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Dear Colleagues,

IASCE is pleased to bring you the second member newsletter of 2011. With this issue, we introduce our updated logo.

Moving into the second decade of the now not-so-new millennia, the IASCE board thought it was time to update our “look.” It was more challenging than I thought it would be and I want to thank co-president Maureen Breeze for keeping us focused and for being a skilled synthesizer. In examining the iconography of cooperation utilized by other organizations, plus some of the ideas we considered for IASCE, I realized that different symbols focused on different stages of group development and on different outcomes related to cooperation. For instance, rainbows and rainbow colors are often utilized to suggest inclusion and the value of cooperation in bringing diverse individuals and groups together. Human figures—in a pyramid shape or lined up and pulling in the same direction—symbolize mutual support, shared effort for common purposes, and the potential power and influence of a group. Circles of embracing figures are common, suggesting the contributions of cooperation to developing appreciation and caring.

In many ways, these varied symbols mirror the diversity of cooperative learning research. It has been 30 years since Johnson et al. published their landmark meta-analysis analyzing the effects of cooperation on measures of achievement. Since then, hundreds of studies have examined the effects of cooperation on a variety of outcomes—including intergroup relations, problem solving, perseverance, skills acquisition, and employee relations. With robust outcomes-focused research to stand on, one trend in more recent work has been to focus on interaction. For instance, abstracts in this issue include a) Lei et al., whose work examined the effects of different grouping strategies on the quality of work and discussion; b) Thanh-Pham and Gillies’ work, which investigated how to match grouping strategies with the learning culture of Vietnamese students; c) Summers and Volet’s work, which evaluated the quantity of high-level discussion and its relationship to perceptions of collaboration; and d) Hmelo-Silver et. al. and Gillies and Haynes, all of whom studied the role of a facilitator in developing high-level group discourse.

How to Subscribe to the CL List

Want to dialogue with others about your use of CL? Not receiving enough email (ha ha ha)? 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 CL_Listsubscribe@yahoo.com. You should very quickly receive an email reply with simple instructions. If that fails, just send an email to george@vegetarian-society.org, and he’ll do the necessary.

Talk to you soon!

In this issue, our board members also add to the discourse about interaction. Maureen Breeze, along with our colleague Pam Flood and board member Yael Sharan, describe the interactional “glue” from our recent conference in Brisbane. Don Plumb describes the steps GLACIE takes to ensure a highly interactional and relevant conference. Kumiko Fushino describes the challenge of leading students to spontaneous interaction. (Special thanks to Rich Cangro, one of our newer board members, for working with Kumiko on this interesting and informative interview.)

I’m sure you’ve noticed that the IASCE logo (yes, I’m back to that), rather than focusing on outcomes, symbolizes the complex interactional possibilities of a face-to-face group. Obviously this was important to our founders in 1979, and it is clearly critical to the work being done today. Therefore, we have chosen to update rather than replace our logo. We think it mirrors our mission to support “the study of cooperation” and it mirrors much of the exciting work being done today. Please let us know what you think.

As always, we hope you will share your copy of this newsletter as one way to develop and sustain supportive interactions in your own work. Thank you for your support.

Cooperatively yours,



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.

Kumiko Fushino

Interviewed by Richard Cangro



How did you become interested in cooperative learning?

It was more than ten years ago (shortly after I got my Master's degree) when I first read about cooperative learning. I was (still am) a member of the Japan Association for the Language Teaching, and the association published a book called *Cooperative Learning* (Kluge, D., McGuire, S., Johnson, D., & Johnson, R. Eds., 1999). I don't remember why I started reading it. However, while I was reading the book, I found cooperative learning so interesting and attractive, and I wanted to use it in my college English classes. In foreign language classrooms in Japan, instruction is often very controlled, and students seldom take initiative in their own

language learning. I thought the role of the language teacher was to help students become independent, autonomous learners so that they can continue studying English even after formal English education finishes. I thought cooperative learning could be used to gradually lead students to be independent from the teacher by working together with peers. I expected that a lot of steps that CL provides would create more opportunities for students to interact with each other.

Can you describe your favorite memory of students cooperating in your classroom?

Several years ago, I started doing project work in my freshman English classes. It was a semester-long project. The students just entered the university and they did not know each other very well. CL provided them a place to belong to. While they were working in groups, their work was filled with laughter and enjoyment while they learned. They almost never missed classes or forgot to do homework. Nobody free-rode or hesitated to provide constructive criticism to each other in order to accomplish their goals. Students commented that they trusted each other and enjoyed working together. I guess it was their first time doing project work in English classes, and after a long period of competitive study for college entrance exams, they found joy in working with peers. I felt so blessed to see my students happily work together in order to reach their goals.

How is the paradigm of cooperative learning accepted with the teachers you work with in your country? Is it pervasive in your educational system?

Unfortunately, I don't think many of my colleagues (university English teachers at Rikkyo University) know even the word "cooperative learning". At universities in Japan teachers seem to be so individualistic and confident in what they are doing although many of them did not study TESOL (Teaching English for Speakers of other Languages). So, they don't show much interest in innovative teaching approaches such as cooperative learning.

What need do you see for cooperative learning in your educational system?

I'm working in a very limited field—teaching English as a foreign language at a university in Japan, so I can't say anything big. What I can say is that cooperative learning should be known and used by many university English teachers. Also, creating cooperative learning activities that can easily be used in English-as-a-foreign-language (EFL) contexts where students' communicative competence is very low can be very effective. You cannot use cooperative learning the same way as you do in students' mother tongue. I think EFL is also very different from ESL (English-as-a-second-language), so care must be taken when we implement CL so that even students with limited English can contribute.

What do you believe are some misconceptions about cooperative learning?

