



Mapping, Clarifying, and Communicating Key Ideas about Collaborative Learning to STEM Audiences

Assessment During Collaborative Learning

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This primer addresses the following questions:

- What should be assessed in collaborative learning:
 - Do we assess groups or individuals?
 - Do we assess collaborative skills or products produced?
- What are effective practices for designing assessments that align with collaborative learning activities, and learning objectives?
- What types of feedback should be given in formative assessment?
- How can you incorporate self- or peer-assessment to empower students in collaborative learning?

This document culminates with strategies, tips, and resources to help you apply the ideas to making your classroom collaborations more successful.

Key Takeaways

- Assessment during collaborative learning can be integrated into learning activities so that it enhances the learning of content and engagement.
- Assessing collaborative learning as a specific skill shows its value and helps students develop collaborative and interpersonal capabilities valued in both academic and workplace settings.
- Balancing group and individual assessment in collaborative learning promotes meaningful participation and ensures individual learning. If needed, individual knowledge checks can help clarify what each student has learned after group tasks.
- Clearly explaining the goals of the assessment approach in collaborative learning helps students and families/caregivers understand what will be assessed collectively versus individually, and how individual progress will be tracked across learning objectives.

Background

Assessment is often misunderstood as an end-of-task activity for assigning grades. However, to effectively assess, we need to go beyond this view. We present the lens of **assessment for learning**, which offers a shift towards thinking of assessment as an ongoing practice to support learning.

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There are two main types of assessment:

- **Summative assessment**, which summarizes and gives information about where the learner ended the learning process
- **Formative assessment**, which informs where the learner is in the learning process and if they are achieving the learning goals of the assignment; this lets a teacher determine if changes need to be made to foster learning (Black & Wiliam, 2009). Formative assessment helps teachers provide timely feedback on content knowledge, collaborative processes, and outcomes. Formative assessment includes pre-assessment, which provides crucial baseline data about learners' existing knowledge, skills, and misconceptions, enabling targeted instructional planning and differentiation before formal instruction begins (Greenberg & Walsh, 2012).

Why do we assess?

We assess to check for understanding, determine if there are misconceptions, and identify if further support is needed or what has been learned. As teachers, we want to help students learn and grow. Formative assessment is a tool that can help by:

- Informing both teachers and learners about where they are in their learning journey, how close they are to the learning goal, and what should happen next.
- Identifying what learners do or do not understand and what they need to continue growing content knowledge and skills.
- Informing a teacher about whether their teaching methods are yielding the intended learning outcomes.

What can we assess?

Assessment in the context of collaborative learning is more complex than assessing individuals because it includes the evaluation of both individual and group content learning along with collaborative skills. We list the combinations of what can be assessed in Table 1 and will refer back to it throughout the document:

Table 1. What we can assess in individual or group learning

Individual Learning	Group Learning
Content knowledge a student has learned	Shared knowledge created through social interaction including multiple perspectives on the task, concept, or solution
Collaborative skills a student has learned	Collaborative skills that groups possess
	Shared regulation of learning or ways to monitor and manage learning process together
	Group work (i.e., the produced produced by the group together)

Effective assessment of collaborative work considers what the individual learned, what the group learned about the content together, the quality of interactions, shared knowledge construction, and the development of teamwork skills. While no single assessment can provide insight on all aspects of collaborative learning, it is not necessary nor possible to assess all types of learning in every assignment (Gillies & Boyle, 2009). Determining what to assess should start in the planning stages of a project to ensure that the assessments are a) aligned with both the collaborative learning activity and the learning objectives, and that they will b) help reveal what students have learned. Example assessments for these purposes are included in Tables 1-3 below.

How to assess?

While it may sound like a major change to make assessment a regular practice to support learning, many of the activities necessary may already be in place or require only low-stakes adjustments. Often, observing the groups and their conversations or having students reflect through brief journal entries can provide the insight needed. Using a checklist during group observations can reveal whether students are actively engaging with the topic, listening to one another, asking clarifying questions, and working toward consensus.

To ensure sufficient evidence for learning is available, take inventory of what evidence is already gathered in practice and what insights it gives. Identifying what else would be helpful to understand and support student learning will point to additional evidence that may need to be gathered. The Implications for Practice section offers practical tips for assessment practices along with example assessments that can be incorporated into ongoing routines.

