The Effects of Various Grouping Strategies on Cooperative Learning
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Submitted June 2003

Introduction
Walking through the cafeteria late last year, I slowed to watch some of my students talking over lunch. Their animation surprised me. The whole lunchroom was pretty wild, and students seemed comfortable expressing/asserting themselves. For many students that presented a stark contrast to their classroom demeanor. I wondered how to elicit some of that energy (not the wildness so much).

Abstract
How could a diverse World Geography class of eighth graders be arranged to encourage mutual support, sharing of ideas, and collaborative problem solving? In the case of the language minority students, how does the formation and composition of groups foster a sense of belonging, self-confidence, and risk taking?

The possibilities and effects of grouping have been widely studied. Theories abound as to group size, homogeneous and heterogeneous groupings, and group structure/hierarchy.

Over the course of the year, various approaches have been implemented and correlation sought between the arrangements of students and their productivity.

Literature Review
Cooperative learning groups have, since the early 90’s, been the accepted schema of middle school, at least in theory. In many ways, the early work of Kagan, D.W. Johnson, R.T. Johnson, and Slavin, echoes the small group work of the mid-70’s ESL movement. Students in small groups collaborate to solve a problem, create a product, or perform a task.

While some form of homogeneous grouping has been recommended by advocates of gifted and talented education (Allan, 1991), most middle school educators emphasize the downside of such groupings to at-risk students. They condemn tracking as destructive and preach instead the gospel of heterogeneous groupings (Carnegie Task Force on the Education of Young Adolescents, 1989). Thus, “when middle school practitioners focus on the diverse middle school population, advanced/gifted learners and culturally diverse learners typically receive less attention than special education or remedial students”(Moon, Tomlinson and Callahan, 1995).
However, within small cooperative learning groups, some have argued that "heterogeneous grouping has positive socioemotional outcomes for gifted children and negative ones for non-gifted children." (Kenny, Archambault and Hallmark, 1995). Others claim that compared to any alternative, cooperative learning experiences promote higher achievement, positive self-esteem, social awareness, and tolerance for individual differences, especially when the groups are arranged heterogeneously. Daniel Holt (1993) points out that "the heterogeneity underpinning cooperative learning did not originally include the linguistic and cultural diversity which is now the rule rather than the exception in many schools. Cooperative learning is nevertheless a strategy that values difference and so can help educators transform diversity into a vital resource for promoting students' acquisition of challenging academic subjects."

Whether a researcher argues for homogeneous or heterogeneous cooperative learning groups, they all agree that, after an initial settling-in period, "group formation should not be left to chance; instead, careful forethought is given to the question of who comprises each learning group in an attempt to create the optimal social learning environment." (Cuseo, 1992).

Whatever the variation, the goal is the same: How equitable are they? "How do you group students together so that each individual is engaged in high quality learning?" (Cohen, 1998)

Procedure

This year I arranged the desks singly in rows and assigned seats. I said I would rearrange the desks and let them choose their own places after I had learned their names.

The students were impatient with my progress but not unkind. When the time came I arranged desks in groups of four - each seat perpendicular to the front board - and invited them to each pick a place. The children were excited, few were shunned, and the room got noticeably louder.

Within a week children had settled on their seats/groups. During that time I concentrated on procedures and routines and reinforced decorum guidelines. I made sure that each class began with a warm-up that we corrected on the spot. That and an activity made up a daily grade, which I struggled to keep up with so that each student knew her/his running average. Each week I posted the class grades (listed by student address to preserve some privacy).

After two weeks, I announced that the privilege of choice would only extend to those who maintained a C or better average. This followed my usual assertion that every person in the class was capable of at least B work. Next Monday I brought those with D's and lower to the center-front two tables where they would stay until they climbed back to C and up. They chafed in the spotlight and at my increased attention, but half were again choosing their seats within two weeks.

For the rest of the year, I held out the carrot of seating choice. I maintained control of the desk arrangements, however. Groups of four were used mostly for specific projects. Triads were reserved for short (one or two day)
activities, like literature reviews and research. Twosomes appeared as often as threes and fours combined, usually for skills development. Individual placement meant bubble sheet assessments (SOLS) for the day.

**Observations**

I felt that students picked partners like they would lunch mates. Groups of two and four were often homogeneous in some way; according to gender, race, ethnicity, existing friendships etc. Triads seemed more heterogeneous with more exceptions to any pattern I could perceive (two of one group and one not of that group).

The class was loud relative to other classes I observed, and not always within my control. My evaluations/observations questioned whether my classroom was an environment particularly conducive to learning. I wondered the same thing on many occasions.

I tracked warm-up grades as well as daily activity grades, wondering if I could correlate choice in seating with any grade trends. I tracked the length of time that students were on "seat restriction". I looked for behavior differences between those with seat privileges and those on restriction.

Overall, I followed students for whom English was a second language and any student with an IEP; about thirty in all.

**Conclusions**

I was not surprised to see little or no correlation between seating privileges and productivity exhibited in positive changes in grades. Too many variables existed to ever begin to isolate seat choice as an independent variable in such a small sample. Variations in instruction quality, a chopped up, discontinuous schedule (due to sniper, snow, etc), and innumerable other possible causes competed to determine the shifting of grades over time.

Slightly more than a third of the students improved significantly (at least a letter grade) during the first quarter. About a quarter dropped their grades as the year progressed. Those remaining showed slight shifts (a letter grade or less) up and down or no shifts at all.

Nonetheless I feel that there is something to pursue regarding the effects of student choice in forming cooperative learning groups. For language minority students as much as anyone, one can only talk the talk of geography (for example) by practicing. Self selected small groups could constitute a rich practice environment.
References


