

have a confession. Had I applied what I know about cooperative skills, I wouldn't be writing this article with the world's sorest thumb. In fact, my right thumb has been hitting the space bar alone while the left thumb throbs, begging for ice. I'm too embarrassed to show it to a physician or x-ray technician. But it really hurts.

You see, as my husband is joyfully backpacking Mt. Rainier's 93-mile Wonderland Trail, I'm watching the home front, doing all those domestic rituals and last-minute personal items teachers must accomplish before the school bell rings. In his absence, I decided to surprise him. That's when I forgot about cooperative skills, how well we work together, how talented he is at pounding things, and how utterly inept I am with drills, saws, hammers, and nails.

Seeing an empty wall in our new storeroom, and all those half-empty boxes of tools, screws, nails, and other items I have never learned to name, I decided the perfect surprise would be to hang it all up on the wall. The hardware store happily sold me racks, hangers, and corner braces. My fertile mind visualized a veritable handyman's haven as I collected and organized all the gear for my do-it-yourself hanging kit. Somewhere amid this fantasy, reality struck! (Probably about the third time I hit that pathetic thumb.)

But don't underestimate my sense of determination! I was mad enough to see it through. I had invested personal pain. You only need know it took me 14 solid, grueling hours to do a job Wayne and I could have done together in two. Even now, I'm not sure I'd invite you to view this handyman's haven. What will Wayne say? He'll feign admiration and surprise, give me a bear hug, then clear his throat.

The Co-op of Cooperative Learning

So what does this little vignette say

about the multigrade cooperative learning experience? Are teaching objectives and learning outcomes as simple as finding and capitalizing on individual strengths for the good of the group? Or is it as intricate as students teaching students to flex and adapt, discuss and debate, and finally value one another's strengths from first-hand, hands-on experiences that prepare them to work side-by-side in the workplace, on church boards, and within their family structure? Probably most teachers recognize the value of cooperative learn-

Getting Started

To develop students' "cooperative sense," we begin the year with worships emphasizing lessons in nature and the Bible where cooperation is crucial:

- Birds building nests together, caring for babies, etc.;
- Bees and insects pollinating flowers;
- Ants and bees in colonies with particular jobs;
- Elephants making circles to ward off enemies;

- Our body systems working intricately together; and

- The church body.

We reinforce these lessons with verbal and written rewards from both teachers and students when we "catch people cooperating."

In my classroom, our first cooperative learning experiences for the year take the form of exploring the differences between good listening behaviors and non-listening behaviors. Then we practice roles as participants, observers, and helpers. (See inset.) Younger students learn that they are valued for their opinions even though they haven't

yet mastered reading or writing. This has a tremendous impact on their sense of acceptance and self-worth.

Next, we group students for low-key, non-graded, high-interest activities that demonstrate the value of several minds brainstorming for a better product. These include:

- The favorite **newspaper tower**.

Each group must make a tower from two pieces of newspaper, a four-foot length of masking tape, and their own ingenuity. It must be able to stand on its own for one minute.

- **Stranded in the desert, or surviving at sea.** These are simulations where the group has to rank survival items in order of importance.

- **Millions of marshmallows.** A small-town store owner inadvertently buys

COOPERATION THE ONLY WAY TO GO IN SMALL SCHOOLS BY DOTTIE CHADWICK

ing, and want to incorporate the "real life" essence of its application. But we need strategies and practical ideas, not just theory.

Multigrade classrooms provide the perfect climate for practicing cooperative skills that can transfer to real life. But to work well, these skills must be caught as well as taught. In our school, cooperative learning is much more a mindset than a lesson plan. At the beginning of the year, teachers spend large blocks of time teaching cooperative strategies, roles, and attitudes. The hours invested bring giant returns when we see students "automatically" cooperating and looking for ways to help a classmate or build community. Perhaps nothing is more rewarding to a multigrade teacher than seeing students assist one another without being asked.

10,000 cases of marshmallows rather than 10. He cannot send them back, and must convince his customers of their many uses. The group has to brainstorm a list of viable uses, and write an advertisement extolling the virtues of hard miniature marshmallows.

• **Inventions.** Each group is given the same paraphernalia on a paper plate and asked to make a new household utensil. They do not have to use all the items on the plate. Each group has 40 minutes to brainstorm, name the invention, manufacture a facsimile, and write a 30-second TV commercial for their product. The advertisement must include an 800 number with the name of the product as the last seven digits.

The groups share their inventions and innovations at the end of each session. During the activities, the observers are probably the busiest since they record group participation data and share it in a debriefing session. All the students become involved, and when asked if they would feel as good about their product and presentation had they done it by themselves, they always affirm the value of the cooperative experience.

Ready, Set, Go!

Having established our group dynamics, we're ready to transfer the learned cooperative skills to real-life daily assignments in skills and content areas. Whenever possible, the lessons and objectives are adapted to accommodate cooperative learning. This means less workbook time and more creative, critical-thinking experiences.

Since most multigrade teachers have three to four grades in one room, the grouping dilemma (heterogenous vs. ability) must be faced head-on. This means

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designing lessons around a single activity that will accommodate the abilities of all members.

Language Arts

Daily Oral Language from McDougall-Littell is a five-minute-a-day activity designed to involve students orally in the editing process. Three or four grade levels can easily group together to edit and check

one another's work. Individual accountability is tested each week by a quiz over the edited sentences.

