Welcome To Cooperative Learning

We will begin at 8:00

We will be using your reading and thinking about Chapter One in *Kagan Cooperative Learning* in our Opening.

**Pat**

Choose at least one of the chart prompts to briefly record a response and be prepared to share:

- I learned…
- Something that was validated for me was…
- I am interested in finding out more about…
The plan for Our Three Days Together:

1. Share the **Vision** of Cooperative Learning and the research that supports it and **PIES** which are the **Heart of Student Engagement**.

2. *Show how CL targets College and career ready skills and speaks to the priorities of the SED approved Teacher Evaluation Rubrics*

3. Examine **Structures and Structure Functions** as a way to generate activities in different learning target areas.

4. Think **Application, Design and plan** for instruction in your own classrooms.

5. **Be Good to the Brain, nourish it and (of course) have FUN!**
FAQ’s, Learnings and Validations

**Mix - Pair - Share** *(6.29)*

- Mix around the room when you hear “Mix”.
- When you hear “PAIR”, hand up - pair up with the person closest to you.
- Introduce yourself.
- Each person take two minutes to share your thinking from the FAQ’s: learnings, validations, areas you want to further investigate..(Switch)
- “Mix”
- Repeat steps 2x
<table>
<thead>
<tr>
<th>FROM......</th>
<th>TO......</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A good class is a quiet class”</td>
<td>“Learning involves healthy noise”</td>
</tr>
<tr>
<td>“Keep your eyes on your paper”</td>
<td>“Help your partner solve it”</td>
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<tr>
<td>“Sit quietly”</td>
<td>“Get up and look what others did”</td>
</tr>
<tr>
<td>“Talking is cheating”</td>
<td>“Verbalize to learn”</td>
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OUTCOMES Day 1

• Identify and explain key areas where the research regarding the effective use of Cooperative learning matches 21st century teaching and learning needs

• Identify and explain PIES – “the heart of learner engagement”

• Explain what is meant by “structure” and identify interpersonal and academic functions that structures fulfill in a lesson

• Explain how Timed-Pair-share, Roundrobin and Roundtable have PIES, what skills they teach and the functions these structures could fulfill in lesson design
Team Windows (commonalties) (10.12)

- Person 1 suggests something all students might have in common.

- If all teammates do, Person 1 records it in the “All” section, if only two people do, then Person 1 records it in Section 2 and so on.

- Continue in RoundTable fashion, passing the paper, until each team member has had a chance to go at least twice. (commonalities will be used to formulate team names)
Team Names (10.13)
Sum-the-Ranks (6.16)

- Teams have two minutes to determine four possible choices for a team name using commonalities. Write each choice on a square of one whiteboard from the team packs.

- Sum-the-Ranks
  - Everyone gets four post its. (use each to write the numbers 1, 2, 3 or 4 down.)
  - Decide which is your #1 choice, #2 choice, #3 choice etc.
  - When I say “Sum-the Ranks” - place the post-its on the whiteboard square, the #1 post it going on your first choice, the #2 on your second choice etc.
  - The choice that has the lowest sum wins.
Team Roles/Teammate #’s

- Materials coordinator
- Timekeeper/Focus keeper
- Cheer Captain
- Quiet Captain

(11.9)
Team Celebrations!

- Create and post your team banner with team name and decorations as desired – team names can go on table stands!
- Create a team handshake and cheer.

(10.13 – 10.14)

RULES

1. Everyone must touch at some point in the handshake, AND when you let go, the team must make a sound or shout a word or phrase.
2. 10.15 has lots of cheer possibilities!
Team Stand-N-Share (6.37)

All students stand by teammates. Each team member shares an idea that went into team poster, name and cheer.
Our Focus is on the Keys For Success! (5.2)

• Structures
• Teams
• Management
• Classbuilding
• Teambuilding
• Social Skills
• PI ES
Student Disengagement

Everybody think. What are things that cause student disengagement from school?

Jot Thoughts (6.28)

• You each have three minutes to simultaneously write causes on post-its, state your cause, and place it in the center of the table.
How does Cooperative Learning address the interrelated crises in education today?

(3.0)
Chapter 3

- #1’s  Crisis 1
- #2’s  Crisis 2
- #3’s  Crisis 3
- #4’s  Crisis 4

Everyone read 3.7.

Additional positive outcomes 36-3.7 outcomes
ThinkWriteRoundRobin

After each of you has read your section of chapter 3...

- **Connections/Passages**: Underline/highlight ideas that stand out to you or caught your attention in the text, jot down thoughts/connections to your own work.