When will we assess?

Assessments can happen before, during, and after learning. However, **assessments during collaborative learning become powerful drivers of learning and engagement** when they are integrated and connected into the learning process and not thought of as separate work (Boud et al., 2016). Taking a formative approach during collaborative learning can boost the collective benefits of collaboration while students are working together. Collective benefits include: the group being able to achieve more together than any individual in the group; increased mastery of collaborative skills; and deeper learning, which may come from clarifying and elaborating concepts and topics in group discussion.

What Does the Research Say?

Assessment for learning as a practice informs teachers and learners of what has been learned and what should come next. However, assessing in the context of collaborative learning is more complex than assessing an individual working alone (van Aalst, 2013). As mentioned in the Background section, there are important elements to assess at the individual level and group level.

Plan group work intentionally. Group work teaches both content and collaborative skills, but issues like unequal participation¹ can affect learning (van Aalst, 2013). Sometimes in a group, one engaged student will do all of the work because other group members are not yet engaged. Sometimes a student who is engaged in the process will have higher standards than what the group can produce together, or want to go faster than the group and will block other students from contributing, which is not collaborative behavior. This can be avoided if the setup for the collaborative work requires all students to be involved (Webb, 2009). A teacher who has students work with different group members at different times and for different purposes will alleviate negative effects that come from group composition and give students an opportunity to learn in different ways (van Aalst, 2013). Teachers need to be intentional as they form student groups for the purpose of the work. The composition of groups along race, gender, and other characteristics can also affect collaborative performance. For further guidance, we recommend reading [Foundations of Collaboration](#), [Teacher’s Roles in Supporting Collaborative Learning](#), and the [Collaborative Learning Toolkit](#).

Assess both individual learning and group learning. In collaborative learning, individual learning and group learning both occur and are distinct and complementary (van Aalst, 2013; Puntambekar, 2013). Individual learning occurs in one student’s mind and is assessed on tests or individual contributions. Group learning includes the creation of shared mental models or a common understanding among the group members (Janssen et al., 2010). Teachers can use conversations of the groups, reflections of the group, and/or products the group creates to understand what a group learned together.

It can be challenging to balance individual and group assessments. While both individuals and groups learn during collaboration, degrees and certifications are conferred to an individual. Students and parents typically prefer to focus on individual assessment and sometimes find grades given for collaborative work confusing or disappointing (van Aalst, 2013). We discuss practical guidance in the practitioner perspective section.

Assess and provide feedback on collaborative skills. Effective collaboration is important to thriving in the world and requires a complex skill set that employers significantly value; students who only learn content independently will not develop all of the skills employers want (Rios et al., 2020). Collaboration involves communication, negotiation, conflict resolution, and developing shared understanding among the group. An important reason for assessing collaborative skills is to help students learn how to collaborate effectively (Barron, 2003). Barron’s work showed that even when groups were made of high performing students, they would often fail at a problem-solving task if they didn’t collaborate. Groups that were successful on a task generally took time to discuss each group member’s ideas and rather than dismissing them if they didn’t immediately understand them. **If we want students to learn well in the context of collaborative work and learning, we need to understand how they are collaborating, assess the quality, and give feedback to help improve it** (Child & Stuart, 2018; Kaendler et al., 2015; van Aalst, 2013).

¹The research literature referred to students who don’t participate as “slackers,” and those who work as “leaders”; we will use the terms engaged and not yet engaged students.

Use formative assessment to foster motivation and autonomy. Formative assessment may help create a learning environment that can increase student motivation (Leenknecht et al., 2020). Formative assessment is thought to provide students with choices (autonomy), opportunities for success (competence), and a sense of belonging in the classroom (relatedness) (Leenknecht et al., 2020). These three components are foundational to nurturing students as intrinsically motivated learners (Ryan & Deci, 2020).

Support deeper learning with collaborative assessment. In a collaborative assessment, students are assessed while working together. Typically, they participate in a two-part assessment (such as a quiz or test) where they first answer questions individually, then answer the same or similar questions in collaborative groups (Bremert et al., 2020). This can be done summatively or formatively, but when used summatively, it transforms the assessment into a learning experience since students engage with their peers while being assessed. Bremert and colleagues discuss the importance of having established a classroom culture of collaboration and parental buy-in. They further suggest that collaborative assessment may help reduce test anxiety.

