The David P. Weikart Center for Youth Program Quality, a division of the Forum for Youth Investment, is dedicated to empowering education and human service leaders to adapt, implement, and scale best-in-class, research-validated quality improvement systems to advance child and youth development. The Weikart Center encourages managers to prioritize program quality. We offer training, technical assistance, and research services that all come together in the Youth Program Quality Intervention, a comprehensive system for improving the quality of youth programs.

Bringing together over fifty years of experience and the latest research, the Youth Work Methods are proven strategies for working with youth. Whether you believe that the purpose of an out-of-school time program is to improve academics, to build life skills, or just to provide a place where kids can hang out and be kids, the approach presented in the Youth Work Methods series provides a foundation for building safe and productive places for youth.

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cooperative learning

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Acknowledgments

The youth development approach described in these pages was originally developed and tested at the HighScope Summer Workshop for Teens (founded in 1963), later called the Institute for IDEAS. In the late 1990s, HighScope’s Youth Development Group took the learning approach developed at the Institute for IDEAS and delivered training for youth workers. These workshops, grounded in HighScope’s direct experience, were extended by the David P. Weikart Center for Youth Program Quality through research in positive youth development and evolved into what is currently our Youth Work Methods series.

The current training framework rests on a foundation developed by many, including David P. Weikart, Nicole Yohalem, John Weiss, Becky Prior, Kiku Johnson, Aaron Wilson-Ahlstrom, Laenne Thompson, Tom Akiva, Alicia Wilson-Ahlstrom, David Martineau, Linda Horne, Mary Hohmann, Charles Hohmann, Charles Smith, Monica Jones, and many others.

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benefits of cooperative learning

This section provides a description of the benefits of cooperative learning.

We have all had experiences with group work in school and the workplace, and chances are, many of those experiences have been negative. The method in this guide is based on reliable strategies that will give you the tools you need to support cooperative learning in a way that is both beneficial and enjoyable for youth. There are many benefits of cooperative learning, and by using this method, youth in your program can experience them. Below you’ll find a summary of those benefits. For a review of the scientific literature on Cooperative Learning please see pages 66-71.

1. **Motivation.** As Glasser (1986) and others have shown, students like to connect with one another; being with friends is one of their interests in coming to school. In a cooperative group, they can develop higher levels of trust, feel safer for taking risks, and feel more comfortable than in the class as a whole. Cooperative groups provide students with a variety of sources of motivation; interest, curiosity, and desire for understanding are often present in group explorations. Social motives are shown by statements such as “I want to do my part well and not let the group down.”

2. **Retention of Facts.** The retention of information is closely linked with formation of concepts because people can form concepts through communicating with others in a group discussion. Plus, cognitive rehearsal strategies can increase retention, and these readily take place in small groups. In fact, youth frequently attest to the benefits of group discussion; for example, one youth remarked, “I remember the story much better when I talk it over with my group than if I just read it by myself.”

3. **Academic Achievement.** More than 70 high quality studies have evaluated various cooperative learning methods. 67 of these studies (Slavin, 1990) measured the effects of cooperative learning on student achievement and compared these effects to those of traditional teaching methods, using the same measures and objectives in all classes. In 61% of the cooperative classrooms students exhibited significantly higher achievement than students in traditional classrooms.

4. **Intergroup Relations.** People who cooperate learn to like one another (Slavin, 1977). Not surprisingly, classroom studies on cooperative learning have found quite consistently that students express greater liking for their classmates in general as a result of participating in cooperative learning (see Slavin, 1983, 1990). This is important in itself and even more important when there are socially recognized differences in student backgrounds, particularly in ethnicity, since there is substantial evidence that ethnic separateness in schools does not naturally diminish over time (Gerard & Miller, 1975).
5. **Individual Control.** In addition to higher achievement, positive intergroup relations, greater acceptance of mainstreamed students, and higher self-esteem, cooperative learning leads to a variety of other important educational outcomes, such as feelings of individual control over the student’s own fate in school, cooperativeness, and altruism (see Slavin, 1983, 1990). One study found that students from a lower socioeconomic status who were at risk of becoming delinquent and who worked in cooperative groups in 6th grade had better attendance, fewer contacts with the police, and higher behavioral ratings by teachers in grades 7-11 than did control students (Hartley, 1976).

