

Chapter 1 : The Jigsaw Classroom

The Cooperative Learning Institute is a (c)3 organization dedicated to furthering the practice and study of cooperation in the classroom.

ECSCW97, " Requirements for access control in CSCW systems have often been stated, but groupware in use today does not meet most of these requirements. There are practical reasons for this, but one of the problems is the inherent complexity of sophisticated access control models. We propose a general authorization model that emphasizes conceptual simplicity and show that several issues— in particular negative access rights and delegation of rights— can be solved elegantly in this model. In a more security-oriented approach, cf. The system should allow delegation of rights from one person to This report proposes a security model designed to support cooperative tasks in which the security of the information used and produced is critical, and where the participants in a task are not equally trusted. This approach will support a range of security policies, including those in which the right The model is designed to be implemented in a variety of distributed system environments, assuming a minimum of trusted system components. We describe an approach to the implementation of the security model in the context of a shared distributed object system and we outline an implementation architecture for an open distributed security system that will allow several security models to coexist in a single distributed system. The model has two levels at which access control is represented -- user level and programming level. Show Context Citation Context We propose a general authorization model that emphasizes conceptual simplicity. Several extensions to the basic model address well-known issues in access control, notably negative rights and delegation. Implementation of the authorization model in the Basic Support for Cooperative Work Shared Workspace system is envisaged. Die in der Praxis verwendeten Systeme kommen diesen Anforderungen jedoch nicht nach. In order to model this, Just as in real collaborative tasks in the workplace, it is often the case that participants in a groupware computer application do not have equal rights. This must be supported by the underlying group communication system. As a prelude to our design we introduce what we refer to as a model of trust in which we explicitly state the components in a system that are trusted and those which are not. Most attempts to provide secure group communication have had very simple blanket models of trust in which the assumption is made that all group members are trusted equally and all others are not trusted at all. Only one other implementation has catered for members that are trusted unequally, however that system was aimed at implementing high integrity services. It employs a very expensive protocol that renders it unsuitable for interactive groupware which demands a high response rate. We show that it is possible to tune the model of trust in order to simplify the protocol and thus enhance the performance of secure group communication for groupware. However, this model is often too simple. These rights typically originate from an organisational role in some task. The mere fact that access control is required implies that some participants are not trusted fully. This paper discusses the design of a system for the protection of shared persistent information objects that are intended to provide a basis for building cooperative applications. A task-based model of cooperative work is adopted and user and task requirements are based on an earlier case study undertaken by the authors. The key problem addressed is the mapping of user-level protection specifications onto groups of programming-level objects. A design for a two-level protection model to address this problem is outlined. January 31, 1 1. Introduction This paper discusses the requirements for the protection of information in cooperative work and describes an approach to the design of a protection system. The design is intended for use in an otherwise open software environment in which cooperative tasks are carried out using cooperative applications accessing shared long-lived information objects in a distributed environment. Application software is assumed to be object-oriented, Our study suggests that it is useful to define the security requirements for the separate tasks in an organisation in a generic manner in terms of the roles of the users that participate in these t

Chapter 2 : Cooperative Learning: 7 Free Jigsaw Activities for Your Students

Consistent with the cooperative learning studies reviewed by Newmann and Thompson () and Slavin (), this study found that Jigsaw II resulted in generally superior academic achievement effects.

George Jacobs Jacobs, G. Theory, principles, and techniques. After two brief definitions of CL, key areas discussed in the paper are: An appendix provides a list of websites on CL. Definitions of Cooperative Learning First, here are some definitions of cooperative learning also known as collaborative learning: The point is that cooperative learning involves more than just asking students to work together in groups. Instead, conscious thought goes in to helping students make the experience as successful as possible. Below are some theoretical considerations often found in the literature on L2 instruction. In other words, we acquire language when we understand input that we hear or read. While acknowledging the validity of this concern, Krashen and Terrell argue that on balance, peer input is useful: The Interaction Hypothesis The Interaction Hypothesis Hatch, a; Long, highlights the role of social interaction in increasing the amount of comprehensible input that students receive. This interaction includes students asking for help when they do not understand input. Perhaps, the collaborative setting in groups and the trust that can grow among groupmates make it more likely that students will have opportunities to repair comprehension breakdowns. The Output Hypothesis The Output Hypothesis Swain, states that while comprehensible input is necessary for L2 learning, learners also need to speak and to write, i. Clearly, CL offers students many opportunities for output. Indeed, as we will discuss later when considering the CL principle of Simultaneous Interaction, when working in groups, student output can increase dramatically. This perspective highlights how L2 learners mediate learning in accordance with context including peers and experience with others. As Newman and Holtzman explain: He created heterogeneous groups of € children he called them a collective , providing them not only with the opportunity but the need for cooperation and joint activity by giving them tasks that were beyond the developmental level of some, if not all, of them p. Individual Differences One central belief of current second language pedagogy is that learners differ from one another in important ways Robinson, One area of difference lies in the tendency of some learners to prefer to learn in social settings. All learners need to know how to succeed in such settings, and CL provides opportunities for students to develop and practice the strategies they need to work with others. Learner Autonomy Modern pedagogy seeks to help learners become more independent, capable of being and keen to become lifelong learners. Thus, the concept of learner autonomy has risen to prominence Wenden, Promoting learner autonomy means that learners have a role in planning, controlling, and evaluating their own learning. Group activities supply one means of moving students away from dependence on teachers. Cooperative Learning Principles Many principles have been proposed for cooperative learning. Below is one list of eight such principles. This principle means that the groups in which students do cooperative learning tasks are mixed on one or more of a number of variables including sex, ethnicity, social class, religion, personality, age, language proficiency, and diligence. Collaborative skills, such as giving reasons, are those needed to work with others. Students may lack these skills, the language involved in using the skills, or the inclination to apply the skills. Most books and websites on cooperative learning urge that collaborative skills be explicitly taught one at a time. This principle encourages students to look to themselves for resources rather than relying solely on the teacher. When student groups are having difficulty, it is very tempting for teachers to intervene either in a particular group or with the entire class. In classrooms in which group activities are not used, the normal interaction pattern is that one person speaks at a time, either the teacher or a student selected by the teacher. In contrast, when groups of students cooperate, we maximize the quantity of peer interactions. When students work together on thinking tasks, when they elaborate on their answers and ideas and when they utilize cooperative skills, we maximize the quality of peer interactions. Equal Opportunity to Participate. A frequent problem in groups is that one or two group members dominate the group and, for whatever reason, impede the participation of others. Cooperative learning offers many ways of promoting more equal participation among group members by attempting to structure interaction so that all group members have chances to participate. When we try to

