Grouping Students for Instruction

Technical Assistance Center on Disproportionality @ Metropolitan Center for Urban Education

New York University
Objectives

• To understand the research behind students working in small groups

• To understand why grouping students is important in addressing disproportionality

• To understand the essential elements for effective student groups
Flexible Grouping for Instruction

- Teacher Guided Group
- Self-monitored Collaborative Groups
- Independent Work

The diagram shows the relationships between these three types of groupings.
Flexible Grouping for Instruction

- Teacher Guided Group
  - skill based
  - diagnostic
  - release of responsibility

- Self-monitored Collaborative Groups
  - centers
  - collaborative challenges
  - grp. products

- Independent Work
  - drill & practice
  - individualized work
  - assessments

Self-monitored Collaborative Groups

Teacher Guided Group

Independent Work
Does Grouping Students Work?

- Low ability
- Medium ability
- High ability
Why Use Heterogeneous Groups?

• To improve social competencies
• To improve self-esteem
• To build positive relationships between majority and minority students
• To foster leadership skills
• To prepare students for the workplace
• To increase student achievement

(Johnson & Johnson, 1999; Brown, 2000; Slavin, 1994)
Improved Social Competencies

• Respect for human differences
• Appreciation of minority rights
• Awareness of equity and justice
• Willingness to negotiate differences
• Patience for orderly participation
• Openness to others’ ideas
• Respect for the rights of others
• Sense of responsibility for the general welfare

(Schmuck & Schmuck, 2001)
Improved Self-esteem

Within cooperative groups, self-esteem is enhanced since individuals tend to:

• Interact more with peers
• Promote each other’s success
• Form multidimensional and realistic impressions of each other’s competencies
• Give accurate and more immediate feedback

(Johnson & Johnson, 1989)
Improved Positive Relationships Between Majority and Minority Students

• Greater cross-ethnic interactions

• Greater perceived helping

• Greater generalization of social interactions between ethnic groups

(Johnson & Johnson, 1982)
Improved Leadership Skills

• A Chance to be a leader

• Better initiative

• Better ability to provide positive feedback

• Better resistance to peer pressure

(Kagan, 1994; Johnson & Johnson, 2000)
Improved Preparation for the Workplace

• To prepare today’s students for the workplace requires schools to teach students to work in teams to make decisions, solve problems and create new ideas.
  
  (Mandel, 2003)

• “The heart of most jobs, especially the higher-paying more interesting jobs, is teamwork. Teamwork involves getting others to cooperate, leading others, coping with complex power and influence issues, and helping solve people’s problems in working with each other. Teamwork involves communication, effective coordination, and divisions of labor.”

  (Johnson & Johnson, 1991, p. 1:24)
Improved Student Achievement

• Higher individual achievement
• Increased retention with active participation
• More frequent higher-level reasoning, deeper-level understanding and critical thinking
• “...learning is often best achieved through in conversation among students.”

(Johnson & Johnson, 2000; Slavin 1994)
Based on Dale’s Cone of Learning By Edgar Dale, Professor of Education, Ohio State University

Retention Rates
Teacher Beliefs

• The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor. Effective teachers appear to be effective with students of all achievement levels, regardless of the level of heterogeneity in their classrooms.

(Wright et al., 1997, p.63)
How to Group

• Ability Groups
  – should be done sparingly
• Base Groups
  – supports set up for extended time (year, semester)
• Skill Set Groups
• Informal Groups
  – random, pair share, turn to your neighbor
• Formal Groups
  – thorough, multiple sessions, limited members
    (3-4 members best), defining elements

(Marzano, Pickering, Pollock, 2001)
Formal Groups

• Formal groups should be:
  – Mixed ability
    • Academic
    • Social
    • Behavioral
  – Mixed gender
  – Mixed ethnic make-up
  – Limited in number of members
5 Defining Elements Effective Heterogeneous Groups

- Positive Interdependence
- Face-to-face promotive interaction
- Individual and group accountability
- Interpersonal and small group skill
- Group processing
Positive Interdependence

• Each group member's efforts are required and indispensable for group success

• Each group member has a unique contribution to make to the joint effort because of his or her resources and/or role and task responsibilities
Explicit Teaching

Positive Interdependence

• Democracy
• Internal Thoughts vs. External Actions
• Team Rules
• Cooperative Games
• Positive Identity
• Positive Outside Enemy
• Equity
Face-to-face Promotive Interaction

- Students encouraging students to achieve
- Applauding success and effort
- Teaching one's knowledge to others
- Checking for understanding
- Discussing concepts being learned
Explicit Teaching