6. **Effects on High-Achieving Students.** Many teachers who use a collaborative approach are surprised to find that seemingly less able students often have insights and ideas that extend far beyond what teachers had expected, and data suggests that high-achieving students also gain much from their exposure to diverse experiences and from peer tutoring (e.g., Johnson & Johnson, 1989). Also, since students who are high achieving in one area may need help in other areas, all students may have an opportunity to contribute to one another’s development. If each student contributes something to the group, the pool of collective knowledge will indeed be rich.

7. **Effects on Shy/Introverted Students.** Teachers and others wonder whether shy students can fully participate in a classroom that depends so much on dialogue. Researchers suggest that these students might actually feel more comfortable talking in small groups, where all students share the responsibility for learning. Furthermore, interaction between learners can happen in ways other than oral dialogue, for example, through writing and art. Cooperative groups accommodate a wide variety of learning styles and modalities; for example, small groups can benefit introverted as well as extroverted learners.
overview

What is Cooperative Learning?
Cooperative learning is a purposeful learning structure coordinated and facilitated by the adult where youth work interdependently with one or more peers.

Groups can range from pairs to small teams and be formed based on certain criteria, planned by the adult, self-selected by the youth participants, or formed randomly to promote interaction.

Why is Cooperative Learning important?
Research demonstrates that young people can benefit in many ways from cooperative learning structures when they are implemented well. Specifically, benefits have been found for motivation, retention of facts, intergroup relations, a sense of individual control, and even for those youth who are generally high-achieving or extroverted as well as those who are more introverted (see pages 2-3 for summary and benefits).

The Method
The Cooperative Learning Method is built on the following four strategies. The pages that follow provide details on each of these strategies.

- Create multiple group work opportunities
- Establish clear goals
- Promote collaboration
- Include reflection on group experiences
Cooperative Learning in School vs. Out-of-School Time

This page overviews how cooperative learning might work differently in school than it does in out-of-school time programs.

Cooperative learning is a method that is equally effective in an academic classroom or in an afterschool program; however, there are key differences to consider as you implement the strategies in these distinct environments. One of the biggest considerations is grading. What happens when youth are working in cooperative learning groups within the context of receiving a grade? You should think about this question as you establish goals for a lesson or activity.

The two strategies that are perhaps most affected by the added factor of grades are Promoting Collaboration and Including Reflection on Group Experiences. Within an afterschool program, shared goals and other forms of interdependence can often easily motivate youth to work with each other and benefit from cooperative learning. On the other hand, when grades enter the picture, some youth will be very concerned about earning a high grade, while others will have to overcome the feeling that they are just bad students and will always get bad grades. Some youth may feel that they will have to do all of the work, others that they can easily “hide” within a group and not have to reveal that they haven’t learned something. Any of these outlooks or situations, as well as any in between the extremes, can make true collaboration difficult as youth tend to be more concerned about their individual performance as opposed to the outcome for the group and its shared goals.

There are many, high-quality models for grading group work in schools. In order to choose one that suits you and your students’ needs, see how the model supports the strategies outlined in this guide, particularly how the grading model promotes collaboration and interdependence among group members rather than implicitly pitting them against each other.

The challenge with reflecting on the experience is that grades often signal the “end” of an activity. Once a student receives her grade, she is ready to move on to the next project. In order for cooperative learning to be complete, the student should have the opportunity to reflect on the experience. Consider incorporating reflection into the grading process, or at least making it a habit so that youth come to expect it as part of the routine.

In spite of these extra challenges in a classroom setting, the cooperative learning method as outlined in this guide can be a powerful tool for teachers, increasing student motivation, achievement, and improving intergroup relations.
Using the Guidebook

Bring Cooperative Learning ideas into your staff meetings by using the materials in this guidebook. Below are suggested activities to accompany each set of content.

Benefits (pages 2-3) 15 - 20 minutes
Have staff Think-Pair-Share about both positive and negative experiences they have had as participants in group work whether in school or in the workplace. Then, have them read through the benefits. At this point, they could talk in small groups about how they see these benefits in their work with youth, why it is important for youth to experience these benefits, or even what they can do to keep these benefits in mind as they implement cooperative learning.