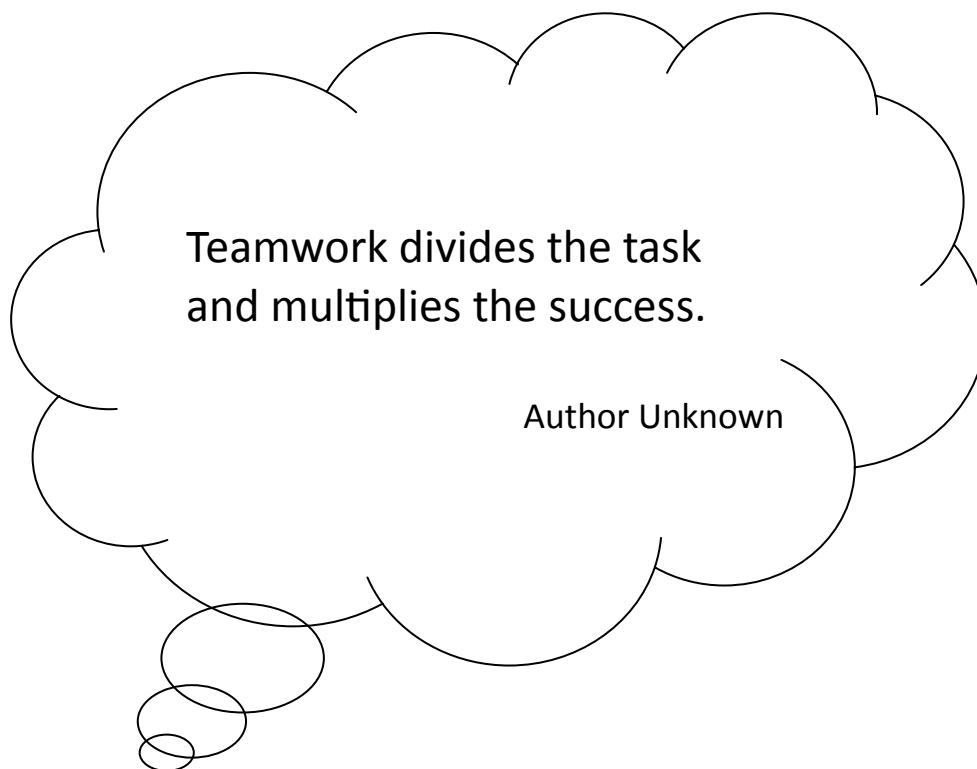
The first commonly held misconception might be that cooperative learning is the same as group work. The second might be that cooperative learning is just techniques. I believe that CL is not just a series of teaching techniques—it involves nurturing the spirit of cooperation in students' mind.

What are your current projects involving cooperative learning research and/or applications?

I'm very interested in how students interact with each other in groups in English and how their attitudes and behaviors change as they work in groups. I would also like to know how their views on group work change over time. However, it's very difficult to conduct qualitative research with my own students.

What is your biggest challenge in incorporating student cooperation in the classroom?

The biggest challenge I have now is finding ways to lead students with low English proficiency from very structured activities to more open-ended activities where students' spontaneous interaction is required. I meet students only once or twice a week for 90 minutes, and it's really challenging for me to find effective ways to help them initiate and control their interaction within this very limited amount of time.



GLACIE 2011 (Toronto, Canada): Report from the Conference Committee

By Don Plumb, Co-Chair GLACIE 2011



On May 26 and 27, 2011 the Great Lakes Association for Cooperation in Education (GLACIE) held its 26th annual cooperative learning conference, “*Achievement Through Active Engagement*” in mid-town Toronto. GLACIE’s focus is on promoting effective cooperative learning (CL) in the classroom, and we work hard at creating a warm and open atmosphere at the conference. A post-conference feedback comment from one teacher captured our intent and, we hope, the result:

“Well run, everyone helpful and friendly and something to do in your class on Monday! I feel the tools and ideas I’ve gained have made me better equipped to organize my room and get more out of my students.”

The organising committee had special challenges this year with major changes in leadership and much more distribution of responsibilities to sub-committees and their chairs. But everything came together beautifully and we had the largest conference in a decade.

Each of the conference days was attended by about 180 people, some for both days and some for only one. For the first time in our history, we had to close registration about a month in advance and set up a waiting list. Part of this success we attribute to our redesigned website and changes in promotion and marketing. The Thursday pre-conference was a Spencer Kagan workshop on accelerated achievement using CL structures. The main conference on Friday had an eclectic range of workshops with 15 sessions led by 18 presenters.

The People

The conference focus was reflected in the people who attended, both organisers and participants. The composition of the organising committee was mostly present and past elementary and secondary teachers and staff developers. Statistics gathered from conference participants gave the following approximate results:

- ◆ 35% were elementary teachers, 45% secondary teachers and 20% administrator/consultant/post-secondary
- ◆ 20% rated themselves as beginners at CL, 60% with some experience, and 20% very experienced
- ◆ 65% were at the conference through recommendation of a colleague
- ◆ 70% were at GLACIE for the first time

The presenters were largely from Ontario but, as always, we were very pleased to have international representation including Neil Davidson (USA), Robyn Gillies (Australia), Spencer Kagan (USA), Paul Vermette (USA), and Chris Ward (Scotland), all of whose sessions were well received.

The Workshops

One of our key goals in choosing workshop presenters is their ability to give teachers immediate classroom-ready strategies and to involve them cooperatively in workshop activities. Lectures are the last thing we want, and feedback from one participant suggested that we succeeded in our goal:

“As always, I had a great time and feel I learned a lot. I appreciate that the workshops are active – the speakers seem to work really hard at keeping us energized and involved.”

The Thursday full day pre-conference, facilitated by Spencer Kagan, explored application of CL structures to increasing achievement in all abilities of students, but particularly in narrowing the gap between high- and low-achieving students. It focused on five variables: classroom environment, student states, student actions, teacher states, and teacher actions.

The main Friday conference kicked off with a keynote from Robyn Gillies that used empirical data and video clips to show the relationships between educational research and classroom behaviours, both student and teacher. The Friday main sessions involved a variety of speakers who integrated various models of cooperative learning with classroom instruction in a number of areas: Jill Eason on Literacy, Jim Craigen and Chris Ward on Brain Theory, Spencer Kagan on Structures, Brian Jones on TRIBES, Neil Davidson on Mathematics, Don Plumb on Science, Lauren Wilson on Exceptionalities, Paul Vermette on Social-Emotional Development, Mitch Zeltzer on Teambuilding, Robyn Gillies on Assessment, Krista Walford on Inclusion, and Kimberley Blanchet on Technology. More detail about the sessions is available at <http://www.glacie.ca/conference.html>.

