinctions were set up between three modes of discourse: knowledge sharing, knowledge construction, and knowledge creation. These were applied to the asynchronous online discourses of four groups of secondary school students (40 students in total) who studied aspects of an outbreak of Severe Acute Respiratory Syndrome (SARS) and related topics. The participants completed a pretest of relevant knowledge and a collaborative summary note in Knowledge Forum, in which they self-assessed their collective knowledge advances. A coding scheme was then developed and applied to the group discourses to obtain a possible explanation of the between-group differences in the performance of the summary notes and examine the discourses as examples of the three modes. The findings indicate that the group with the best summary note was involved in a threshold knowledge-creation discourse. Of the other groups, one engaged in a knowledge-sharing discourse and the discourses of other two groups were hybrids of all three modes. Several strategies for cultivating knowledge-creation discourse are proposed.

#### FROM THE JOURNALS continued

Weidman, R., & Bishop, M. J. (2009). Using the Jigsaw model to facilitate cooperative learning in an online course. *Quarterly Review of Distance Education*, 10(1), 51-66.

This study examined whether the jigsaw model might be used in an online higher education course to produce the key characteristics of successful cooperative learning: interdependence, individual accountability, development of social skills, and promotive interaction. The authors employed a qualitative case study design to examine a 6-week online literature course that incorporated three jigsaw activities. Analysis of online questionnaires, transcripts from in-depth interviews, and course documents revealed that the jigsaw activities yielded mixed results with regard to the key characteristics of successful cooperative learning. The authors discuss the implications of these findings for the design of online cooperative learning activities.

Wilfong, L.G. (2009). Textmasters: Bringing literature circles to textbook reading across the curriculum. *Journal of Adolescent & Adult Literacy*, *53*(2), 164–171.

A fifth-grade science teacher and university researcher challenged the notion that textbook reading follows the same archaic formula: read the textbook and answer the questions at the end of the section. Together, they adapted literature circle roles to fit textbook structures, resulting in the strategy they call Textmasters. This article describes the strategy, along with the action research project that proves its efficacy in the content area middle school classroom.

Willoughby, T., Wood, E., Desjarlais, M., Williams, L., Leacy, K., & Sedore, L. (2009). Social interaction during computer-based activities: Comparisons by number of sessions, gender, school -level, gender composition of the group, and computer-child ratio. *Sex Roles*, *61*(11-12), 864-878.

This study assessed the quality of social interactions that occur in group-based computer learning contexts. Gender comparisons of interactions were examined across 3 sessions with 116 preschoolers (M age=4.9 years) and 108 fifth and sixth-grade (M age=11.7 years) Canadian children from southwestern Ontario, when children had access to one computer per child (parallel computer) or one computer per group (integrated computer), and when they worked with same-gender or mixed-gender peers. Preschoolers engaged in more collaborative behaviors in mixed-gender than same-gender groups, while elementary children engaged in collaborative behaviors more often in integrated than parallel computer conditions. In mixed-gender groups, boys were more likely than girls to dominate the computer in elementary school while girls were more likely than boys to dominate the computer in preschool.

"... let us unite, not in spite of our differences, but through them. For differences can never be wiped away, and life would be so much the poorer without them. Let all human races keep their own personalities, and yet come together, not in a uniformity that is dead, but in a unity that is living."

Rabindra Nath Tagore, Nobel Laureate

#### STRIVING TOWARD INDEPENDENCE IN MUSIC EDUCATION

#### **Richard Cangro**

When I started graduate school, I was already a school band and orchestra director. My job was to stand in front of a group of instrumentalists and tell them how to play, pouring musical knowledge into my empty vessels. Where they should play loud, where they should play soft, where we should slow down, who had the melody, who needed to hold their instrument higher: I was the commander of this musical army. I made all the musical decisions as an effective music director should in an efficient rehearsal.

Imagine going to an orchestra concert and not having a conductor. When would the group start to play? When would they end a held note? Who would be there to help meaningfully express the music that reaches the audience in a most aesthetic way? In the performance setting, a conductor is an important person to be sure in ensemble leadership. School ensembles need a conductor as well, coordinating efforts of budding musicians. However, when students leave the rehearsal or graduate from a school, who will tell them to play soft or loud, or when to play faster and slower, or who has the melody? These skills and concepts are not magically absorbed by ensemble members in a music rehearsal lead by one person. Such direct instruction is limiting in that ownership for new concepts becomes centered on the teacher's pace of instruction rather than the individual learner's pace of comprehension. Conceptual understanding occurs when students are provided opportunities to construct their understanding and apply what they know independently. The conductor must become a teacher to enable students to make musical decisions on their own, developing independent musicianship for when they no longer have a conductor.