encourage individual accountability in groups, we hope that everyone will try to learn and to share their knowledge and ideas with others. This principle lies at the heart of CL. When positive interdependence exists among members of a group, they feel that what helps one member of the group helps the other members and that what hurts one member of the group hurts the other members. Cooperation as a Value. This principle means that rather than cooperation being only a way to learn, it flows naturally from the most crucial cooperative learning principle, positive interdependence. Below, three simple CL are described. Simple is good, i. Circle of Speakers a. In groups of 4, students take turns to speak. Several such rotating turns can be taken. Students listen as their partner s speak and perhaps take notes, ask questions, or give feedback. The teacher randomly chooses some students and asks them to tell the class what their partner s said. This technique can also be done with students taking turns to write, or they can write and speak at each turn. Each student works alone to write answers. In pairs, students share answers. Ss work alone to write one or more questions. They write answers to their questions on a separate sheet of paper. Ss exchange questions but not answers. CL Lesson Plan Considerations Cooperative learning represents a major change from teacher-fronted instruction and, therefore, raises new issues that educators need to consider Cohen, At the same time, using CL does not mean abandoning teacher-fronted mode; it means combining various modes of learning. Below are five issues that many L2 teachers raise when they undertake or even contemplate undertaking CL. Difficulty level Difficulty level of activities may be the largest stumbling block to successful CL use. Especially when beginning with CL, the task should be an easily doable one, so that students can feel comfortable and confident working in groups. Ideas to consider here include starting CL with easy tasks, carefully clarifying procedures so that students know what they will be doing, providing examples of what groups are being asked to do, and monitoring groups so that teachers can provide help when needed. Sponge activities Often some groups or group members will finish before others. Some ideas include doing homework or extensive reading, helping other individuals or groups who have not yet finished, comparing answers with others who have finished, and doing an enrichment activity such as creating similar tasks as is done in Question-and-Answer Pairs. Thus, students may initially feel uncomfortable with their groupmates who they might not have known before or who perhaps they knew and did not like. As a result, groupmates may not get along with each other. Some ideas for addressing this include helping groups enjoy initial success, explaining the benefits of heterogeneity, doing teambuilding activities to promote trust and to help students get to know each other, and teaching collaborative skills. Noise level Some teachers worry that the noise level may be higher than acceptable during CL activities. Use of the L2 Students are often tempted to use their L1 when working in groups. We should discuss with students what constitutes appropriate L2 use. Also, students need sufficient language support, such as dictionaries and other reference sources and pre-task examples. Referring back to point one in this section, when seeking to promote proper L2 use, we need to consider whether the level of task difficulty is appropriate. One more idea is to use heterogeneous groups with at least one relatively more proficient student in each group. These benefits include increased self-esteem, greater liking for school, enhanced inter-ethnic ties, and improved complex thinking. Furthermore, CL offers one small ray of hope that we can move away from the all-too-present unhealthy forms of conflict and competition that plague our world today Kohn, However, using CL may be difficult at first. It requires some initial thought, some long-term vision, and some persistence to succeed. Often, students may not be familiar with or skilled at working together. Fortunately, the CL literature allows us to learn from the trial-and-error and effective practices of educators who have come before us. With this assistance, we and our students can come to enjoy and benefit from cooperation in the classroom and beyond Sapon-Shevin, Upper Saddle River, NJ: Strategies for the heterogeneous classroom 2nd ed. Practical techniques, basic principles, and frequently asked questions. Learning together and alone 5th ed. Individual differences and instructed language learning. Because we can change the world: A practical guide to building cooperative, inclusive classroom communities. Handbook of cooperative learning methods. Theory, research, and practice 2nd ed. Appendix 1. Links to a site with lots of papers on CL and computers [http: Success for All The Success for All Foundation SFAF](http://www.successforall.org/) is a not-for-profit organization dedicated to the development, evaluation, and dissemination of proven reform models for preschool, elementary, and middle schools, especially those serving many children placed at risk.

Cooperative learning is a key component of their model. The foundation was founded by Robert Slavin and his colleagues. Johnson and David W. This site features the work of Elizabeth Cohen, Rachel Lotan, and their colleagues which has focused on the sociology of cooperative learning groups, in particular the treatment of status differences among group members.

Chapter 3 : CiteSeerX " Citation Query Requirements for security in cooperative work: two case studies

This third volume of the final report on urban cooperative work education programs contains summaries or case studies of the programs in 19 secondary and 11 postsecondary schools throughout the.