General Conference Organisation

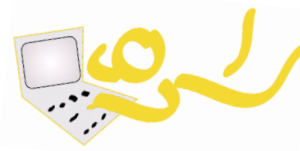
As always, the main focus of the conference was the workshops but we worked to improve other areas as well. The Vendors area was expanded to include organizations and companies promoting educator materials, environmental education, and corporate and school teambuilding. Particularly notable was the IASCE booth, organised by Kathryn and Corda – thanks for the buttons and rings! The Hospitality Suite continued to be a popular and successful forum for informal cooperative learning.

Thoughts for the Future

Our Saturday brainstorming and de-brief session suggested definite ways that we could improve the conference leading up to our 27th next year. In addition, GLACIE is moving toward expanded content and interactivity on our website, including use of social media, as well workshops and other outreach beyond the May conference.

We would love to have more IASCE members at the conference in May of next year. Check out our website at www.glacie.ca and join us in 2012!

Contributors: George Jacobs, Lalita Agashe and Yael Sharan



Bhatia, A., & Makela, C. J. (2010). Collaborative test reviews: Student performance. *Journal of Family and Consumer Sciences*, 102(2), 23-26.

A group study method proved helpful in improving senior-level students' performance on unit tests through collaborative learning. Students of a History of Textiles course voluntarily attended study sessions to review course content and prepare for unit tests. The students who attended the group reviews scored better on tests than those who did not. The effect sizes based on t-test of groups suggest medium to high impact of collaborative learning for the five unit tests. Findings have implications for courses where review sessions can supplement classroom teaching and learning. Benefits of collaborative learning are relevant for all areas of family and consumer sciences.

Bowers-Campbell, J. (2011). Take it out of class: Exploring virtual Literature Circles. *Journal of Adolescent & Adult Literacy*, 54(8), 557-567. doi: 10.1598/JAAL.54.8.1

Fifteen graduate students enrolled in an English methods class were organized into three book clubs to participate in online literature discussion. Participants' posts about their reading included evidence of group harmony, text focus, text connections, and aesthetic responses. The findings suggest that an online format allows for natural, sophisticated discussion around text.

Campbell, E., & Lassiter, L. E. (2010). From collaborative ethnography to collaborative pedagogy: Reflections on the other side of Middletown Project and community-university research partnerships. *Anthropology and Education Quarterly*, 41(4), 370-385.

Here we reflect on the collaborative research, engagement, and pedagogical relationships and processes that gave rise to The Other Side of Middletown, a collaborative ethnography written by a team of faculty, students, and community participants. We offer background on the project; discuss how collaborative research engendered community-based engagements and collaborative pedagogies; and conclude by suggesting that those collaborative pedagogies that work between communities and universities both expand and complicate recent calls for democratic civic engagement.

Caspi, A., & Blau, I. (2011). Collaboration and psychological ownership: How does the tension between the two influence perceived learning? *Social Psychology of Education*, 14(2), 283-298.

Collaborative writing may evoke conflict between individuals' feeling of contribution and their sense of ownership toward the collective outcomes. The present study tested the relations between perceived psychological ownership, perceived quality of the product, and perceived learning in five experimental conditions: two collaborative, two sharing, and a control. Analysis of the changes made between versions revealed differences in quantity and in types of changes between collaboration, sharing, and control conditions. Results showed that collaboration may improve the perceived quality of the written product more than sharing or control. In addition, less intrusive collaboration seems to enhance the sense of perceived learning. The relation between perceived ownership and perceived learning was mediated by perceived quality of the written product. We conclude that students may avoid collaboration partly because they do not want to lose a sense of personal ownership or to lessen peer ownership.

Cumming, J. (2010). Student-initiated group management strategies for more effective and enjoyable group work experiences. *Journal of Hospitality, Leisure, Sports and Tourism Education*, 9(2), 31-45.

This study examined whether group processes and task cohesion mediated the relationship between student-initiated group management strategies and three specific outcomes of working in groups. Undergraduate students completed a multi-section questionnaire to measure group management strategies, perceptions about group processes, task cohesion, group effectiveness, enjoyment, and learning benefits. Use of group management strategies was positively related to all three outcomes. Further, group process and task cohesion mediated this relationship when the outcomes were effectiveness and enjoyment, but not learning benefits. These results indicate the importance of group management strategies for developing positive group working experiences in higher education.

Dornisch, M., Sperling, R. A., & Zeruth, J. A. (2011). The effects of levels of elaboration on learners' strategic processing of text. *Instructional Science*, 39(1), 1-26.

In the current work, we examined learners' comprehension when engaged with elaborative processing strategies. In Experiment 1, we randomly assigned students to one of five elaborative processing conditions and addressed differences in learners' lower- and higher-order learning outcomes and ability to employ elaborative strategies. Findings indicated no significant differences among conditions on learning outcomes. However, learners better able to employ elaborative processing strategies performed better on outcome measures. Experiment 2 extended this research and addressed whether there would be differences across elaborative processing conditions in learners' comprehension at delayed testing. We also examined the role of motivation in performance and strategy use. Findings indicated no differences on the outcome measures at delayed testing; however, there were significant differences in learners' performance on an integration outcome at immediate testing. In addition, significant positive correlations were indicated for several outcome measures, strategy use and mastery orientation. Future research should further consider instructional scaffolds to promote learners' strategic processing and critical individual difference variables as they effect elaborative processing.

Fukuda, H. (2010). Development of cancer cooperative groups in Japan. *Japanese Journal of Clinical Oncology*, 40(9), 881-890.