- **Summary and Reaction**: Prepare a two to three sentence summary of your reading on the yellow note sheets in your folder.

- **Illustration**: On your note sheet, quickly sketch a picture relating to your reading.

- **RoundRobin Share beginning with teammate #1**
Cooperative learning is:

✓ The most researched
✓ The most beneficial
✓ The most powerful instructional strategy
Research & Rationale

- Academic Achievement Increases
- Ethnic Relations Improve
- Social Development is Enhanced
BRAIN Research

1 Reading

2 Listening

3 Thinking

4 Explaining to someone else
Academic

- Promotes higher achievement - increased time on task, individual accountability
- Brain Compatible – Takes advantage of student needs to talk, move and express themselves
- Positively influences motivation
- Targets wide spectrum of college and career ready skills
Social Development

- Increases the ability of students to communicate and work effectively with others
- Increases self-esteem
- Increases self direction
- Increases student ability to take on different roles/work well with all ethnic groups
What do students need for the future?
College and Career Ready

Latest research...

- Problem formulation
- Research
- Interpretation
- Communication
- Precision and Accuracy

David Conley, College Knowledge

21st Century Skills...

- Critical and Creative Thinking
- Problem Solving
- Accessing and integrating vast amounts of information
- Collaborating
- Effectively Communicating
- Developing Positive Relationships
- Flexibility and Adaptability

Partnership for 21st Century Skills
Cooperative Learning is a match for so many areas of all of your approved APPR Rubrics!
Our Focus is on the Keys For Success! (5.2)

- Structures
- Teams
- Management
- Classbuilding
- Teambuilding
- Social Skills
- PIES
PIES

P: Positive Interdependence
I: Individual Accountability
E: Equal Participation
S: Simultaneous Interaction
Positive Interdependence

Is my gain your gain? Is help necessary?
Individual Accountability

“Is individual public performance required?”
Equal Participation

“How equal is the participation?”
Simultaneous Interaction

“What percent are overtly active at once?”
Goal: 100% working
Minimum: 25% working
Our Focus is on the Keys For Success! (5.2)

- Structures
- Teams
- Management
- Classbuilding
- Teambuilding
- Social Skills
- PIES
The Fundamental Formula

Content + Structure = Activity

Content → The "What" of Teaching  
(Ideas for My Class)

Structure → The "How" of Teaching  
(Directions)

Activity → Learning Experience

Lesson → A Series of Activities
Structures have specific functions or purposes: (6.11)

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<td>7. Procedure Learning</td>
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<td>3. Social Skills</td>
<td>8. Processing Information</td>
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Interpersonal Structure Functions (purposes)

Classbuilding (9.0)

Stand-up- walk around- work with everyone
Create active engagement and a safe, caring community: students come to know classmates, celebrate diversity, gain mutual respect and share ideas

Once a week – insert content if needed

Structure I used: Mix-Pair-Share
Interpersonal Structure Functions (purposes)

Teambuilding (7.0)

a. Help students get acquainted, forge team identities, value differences, foster mutual support and develop SYNERGY!

b. 2 times per week, can put in content as needed

Structure I used -- commonalities
Other **Interpersonal Structures** function to improve

**Communication Skills** and **Social Skills**...

Actually, most structures somehow work to improve student capacity in each of these areas.
Academic Structure Functions(purpose)

1. Knowledgebuilding/ Procedure Learning- acquire facts, acquire & practice skills (Think Write RoundRobin)
2. Thinking Skills - engage in and develop different kinds of thinking (Jot thoughts)
3. Processing (stop structures) - review of information presented (Standup-Handup-Pairup)
4. Decision-Making - consider all points of view/ reach consensus (Sum the Ranks)
5. Presenting information - Equal sharing(presenting) of team work (Team Stand-N-Share)
Structures have specific functions or purposes: (6.11)

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Explain the purpose of various structure functions in a lesson

Round Robin

• Start with #…

• Each person will explain the purpose of the structure function in a lesson

• Rotate through your team twice explaining each structure function
Teacher A

- Teacher asks a question or gives assignment or task
- Teacher gives think time/work time
- Students raise hand to answer
- Teacher calls on student
- Student will answer
- Teacher will respond
What does Teacher A’s classroom look like?

**Oral**
- Teacher asks a question
- Think time is provided
- Students raise hands
- Teacher calls on 1 student at a time
- One student answers
- Teacher responds

**Written**
- Solo
Teacher A – Mental Math

• Complete each puzzle on your own
Teacher A – Mental Math

All of you think and be ready to share:

- Did all students finish at the same time?
- What happened when a student was struggling?
- What happened with high achieving students?
Teacher B

- Teacher asks a question or assigns a project
- Teacher gives think time
- Students work as a group to solve, discuss and share answers
- Teacher calls on a student
- Student will answer
- Teacher will respond
What does Teacher B’s classroom look like?

