

Dynamics of Desk Arrangement: Enhancing Student Engagement

by: Brady Gawne



Context: Harper Creek Community Schools



Number of schools: 5

Enrollment: 2,819

Student demographics:

- 82.3% White
- 7.8% Two or more races
- 4.9% Hispanic/Latino
- 3.4% Black or African American
- 0.7% Asian or Asian Pacific Islander
- 0.5% American Indian or Alaska Native
- 0.4% Native Hawaiian or Other Pacific Islander

Qualify for free/reduced lunch: 34.4%

My Internship

Mentor teacher: Mr. Brian Crackel

Location: Harper Creek Middle School

Subject area: 6th grade social studies

Class size:

- 2nd hour = 29
 - 3rd hour = 29
 - 4th hour = 28
 - 5th hour = 29

 - Total = 115
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Situation & Question

Situation: Currently, 30 desks are arranged in isolated rows, creating a cluttered walkway and limiting student interaction. Student interaction is often limited to the same five or six students participating in the discussion. I want to address isolation by fostering more intentional participation and collaboration.

Question: *How do I rearrange desks to impact student participation and collaboration?*



Criteria for Participation

1. Shares thoughts or answers in response to a peer during a class discussion (at least once a week).
2. Speaks directly to the teacher at least once during a class session.



Desk Arrangement–Before



Baseline participation:

- 2nd hour = 20.6 % (6/29)
- 3rd hour = 24.1% (7/29)
- 4th hour = 28.5% (8/28)
- 5th hour = 31% (9/29)



Desk Arrangement—After



Cycle 1: Participation

Desk Rearrangement:

- Eight different groups of four
- “Uncertainty” of who will be chosen
- Place target students at separate tables

Instructional strategies:

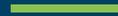
- Placement of target students
- Three-step clarification
 - Group discussion
 - Group speaker verbalizes answer
 - Feedback from teacher
- Affirmations towards students



Cycle 1: Results

Changes in participation:

- 2nd hour = 100% (6/6)
- 3rd hour = 100% (7/7)
- 4th hour = 100% (8/8)
- 5th hour = 100% (9/9)



Criteria for Collaboration

1. Persists in respectful problem-solving with group peers or partner.
2. Takes on a role to support the group's or pair's successful completion of an activity.



Cycle 2: Collaboration



Strategies to restructure collaboration:

Jot & Pass–

- Prompt given
- Students Jot (timed duration)
- Pass to next
- Repeat

KWL + Think-Pair-Share–

- Separately write “K”
- Collaborate on “W”
- Verbalize “L” to teacher



Cycle 2: Results

Changes in collaboration:

→30/30 target students consistently shared ideas and work during group or partner discussion.

→30/30 target students consistently engaged in respectful problem-solving with partner and group peers.

→30/30 target students consistently took initiative to help partner and group peers to successfully complete an activity



Criteria for Organization

1. Students and teachers can move freely between desks without disruption
2. Learning tools and resources are easy to reach and do not clutter the space



Cycle 3: Organization



Objective:

- Boost participation by addressing physical layout and interaction flow in the classroom

Strategies for organization:

- Require water bottles to be on desk
 - Utilize the “middle zone” for teacher-led discussions
 - Give teacher more clear access to individuals and small groups
 - Space out the pods for maximization of physical space
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Cycle 3: Results



Effectiveness in Reorganization:

- No water bottles blocking walkways
- Teacher was able to move into “middle zone” for discussion everyday
- Teacher approached small groups and individuals to answer questions and assist on work
- More efficient way for students to access materials for class

Administrator Feedback:

- “I used to be in this classroom teaching, once upon a time... I absolutely love the space these pods of 4 open up”

Findings & Conclusion

Findings:

- Strategically placing target students and designing an explicit process of practice changed participation in discussion everyday
- Structuring ways to allow students to work independently, with a partner, and in a group, increases engagement in learning content and effectiveness in sharing their learning

Conclusion:

- Arranging small groups of desk, creating a “middle zone”, and spacing the groups for clear walkways, increases student participation and collaboration

Sources

Harper Creek Community Schools - U.S. News Education. (n.d.).

<https://www.usnews.com/education/k12/michigan/districts/harper-creek-community-schools-111856>

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Questions?

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Feedback