Investigator-initiated clinical trials are essential for improving the standard of care for cancer patients, because pharmaceutical companies do not conduct trials that evaluate combination chemotherapy using drugs from different companies, surgery, radiotherapy or multimodal treatments. Government-sponsored cooperative groups have played a vital role in developing cancer therapeutics since the 1950s in the USA; however, the establishment of these groups in Japan did not take place until 30 years later. Methodological standards for multicenter cancer clinical trials were established in the 1980s by the National Cancer Institute and cooperative groups. The Japan Clinical Oncology Group, one of the largest cooperative groups in the country, was instituted in 1990. Its data center and operations office, formed during the 1990s, applied the standard methods of US cooperative groups. At present, the Japan Clinical Oncology Group consists of 14 subgroups, a Data Center, an Operations Office, nine standing committees and an Executive Committee represented by the Japan Clinical Oncology Group Chair. Quality control and quality assurance at the Japan Clinical Oncology Group, including regular central monitoring, statistical methods, interim analyses, adverse event reporting and site visit audit, have complied with international standards. Other cooperative groups have also been established in Japan since the 1980s; however, nobody figures out all of them. A project involving the restructuring of US cooperative groups has been ongoing since 2005. Learning from the success of this project will permit further progress of the cancer clinical trials enterprise in Japan.

Gillies, R. M., & Boyle, M. (2011). Teachers' reflections of cooperative learning (CL): A two-year follow up. *Teaching Education*, 22(1), 63-78.

Although teachers often report that they subscribe to cooperative learning (CL) to help students attain social and academic goals, research indicates that they often have difficulties implementing and sustaining their commitment. The purpose of this study is to report on the reflections of seven middle-year teachers who had embedded CL in their social science curriculum for the past two years to investigate their responses to this pedagogical practice, and to gauge their perceptions of how students with behavioural and learning needs responded to it. Data from the interviews indicated that all teachers believed that their lessons were more interesting, the children learned more, they felt more confident, and they often learnt to work more closely with their colleagues. However, all teachers did note that CL needed to be well planned, students needed to be prepared to work in groups, and teachers' expectations needed to be explicitly stated if the benefits attributed to CL were to be realised.

Gillies, R. M., & Haynes, M. (2011). Increasing explanatory behaviour, problem-solving, and reasoning with classes using cooperative group work. *Instructional Science*, 39(3), 349-367.

The present study builds on research that indicates that teachers play a key role in promoting those interactional behaviours that challenge children's thinking and scaffold their learning. It does this by seeking to determine whether teachers who implement cooperative learning and receive training in explicit strategic questioning strategies demonstrate more verbal behaviours that mediate children's learning than teachers who implement cooperative learning only. The study also sought to determine whether students who receive training in explicit questioning strategies demonstrate more explanatory behaviour than their untrained peers, and, as a consequence, do these same students demonstrate more advanced reasoning and problem-solving skills on follow-up reasoning and problem-solving tasks. The study involved 31 teachers in two conditions, the cooperative + strategic questioning condition and the cooperative condition, and two groups of students from each teacher's classroom. The results show that the teachers in the cooperative + strategic questioning condition used significantly more mediating behaviours than their peers in the cooperative condition. The study also showed that the children in these teachers' classes engaged in more elaboration and obtained significantly higher scores on the follow-up reasoning and problem-solving tasks. The study demonstrates the importance of explicitly teaching strategic questioning strategies to children during cooperative learning.

Goncalves, S. (2011). Intangible culture, cooperation and intercultural dialogue among university students. *Intercultural Education*, 22(1).

This paper focuses on intercultural competence and dialogue across cultural borders between university students from different Portuguese-speaking countries. Various principles and strategies for intercultural education are summarized, and the project *cultures@esec*, based on such principles and strategies, is described. The project focused on cultural heritage. The identity of African students and intangible culture were also explored. Part of the project involved frequent contacts between domestic and international students, cooperation under equal status conditions, joint decision-making and active learning. Results show that sharing knowledge and ideas, and working under pleasant learning conditions can help reduce cultural barriers and prejudice and contributes to intercultural sensitivity and competence.

Hall, R., & Jaugietis, Z. (2011). Developing peer mentoring through evaluation. *Innovative Higher Education*, 36(1), 41-52.

Peer mentoring programs are an important component in the strategy to enhance the first year undergraduate experience. The operation of these programs needs to be informed by evidence as to their effectiveness. In this article we report on a six-year study of the development of a peer mentoring program in which feedback is used to improve program implementation. Evidence from surveys of participants in the program shows that this process has significantly enhanced their experiences and that the effects of these benefits have increased throughout the life of the program. Moreover, participation in the program enhanced the leadership, communication, and organizational skills of the peer mentors.

Hmelo-Silver, Cindy E., Barrows, Howard S. (2008). Facilitating collaborative knowledge building. *Cognition and Instruction*, 26(1), 48-94.

This article describes a detailed analysis of knowledge building in a problem-based learning group. Knowledge building involves increasing the collective knowledge of a group through social discourse. For knowledge building to occur in the classroom, the teacher needs to create opportunities for constructive discourse in order to support student learning and collective knowledge building. In problem-based learning, students learn through collaborative problem solving and reflecting on their experiences. The setting for this study is a group of second-year medical students working with an expert facilitator. The analysis was designed to understand how the facilitator provided opportunities for knowledge-building discourse and how the learners accomplished collective knowledge building. We examined episodes of knowledge-building discourse, the questions and statements that the students and facilitator generated throughout the tutorial, the change in their understanding of the problem that they were solving, and the collective knowledge that was constructed. The results indicate that the group worked to progressively improve their ideas through engaging in knowledge-building discourse. The facilitator helped support knowledge building through asking open-ended metacognitive questions and catalyzing group progress. Students took responsibility for advancing the group's understanding as they asked many high-level questions and built on each others thinking to construct collaborative explanations. The results of this study provide suggestions for orchestrating knowledge-building discourse.

Hodges, H. F. (2011). Preparing new nurses with complexity science and problem-based learning. *Journal of Nursing Education*, 50(1), 7-13.

Successful nurses function effectively with adaptability, improvability, and interconnectedness, and can see emerging and unpredictable complex problems. Preparing new nurses for complexity requires a significant change in prevalent but dated nursing education models for rising graduates. The science of complexity coupled with problem-based learning and peer review contributes a feasible framework for a constructivist learning environment to examine real-time systems data; explore uncertainty, inherent patterns, and ambiguity; and develop skills for unstructured problem solving. This article describes a pilot study of a problem-based learning strategy guided by principles of complexity science in a community clinical nursing course. Thirty-five senior nursing students participated during a 3-year period. Assessments included peer review, a final project paper, reflection, and a satisfaction survey. Results were higher than expected levels of student satisfaction, increased breadth and analysis of complex data, acknowledgment of community as complex adaptive systems, and overall higher level thinking skills than in previous years.