The identity struggle between conductor and teacher has been present since the beginning of public school music education. By the early 19th century it became the norm to have a dedicated conductor in Western art music, leading and rehearsing a group of performers and having the ultimate decision as the artistic director. The history of instrumental music in the public schools is based on conductor models as well: military bands with their drum major and symphony orchestras with their conductor. School band and orchestra directors typically take on this leadership persona as they conduct students in concerts and performances. Many music education majors also have the desire for this position of leadership and musical command. However, there is a big difference between professional conductors and school ensemble conductors. Professional conductors are paid to efficiently rehearse accomplished musicians to put forth a musical product that fills concert halls with large audiences. School ensemble conductors have a larger responsibility: they are educators first and foremost. Their responsibility is to provide a profound music education to students that enable them to become independent music makers and active music learners beyond their school years. Providing a foundation of musical understanding through experiences that encourage students to intelligently make music on their own is the number one skill that should be developed in music education. Students who graduate from school are not able to take a conductor with them, telling them when to play loud, when to play soft, when to slow down and when to be expressive just like they are not able to take a math teacher to help balance a checkbook, or an English teacher to help write a letter. These are all skills and concepts that need to be developed during schooling so a student can independently apply them outside of school.

A profound music education includes opportunities to perform as part of a group led by a conductor as well as experiences learning music through interactive opportunities that enable students to construct knowledge through collaboration. Students critically listening to and analyzing music through collaboration enables multiple points of view. Students coaching and performing for each other enables a student to receive immediate feedback. Students also learn to diagnose musical difficulties and assess each other's performance according to specific criteria, established by the teacher or generated by the students. Providing opportunities for students to learn from each other develops vital musical skills and conceptual understanding through verbal interaction and observation. Research shows that when students have the opportunity to dialogue and paraphrase, learning is deepened. In music, it is reasonable to suggest that when students dialogue, interact, and perform for each other, musical understanding can be deepened. As a result, students will take away skills that will be meaningful and life-long.

In elementary general music classrooms, Wiggins (2000) gathered data from a series of past qualitative studies involving cooperative learning. Through videotapes, observation, teacher lesson plans, interviews, and audiotaped student interactions, the researcher examined how individuals converse and arrive at musical ideas in composition and improvisation activities. Wiggins concluded that individual student initiation of musical ideas is strengthened when they are required to explain, justify, defend, and/or alter them to accommodate someone else's viewpoint. By engaging learners to cooperatively make decisions in the processes of creating, performing, and responding to music, educators may be able to more effectively address individual musical needs in an instrumental music setting. Developing both group musicianship and individual musicianship during instrumental instruction requires learning strategies that address skill development in a way that leads to musical independence by simultaneously engaging as many individuals as possible.

#### STRIVING TOWARD INDEPENDENCE IN MUSIC EDUCATION continued

According to the U.S. National Association for Music Education, all music students need be able to learn and perform music "alone and with others" as recommended by the *National Standards in Music* (MENC, 1994). Opportunities for instrumentalists to interact with each other in a cooperative setting can serve multiple purposes: extra practice for each individual as compared to practicing alone; assessment and prescriptive feedback from peers; high percentage of engagement; small ensembles meeting more individual musical needs; encouragement of divergent thinking and multiple solutions to a question or task; and, building understanding leading to mastery through elaboration and discourse. By including

experiences for student interaction in the instrumental ensemble, a teacher facilitates learning through active engagement in the musical process with opportunities for application of musical skills and concepts with immediate feedback. As a result, the conductor/teacher's role becomes one not of the fountain of knowledge, but a facilitator for learning; not the "sage on the stage, but the guide on the side." Teachers who engage their ensembles through cooperative learning can create active music learners and independent music-makers, developing a foundation of social and musical skills for their students that will last a lifetime.

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#### Lesson plan ideas

#### Composition

- Objective: Students will compose a melody following a given harmonic progression.
- Activity: After distributing staff paper, students make 4 measures on 4 lines, with 16 measures total. Students fill in chord symbols from a given harmonic progression.
- Cooperation: Students begin to compose a melody, writing one measure of music. Students then trade
  papers and compose the next measure of music on their partner's paper. Papers are passed back and
  forth until a melody is complete. Partners coach and critique each other throughout.
- Performance: Students then practice and perform the newly composed melody for the class.

#### Critical Listening

- Objective: Students will listening and describe a piece of music using musical terminology
- Activity: Students listen to "Pine of Rome" by Ottorino Respighi.
- Cooperation: On a piece of paper, students list what instruments are performing and describe the function of each instrument, trading papers after they each write one instrument with its function in the piece.
- Discussion: Students in pairs discuss their answers together, then share with the class.

#### Performance

- Objective: Students will perform a melody with a steady beat, matching style and sound with each other.
- Activity: In groups, students will first practice, then perform a given melody, one measure at a time, passing the melody to each other while keeping a steady beat (Pass it down).
- Cooperation: Students must match tempo, dynamic level, sound, style and articulation of the person who plays the measure before them, without any hesitation in between measures.

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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.

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



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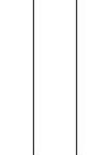
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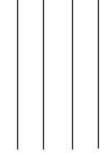
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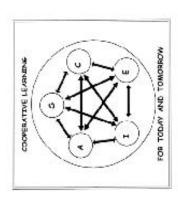
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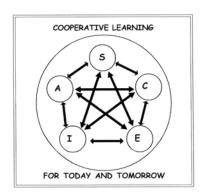


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