Return to Top of Page As I mentioned above, the jigsaw strategy is a unique cooperative learning approach. With this approach, students work together as a team toward learning the target material--particularly when that material contains several chunks of related information. For that reason, I would strongly suggest doing a simple one-class-period jigsaw activity before proceeding to more challenging and involved assignments. Start by determining your target material. What is it that you want your kids to learn? Obviously that could be anything that you want to choose, but for this example, I will choose as the target material the question, "What does it take to become a successful student? Determine how many pieces there will be in that puzzle. For this example, those pieces might include the following: Supplies and organization Preparing to enter the classroom Positive classroom behavior Study and homework techniques Other factors affecting school success Step 3: Have your kids sit together in their groups and explain to them that this is their home group or jigsaw group. Tell them that they are all about to become experts on one aspect of the question, and in order to do, that they will have to temporarily leave their new group and join an expert group. Remind them to note the numbered group area in which they are currently sitting before temporarily dividing them into expert groups. To form the expert groups, you can pick the simple and straightforward method of having your kids count off one thru five until everyone has a number and then group all the ones in an expert group or piece group , all of the twos in another expert group, and so forth. Obviously, you may use your own favorite grouping strategy. After the kids have relocated to the expert groups, visit each expert group with a note card containing the numbered pieces of the puzzle. Explain to the class that each expert group is to brainstorm ideas related to their particular topic, but NOT ideas related to any of the other topics listed. So, expert group number one does Supplies and Organization, expert group number two does Preparing to Enter the Classroom, and so on. Remind them that they will need to take notes on what they are discussing so that when they return to their original jigsaw group, they can "teach" the other members of their jigsaw group what they learned. After an appropriate time is allowed for brainstorming, ask students to reassemble in their original jigsaw groups. Each group leader, then calls on each expert to share ideas from his or her notes. Once all experts have shared their ideas, the jigsaw puzzle is now completely assembled and they will be able to see the overall picture of what it takes to become a successful student--the target material. For this simple introductory example activity, you may want to go with a very informal assessment. For instance you may ask each jigsaw group to summarize in one sentence what it takes to become a successful student. Those summaries then could be displayed for the entire class to compare, contrast, and synthesize. Of course, with more complex and demanding jigsaws, other methods of evaluation would probably be more effective. Return to Top of Page This example of a language arts grammar jigsaw will probably require a longer period of time than the example activity outlined above. As you know, grammar seems to be a difficult area for many students. The eight parts of speech seem to be learned at various grade levels but then quickly forgotten by students. This jigsaw activity may increase retention time. This takes very little preparation. All that you would need are resource books with examples of the parts of speech. Form teams and assign a leader. Each group should be four students. There are eight parts of speech and each student will become an expert on two of the parts of speech. The leader should help the group members each choose 2 parts of speech. You will probably need to group the parts of speech into two sections. Although you may determine what goes in each section, I prefer to use the following: Definition Rules about using the part of speech Unique qualities about the part of speech Use two examples of a part of speech in a sentence and underline the part of speech. Once the students have found out the information about the two parts of speech, you may want to set up four stations in the room noun, verb, adjective, and adverb. Then, you can have four of the eight part of speech experts meet together and then switch to pronoun, preposition, conjunction, interjection. The experts need to talk to each other and make sure that they have their information correct. Students go back to their original group after the two expert group sessions. Each expert then shares

what he or she learned. I strongly urge you to have group members take notes. After each group member or expert has presented, ask students to study their notes for a quiz over the information on the following day. The jigsaw lesson strategy can be used in the language arts classroom any time there is a great deal of information to be learned. For example, Renaissance poetry can easily be organized into a Jigsaw lesson. It just takes a little planning, but students will learn how to work together to learn a great deal of information quickly. Return to Top of Page An English class involved in an in-depth, 9-week author study, say on Gary Paulsen, would benefit from the jigsaw approach. Again, you would divide your class into groups of four or five depending on the number of students in the class and the number of "pieces" for the puzzle. Those pieces might include some or all of the following chunks of information: YOU are the expert in your field. If you are a geography teacher, and you want your kids to learn about Great Britain, some pieces for the jigsaw might include some or all of the following: Demographics which, of course, could be further divided into separate pieces Natural Resources.

Chapter 4 : What is Cooperative Learning? – Cooperative Learning Institute

In a study by B.J Farrell and H.M Farrell () called Student satisfaction with cooperative learning in an Accounting curriculum showed that team work has been as an instructional strategy. As a result, it can be viewed that the used of cooperative learning is common in tertiary sector.

The first day of school. The eager expectations of meeting new friends, getting to know your new teacher, finding your new desk. Students encounter a lot of new things that first day of school and our job as teacher is to help them wade through the waters of a day of many firsts. One of the most important things we can do on the first day is teach students how we want them to get along with one another and with you, the teacher. Teach them how you want them to interact inside and outside the classroom. Teach them that school is a safe environment where we truly care about each student. Cooperative learning activities provide a perfect opportunity to show students we care about them. These activities also show students how they can interact with each other and help students get to know one another. Before I get into depth with each activity, one of the key pieces of these activities that usually gets left out is the reflection piece. How did they respond to other students? What would they have done differently? These can be done within a community circle or in a writing journal.

Five Cooperative Learning Activities Here are several cooperative learning activities that I use within the first week of school. I use different ones with different grade levels, depending on their skill.

Interview The interview is pretty simple. This reporting out can take place over the course of a week or so. I tend to do the interviewing on one day and the reporting out over a course of days. Instead of questions, you can also put attributes, which is how the game is originally supposed to be played. Either way, the idea is that students are talking to multiple students in the class. For my second graders, I create a grid, usually 4 x 3 or so and write down 12 questions or attributes, one in each box. Students find another student, ask one question, then have the student sign his or her name in that box.

Spider Web This one is so much fun! You will need a ball of string or yarn, any color will do. Have students sit in a circle, either on the carpet or in chairs. This game can also be played outside. Say your name and one thing about yourself. That student says his name and one thing about himself. Play continues until all students have gotten a turn and there is a web of string criss crossing the circle. You can make the game more simple where students just choose the next student or more complicated, where students have to tell one thing about themselves, like their favorite food or something.

Graffiti This is one of my favorite cooperative learning activities, especially for older students. In this activity, I create six pieces of chart paper with one statement on each piece of paper. I group students and give each student a marker. Students rotate through the pieces of chart paper responding to the prompt on the paper. At the beginning of the year, I make the statements more low-key, but as the year progresses, I increase the complexity of the statements, even using academic questions to review content.

Favorite moment What I want to be when I grow up and why
Things that scare me
Things that get me excited
What I like about school
What I dislike about school
Things people do that annoy me
Things that people do that I like
I feel sad when

Squiggly Line Drawing The squiggly line drawing is an individual activity that can be turned into a cooperative learning activity during the reflection piece. Draw a line in the top space that has a curve to it and photocopy that page for each student in your class. Students spend some time drawing a picture incorporating that curved line and then write about their picture below. During the reflection time, students can partner up and share their picture and writing with a partner, or you can sit in a circle and share out within the circle whole group. The beauty of this activity is that it provides students with some down time during a busy first day. The book is much more than cooperative learning activities, but those have been the best takeaway from the book for me. Another good book is *Keys to the Classroom*. It, again, is much more than cooperative learning activities, but has a few good ones in there, too. One last piece of advice: Do them throughout the year as you need to refocus students on how to get along in the classroom and how to think about each other.