Lei, S., Gorelick, D., Short, K., Smallwood, L., & Wright-Porter, K. (2011). Academic cohorts: Benefits and drawback of being a member of a community of learners. *Education, 131*(3), 497-504.

In response to the increasing rate of students failing to complete their bachelor, master, and doctoral programs, many colleges and universities are now offering cohort education models of study. The goals of cohort education are to promote retention, graduation, and success rates of students. This non-traditional approach to education places students pursuing the same field of education into learning groups that take a majority of their class work together according to a pre-determined schedule of classes. This paper reviews the benefits and drawbacks of being a member of a cohort program from two different perspectives: Cohort members and instructors of cohort members. The experiences of these two major sub-groups within the cohorts' structure, as well as the effects of an association with cohort members are discussed. Educational implications of college cohort programs and suggestions for future research studies of cohort members are provided.

Lei, S. A., Kuestermeyer, B. N., & Westmeyer, K. A. (2010). Group composition affecting student interaction and achievement: Instructors' perspectives. *Journal of Instructional Psychology, 37*(4), 317-325.

Although group work can be beneficial for many students, the composition of the group can also introduce a possible source of inequality (Webb et al., 1998). The group composition has a major impact on the quality of group work and discussion (Webb et al., 1998). There are at least six major ways that students can be grouped. This paper reviews previously published literature that focuses on groups based on gender, ethnicity, member familiarity, ability level, as well as motivational level and source.

Leng, J. S., & Lim, C. P. (2010). Reinforcement learning of competitive and cooperative skills in soccer agents. *Applied Soft Computing, 11*(1), 1353-1362.

The main aim of this paper is to provide a comprehensive numerical analysis on the efficiency of various reinforcement learning (RL) techniques in an agent-based soccer game. The SoccerBots is employed as a simulation testbed to analyze the effectiveness of RL techniques under various scenarios. A hybrid agent teaming framework for investigating agent team architecture, learning abilities, and other specific behaviours is presented. Novel RL algorithms to verify the competitive and cooperative learning abilities of goal-oriented agents for decision-making are developed. In particular, the tile coding (TC) technique, a function approximation approach, is used to prevent the state space from growing exponentially, hence avoiding the curse of dimensionality. The underlying mechanism of eligibility traces is evaluated in terms of on-policy and off-policy procedures, as well as accumulating traces and replacing traces. The results obtained are analyzed, and implications of the results towards agent teaming and learning are discussed. (C) 2010 Elsevier B.V. All rights reserved.

Lowrie, T. (2011). "If this was real": Tensions between using genuine artefacts and collaborative learning in mathematics tasks. *Research in Mathematics Education, 13*(1), 1-16.

This investigation identified the interactions and discourse employed by students (11-12 years old) when challenged to solve a realistic mathematics problem in a collaborative group situation. The students were asked to use genuine artefacts (including brochures, menus, bus timetables and photographs) to complete an open-ended task in small groups. Although most students were able to establish their own sense of authenticity by aligning the problem to their personal experiences and understandings, it was also the case that the majority found it difficult to establish meaningful, realistic understandings in the group situation. The students were unable to regulate the collective ideas of the group because too much emphasis was placed on personalising the task.

Luu, T. T. [luutrongtuan@hcm.fpt.vn] (2010). Infusing cooperative learning into an EFL classroom. *English Language Teaching*, 3(2), 64-75.

This study sought to investigate student diversities in terms of learning styles and linguistic competence, and the extent to which students change as regards participation, interaction and achievement through Cooperative Learning activities embracing their diversities. 77 first-year EFL students from the two reading classes, one treated as the experimental group (EG) and the other as the control group (CG), at the Faculty of English Linguistics of the University of Social Sciences and Humanities in Ho Chi Minh City (USSH-HCMC) were invited to participate in the study. The findings substantiated that Vietnamese learners are open to change and Vietnamese EFL teachers should create effective activities for learners to immerse themselves in talking cooperatively instead of talking individualistically in the classrooms.

Maceiras, R., Cancela, A., Urrejola, S., & Sanchez, A. (2011). Experience of cooperative learning in Engineering. *European Journal of Engineering Education*, 36(1), 13-20.

The objective of this work is to share the authors' experience towards a different mode of teaching/ learning method. Cooperative learning (Jigsaw) was employed on the University of Vigo's fourth-year engineering students. The results of the experience show that cooperative learning is quite a viable alternative to the classical way of lecturing at the university when the number of students is not too high. The authors' observation indicates that students did not show a lot of interest towards the new learning style but their resistance changed once they began the activity. The Jigsaw method has proved to be a useful tool for improving the learning process so that students have the opportunity to participate actively in the learning activities.

Ning, H., & Hornby, G. (2010). The effectiveness of cooperative learning in teaching English to Chinese tertiary learners. *Effective Education*, 2(2), 99-116.

Few studies have been conducted of the impact of cooperative learning (CL) on the teaching of English as a foreign language (EFL) at the tertiary level. This study investigated the effects of CL on Chinese EFL learners' English language competencies in listening, speaking, reading, writing and vocabulary. Participants were a 100 first-year College English learners from a university in the north of China. A pre-test-post-test control group quasi-experimental design was employed to study the effects of the CL approach on students' language competencies in comparison to traditional instruction. Findings revealed clear differences in favour of the CL approach in the areas of listening, speaking and reading but no differences were found between the two approaches in the areas of writing and vocabulary.

Reinig, B. A., Horowitz, I., & Whittenbury, G. E. (2011). A longitudinal analysis of satisfaction with group work. *Group Decision and Negotiation*, 20(2), 215-237.

