

## **Making the Invisible Visible: Using Collaborative Playing Cards to Monitor Students' Collaboration During Group Work**

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## **Abstract**

To teach for collaboration in diverse classrooms, teachers must monitor and support students' collaborative behaviors as they engage in group work. Nevertheless, observing these behaviors is challenging. In this paper, we propose an instructional tool that can help make students' *invisible* collaborative behaviors *visible* to enable better teacher monitoring and support of group work. We also illustrate how this tool can be used by describing how a 7th Grade social studies teacher implemented it in her classroom.

## **Introduction**

As teachers, most of us would agree that group work is a fun and functional part of teaching and learning. At its best, group work provides students with opportunities to construct understandings and talk about their ideas in a supportive, social environment. Good group work can be seen as practice for the 'real world' - a world in which individuals must work together to address any number of challenges. And so, it's no wonder why collaboration is starting to show up more substantively in the content area standards. For example, activities aligned with the Next Generation Science Standards (NGSS) would urge students to engage in evidence-based argumentation and to clearly communicate their learning to their peers. In the social studies, the College, Career, and Civic Life Framework (C3) requires students to engage as civic actors who communicate and critique arguments to ultimately take informed action from what they have learned; activities like these are quite impactful when enacted through collaboration and would be almost silly to do alone.

In order to help students engage with their peers and learn from these complex activities, teachers of all content areas and grade levels need to explicitly teach students how to collaborate (Quinn, 2012). This means providing students with the tasks and environments that spur productive collaboration. It also means that teachers will need to provide appropriate support and feedback on the collaborative behaviors that students enact. Teacher monitoring, prompting, and supporting can be a powerful force in helping a keen ear for critical listening and the verbal skills necessary to elaborate on a proposition, negotiate an idea, and argue from evidence.

Unfortunately, many teachers still view student collaboration as only a means for students to acquire content knowledge and not as an end in itself. This perspective may result in teaching only tracks or assesses content learning outcomes, hoping that productive collaborative behaviors develop on their own. But to be fair, it is quite challenging for a teacher to observe and track numerous students' collaborative behaviors in a bustling classroom - behavioral expectations and periodic reminders are often the best we can do! With these challenges in mind, we would like to propose a simple instructional tool that can help teachers more intentionally teach *for* collaboration. This tool can help make students' *invisible* collaborative behaviors *visible* to enable better teacher support and eventually promote students to self-assess. So, what are these students' collaborative behaviors and how does our tool help teachers track, support, and reflect on these behaviors?

## Students' Collaborative Behaviors

When working in groups, students usually engage in three types of complementary collaborative behaviors. These behaviors are collaborative, cognitive, and metacognitive (Kaendler et al., 2015). Collaborative behaviors include sharing an idea, responding to someone's proposal, listening to others as they talk, and encouraging others to contribute. Cognitive behaviors include providing reasons for proposals, asking accurate and relevant questions, offering elaborated explanations, and negotiating ideas. Metacognitive behaviors include evaluating group progress, expressing lack of understanding, and pointing out mistakes for others. These behaviors enable the group members to build common ground for sharing information or ideas to achieve a common goal such as solving a problem or fulfilling a project. However, students will not simply learn and implement these behaviors just because they are put in a group to work with others. Teachers must introduce students to these behaviors then be able to monitor, support, and reflect on these behaviors as students work in groups. To support teachers in this work, it would be helpful to have a tool that makes invisible student contributions and behaviors visible without interfering too much with the fun, challenging tasks that are critical for any successful group activity.

### Making Invisible Collaborative Behaviors Visible with Collaborative Playing Cards

A friendly game of cards can be considered as one example of how invisible collaborative behaviors can turn visible. Sitting around a table together, players often interact primarily through their cards, keeping their schemes and strategies to themselves. In a fast-moving card game, talk is generally at a minimum, but collaborative interactions are playing out. Each player can gradually learn about the strengths, strategies, and potential plans of their fellow players through the cards that are played, and each player responds and communicates in turn. As the game goes on, the cards that have been laid on the table eventually externalize the story of the game and the interactions of the players. Without the visual representation of the playing cards, most of the strategy and interaction in the poker game would be invisible.

Similarly, students' collaborative behaviors can be somewhat invisible to a teacher monitoring group work in a full, bustling classroom. Until a group has gone awry or loses focus on a task, it is challenging for a teacher to prompt, monitor and support the collaborative, cognitive, and metacognitive behaviors employed by the students. While pre-teaching these skills can help, it is most important that students are given the opportunity to practice these behaviors.

And so, we suggest the use of a set of "playing cards" to help make the invisible visible during group work. However, these playing cards have a special purpose - they feature prompts representing the crucial collaborative, cognitive, and metacognitive behaviors. Examples of Collaborative Playing Cards like these are shown in Figure 1 below. Each card represents a single behavior that a good collaborator should use to further the work of the group. Each card is color-coded by student to enable even clearer signaling of participation. Although relatively simple in nature, these cards function to *both* tangibly scaffold student talk *and* support a teacher's assessment of students' collaborative behaviors.