Face-to-face Promotive Interaction

• Sharing
• Teach tutoring skills
• Reward asking for help or clarification
• Role play ways to encourage group members
  – Positive situations
  – Making mistakes
Individual and Group Accountability

• Students are giving individual assessments in which they cannot receive help
• All roles or responsibilities rotate among members
• The group as a whole received reward/grade for quality of group work
Explicit Teaching

Individual and Group Accountability

• Teach self-monitoring skills (checklists)
• Call on random students to explain group process or information
• Stop activities to point-out positive interactions
• Have students quiz each other to practice for assessment
• Have a “checker” for group participation
Observing Work in Our Class: Form 2

For younger students the following simple observation form could be used. Initials of the students could be placed in the "What I Saw" area, and the observation should last only ten to fifteen minutes so students can remember the evidence.

1. Who listened?  

2. Who talked?  

3. Who gave an idea?  

4. I think this group was:

   - [ ] Smiley
   - [ ] Smiley
   - [ ] Neutral
   - [ ] Sad
   - [ ] Very Sad

5. Why I think the group was like that?

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________
Interpersonal and Small Group Skill

• Leadership

• Group Decision Making

• Trust Among Members

• Effective Communication

• Conflict-management
Explicit Teaching

Interpersonal and Small Group Skill

• Brainstorm actions of a good leader
• Practice ways to give positive and negative feedback
• Role play acceptable and unacceptable ways to attend
• Role play acceptable and unacceptable ways to react to ideas (manners)
• Play communication and trust games
Group Processing

• Group members discuss how well they are achieving their goals and maintaining effective working relationships

• Describe what member actions are helpful and not helpful

• Make decisions about what behaviors to continue or change
Explicit Teaching

Group Processing

- Make sure students know the purpose and objective for the group as a whole
- Assign each member a specific role for each time they meet
- Debrief – what worked and what didn’t
Flexible Grouping for Math

- **Teacher Guided Group**
  - skill based
  - release of responsibility
  - diagnostic

- **Self-monitored Collaborative Groups**
  - centers
  - collaborative challenges
  - grp. products

- **Independent Work**
  - drill & practice
  - individualized work
  - assessments
Flexible Grouping for Reading

Teacher Guided Group

• skill based
• release of responsibility
• diagnostic

1/2

Self-monitored Collaborative Groups

• centers
• collaborative challenges
• grp. products

Independent Work

1/2

• drill & practice
• individualized work
• assessments
Student Centers Should...

• have a specific location
• have written directions
• rule reminders
• have a leader
• have a “when done” component
• be well liked
• free you up
Favorite Math Centers

• Games
• Internet challenges
• Multiple Intelligence application
• Quiz creation
• Real life scenarios
• Brain teasers and puzzles
• Biographies
Favorite Literacy Centers

• Literature Circles
• Vocabulary applications
• Illustrations
• Cross-curricular challenges
• “Brain-Pop” and its like
• Group letters
• Spelling mnemonics
Grouping Students for Instruction

Debrief
Activities

• The following activities can be used to demonstrate what happens in small groups when the 5 Defining Elements of Effective Heterogeneous Groups are not in place. Activities can be modified, or substituted or placed anywhere in the presentation in a way that works for the presenter.
Who will be first?

Mary's father has five daughters:


What is the name of the fifth daughter?
Answer

• Mary
Answer the following

Nimrod, Manlin, Soltoy and Jovar are creatures from the planets **Mercury, Jupiter, Saturn, and Neptune**.

- None live on a planet with the same first letter as his/her name.
- Neither Jovar nor Nimrod can survive close to the sun.
- Manlin depends on his planet’s rings for life.

Who lives where?
Answer

• Who lives where...
  – Manlin lives on Saturn
  – Soltoy lives on Mercury
  – Jovar lives on Neptune
  – Nimrod lives on Jupiter

• What Prior Knowledge was needed?
How Many Rectangles Can You Find In This Figure?

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Rectangle Jobs

Person A – Count the 1x1 & 2x3

Person B – Count the 1x2 & 2x2

Person C & D – Count the 1x3 & 3x3
2x2

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3x3
Rectangle Jobs

Person A – Count the 1x1 & 2x3

Person B – Count the 1x2 & 2x2

Person C & D – Count the 1x3 & 3x3
Lights

• You are in a room with three light switches (A, B & C) that correspond to three lamps (1, 2 & 3) in another room. The door is closed between the rooms, and there is no way to see into the other room. You may (as a group) enter the other room only once, but must close the door behind you when you exit (again, as a group.) How can you determine which switch is connected to which lamp?