Collaborative Learning in the Classroom

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The effectiveness of collaborative learning in the classroom has as much to do with the teacher as it does with the students in the groups. There is an ongoing discussion surrounding the effectiveness of group work in the classroom and its effects on student learning. Some teachers praise collaborative efforts, while others have a strong disdain for group work. There is considerable research on both sides of the issue that has produced results for and against collaboration in the classroom, stoking the fires of debate surrounding the merits of such teaching practices. There are always numerous variables at play in the classroom that influence an outcome or opinion of either the merits or disadvantages of utilizing group work. In one particular classroom, collaborative learning clearly results in an additional stimulus that enhances learning by straying from the traditional teacher and student interaction. In yet another classroom, collaboration could have a negligible or even negative effect on learning. How best to get students to learn in the classroom is truly a wicked problem, in that addressing one classroom variable changes several others, and because of it, collaborative learning and its synergistic effects do not always work. (Rittel and Webber, 1973)

The Research

There is a great deal of research on collaborative learning, but one research institution that stands out among the rest is the University of Minnesota’s College of Education and Human Development headed up by professors and brothers Roger and David W. Johnson. They have dedicated the last twenty years and over 80 research studies to the investigation of collaboration in the classroom. Their research concludes that collaboration in the classroom resoundingly improves student learning, but with a catch. The collaboration must be implemented correctly. This goes back to the idea that the teacher has a pivotal role in group work even if they are not directly lecturing. (University of Minnesota’s College of Education and Human Development 2013)

Johnson and Johnson conclude that there are five key components to successful collaboration in the classroom:

- Positive interdependence (each individual depends on and is accountable to the others—a built-in incentive to help, accept help, and root for others)
- Individual accountability (each person in the group learns the material)
• Promotive interaction (group members help one another, share information, offer clarifying explanations)

• Social skills (leadership, communication)

• Group processing (assessing how effectively they are working with one another) (University of Minnesota's College of Education and Human Development 2013)

These five tenets for successful collaboration seem reasonable, but the question is how they are implemented in the classroom. It is hard to imagine that these key components occur naturally, or that all students have a suitable understanding of these requirements. The teacher must be the integrator of the five key components to successful group work and they must be able to teach collaboration just like any other subject.

**Group Dynamics**

How to form student groups is an important variable within the wicked problem that is the classroom. How the teacher influences that variable will have ripple effects throughout the classroom. With such an important impact on the classroom it is precarious to witness how nonchalant some teachers are about group work in the classroom. At some point in our educational experience we have encountered a teacher who asked the students to break up into groups. Teachers make assumptions, especially in higher education, that somewhere along the way students were taught how to effectively collaborate. Making assumptions about student experience and understanding of group work is undoubtedly directly related to the negative perceptions of group work in the classroom. This is unfair to the students and the merits of collaboration. Because students in primary school are able to work in groups to complete an arts and craft project certainly does not mean that they have a suitable foundation for group work in higher education. And yet, we have all been in those classrooms where the teacher splits the class up and instructs them to begin group work, with little to no other instruction. (O’Brien, Munro, and Payton, 2006)

Teachers must assume the leadership role of group work in the classroom and ensure that the purpose and process of collaboration are clearly defined. Most literature on the subject supports the idea that the teacher should design the student groups, as students may not have learning and effective team building at the heart of their group membership decisions. For many students, collaboration is simply a collection of individuals discussing a topic as they complete their work, or perhaps a dominant member that does all the work as the rest of the group practices social loafing. (University of North Texas, 2008)

There are several different types of groups that can be established in the classroom. Some teachers will establish enduring groups for a semester that will have one or several assignments to complete together. Other teachers will establish ad hoc groups that will form to execute an in class task or assignment and the group dissolves afterward. (Ward, 1987)
Whatever the purpose of the group will be, it is important to analyze the character traits, personalities, aptitude and other characteristics of students in the classroom. This is certainly a difficult task, but attempting to influence the group dynamics within a classroom can lead to an optimal collaborative learning environment. Having some background or training in group dynamics could ease the burden on teachers as they attempt to optimize collaboration in their classrooms. (Bennis and Herbert 2009)

With teacher assigned groups there are many different approaches to establishing group work. Some teachers pair a few high performing students with a few lower performing students. The idea being that the high performing students will elevate the lower performing students resulting in improved performance. Teachers have commented that this holds back the high performing students and allows the low performing students the opportunity for social loafing. Other teachers have grouped all the high performing students together and all the lower performing students together; the idea being that both groups will be able to achieve a synergistic effect that takes the learning to the next level. The results of this approach are mixed as well. The point of discussing how to group students is that there is no cookie-cutter way to go about it. The dynamics of every classroom in the world is different. To find a successful approach to collaboration rests heavily on the shoulders of the teacher. (Stanford University Center for Teaching and Learning 1999)