This book constitutes the thoroughly refereed post-proceedings of the 9th International Conference on Computer Supported Cooperative Work in Design, CSCWD , held in Coventry, UK, in May

A General Assembly is the highest policy-making body of the co-operative and is the final authority in the management and administration of the affairs of the co-operative. It is composed of members who are entitled to vote, duly assembled and constituting quorum. The general assembly holds at least one meeting a year; the date of the meeting is fixed in the by laws, or within 90 days after the close of each fiscal year. For newly registered co-operatives a special general assembly meeting must be called within 90 days from the date of approval. The General has the following exclusive powers, which cannot be delegated: The Board of Directors is the body that formulates policies, directs, supervises and manage the business of the co-operative. It is generally composed of five to fifteen members elected by the general assembly. Their term of office is determined by the laws of the co-operative. Usually, a term of office must not exceed two years and no director can serve for more than three consecutive terms. The board of directors must hold monthly meetings, unless the by laws say otherwise. Special meetings may be called as stipulated in the laws of the co-operative. Directors cannot attend or vote by proxy at board meetings. All regular members who meet the qualification and none of the disqualification set by the laws of the co-operative can be elected to the board of directors. What Constitutes A Quorum? For the board of directors a simple majority of its member makes a quorum. Generally, the distribution of a co-operatives surplus is determined by-laws. Surplus is determined at the close of a co-ops fiscal year or as prescribe by its by-laws. A co-operatives surplus is not profit in the usual sense of the word. As far as the co-op is concerned, this excess payment or surplus is considered as having been returned to the members if the surplus is distributed in the following manner. First priority goes generally to the reserve fund at least 10 percent of the net surplus. The reserve fund is meant to stabilize co-op operations and may be used only for investments allowed by the code. Second priority goes to Education and Training, which is generally not more than 10 percent of net surplus. Third priority is an optional fund, a land and building fund, community development fund and any other necessary funds. After all these have been allocated, the remainder is available to the general membership in the form of interest on his investment and patronage refund. Nevertheless, interest in share capital should exceed normal rate of return on investment. Yes, some large co-ops in the US trade their stock class B, non-voting shares on the stock market. Notably, member shares, which permit voting rights, may not be traded in such a manner. Are there advantages to forming a co-operative rather than a traditional private enterprise? Definitely, particularly if you think you will need to obtain the commitment and advice of associates. The co-operative option could then prove to be the best legal choice because it is an organizational tool designed to meet the needs, and facilitate the operations, of both small groups and of large groups with tens, hundreds or even thousands of members. You might be looking for a way to obtain affordable quality housing, or access to cable television or any other product or service unavailable in your region. You might want to create a job corresponding to your abilities and your requirements, or reduce your costs of production. By forming a consumer or service co-operative, you will be able to obtain: As co-owner of an enterprise operating according to democratic rules, you will be able to define the characteristics of the products or services with the other members; products or services at a lower cost. How many people are needed to form a co-operative? This varies according to applicable local legislation on co-operatives. Most national legislation requires at least three founding members. Some legislation may require up to twelve founding members to form consumer, service or producer co-operatives, and only three or five to form a worker co-operative. Is a co-operative non-profit? Although the primary goal of a co-operative is not to maximize profits but its service to members, a co-operative must, nevertheless, generate sufficient revenue to cover expenses and ensure its growth. After securing, in a general reserve, the capital needed to finance the expansion of the business, any surpluses remaining are returned to members. Beyond this basic requirement, and in accordance with certain existing federal and provincial legislation on co-operatives, a co-operative may decide not to distribute any surpluses and therefore, in some situations, will meet the

definition of a non-profit organization. There may, therefore, be two kinds of co-operatives: For example, housing, day care, health and other similar co-operatives. Must all members of a co-operative buy shares? Yes, if the co-operative is listed as a co-operative with share capital. What is the cost of a share in a co-operative with share capital? A distinction must be made between a share and the number of shares required to become a member of a co-operative. The number of shares, or the cost of the shares that a member purchases, will depend on the kind of co-operative and on the legislation governing co-operatives. When it is first set up, each co-operative defines the minimum amount each person will have to invest to become a member. This amount may correspond to one share or to several shares. Certain provincial legislation may decree that the value of a share is always the same -- such as, ten dollars. Depending on investment or start-up requirements, a co-operative will define the number of ten-dollar shares a person must purchase to become a member: Must all members have exactly the same total value of shares? All must have the minimum number of co-op shares and preferred shares defined by the co-operative in order to be eligible for membership, but some members may decide to invest more and to buy more than this minimum number. This does not give them greater rights in the co-operative, because the rule of one person, one vote applies regardless of the number of shares a member has. The amount members must invest in co-op shares and preferred shares may vary greatly from one co-operative to another. May non-members invest in a co-operative? Normally, only members may invest in a co-operative. Given the size of investment necessary to start up or develop an enterprise in certain economic sectors, however, some legislation authorizes the issue of preferred shares to non-members. This is not obligatory. It may sometimes be the case in very small co-operatives, such as co-operatives composed only of professionals. Generally, however, a co-operative must adapt its salary policies particularly its salary scale to the practices in effect in the sector in which it is operating. Otherwise, it runs the danger of having production costs that are too high to be competitive in the marketplace. If salaries are too low, on the other hand, the co-operative may face difficulty hiring or retaining experienced workers. Does a co-operative perform as well as a traditional private enterprise? It may perform a great deal better, particularly in the case of worker co-operatives. Some studies comparing the performance of these co-operatives with private enterprises operating in the same economic sector have demonstrated their superiority in two ways: This is the result of the high motivation of workers. They know that the business belongs to them. They know that the better their work, and the greater the surplus the enterprise generates at the end of the year, the more they can increase their income through returns. The co-operative model is also particularly well suited to new methods of participatory management being increasingly adopted by enterprises wishing to maximize their performance and the quality of their client services. In fact, through its democratic management philosophy and its work team approach, a worker co-operative can function like a natural quality circle. This democratic management approach is particularly important in highly skilled sectors. By its nature, a worker co-operative has the potential to be an "intelligent" operation in which all workers contribute their intelligence and skills to collective decision-making for the benefit of the enterprise.