Poetry is another group favorite at our school. After the class writes a poem with the teacher, various groups construct a poem using the same structure, followed by individual poems. This gives students enough confidence to make the transition from group work to individual poetry writing. All students have had practical experience, and understand the expectations. Therefore, the teacher, when editing, can more readily call on student teaching assistants without their resenting the interruption. Team editing is one of my most successful classroom methods.

Even *Handwriting* is edited by a partner. At

dictation times for older students and practice times for younger students, pupils rate their work individually, then pass it on to a partner who circles the letters or sections he or she likes best. Students must give positive and negative feedback. Coming from a peer, the critique has more impact.

Biographies are another effective tool for building community between older and younger students. This past year students from the upper grades formed groups to brainstorm interview questions in order to write a biography for each younger student. When the older students finished the projects three weeks later, the younger students were surprised and thrilled to be presented with a book about themselves that they could take home. The older students had phoned parents, talked to siblings, and ad-libbed enough to make the project amusing and interesting. As they were writing, they informally shared their findings, illustrations, and excitement with one another. I'm still not sure who enjoyed the presentations most, the biographers or the

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Co-op groups make Valentine cards for shut-ins and the homeless.

An older pupil teams with a younger one for Friday fun math with manipulatives.

GROUP ROLES

PARTICIPANTS

- Ask Questions:
“How should we...?”
“What do you think about...?”
- Respond to ideas:
“I like your idea because...”
- Work well with others:
“You could help me...”
“Let’s do ____ together.”
- Produce products.

OBSERVERS

- Analyze and keep records of groups’ interactions and behaviors.
- Share observations and lead debriefing discussions.

younger students. Certainly the writers were proud because they’d already had enough feedback from their groups to know their product was a success.

Reading

While basal readers can be used effectively in multigrade groupings, the

size and dynamics of the group can make them stifflingly limited. I use the *Literature Set*, which includes periodic teacher/group discussions. The multigrade teacher must carefully select a variety of literature to reach the vocabulary and interest level of all students, but my students haven’t complained about the reading content. We

still use selections from the basal readers, especially for younger students. Even then, they seldom work alone.

Readers Theatre and *Character Dialogue Journals* lend themselves wonderfully as group activities to enhance reading, speaking, and writing skills.

Bible

Bible activities come alive when students apply group dynamics as they write a script for readers theatre or a skit. Memory verses can be written as a group, as can research projects. When the assignments are handled properly, everyone is involved and accountable. In small Bible classes, students feel safe enough to share their experiences and spiritual aspirations. Bible classes can also spill over into joint worship, as younger groups of students share their “TV” scroll stories. Older students might perform a self-generated skit. This camaraderie serves to bring students together and to build school spirit.

Science/Social Studies

What could be more appropriate than being “social” in social studies? The differences we see in the quality of projects assigned to groups, compared to those done by individuals, is amazing. These groups may need to be smaller than in other classes, but their strength is in verbalizing and internalizing. Following a science project from hypothesis to experiment, or studying several countries and their comparative virtues is much less intimidating when the project is shared. Again, it takes planning to hold everyone accountable, but it is worth the effort.

Math

Daily Math and *Daily Analogies* from McDougall-Littell are great group activities to warm up math classes. These can be purchased very reasonably, and provide group practice in real-life math situations. After calculating answers, groups are asked to share their methods. Students soon discover there are many valid ways of finding solutions.

For daily assignments, students are grouped by grades. They assess their own work, and show the teacher their group grade. At testing time students get a choice: They can do a group test, then a

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similar one individually, averaging the scores of the two for their final individual score; or they can work alone. Most upper-grade students prefer the group test method because verbalizing helps them review the concepts on the individual tests.

Throughout the year, the class and I continue the cooperative learning rationale by sharing news clippings and media coverage of cooperation in real life. This past year I heard a radio broadcast explaining how a large American automobile company had cut its design time for a new model by six months simply by bringing the 60 corporate designers together from the onset instead of having each one design a part without discussion, then trying to make it fit together at the end. This was a graphic real-life application for my class.

Another effective reality check happens when students conduct career interviews, using questions like, "How important is teamwork in your company?" Or "What did you learn early in school that has helped you the most in your job?" I show students a chart from the U.S. Bank that lists "Working well with your peers" as the number-one quality in their "Eight Keys to Employability."* These activities provide added impetus for learning to cooperate and build community.

Whatever your personal style, cooperative learning in the multigrade classroom can save your sanity while teaching students the vital importance of valuing each others' strengths, and building up in areas of weakness.

Now, will someone please pass my teammate that hammer and saw? I'll carry the lemonade and cups. ☞

After writing the biography of a third grader, an older student shares it with him.

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A social studies region is presented cooperatively.

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REFERENCE

*Linda L. Buck and R. Kirby Barrick, "Eight Keys to Employability" (1987). Chart available from: Oregon Dept. of Education, 700 Pringle Parkway SE, Salem, OR 97310-0290.

RECOMMENDED RESOURCES

Teaching Cooperation Skills, by a Washington State Teacher's Cooperative (1990). Published by: Sopris West, Inc. 1140 Boston Avenue, Longmont, CO 80501.

Lynn Molyneux, *Cooperative Learning, Geography, & Success* (Step-by-Step Activities) (1994). From Trellis Books, Inc., Canandaigua, NY 14424.

Lynn Molyneux, *Cooperative Learning, Social Studies & Success* (Step-by-Step Activities) (1994). From Trellis Books, Inc., Canandaigua, NY 14424.

Spencer Kagan, *Cooperative Learning* (1992, 1994). Publisher: Resources for Teachers, Inc., 1-800-WEE-COOP.