**Recommendations**

- Teachers must take the time to assess the students in the classroom and attempt to determine which students will work best together. Admittedly, this is a recommendation that is impossible for anyone to execute perfectly, but with an understanding of group dynamics, experience in the classroom, trial and error, assessment techniques, and perhaps even teacher development programs it is possible to best guess optimal student work groups.
- Teachers, first and foremost, must contract with the students. Transparency of the intent, method, and desired outcomes is essential to all student work groups before work is started.
- Students have a responsibility to contract internally as well. The teacher may have to walk them through the process, but it may result in the same shared understanding as with the teacher/student contract.
- Keep trying. The classroom learning environment is a complex amalgamation of variables that are constantly influencing each other. There will not be a perfect answer from one year to the next or even one semester to the next.
- Teachers within and across academic institutions need to form a community of practice and share strategies on how to build student groups, contract with students, assess the results of collaboration, and anything else that may transform ineffectual group work to synergistic collaboration. (Marzano, 2003)
Conclusion

Collaboration in the classroom has the potential to elevate the learning of students past the superficial and into the deeper learning that remains for a lifetime. The students have been working in groups since their primary education days, but it is likely that no one has taught them how to maximize the potential of a group in higher education. The teacher is the one that must not only teach them a subject, but also the different methods of learning. Not all teachers have an understanding of what it takes to foster effective collaboration. Some teachers apply the same group work method over and over with some positive and some negative results, because they are not accounting for the group dynamics that are ever changing in the classroom. An understanding of group dynamics on the part of the teacher coupled with collaboration methods can help them form student teams that can get to the next level of learning through collaboration.

References


Annotated Readings

This chapter taken from Organization Change describes several ideas about what elements need to be addressed during the team building stage of group development. According to the chapter there are four purposes of team building: 1. To set goals or priorities, 2. To analyze or allocate the way work is performed according to team members' roles and responsibilities, 3. To examine the way the team is working—that is, its processes, such as norms, decision making, communications, and so forth, 4. To examine relationships among the team members. Personal experience and feedback from other teachers indicates that group formation in the classroom is typically not as deliberate as the four tasks described above. Perhaps if a teacher assisted student group development by walking students through a team building process of some sort, there would be a noticeable improvement in group work in the classroom.


This document discusses the different types of student learning groups and how teachers can utilize these groups. Also the document suggests ways in which teachers can prepare themselves and their institutions to utilize collaborative learning in the classroom. The author, Beatrice Ward, cites three main types of groups. The first being, Learning Cycle Groups, which are formed for a short period of time consisting of students with similar learning needs. The next is Cooperative Groups which consists of three types: Group Investigation, Peer Tutoring, and Long Term Ability Groups. All three of the Cooperative Group types are small (4-6 students) the differences come in student ability and duration of the groups. To effectively use one of the group types, the author suggests that teachers need to be trained in collaborative learning. Institutions should have a few teachers trained in using the different group types and then have those teachers return to train the remainder of the faculty. By training the teachers, the group work is more effective and nets a deeper learning.


Teaching and Learning is a research project in the United Kingdom that looks at many different pedagogical topics, with group work in the classrooms being one of them. This report dismisses the idea that students can simply be put into a group and that will somehow improve learning. The relationship between the student and teacher is essential and the teacher has a responsibility to effectively organize the group work. The teacher must adapt the grouping of students based on ability, learning goals, class size, seating arrangements and all the other variables of the
classroom. Then the teacher must explain the how and the why prior to beginning group work in the classroom. The idea is that deliberate planning on the part of the teacher, coupled with a shared understanding of the purpose of the group work will result in better learning in the classroom.


This book was written more for corporate America but it has tremendous insights into team building as an essential part of collaboration in problem solving. An easy parallel can be drawn to collaboration with the goal of heightened learning. The formulation of the team or group is essential in the pursuit of deeper learning outcomes. The book highlights the “Four Cs” that are essential to group success: Context, Composition, Competencies, and Change. Context could be created by the teacher in the classroom with an explanation of the group work and how the group will be support by the teacher/institution. Composition goes back to selecting 4-6 person teams based on what the teacher believes is the best method of group selection. Competencies look at developing individual members of the group, as well as, the development of the groups’ capabilities as a whole. And finally, Change would be the teacher and the students being able to adapt the groups to changes in the classroom variables. Building a strong team based on these four principles could result in more effective and efficient group work in the classroom.


This is an educational blog where ideas are exchanged in a community effort to improve pedagogical practices. This particular post deals with why collaboration in the classroom is important and suggests ways to approach the group work. The blog calls for the teacher to instruct students on how to be members of a collaborative group and cites the “Seven Norms of Collaboration” available at the following link: https://sites.google.com/site/collaborationskills/Web2collaboration/working-collaboration/garmston-wellman-seven-norms.