International Labour Organization The International Labour Organization is the UN specialized agency which seeks the promotion of social justice and internationally recognized human and labour rights. It was founded in and is the only surviving major creation of the Treaty of Versailles, which brought the League of Nations into being, and it became the first specialized agency of the UN in The ILO formulates international labour standards in the form of Conventions and Recommendations setting minimum standards of basic labour rights: It provides technical assistance primarily in the fields of vocational training and vocational rehabilitation; employment policy; labour administration; labour law and industrial relations; working conditions; management development; co-operatives; social security; labour statistics and occupational safety and health. Within the UN system, the ILO has a unique tripartite structure with workers and employers participating as equal partners with governments in the work of its governing organs. For a detailed discussion of the labour standards, their history and method of enforcement, along with relevant recent examples of their application, visit the International Labour Standards page of the ILO website.

Chapter 6 : What is a Co-operative? | The Co-operative Learning Centre

Computer Supported Cooperative Work (CSCW) is a community of behavioral researchers and system builders at the intersection of collaborative behaviors and technology. The collaboration can involve a few individuals or a team, it can be within or between organizations, or it can involve an online.

An Overview Of Cooperative Learning David W Johnson and Roger T Johnson Without the cooperation of its members society cannot survive, and the society of man has survived because the cooperativeness of its members made survival possible. It was not an advantageous individual here and there who did so, but the group. In human societies the individuals who are most likely to survive are those who are best enabled to do so by their group. Ashley Montagu, How students interact with each another is a neglected aspect of instruction. Much training time is devoted to helping teachers arrange appropriate interactions between students and materials. It should not be. How teachers structure student-student interaction patterns has a lot to say about how well students learn, how they feel about school and the teacher, how they feel about each other, and how much self-esteem they have. In the mids, cooperative learning was relatively unknown and largely ignored by educators. Elementary, secondary, and university teaching was dominated by competitive and individualistic learning. While competition dominated educational thought, it was being challenged by individualistic learning largely based on B. Educational practices and thought, however, have changed. Cooperative learning is now an accepted and often the preferred instructional procedure at all levels of education. Cooperative learning is presently used in schools and universities in every part of the world, in every subject area, and with every age student. Materials on cooperative learning have been translated into dozens of languages. Cooperative learning is now an accepted and highly recommended instructional procedure. In every classroom, instructional activities are aimed at accomplishing goals and are conducted under a goal structure. A learning goal is a desired future state of demonstrating competence or mastery in the subject area being studied. The goal structure specifies the ways in which students will interact with each other and the teacher during the instructional session. In the ideal classroom, all students would learn how to work cooperatively with others, compete for fun and enjoyment, and work autonomously on their own. The teacher decides which goal structure to implement within each lesson. The most important goal structure, and the one that should be used the majority of the time in learning situations, is cooperation. Cooperation is working together to accomplish shared goals. Within cooperative situations, individuals seek outcomes that are beneficial to themselves and beneficial to all other group members. In cooperative and individualistic learning, you evaluate student efforts on a criteria-referenced basis while in competitive learning you grade students on a norm-referenced basis. While there are limitations on when and where you may use competitive and individualistic learning appropriately, you may structure any learning task in any subject area with any curriculum cooperatively. Theorizing on social interdependence began in the early s, when one of the founders of the Gestalt School of Psychology, Kurt Koffka, proposed that groups were dynamic wholes in which the interdependence among members could vary. For interdependence to exist, there must be more than one person or entity involved, and the persons or entities must have impact on each other in that a change in the state of one causes a change in the state of the others. Deutsch conceptualized three types of social interdependence—positive, negative, and none. Positive interdependence tends to result in promotive interaction, negative interdependence tends to result in oppositional or conitient interaction, and no interdependence results in an absence of interaction. The relationships between the type of social interdependence and the interaction pattern it elicits is assumed to be bidirectional. Each may cause the other. Teachers a formulate both academic and social skills objectives, b decide on the size of groups, c choose a method for assigning students to groups, d decide which roles to assign group members, e arrange the room, and f arrange the materials students need to complete the assignment. In these preinstructional decisions, the social skills objectives specify the interpersonal and small group skills students are to learn. By assigning students roles, role interdependence is established. The way in which materials are distributed can create resource interdependence. The arrangement of the room can create environmental interdependence and

provide the teacher with easy access to observe each group, which increases individual accountability and provides data for group processing. Explaining the instructional task and cooperative structure. Teachers a explain the academic assignment to students, b explain the criteria for success, c structure positive interdependence, d structure individual accountability, e explain the behaviors i. Teachers may also teach the concepts and strategies required to complete the assignment. By explaining the social skills emphasized in the lesson, teachers operationalize a the social skill objectives of the lesson and b the interaction patterns such as oral rehearsal and jointly building conceptual frameworks teachers wish to create. While conducting the lesson, teachers monitor each learning group and intervene when needed to improve taskwork and teamwork. Monitoring the learning groups creates individual accountability; whenever a teacher observes a group, members tend to feel accountable to be constructive members. In addition, teachers collect specific data on promotive interaction, the use of targeted social skills, and the engagement in the desired interaction patterns. This data is used to intervene in groups and to guide group processing. Teachers a bring closure to the lesson, b assess and evaluate the quality and quantity of student achievement, c ensure students carefully discuss how effectively they worked together i. The assessment of student achievement highlights individual and group accountability i. The group celebration is a form of reward interdependence. The feedback received during group processing is aimed at improving the use of social skills and is a form of individual accountability. Discussing the processes the group used to function, furthermore, emphasizes the continuous improvement of promotive interaction and the patterns of interaction need to maximize student learning and retention. During a lecture, demonstration, or film, informal cooperative learning can be used to focus student attention on the material to be learned, set a mood conducive to learning, help set expectations as to what will be covered in a class session, ensure that students cognitively process and rehearse the material being taught, summarize what was learned and precue the next session, and provide closure to an instructional session. Two important aspects of using informal cooperative learning groups are to a make the task and the instructions explicit and precise and b require the groups to produce a specific product such as a written answer. The procedure is as follows. Teachers assign students to pairs or triads and explain a the task of answering the questions in a four to five minute time period and b the positive goal interdependence of reaching consensus. The discussion task is aimed at promoting advance organizing of what the students know about the topic to be presented and establishing expectations about what the lecture will cover. Individual accountability is ensured by the small size of the group. A basic interaction pattern of eliciting oral rehearsal, higher-level reasoning, and consensus building is required. Teachers divide the lecture into 10 to 15 minute segments. This is about the length of time a motivated adult can concentrate on information being presented. After each segment, students are asked to turn to the person next to them and work cooperatively in answering a question specific enough so that students can answer it in about three minutes that requires students to cognitively process the material just presented. Each student formulates his or her answer. Students share their answer with their partner. The question may require students to: Summarize the material just presented. Give a reaction to the theory, concepts, or information presented. Predict what is going to be presented next; hypothesize. Relate material to past learning and integrate it into conceptual frameworks. Resolve conceptual conflict created by presentation. Teachers should ensure that students are seeking to reach an agreement on the answers to the questions i. Randomly choose two or three students to give 30 second summaries of their discussions. Such individual accountability ensures that the pairs take the tasks seriously and check each other to ensure that both are prepared to answer. Periodically, the teacher should structure a discussion of how effectively the pairs are working together i. Group celebrations add reward interdependence to the pairs. Teachers give students an ending discussion task lasting four to five minutes. The task requires students to summarize what they have learned from the lecture and integrate it into existing conceptual frameworks. The task may also point students toward what the homework will cover or what will be presented in the next class session. This provides closure to the lecture. Informal cooperative learning ensures students are actively involved in understanding what is being presented. It also provides time for teachers to move around the class listening to what students are saying. Listening to student discussions can give instructors direction and insight into how well students understand the concepts and material being as well as increase the individual accountability of participating in