**Oral**
- Teacher asks a question
- Think time is provide
- Pairs or teams discuss

**Written**
- Instructed interaction
- “Help each other”
- Student can hide
Teacher B – Mental Math

• As a group, complete each puzzle
  – 1 person record the answers on one sheet
  – Work together to solve the problems
Teacher B – Mental Math

All of you think and be ready to discuss these questions with your team:

- How will the recorder probably do on the test? Everyone else?
- Did everyone participate? Was it possible to hide?
- Are all benefiting from guided practice?
- Is there social skills instruction and support?
Teacher C

• Teacher asks a question/assigns a task
• Teacher gives think time
• Student to student interaction
What does Teacher C’s classroom look like?

Oral

• Teacher asks a question
• Think time is provide
• Student to student
  – Structured interaction

Written

• Structured Interaction
• Rally Coach
Mental Math Pairs (Rally Coach 6.32)

- Partner A solves the first problem and thinks the process aloud.
- Partner B watches and listens.
- Partner A says, “Do you agree?”
  - If Partner B agrees – write it down
  - If Partner B disagrees – coach
- Partner B praises.
- Switch roles and partner B solves problem 2 thinking aloud as they complete.
- Partner A agrees or coaches, praises.
- Partners record answers.
All of you think and be ready to discuss these questions with your team:

- How are you going to do on Mental Math test tomorrow? Was it helpful to see and hear how others solved the problems?
- What was different about the student to student interaction?
- Can you identify P.I.E.S.?
All Write RoundRobin

- Every person has a pencil and paper
- #__ starts by sharing 1 answer
- Everyone records
- Repeat for 2 minutes

How would students benefit from being in Teacher C’s room?
Structure One – Timed Pair Share
What is the best lesson you ever taught and why?

• Think about your response.

• Pair with your face partner. Partner A will begin.

• You will each have 1 minute to respond.

• When you hear time, the other partner responds with a positive comment.

• Then switch roles
What are effective “sponges” for you?

- Think about your response.
- You will each have 1 minute to share.
- Pair with your shoulder partner. The tallest partner will go first.
- When you hear switch, the other person responds.
Structure One – Timed Pair Share:
(Communication Skills)

Should students receive monetary rewards for good grades? Why or why not?

- Think about your response.
- Find a partner at another table.
- Determine who is partner A and B.
- You will have 30 seconds to share.
- The other partner then has 20 seconds to paraphrase what was said.
- B’s start first. When time is up, partner A will respond.
- Then switch roles.
Structure One – Timed Pair Share

1. Teacher announces a topic and states **how long** each student will have to share.
2. Teacher provides **think time**.
3. In pairs, Partner A **shares**; Partner B **listens**.
4. Partner B **responds**.
5. Pairs switch roles: Partner B **shares**; Partner A **listens**.
6. Partner B **responds**.

(yellow sheets)
Timed Pair Share
Variation: Rally Robin

- Rally = Partners = Two People
- Robin = Talk
Timed Pair Share Variation: Rally Robin

Individually think...

*What are the benefits of using cooperative learning structures?*

- With your face partner, you will share as many benefits as you can in 1 minute
- Partner A will start by sharing one benefit
- Partner B then shares one benefit
- Continue sharing until time is up – “Time”
Rally Robin

1. Teacher poses a problem to which there are many possible responses or solutions.

1. In pairs, students take turns stating responses or solutions orally.

Rally Robin- simultaneous interaction is 50%. 
Rally Robin (6.33)

Individually think:

How was this structure different than what you experienced in Timed Pair Share?

Discuss with your group
Structure One – Timed Pair Share and Rally Robin (P.I.E.S.)

Where are the PIES?

P-while one partner is talking, the other is listening
I-both partners are responsible for sharing
E-both partners share and listen
S-both partners are engaged in the conversation
Timed Pair Share
A better way to structure sharing

Think Pair Share = broken structure

Why?

How is Think Pair Share different?
Management - Timed Pair Share

- Use a Teach Timer
- Monitor
- Precise directions
- Modeling
- Plan for pairs
- “Twins” for an odd number
What are the social skills needed for a Timed Pair Share?