Satisfaction with group work is an important and frequently studied phenomenon that often determines whether a new tool, technology, or method is successfully implemented in an organization. We report on a longitudinal study of small groups which used regression to model how satisfaction with the process, outcome, and group evolves over multiple sessions as a function of performance measures and prior satisfaction levels. The results indicated that current performance contributed less to satisfaction as the study proceeded and by the end of the study period satisfaction with the process and outcomes were determined almost exclusively by prior satisfaction levels. In general, the conclusions were dependent on the point in time at which the analysis was conducted and on the object of satisfaction under consideration. The results highlight the importance of longitudinal studies, rather than one-shot approaches, for understanding individual satisfaction with group work.

Sandahl, S. S. (2010). Collaborative testing as a learning strategy in Nursing education. *Nursing Education Perspectives, 31(3), 142-147.*

A primary goal of nursing education is to prepare nurses to work collaboratively as members of interprofessional health care teams on behalf of patients. Collaborative testing is a collaborative learning strategy used to foster knowledge development, critical thinking in decision making, and group processing skills. This study incorporated a quasi-experimental design with a comparison group to examine the effect of collaborative testing as a learning strategy on student learning and retention of course content as well as group process skills and student perceptions of their learning and anxiety. The setting was a baccalaureate nursing program; the sample consisted of two groups of senior students enrolled in Medical-Surgical Nursing II. Student learning, as measured by unit examination scores, was greater for students taking examinations collaboratively compared to individually. Retention of course content, as measured by final examination scores, was not greater for students taking examinations collaboratively compared to individually. Student perceptions were overwhelmingly positive, with students reporting increased learning as a result of the collaborative testing experiences. Despite the lack of data to support increased retention, collaborative testing may be a learning strategy worth implementing in nursing education. Students reported more positive interactions and collaboration with their peers, skills required by the professional nurse.

Shoval, E., & Shulruf, B. (2011). Who benefits from cooperative learning with movement activity? *School Psychology International, 32(1), 58-72.*

The goal of this study is to identify learners who are most likely to benefit from a small group cooperative learning strategy, which includes tasks involving movement activities. The study comprised 158 learners from five second and third grade classes learning about angles. The research tools included structured observation of each learner and pre- and post-tests. The analysis identified three behavioural clusters: 'active', 'social' and 'passive'. The results suggest that students who are physically active while seeking knowledge and/or solutions are more successful than their peers who are more socially active, even if initially they were lower achievers. Passive students demonstrated the lowest academic achievements. This study points to a possible solution for the problems that cooperative group learning, based mainly on verbal interaction, often encounter at the primary education level.

Stelzer, L., & Coll-Reilly, J. (2010). Collaborative team testing to support individual learning: Can teamwork motivate learning? *Contemporary Issues in Education Research, 3(12), 7-16.*

A challenge in the contemporary classroom is that many students do not prepare for class. While technology is a boon in the classroom it can often be an apathy-fostering distraction. To encourage greater student preparation a course was designed with 4 quizzes to be taken first as individuals and then as members of predetermined teams. We reasoned that students knowing they would be quizzed on the chapter material would be motivated to prepare for the quiz on the assigned day. It was hypothesized that team spirit would lead students to higher levels of performance. We reasoned that students, believing other members of the team were depending on them, would be motivated to prepare for the quiz. While a majority showed no improvement, a minority who expressed team spirit did show gains.

Summers, M., & Volet, S. (2010). Group work does not necessarily equal collaborative learning: Evidence from observations and self-reports. *European Journal of Psychology of Education, 25*(4), 473-492.

Situative and sociocognitive analyses were combined to examine engagement in high-level collaborative learning and its relationship with individuals' cognitions. Video footage of 53 science university students' (nine groups) collaborative learning interactions as they worked through a case-based project was analysed in combination with students' appraisals and reflections on the activity. Sizeable group differences in amount of high-level discussion of learning content were revealed. Individual high-level contributions were positively correlated with overall unit performance. Motivation at task onset predicted amount but not depth of content-related group discussion. Interviews with participants suggested that groups' divergent patterns of engagement with content could be related to different perceptions of the notion of collaborative learning. Results are discussed in terms of implications for collaborative learning research and educational practice.

Thanh-Pham, T. H. (2011). An *investigation of perceptions of Vietnamese teachers and students toward cooperative learning (CL)*. *International Education Studies, 4*(1), 3-12.

The present study examined how cooperative learning (CL) is implemented in Vietnamese classrooms, how local teachers and students perceived this approach to learning, and what were the local barriers that hindered its implementation. Forty teachers and forty students from twenty Vietnamese colleges completed a questionnaire about CL and follow-up interviews were conducted with ten students and ten teachers on their perceptions of this practice. The results showed that CL has become a common and preferred method of instruction in Vietnam. However, the functions of CL were often not understood correctly because the teachers and students maintained that CL mainly helped the students remember information rather than develop a deep understanding of the text they were studying. Responses also revealed that CL was hindered by a number of local cultural and institutional barriers such as class size, curriculum coverage and workload division. Future research may need to identify strategies to correct mismatches between CL principles and local barriers so that this approach to learning becomes more adaptive to the local context.

Thanh-Pham, T. H., & Gillies, R. (2010). Group composition of *cooperative learning*: Does heterogeneous grouping work in Asian classrooms? *International Education Studies, 3*(3), 12-19.

Constructing an appropriate group is important to teamwork success. Although, heterogeneous grouping is widely recommended in Western countries, this method of grouping is questioned in Asian classrooms because Asian and Western students have different cultures of learning. Unfortunately, this issue has not been addressed in any research to date. This study aims to investigate how Vietnamese students should be grouped so that they can maximize their opportunities to learn. The study is in two parts: a pilot study and an intervention. The pilot study included twenty students and was conducted for four weeks. The intervention consisted of one hundred and forty five students and lasted for eight weeks. In both studies, students answered a questionnaire survey and ten students were interviewed. The results of both studies showed that friendship grouping was more preferred. Future researchers should take these findings into consideration so that cooperative learning activities can be designed adaptively in Asian classrooms.

Topping, K. J., Thurston, A., Tolmie, A., Christie, D., Murray, P., & Karagiannidou, E. (2011). Cooperative learning in science: Intervention in the secondary school. *Research in Science & Technological Education*, 29(1), 91-106.