the discussions. In order to ensure the base groups function effectively, periodically teachers should teach needed social skills and have the groups process how effectively they are functioning. Typically, cooperative base groups are heterogeneous in membership especially in terms of achievement motivation and task orientation, meet regularly for example, daily or biweekly, and last for the duration of the class a semester or year or preferably for several years. Permanent cooperative base groups provide the arena in which caring and committed relationships can be created that provide the social support needed to improve attendance, personalize the educational experience, increase achievement, and improve the quality of school life. A typical class session may begin with a base group meeting, which is followed by a short lecture in which informal cooperative learning is used. The lecture is followed by a formal cooperative learning lesson. Near the end of the class session another short lecture may be delivered with the use of informal cooperative learning. The class ends with a base group meeting. Placing people in the same room, seating them together, telling them they are a group, does not mean they will cooperate effectively. To be cooperative, to reach the full potential of the group, five essential elements need to be carefully structured into the situation: Mastering the basic elements of cooperation allows teachers to: Take existing lessons, curricula, and courses and structure them cooperatively. Tailor cooperative learning lessons to unique instructional needs, circumstances, curricula, subject areas, and students. Diagnose the problems some students may have in working together and intervene to increase the effectiveness of the student learning groups. The first and most important element is positive interdependence. If one fails, all fail. If there is no positive interdependence, there is no cooperation. The second essential element of cooperative learning is individual and group accountability. The group must be accountable for achieving its goals. The group has to be clear about its goals and be able to measure its progress in achieving them and the individual efforts of each of its members. Individual accountability exists when the performance of each individual student is assessed and the results are given back to the group and the individual in order to ascertain who needs more assistance, support, and encouragement in completing the assignment.

Chapter 7 : Cooperative Learning and Achievement in Social Studies: Jigsaw II

The present study compares the effects of the cooperative jigsaw II method and traditional teacher-centred teaching method on improving vocabulary knowledge and active-passive voice in English as a foreign language for engineering students and the students' attitudes towards learning English.

What is Co-operative Education Co-op? The University of Houston Cooperative Education Program CO-OP is an internship program that gives UH students an opportunity to receive career training with pay as they work with professionals in their major fields of study. They tend to fill their new hire vacancies with graduates from their own CO-OP programs, whenever possible, since they already know the capabilities and work habits of the CO-OP interns they have trained. CO-OP positions are offered on a part-time, parallel basis 20 hours or less weekly or a full-time, alternating basis hours weekly. Most students participate in CO-OP at the start of their junior year but all student levels are eligible to apply to CO-OP after completing a minimum of two semesters of college in the United States, including currently enrolled post-baccalaureate, DACA, F-1 international, and graduate students. CO-OP positions are available in most UH college disciplines, especially engineering, business, and natural science and mathematics. Students must be in good academic standing within their college, enrolled full-time the semester Long Semester: International Students are required to complete a CPT form. Register for the non-credit CO-OP course. Some employers reimburse the student for the fee and it is up to the student to discuss with the employer regarding CO-OP fee reimbursement. If the employer agrees to reimburse the student, the student should contact the CO-OP office about the fee reimbursement procedure once they have paid the fee in PeopleSoft. Provides months of meaningful experience, making the student more valuable to an employer upon graduation. Many companies reduce recruiting and training costs by hiring former CO-OP interns. Makes academic work more meaningful through practical application of classroom principles and many employers have lab facilities and equipment that are not available on most campuses. Creates the proper environment to explore career choices and be professionally exposed to diverse opportunities within a specific field of study before graduation. Students can retain actively enrolled status while working as a part-time or full-time CO-OP intern. Review of the Work Report which includes an employer evaluation assists in determining the grade received on the official transcript. Work Reports must be completed, submitted, and signed by the appropriate employment supervisor for undergraduate and graduate students and faculty advisor for graduate students only before each semester deadline in Blackboard. Submitting the Work Report after the deadline will result in the student receiving a grade of Unsatisfactory on the official transcript. Can an intern complete back-to-back full-time CO-OPs during fall and spring semesters? To maintain full-time actively enrolled status CO-OP interns must be on one semester and off the next semester for full-time work experience within the UH Cooperative Education Program.

Chapter 8 : Using the Jigsaw Cooperative Learning Technique - ReadWriteThink

Cooperative education is a structured educational strategy integrating classroom studies with learning through productive work experiences in a field related to a student's academic or career goals.