Card 1	Card 2	Card 3
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My group got off task; but, I helped to get my group back on task	I shared a new idea that helped my group make progress on the task	I made a positive comment on another a group member's idea
<b>Card 4</b>  I encouraged a quiet group member to contribute to the conversation	<b>Card 5</b>  I helped my group come to a consensus	<b>Card 6</b>  I listened attentively to what a group member was saying

*Figure 1. Examples of Collaborative Playing Cards*

At the beginning of a group work activity, one or two Collaborative Playing Cards would be distributed to each student. After some pre-teaching of what good collaboration looks and sounds like, students would be instructed to place or “play” their card once they have implemented the behavior described on the card. By placing cards in the middle of the table, students are able to be more cognizant of their own contributions; they’re not only given a prompt for productive group talk, but they’re prompted to think carefully about their role in the group as well.

You might be familiar with posters or worksheets that prompt students to use key phrases during group work. However, Collaborative Playing Cards improve upon posters or prompts of collaborative phrases in one significant way - they provide immediate, visible evidence of student collaboration. By placing their Collaborative Playing Cards in the middle of the table, students are displaying their collaborative behaviors for themselves, their peers, and their teacher. Because group work can be a busy time for teachers and students alike, this method for quick viewing of each student’s collaborative behaviors can better enable a teacher to observe, assess, and support group work. This facilitates more efficient progress for the group as a whole and for individual students. The classroom example below further illustrates this student-directed instructional tool in action.

### **Using Collaborative Playing Cards: A Classroom Example**

Consider the example of 7th Grade Social Studies Teacher, Ms. Williams:

*Ms. Williams’ social studies classes are often given the opportunity to work in small groups, but she has found that their talk during group work is inconsistently productive. She often finds herself interrupting students to remind them of the discussion they had earlier in the year about being good group members. Although Ms. Williams has experimented with various prompts, tasks, and student combinations, she feels like she is lacking the information she needs to assess the root of their collaboration issues. Additionally, her end goal is for students to learn how to collaborate and eventually be able to autonomously monitor their own learning in*

groups. She decides the Collaborative Playing Cards might help her accomplish both of these tasks at once and decides to implement them the next time the students are working in groups.

And so, at the beginning of a group activity, Ms. Williams puts her students in small groups of three. One group is composed of Anthony, Marcus, and Sara. These three students are good workers but tend to work side-by-side rather than in support of one another. After introducing the activity and the function of the Collaborative Playing Cards, Ms. Williams distributes only Card 2 and Card 3 (shown in Figure 1) to each student in each group. Ms. Williams encourages the students to “play” their cards during as they work together. She tells them that playing the cards will help move their groups along and will help her see which groups are being the best collaborators!

While working on the problem with his group, Anthony realizes that he proposed a new idea to help the group make progress so, he places his Card 2 in the middle of the table. Sara seizes on the opportunity to recognize and comment on Anthony’s contribution, saying “I like that idea! Let’s try that next!” As she walks around the groups, Ms. Williams notices that Anthony has played his Card 2. Ms. Williams now knows that Anthony has tried practicing the collaborative behavior that is described on Card 2. Also, Ms. Williams can assume that Anthony is aware that he had actually practiced the collaborative behavior that is described on Card 2. This is key to Ms. Williams’ goal of encouraging her students to reflect upon and direct their own learning. Noticing the group has come to a pause, Ms. Williams approaches Anthony and asks him to explain the moment when he decided to play his Card 2. Anthony explained that he was first going to just make a suggestion but remembered that this kind of contribution was just what Card 2 was about! Ms. Williams thanks Anthony for his quick thinking and congratulates Sara on her efforts to respond. This group is on their way toward self-monitoring, and Ms. Williams decides to let them try to continue their work with a refreshed set of cards.

The above scenario illustrates how the use of the Collaborative Playing Cards helped students self-monitor their collaborative behaviors, and allowed Ms. Williams to better track, support, and reflect on these behaviors during group work. Without the cards, feedback provision on students’ collaborative behaviors can be more time consuming if not impossible and might not go as far to encourage student self-monitoring of these behaviors. It also may require teachers to intervene more frequently, ask more questions, and engage in more teacher-directed interactions to evaluate students’ collaborative behaviors.

## **Conclusion**

Content area and social-emotional standards emphasize the need for students to develop collaborative behaviors. Behaviors like sharing ideas or evaluating a peer’s claim have the potential to aid effective participation, resulting in productive group work and meaningful learning. For students to develop these behaviors, teachers must view group work activities as more than just a way for students to finish an assigned task. Teachers must use group work activities to explicitly teach students how to collaborate by tracking, supporting, and reflecting on their behaviors as they work with their peers. This kind of scaffolded rehearsal can promote internalization of good collaborative behaviors that can eventually turn into sturdy, transferable collaborative practices. Practices that students can eventually autonomously implement with less and less support from Collaborative Playing Cards or teacher intervention.

The classroom example provided above was just one simple illustration of the potential of these cards in making good invisible collaborative behaviors visible. With simple tweaks, the potential adaptations of these cards are numerous. We would like to encourage teachers to modify the content of the cards to match the collaborative behaviors they value most in light of their students' needs, curriculum content, and classroom context. Likewise, the manner in which these cards are applied may be differentiated within and across groups, allowing flexibility in the overall demands of the tool.

As our students venture more and more into collaboration that is mediated through phones, computers, and other forms of technology, we hope that the use of teacher interventions like the Collaborative Playing Cards will support productive dialogue for all young learners. We also hope that this tool can make the teaching of these complex behaviors just a little bit easier.

## References

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