The Method (pages 8-15) 10 - 15 minutes
Review the definition of Cooperative Learning with staff, then review the four strategies. In small groups, have them read each ingredient then share what they read with others either through a Jigsaw or Expert Group structure.

Positive Interdependence (page 18) 15 - 20 minutes
Ask staff to read the article on positive interdependence, then assign one type of interdependence to pairs or trios and ask each group to design an activity they could use where it would be implemented.

Across Age Groups & Content Areas (pages 22-23) 15 - 20 minutes
Write a different content area (e.g., art, math, literature, sports, etc.) at the top of large sheets of paper. Have staff rotate to each of the sheets and brainstorm cooperative learning activities that could work for different age groups. After all the ideas are posted, have staff do a gallery walk to gather ideas from the posted sheets.

Group Formers (pages 36-49) 10 - 15 minutes
Assign one or two group formers to each staff member, and then have them practice using it on the rest of the group. They should practice making different numbers of group as well as different sized groups.

Group Structures (pages 50-64) 15 - 20 minutes
In an initial meeting with staff, have each person choose a group structure they would like to use in their next program session. Ask them to write a brief (one to two sentences) description of their activity. In the next meeting have everyone write a one paragraph description of how it went, and then share their experience with a partner. Then have two or three volunteers share their experience with the whole group.

Research Review (pages 66-71) 20 - 30 minutes
Have staff read the Research Review before coming to the meeting. Begin the session by having staff underline two sentences in the text that stand out as important or intriguing. Have staff form group of no larger than 4. Have one person in each group begin by reading the statement that they underlined, without going into why they underlined it. The person to the left then shares their thoughts on the quote the leader read aloud. The next person shares their thoughts on that same quote, and so on until it gets back to the leader. Then the leader has the “last word” to share their thoughts. Then the leadership shifts to the next person. Debrief with the large group once all of the small groups have completed the exercise.
**Group Formers**

The majority of the group formers here rely on random selection or self-selection. They are usually good for getting youth into groups quickly for short activities. If you want to form the groups yourself, take some planning time beforehand. Think about the goals of the group work, the dynamics and needs of your youth, and their relationships with one another.

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Famous Trios

what
Form groups of three using sets of cards.

how to do it
1. (Before activity) Decide how many different groups you need and for each group, create a set of cards that reflects a famous trio.

2. As you begin the activity, distribute one card to each participant.

3. Explain, “Your card contains one member of a famous trio. Find the other two members of your trio to form groups of three for the next activity.”

4. Go around and make sure that groups are forming correctly.

examples
Some possible famous trios:
- Red light, yellow light, green light
- Earth, Wind, Fire
- Scarecrow, Tin man, Lion
- Executive branch, legislative branch, judicial branch
- Peanut butter, jelly, bread
- Huey, Dewey, Louis

time
Less than five minutes for a group smaller than 18. For larger groups, it could take a little more than five minutes just because of the number of different groups.

materials
famous trio cards

adaptations
You can certainly do famous duos or foursomes as well.
Group Structures

The group structure you use is entirely dependent on the time you have available and the goals you want the groups to achieve. As you read through them, think about ideas or concepts from your program that would work well with each one. There are many different variations for each structure, so don’t be afraid to get creative!

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Butterfly or Bee

what
A variation on rotation brainstorm that has two roles for participants — the butterfly who moves from group to group, and the bee who stays with one group the whole time.

how to do it
1. Choose topics for discussion.
2. Ask individuals to volunteer to lead a discussion by writing their name and the topic on a sheet of easel paper. These volunteers remain with their discussion group the entire time and are responsible for reporting out at the end.
3. Remaining youth sign up to be in an initial discussion group. After initial discussion, all non-leaders may decide to become a butterfly or a bee.

examples
The following topics are posted:
   - Field Trip ideas
   - Club ideas
   - Community Service ideas

Three youth volunteer to lead, one for each discussion group. The other youth evenly disperse themselves to the group that interests them most. The groups brainstorm ideas and the leader records responses on easel paper.