Designing with an adoption process in mind Table Eight design and adoption challenges. When a technology requires that some of its users perform additional work without a compensating benefit, adoption may not follow. A corollary is that a decision about which technology to research, develop, or deploy is generally based on the intuitions of managers who may not appreciate how the technology will be received by other group members. A collaboration tool may not achieve the necessary critical mass of users. For example, one of the most actively researched CSCW applications was desktop videoconferencing; generally only some people had video, but everyone could be reached by telephone. The converse problem is the tragedy of the commons: If everyone looks to their own best interest, perhaps by free-riding on the efforts of others, then outcomes deteriorate and use may collapse altogether. Adverse social and motivational effects can result when a new tool disrupts existing channels, creates uncertainty about where to find information, and challenges existing authority structures. For example, executives who adopt a communication tool that enables them to interact directly may find that their administrators, now out of the loop, are less effective at managing their schedules and anticipating events. A major contribution from ethnographic studies is the observation that group behavior often focuses on handling exceptions or unanticipated events. Technologies designed to coordinate work activities often incorporate and enforce models of standard work processes and cannot gracefully handle deviations from such models. Collaborative features often must paradoxically be unobtrusive, because they are often used less frequently than other features, yet readily accessible when needed. In addition, these technologies can be very difficult to evaluate. Designers must consider what will be needed to promote successful adoption from the outset. Mark and Poltrock studied a success case, the rapid adoption of data conferencing in a large organization, with minimal technical support and no management mandate. A system of overlapping distributed social groups overcame differences in local customs, values, and infrastructures when members of a group supported adoption by other members, regardless of their location. The social media of today have predecessors in chat systems of decades past, but using a simple chat application then required all the resources of an expensive desktop computer. Today, feature rich applications run in the background or one window, or on an inexpensive mobile phone. The experience is constantly being radically reinvented. Technology change has shaped not only communication and collaboration possibilities, but the relevant social issues. A nice illustration is our awareness of the activities of distant collaborators. For many years, people only saw what collaborators sent or told them. Passive awareness was technically difficult. The World Wide Web took hold. The stance toward remote awareness rapidly evolved. A similar progression occurred with another awareness tool, desktop videoconferencing. In , prototype builders argued for surreptitious monitoring of colleagues: Glances allow us to maintain our awareness of colleagues without actually engaging in interaction with them. Slowly, the initial tolerance of privacy invasion and the stress on maximizing technology use faded. The first step toward greater symmetry in awareness was an audible notification that one was being watched but no indication of who it was, and eventually invitation and reciprocity became the norm. Along with the increase in capability, declining technology prices enabled researchers to get ahead of the curve. Collaboratories have been developed to support large-scale multisite efforts, primarily in scientific research, engineering, and education see Olson and Olson, Their lofty goals enable many of them to get ample funding, but the communication and collaboration problems they encounter will be common in other settings, so studying them to glean best practices and technology requirements is a logical research strategy. Smaller sensors and effectors, larger displays, better networking, and powerful visualizations will drive innovation and open design opportunities. Interest in multi-user simulations and virtual worlds has waxed and waned. Second Life see Figure 6 attracted attention in the late s. World of Warcraft is a gaming success. Dramatic high-end uses of technology that have appeared in theme parks are strong indications that compelling, fully immersive digital environments are possible and will eventually be

affordably priced. Copyright terms and licence: A group meeting in Second Life - circa Opportunities on the behavioral side come from two directions. As technology is used to support more of our activities in ever finer granularity, changing those activities as it does, there is a tremendous need for " and benefit in " understanding the changes around us, some of them broad and others domain-specific. This is a golden opportunity for ethnography; organizations and societies have never evolved as rapidly and profoundly as they will in the years ahead. At the same time, the information streaming over networks presents unparalleled opportunities for data mining and information visualization , and for machine learning to find and exploit patterns in the data. In the past, large-scale statistical analysis and ethnography were largely distinct undertakings, but in the future the two will work together, the former finding correlations and patterns, the latter enabling us to discover what they mean and identify other patterns to look for. Education, medicine, and software development are domains in which communication, information sharing, and coordination are of wide interest. Of these, education is coming to the fore, because a key facet is information that can be readily digitized and shared. With the availability of so much information of variable quality, a new set of skills is required of students " browsing, skimming, assessing, and synthesizing to a greater degree than before. The single largest issue that we are likely to contend with, as individuals, organizations, and societies for a very long time, is how to deal with transparency. Once information is digital it can show up anywhere at any time in the future, and much more is represented digitally every minute of every day. In this way, we learn that people do not behave as we thought they did or believe they should, people do not follow policies, regulations, or laws as closely as we imagined, social conventions are not honored consistently, and violations of all of these are prosecuted unevenly. We see chaos, inconsistency, and fallibility that was always present but not revealed. How will we react? Formulate more nuanced rules, enforce them more strictly, or become more tolerant of deviation? The field of CSCW that had come together around groups in organizations in the s has now split again, with North America highly focused on social media and online community and European CSCW focused on organizational issues and domain-specific research and development. It is plausible that these efforts will converge again as social media move into widespread use in a broad range of organizations.

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Chapter 9 : What is Co-operative Education (Co-op)? | Engineering Career Center

Research Studies on Effect of Cooperative Learning on Social Relations International Journal of Education and Psychological Research (IJEPR) Volume 4, Issue 1, March