The use of cooperative learning in secondary school is reported—an area of considerable concern given attempts to make secondary schools more interactive and gain higher recruitment to university science courses. In this study the intervention group was 259 pupils aged 12-14 years in nine secondary schools, taught by 12 self-selected teachers. Comparison pupils came from both intervention and comparison schools (n = 385). Intervention teachers attended three continuing professional development days, in which they received information, engaged with resource packs and involved themselves in cooperative learning. Measures included both general and specific tests of science, attitudes to science, sociometry, self-esteem, attitudes to cooperative learning and transferable skills (all for pupils) and observation of implementation fidelity. There were increases during cooperative learning in pupil formulation of propositions, explanations and disagreements. Intervened pupils gained in attainment, but comparison pupils gained even more. Pupils who had experienced cooperative learning in primary school had higher pre-test scores in secondary education irrespective of being in the intervention or comparison group. On sociometry, comparison pupils showed greater affiliation to science work groups for work, but intervention pupils greater affiliation to these groups at break and out of school. Other measures were not significant. The results are discussed in relation to practice and policy implications.

van Blankenstein, F. M., Dolmans, D. H. J. M., van der Vleuten, C. P. M., & Schmidt, H. G. (2011). Which cognitive processes support learning during small-group discussion? The role of providing explanations and listening to others. *Instructional Science*, 39(2), 189-204.

Seventy students participated in an experiment to measure the effects of either providing explanations or listening during small group discussions on recall of related subject-matter studied after the discussion. They watched a video of a small group discussing a problem. In the first experimental condition, the video was stopped at various points in time, enabling the participants to verbally respond to the discussion. In the second condition, they listened to the same discussion, without contributing. In the control condition, they listened to a discussion that was not related to the subject-matter subsequently studied. After the discussion, all participants studied a text and answered questions that tested their recall of information from this text. No immediate differences in recall were found. One month later, participants who had actively engaged in explaining remembered more from the text. The conclusion appears justified that actively providing explanations during a discussion positively affects long-term memory.

Vasiljevic, A. (2010). Dictogloss as an interactive method of teaching listening comprehension to L2 learners. *English Language Teaching*, 3(1), 41-52.

The article describes how the dictogloss method and cooperative learning can be combined to promote the development of listening and speaking skills of second language learners. The paper begins with an outline of the dictogloss procedure and the theoretical background behind it. The procedures for conducting a dictogloss-based listening class are then described in great detail. Finally, the potential advantages of this method as well as concerns about its implementation are discussed.

Yurdabakan, I. (2011). The investigation of peer assessment in primary school cooperative learning groups with respect to gender. *Education 3-13, 39(2)*, 153-169.

There are studies especially at higher education level investigating the subsequent responses of students towards reciprocity, tacit agreement and assessment of peers, but research on the effect of gender on peer assessment is limited. The present study focuses on whether peer assessment used in cooperative learning groups varies with respect to gender and investigates the compatibility level of peer assessments with teacher grades. This study was conducted in a primary school fourth grade social sciences course with 46 participants, 28 female and 18 male, their ages ranging from 9 to 10. The study rendered different results of peer assessment, where male and female students scored their fellow and opposite sexes with respect to their contribution to group work and their learning levels. The compatibility between female and teacher scores was higher than male and teacher scores.

Zentall, S. S., Kuester, D. A., Craig, B. A. (2011). Social behavior in cooperative groups: Students at risk for ADHD and their peers. *The Journal of Educational Research, 104(1)*, 28-41.

Cooperative learning has broad support as an instructional strategy to improve achievement. If the social behavior of students at risk for ADHD could be documented, cooperative groups could also provide a context for intervention. To this purpose, we observed 22 same-gender triads, with or without a member at risk for ADHD during problem-solving performance. Findings were that at-risk students exhibited more negative verbal, off-task, and less cooperative behavior. Unexpected findings were that their groups were also more successful. Educational implications when planning group experiences were described in terms of (a) the identification of behavior to anticipate from students at risk, (b) how students' behavior can alter the behavior of their general education peers, and (c) the importance of interventions for all group members, especially boys.

Zacharia, Z. C., Xenofontos, N. A., & Manoli, C. C. (2011). The effect of two different cooperative approaches on students' learning and practices within the context of a WebQuest science investigation. *Educational Technology Research and Development, 59(3)*, 399-424. DOI: 10.1007/s11423-010-9181-2.

The goal of this study was to investigate the effect of two different cooperative learning approaches, namely, the Jigsaw Cooperative Approach (JCA) and the Traditional Cooperative Approach (TCA), on students' learning and practices/actions within the context of a WebQuest science investigation. Another goal of this study was to identify possible problems that students face within the context of a WebQuest when following either approach and to provide suggestions for developing web-based learning tools that enable students to overcome these problems. The sample of the study consisted of 38 seventh-graders, who, according to their science teachers, had prior experience with TCA and JCA. All participants studied about the ecology, architecture, energy and insulation of CO₂-friendly houses through the use of a WebQuest science investigation. The data collection involved conceptual tests, screen-video captured data and interviews. Results revealed no differences between the two approaches, in terms of enhancing students' understanding of concepts related to CO₂-friendly houses, because of (a) JCA students' inability to apply one of the JCA components, namely, teaching one another about learning material they solely studied, and (b) the fact that the JCA students started applying the TCA after failing teaching one another in the context of JCA. Finally, a number of problems that students faced within the context of a WebQuest science investigation when following the JCA or TCA were identified.

2010 IASCE Conference *Cooperative Learning: Pedagogy, Policy, and Practice:* **Creating a Cooperative Conference**

Pam Flood and Maureen Breeze describe the added dimensions of the conference.

As the planning for the November 2010 IASCE Brisbane Australia Conference commenced it was natural that the planning committee would aim to model cooperative learning throughout the conference. The whole event was designed to engender a co-operative, caring and welcoming atmosphere that would encourage personal connections. With participants from over 25 countries, it was important alongside the formal sessions, to provide time for interaction and to facilitate the development of new relationships and nurture ongoing ones. Specific activities designed to build a sense of community and cohesion, referred to as the “Glue Activities”, were infused throughout the conference.