After about 10 minutes, the adult asks the leaders (the bees) to stay with the discussion they started, while the other youth become butterflies and visit another group.

When all the butterflies have landed, the bees sum up the discussion that the previous group had.

time
30 - 45 minutes

materials
easel paper, markers

adaptations
Older youth can create their own discussion topics, while younger youth might need more guidance.
Cooperative Learning: The Research
This section presents a review of research related to the Cooperative Learning method.

If two people have the same opinion, one is unnecessary. ... I don’t want to talk, to communicate, with someone who agrees with me; I want to communicate with you because you see it differently. I value that difference.

-Stephen Covey (2004)

Real learning does not happen until students are brought into relationship with the teacher, with each other, and with the subject. We cannot learn deeply and well until a community of learning is created in the classroom.


Cooperative learning is one of the most frequently implemented organizational structures in education. National surveys report that 60-90% of teachers use cooperative learning in primary, secondary, and post-secondary classrooms (Antil et al, 1998; Smith, 2010). Not only can cooperative learning support a host of prosocial goals including improved relationships among diverse learning populations (Oortwijn et al, 2008), it has been shown to support improved understanding and students’ attitudes about learning (Cohen, 1992; Slavin et al, 1995; Johnson & Johnson, 1999; Lancaster et al, 1997; Farris, 2008). The strength of research support for cooperative learning validates its prevalence, but this does not mean all cooperative learning is effective or even positive. There’s a difference between a teacher reporting they use cooperative learning, and using cooperative learning well. Cooperative learning has the potential to inspire real gains in student learning and motivation, but poor implementation is common and can make both participants and facilitators feel frustrated with the process.

The idea of cooperative learning is even bigger than it’s already substantial popularity. Indeed, the concept of individual accountability within the framework of group goals (Johnson and Johnson, 1999, Slavin et al. 1995) could describe numerous activities of a social group...from organizing a grocery list to building a bridge! This literature review begins with explanation of definitions commonly employed for cooperative learning, reviews theoretical foundations for cooperative learning, then reviews empirical research on cooperative learning. Distinctions between cooperative learning in out-of-school time in school are then addressed before presenting principles of the Weikart Center method.

Defining Cooperative Learning
Cooperative learning can be divided into two general categories: formal and informal. Informal cooperative learning is generally defined as students working together to achieve shared learning goals (Cohen, 1994; Johnson and Johnson, 1999; Slavin et al, 2003). This is the definition most classroom teachers employ. The obvious difficulty with this definition is that it’s open nature allows for a wide variety of interpretations and, not surprisingly, an equally wide variety of outcomes, both positive and negative. There are a number of accepted interpretations for formal cooperative learning, but the definition most well-supported by education professionals, including the U.S. Department of Education, is based on the work of a group of education researchers who have devoted their careers to studying Cooperative Learning; including Daniel Johnson, Robert Johnson, Spencer Kagan, and Robert Slavin. According to these researchers, the critical principles of effective formal cooperative learning structures are: Although this list may appear long or restrictive at first glance, decades of research and practice have produced a rich variety of easily adaptable and validated methods of implementation that carry out these principles (Kagan, 1990; 2010). Many cooperative learning structures are deceptively simple and, because they give every group member a sense of accomplishment while attending to their social-developmental needs, they are both personally satisfying and often really entertaining!

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5 For more information on this and comparable lists of cooperative learning principles, see Cohen, 1992; Balkcom, 1992; and Stevens & Slavin, 1995.
Theoretical Foundations
According to some theorists, it is primarily an interest in being part of a group that sustains commitment. But social interdependence theorists, such as the Johnsons and their predecessor Kurt Lewin, provide only one perspective on the greater social importance of cooperative learning. Motivation-oriented scholars suggest that the primary interest of the learner is the goal and the personal benefits one receives from being part of a group goal (Slavin, 1995). Social-constructivists, like Lev Vygotsky, view social interaction as essential to knowledge growth (1978). His metaphor of the Zone of Proximal Development—the learning condition between what a child can do without help and what can be achieved with help from competent adults or peers—helped establish the foundation for the idea of “constructive controversy” or the idea that interacting with others produces cognitive conflict that is necessary for learning (Johnson et al., 2000; cf. Piaget’s equilibration concept). Situations which provide opportunities for youth to make choices within a context of gradually decreasing adult control may be especially supportive environments for developing autonomy (Eccles et al, 1991). The benefits of personal choice are echoed in self-determination theory (Deci & Ryan, 2000) which describes the inherent motivation of students to learn. This natural impulse can be dampened by restrictive external controls. Out-of-school-time programs that employ youth-driven cooperative learning strategies support the ideas of autonomy as well as belonging, which have been identified as important psychological needs (Maslow, 1943; Glasser, 1998; Deci & Ryan, 2000). These types of programs provide students with a unique learning environment which is not bound by traditional external controls such as grades, but rather by the needs of the group. Ultimately, this construct most closely mirrors the greater society and supports both democratic values and acceptance.