Social Education 55 6 pps. Jigsaw II Robert M. Mattingly and Ronald L. VanSickle Cooperative learning techniques usually demonstrate superior effects in instructional goals important to social studies teachers. These goals include improved student motivation and time on task, attendance, attitude toward school, friendship between students of different social groups e. Academic achievement is the most critical instructional goal for most secondary social studies teachers, and cooperative learning techniques usually have demonstrated relatively greater effectiveness in achieving that goal than have various whole-class instructional procedures. These positive achievements have been observed for students over a wide range of ability; learners with histories of learning difficulties, however, appear to benefit the most from cooperative learning techniques Slavin Newmann and Thompson reviewed research on cooperative learning in the secondary grades and compared the results of five different cooperative learning techniques: Newmann and Thompson reported that 68 percent of the comparisons between cooperative learning techniques and conventional instruction showed superior achievement effects for the cooperative techniques. In most experiments, Jigsaw, the least effective technique in the studies Newmann and Thompson reviewed, was no more effective in terms of academic achievement than conventional instruction. Slavin reviewed a larger set of cooperative learning studies and concluded, as did Newmann and Thompson, that Jigsaw is academically the least effective of the well-known cooperative learning techniques. Nevertheless, Jigsaw is often more effective than conventional, noncooperative instruction in producing desirable affective outcomes, such as helping relationships. Slavin , has emphasized that cooperative learning techniques must meet certain conditions to be consistently effective academically: Newmann and Thompson hypothesized that the Jigsaw treatments were relatively less effective than the other techniques because they did not meet these criteria. Jigsaw and Jigsaw II As originally conceived and functionalized by Aronson , Jigsaw requires students to work in groups of five to six members. Each student in a group is given information to which no one else in the group has access, thus making each student an "expert" on his or her segment of the subject matter. After receiving their assignments, the students reorganize into "expert" groups to study the subject matter and prepare to teach it to the members of their respective "home" groups. Next, they return to their "home" groups and take turns teaching each other what they have learned. All students in a group are expected to learn all the subject matter assigned to members of their group. After the small group instruction, students are tested on the subject matter and receive individual grades or other rewards. Slavin developed a variation of Jigsaw called Jigsaw II. However, several strategies differentiate Jigsaw II from its predecessor. Teachers do not necessarily determine grades by this process. They provide, instead, public group recognition e. Research Reviews on Jigsaw The Newmann and Thompson and Slavin research reviews did not clarify how teachers used Jigsaw in the studies reviewed. In six of the studies, Jigsaw was no more effective in terms of academic achievement than the noncooperative comparison treatments, and in one study it was less effective Tomblin and Davis Before concluding that Jigsaw is no more effective than other noncooperative instructional procedures, we need more research than is currently available. This study tested the hypothesis that if modified along the lines Slavin recommended, Jigsaw would produce superior academic results when compared to a conventional, whole-class instructional process. Methodology Subjects The treatment groups consisted of two comparable, heterogeneously grouped, 9th grade world regions geography classes at a United States Department of Defense Dependents High School in Germany. The average age in each class was fourteen years, eight months. The number of boys and girls in each class was approximately equal. The ethnic diversity of the classes i. The students at this Department of Defense Dependents High School differed from most of their stateside counterparts in that almost none who began their high school careers at this school would finish high school there. The students were dependent children of the United States military personnel stationed in the area and the overseas tour of duty for military personnel is generally three years; often, as a result of transfers, students might stay for only a few months.

The socioeconomic status of these students varied, generally along military pay and grade lines, ranging from senior noncommissioned officer to colonel. Treatment The experimental period was nine weeks and encompassed a complete, nine-chapter study of Asia Swanson A typical chapter included the narrative description of its topic e. The two groups proceeded through the three units South Asia, East Asia, and Southeast Asia at a rate of one chapter per week. Both classes used the same text, were provided the same enabling activities and materials e. The experimental, cooperative groups were organized according to the Jigsaw II student team learning model Slavin The teacher assigned students to four-member teams balanced in terms of high, average, and low past achievement. The teacher told the students that several times each week they would be meeting in cooperative groups. The groups might be their "home" teams or their "expert" groups, depending on what they were studying or discussing. Students in the Jigsaw II classroom played a major role in planning and implementing instruction with teacher guidance; in all other ways, class materials, subject matter, and enabling activities given the two classes were identical. A typical cycle of team activity for the cooperative groups through one textbook chapter consisted of the following steps: They then read the assigned material. The teacher determined improvement points by using a system known as Equal Opportunity Scoring Slavin EOS awards improvement points ten points maximum based on improvement differences between test scores and base scores. The ten-point limit worked well in this study, allowing sufficient latitude for steady improvement by low and average achievers. High achievers were also able to score maximum points because a perfect score earned ten points. The minimum number of improvement points students could earn was zero. The teacher adjusted base scores weekly. The comparison class received instruction in a traditional format: Although both treatment conditions used the same materials and enabling activities, time allocated to particular activities varied. For example, the Jigsaw II class spent less time than the comparison class in lecture and whole-class discussion. With the exception of occasional unplanned cooperation during various class projects, the comparison group members were independent agents. Each was solely responsible for whatever classroom task he or she had been given. The teacher controlled the information each group received. Because we could not assign students randomly to the treatment groups, we administered three pretests to assess the extent to which the two classes were equivalent at the beginning of the experiment. A high internal consistency reliability coefficient of .92. Second, we gave the Henmon-Nelson Test of Mental Ability Lamke and Nelson to measure any discernable difference in the mental abilities of the two classes. We chose the Henmon-Nelson test because it is valid and reliable, is easy to administer and score, and requires only thirty minutes to complete. During development of the test, the reliability of Form I was computed to be a satisfactory .92. The posttest was the sum of the nine chapter tests on Asia provided with the textbook Swanson. The weekly chapter tests were similar in content and form to the pretest, but covered the content in greater detail. Each test contained knowledge, comprehension, and simple application items. The teacher added the nine chapter test scores for each student and computed a percentage correct. No reliability estimate is available. Data Analysis Pretests We assessed the two classes according to general geographic knowledge and skills, intelligence, and text-specific knowledge of Asia. The three pretests produced highly consistent results see table 1. Although we did not assess all possible differences, these three measures support the position that the two classes were academically equivalent. Posttest We analyzed the posttest scores with a t-test for independent means. We judged that the 5. The effect size of this difference is .79. Stated another way, 79 percent of the Jigsaw students exceeded the mean score of the comparison class students. We believe the lack of a reliability estimate is not a serious problem for two reasons. First, the nine-chapter posttest was similar in content and format to the pretest which was highly reliable. Alternatively, the true effect was greater than the effect observed. In any case, the test was sufficiently reliable to detect a substantial effect in favor of the Jigsaw II treatment. Conclusions Consistent with the cooperative learning studies reviewed by Newmann and Thompson and Slavin , this study found that Jigsaw II resulted in generally superior academic achievement effects. It is, therefore, inconsistent with the achievement effects reported by most Jigsaw studies. Equal Opportunity Scoring allowed all students to contribute to the achievement of the group goal and made it possible to hold individual group members publicly accountable to their peers for their contributions to the group effort. Theory, Research, and Practice Statistical Power Analysis for the Behavioral Sciences. Learning

Together and Alone. Schaeffer, and Eric Schaps. A Summary of Research. National Center on Effective Secondary Schools. University of Wisconsin, Palmer, Jesse, and J. Sharan, Shlomo, and Yael Sharan. Educational Technology Publications, Theory, Research, and Practice. The Johns Hopkins University, Using Student Team Learning. Lawrence Erlbaum Publishers, A Physical and Cultural Approach. Laidlaw Publishing Company,