- Active listening
- Contributing your ideas
- Expressing an opinion
- Giving reasons
- Patience
- Praising
- Respecting differences
- Switching roles
- Taking turns
Examples:
Timed Pair Share
Thinking Skills

• What do you think will happen next in the story?
• What do you think will happen when you mix those two chemicals together?
• Which candidate is best qualified to be President?
• Rank the principles of kitchen safety in order of importance to you.
• Compare and contrast plant and animal cells
• Compare and contrast two characters in a book
Examples:
Timed Pair Share

Presenting Information

• Describe your project, describe the main character
• Share the information you gathered from an interview
• Share the information you collected during your research
• Explain the steps you took to solve the problem
• Storytelling pairs – sharing/asking questions about writing
Examples:
Timed Pair Share

Communication Skills

• Paraphrase what the speaker said
• Summarize what you read in the text
• Summarize the findings of your experiment
More Examples: Timed Pair Share

• How have we used Timed Pair Share so far?

• How could you use Timed Pair Share in your classroom? List under Ideas for my class.
Brainstorm!

- Brainstorm with your table other ways that you could apply “Timed Pair Share” in your classrooms.
Structure One –
Timed Pair Share:
(Closure)

Think about Timed Pair Share (the steps, PIES, etc.). How did the structure give you the opportunity to gain knowledge and convey your own experience and learning?

Timed Pair Share with shoulder partner - A’s start.
Structure Two

Round Robin and Variations

Round = Group of 4
Robin = ____________
Structure Two: Round Robin

(Teambuilding)

- Use the Teambuilder cube
- Start with Person #4, roll the cube and respond to the statement
  - Each person will roll the cube when it is their turn
  - Continue until each person responds once
Buzz
Count to 40 and say buzz for every multiple of two. Start with person #2.

Bang
Count to 40 and say bang for every number that has a two in it.

Buzz/ Bang
Count to 40 and say buzz for every multiple of two, bang for every number that has a two in it, and buzz/bang for every number that is both a multiple of two and has a two in it.
Think about the following Statement:

Merit pay for teachers is a good idea.

• Agree or disagree with the statement, and tell why.
• Start with person #1.
• Each person has 30 seconds to respond
Think about the ways you promote literacy in your classroom.

Share your ideas with your teammates.

Each of you should have a piece of paper and a writing utensil.

When an idea is shared, all of you write it down.

Start with person #3.
Individually read *Engaged and On Track*. Prepare to share a reader response using one of the following prompts:

- I learned...and it made me think....
- I’d like to read/hear more about...
- Questions I have are...
- Connections I made were...
1. Teacher assigns a topic or question with many possible answers.

2. In teams, students respond orally, each in turn taking about the same amount of time.
Structure Two - Round Robin
(P.I.E.S.)

P-while one person is talking, the others are listening
I-everyone is responsible for sharing
E-everyone participates equally
S-at least 25% of the students are overtly active at once
Management – Round Robin

• Many rounds
• Monitor
• Precise directions
• Modeling
• Decide who goes first
• Talking chips
• Ball toss or cube pass
Social Skills – Round Robin

• Active listening
• Working together
• Sharing
• Giving reasons
• Patience
• Encouraging contributions
• Respecting differences
• Switching roles
• Taking turns
Round Robin Variations

• Everyone think…
  – What were the different variations of Round Robin you experienced?

<table>
<thead>
<tr>
<th>Single Round Robin</th>
<th>Continuous Round Robin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timed Round Robin</td>
<td>All Write Round Robin</td>
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</table>
Examples: Round Robin

Teambuilding

• Tell about a favorite trip you took
• Tell about a favorite book
• Tell about a favorite teacher

Knowledgebuilding/Procedural learning

• Explain the correct order of operations in math
• Give a cause of rainforest depletion
• Share one characteristics/examples of arthropods
Examples: Round Robin

• Explain a possible way to solve a word problem.
• List the items settlers involved in the western movement would have needed.
• Give an example of a past tense verb.
Examples: Round Robin

**Thinking Skills**

- What do you think might happen?
- Why do you think the water turned blue?
- Students agree or disagree with a statement and tell why (students should be able to buy soda during lunch)
- Students give a value judgment (regarding modern art and traditional art)
Talking Chips - Communication Skills/Social Skills

- Each person takes two chips.
- Toss in one chip at a time and share something you learned about Round Robin.
  - the steps
  - PIES
  - an idea for implementation
- Continue until everyone’s chips are in the middle.

Pat – Cayuga Onondaga BOCES Professional Development Unit - 2009
Why is Cooperative Learning as part of our teacher decision making good practice?

Individually write down a response.
RoundRobin Share.
RoundRobin Consensus.
Team Statement.
One Stray.
THANK YOU FOR YOUR RESPONSES AND QUESTIONS.

SEE YOU ON FEBRUARY 3RD!