Figure 1. Cooperative Learning Principles

| Goal clarity | Facilitators have a set of academic and social goals that they are able to clearly articulate to participants in terms of specific roles (what each participant should do to accomplish the goals), social emotional behaviors (how participants are expected to perform those roles, as well as behavior expectations), and learning outcomes (the ultimate purpose of the task and a clear idea of what the outcome should look like). |
| Individual accountability & positive interdependence: | Each participant has an opportunity to make a contribution to the ultimate goal and one participant cannot accomplish the goal alone. Participants depend upon one another to accomplish the shared goal. |
| Equal access to information | Participants have equal opportunities to learn, with equal access to necessary resources and equal time on task. |
| Reflection | Participants have the opportunity to consider, as a group, the cooperative learning process. |

From Johnson et al. (2000)
Cooperative Learning and the Active-Participatory Approach
Youth and adults learn best through hands-on experiences with people, materials, events, and ideas. The experiential learning model — validated by decades of research and rooted in our early work as part of the HighScope Educational Research Foundation — is the basis of our approach to teaching and learning.

Cooperative Learning and Other Youth Work Methods
Cooperative learning is a way for young people to have productive and collaborative experiences with peers. It gets young people out of the large group and into pairs or smaller groups. In their small groups, young people often feel more comfortable expressing their ideas and taking responsibility as they work together to achieve their goals. Research suggests extensive benefits for cooperative learning.

The adult-youth interaction strategies we promote in Cooperative Learning are an essential part of quality youth work, but they won’t be completely successful on their own. Successful cooperative learning relies heavily on providing a safe environment in which youth are encouraged to learn from one another and feel motivated to do so.

By incorporating other Youth Work Methods along with cooperative learning, you will be able to ensure that youth benefit from cooperative learning and think of it as a positive experience. You will support them in avoiding negative group work experiences.

Other Methods may also relate to Cooperative Learning. See the relevant guidebooks and trainings for more information.

Cooperative learning structures are built on the strategies found in Active Learning, challenging youth to engage not only with great content, but also with each other.

With support from the Planning and Reflection strategies, youth can be prepared to become active participants in cooperative learning structures, planning how to build interdependence within their groups and reflecting on progress and success. By employing the strategies found in Ask Listen-Encourage, adult facilitators can provide a positive support structure for youth that will help them overcome and learn from the challenges of cooperative learning.

Voice and Choice provides strategies to support youth in taking ownership over cooperative learning structures, providing quality feedback to facilitators and peers and improving their programs. In order to reap all of the benefits of cooperative learning, establishing Structure and Clear Limits throughout the process is essential.

To learn more about the history of the Active Participatory Approach, visit www.highscope.org.
The Youth Work Methods Series

The Youth Work Methods are powerful strategies for working with young people, based on positive youth development. The Methods are a key part of the Youth Program Quality Intervention (YPQI), a comprehensive system for integrating assessment and training. Each Method is linked to assessment items and designed to help youth workers improve the areas they choose to focus on.

- Youth Voice
- Planning and Reflection

YOUTH ENGAGEMENT

- Building Community
- Cooperative Learning
- Homework Help

PEER INTERACTION

- Active Learning
- Ask - Listen - Encourage
- Reframing Conflict

SUPPORTIVE ENVIRONMENT

- Structure and Clear Limits

SAFE ENVIRONMENT

- Teen Advisory Council
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