There were a number of ways that the “Glue” was applied, from an interactive welcome cocktail evening, to break-out sessions, whole plenary activities, and individual sharing during conference breaks. All activities were intended to be enjoyable and include co-operative learning strategies. Many of the activities were organized by members of the conference planning team, while others were organized by conference participants, all of whom had been invited to bring ideas and model some of their favorite fun and engaging cooperative learning activities. These activities also allowed participants to get to know the organization and some of its long standing members and ultimately to strengthen the IASCE network.

The “Glue Activities” provided the structures and opportunities for strangers to become friends and for colleagues to share ideas and resources. For example, the large conference plenary space was adorned with large flags, one for each country participants represented. One of the ongoing activities was a quiz for individuals to identify the nations represented by the flags, then to find a person from that country and discover a fun fact about each other. We know much broader conversations took place as well! All of those with correct flag identifications and a completed sheet were rewarded with a free year’s membership in IASCE.

The following are a sample of other “Glue Activities” that were utilized during the conference. These activities are described in detail by those who facilitated the activities so that you may take them and implement them in your own settings.

Enjoy!!



Title of Activity: *Summary of Conference Experience*

Goals and Objectives: Comparing initial expectations with outcomes

Materials Required or Suggested: “Persona” cards, showing faces of men and women of various ages, colors and types, and diagrams of various interaction patterns

Time Requirements: No time limit (generally takes about 15 minutes, depending on size of group)

Proposed Audience: Workshop participants

Directions for Implementation: Spread cards face up on table; each participant takes two cards—one that represents his/her expectations before the workshop (or conference) and another that represents feelings about outcomes of workshop or conference. Each one in turn shows the chosen cards and tells the whole group what they represent.

Other ideas for implementation: Many other cards are available with different pictures, some abstract, some nature scenes, children's faces, etc. All sets come with suggested activities. Great for introductions, for wrapping up, and for generating discussion about a variety of topics.

Cards are available from nordcards@gmail.com and can be viewed on www.nordcards.com

Submitted by: Yael Sharan

Title of Activity: *WordFest*

Goals and Objectives:

Appreciate that many heads are better than one
Promote equal opportunity to participate
Have fun
Build vocabulary
Learn a game that can be played outside class as well

Materials Required or Suggested: paper, pencil/pen, can also be done with computers or related devices, dictionaries can also be used, but not necessary

Time Requirements: 15-30 minutes, but it's quite addicting and more time can be spent

Proposed Audience: primary/upper elementary and older

Directions for Implementation:

- Teacher writes a word or phrase on the board. It should have at least 9 letters.
- Students are in groups of four
- Each works alone to write as many words as they can using the letters in the word/phrase on the board. Words can have any number of letters from one letter. Words created can only contain the letters in the word, e.g., if the word on the board is "important," "tot" is okay because "important" has two "t's," but "pop" is not okay, because "important" has only one "p."
- After about two minutes, students stop writing words. They count the number of words they have written and write that at the top of their paper.
- Students work in pairs. Each reads aloud the words on their list. They add any words on their partner's list that are not on their list. They can also add new words that they thought of while sharing with their partner.
- Students again count the words on their list and write the new number at the top of their paper. This should be larger.
- The two pairs combine. The members of each pair speak aloud to share about half their combined list with the other pair. Again, students add words they hear that were not on their list, as well as words inspired by their sharing.
- Finally, students again count the number of words on their list and write that at the top of their paper.

Other ideas for implementation: Students can share strategies for generating words, such as looking for rhymes. This is an application of Forward Snowball. Kearney, P. (1993). *Cooperative learning techniques*. Hobart, Tasmania: Artemis Publishing.

Submitted by: Anonymous



Title of Activity: *About Me or Wall of Fame*

Goals and Objectives: Provide a means of sharing information about yourself and networking

Materials Required or Suggested: Pre-printed information capture sheets

Time Requirements: 15 mins to complete form

Proposed Audience: All ages

Directions for Implementation:

Each member of the group fills out the sheet with details about themselves and then posts it on a wall alongside those of everyone else.

- The sheets are left there as long as the group is gathered.
- Participants are invited to read the information from the 'Wall of Fame' and make connections with people they have things in common with/would like to find out more from.

Other ideas for implementation:

A participant's quiz can be devised around the information on the sheets, that can be solved by reading the information and then finding the individuals' concerned to get more details.

Submitted by: Maureen Breeze

About the ...

My Name:

My Workplace:

What I do at my Workplace:

You can contact me at:

My professional interests are:

My Photo

My place

The photo about my place

About my place:

Those who know me know I love to

COOPERATIVE LEARNING FAQs

Once again we present some frequently asked questions about CL and a short guide to answers you can find in IASCE newsletters.

Q *Looking for a book on a particular CL method? Eager to expand your pool of cooperative activities? Involved in CL and second language teaching?*

A Books on these topics are reviewed in vol. 26, no.1, February 2007.

Q *How can technology help peer tutoring?*

A Abstracts of research on various aspects of peer tutoring are found in the From the Journals feature in vol. 27, no.1, March 2008.

Q *How can CL methods contribute to higher education?*

A Two abstracts from the European Journal of Engineering Education in the above issue of the newsletter address the education of civil engineers. One abstract is of an article that deals with lecturers' perceptions of CL and the second - of the effectiveness of Jigsaw II in teaching EFL to engineering students.

More about CL in higher education (nurses' education, general college lecturing, and economics courses) can be found in several abstracts in the From the Journals feature in vol. 27, no.3, November 2008. "Farewell, lecture?" is the intriguing title of an article whose abstract is in vol. 28, no.1, April 2009.

Q *After reading Don Plumb's report on the recent GLACIE conference you may be wondering what explains the success and longevity of this association.*

A The story of GLACIE, the Great Lakes Association for Cooperation in Education, a vibrant organization since 1983, is told by John Myers of OISE. He outlines GLACIE's history and offers an explanation of its success in vol. 27, no.2 & 3 (July and November 2008).

The evaluation of another group of CL educators which has sustained its momentum for over ten years is outlined in the story of LAPSA, the Latvian Association for CL, in vol. 28, no.2, September 2009.

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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.

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.

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