Teach students how to self and peer assess. When learners develop the skill to self-assess or assess their peers, they gain the ability to monitor both their own progress and the progress of others. Knowing how to self-assess or assess others may help promote motivation for continued learning, responsibility, and independence (McMillan & Hearn, 2008; Ndoeye, 2017). Both peer and self-assessment show significant effects on improving academic performance and no significant differences between their impacts (Double et al., 2020). In collaborative learning, if the teacher has created a classroom culture of learning and set up groups with collaboration skills, then students can be taught to perform peer assessment. However, a teacher needs to intentionally guide and support the process (Mellalieu & Dodd, 2024; Topping, 2009) (see the [Collaborative Learning Toolkit](#) for more information peer assessment).

Practitioner Perspectives

Assessment is much more than just grading; it can provide a window into student learning. In collaborative learning, teachers can't be in every group 100% of the time and it can sometimes feel difficult to know what is happening. However, there are strategic ways to gain insight into students' learning (see [Teacher's Roles in Supporting Collaborative Learning](#) and the [Collaborative Learning Toolkit](#)). In some ways, it can be easier to track group progress than individual work; in groups, students speak to other members, making their thoughts and processes observable.

There are several ways to assess during a collaborative learning activity, but all should center around the learning goal of the assignment. For example, the learning goal might focus on content knowledge, skills, or collaboration abilities, so the assessment and feedback should connect to that particular goal. Additionally, assessment can target individual learning outcomes or group-level achievements. The goal is to integrate assessment into the learning task so that it guides growth for students and informs teacher instruction, rather than feeling like extra work.

All assessments for learning require intentional planning and communication. For assessing content, formative assessments can reveal if students are on track, if they need misconceptions corrected, or if additional support and scaffolding is required to fully understand a task. Quick intentional visits to groups can provide insights through listening to discussions; alternatively, for more formal assessment, groups can be informed that an observer will join their discussions to ask questions. The next section will provide more examples of creating collaborative tasks with formative assessment to establish student accountability.

Assessing individual versus group learning in practice. As students work together, they will experience both individual learning and collective group learning. Finding the right balance between assessing the group and the individual is difficult. Some practitioners find a mix of 40% collaborative group grades and 60% individual grades encourages students to engage seriously in collaborative work while still providing a good understanding of individual students' abilities. If collaborative assessments do not uncover what each student can do, follow up with an assessment focusing on individual knowledge, such as a pre/post individual assessment to assess growth, or a quiz of an individual student.

Preplanning what to assess and when is key. Even though students are in groups, it is important to know what each individual student knows and is able to do. There is a common misconception that group work only involves group grades or that it only focuses on assessing collaborative skills. However, this misconception can lead to uneven workload in groups and missed opportunities for subject matter learning. Balance group assessment with individual assessment, and balance content assessment with assessment of collaborative skills (see Table 1 for information on what we can assess in individual or group learning).

Helping students and families/caregivers understand collaborative learning and formative assessment. When using formative or alternative assessments, both students and their families/caregivers need information about the purpose of formative assessments. Clearly explain the assessment approach at the beginning of collaborative projects and specify what will be evaluated collectively versus individually. This transparency helps manage expectations and reduces confusion or disappointment about collaborative work grades. When explaining formative assessments, emphasize how they give valuable information to a teacher and to the student so both can track progress and work towards the next step in the learning process.

Assessment During Collaborative Learning in Practice

As noted above, a teacher can't be in each group all the time. Some ways to get a "window" into student activities involve quick checks and group observations, which inform if a group has been working well together without teacher presence. In addition, many of the strategies listed below are probably related to existing classroom practices in use that can be repurposed for collaborative assessments, making it easier to weave in assessment during collaboration.

1. **Create targeted checklists:** Develop observation guides or rubrics focused on specific learning goals that can be used while visiting groups and monitoring group work.
2. **Listen actively to group discussions:** Student conversations can give evidence of learning and collaboration.
3. **Ask probing questions:** If productive discussion or understanding of a topic isn't evident, ask group members strategic questions to identify misconceptions or determine if students need assistance.
4. **Reinforce positive collaboration:** Prepare students to actively participate in group activities. Monitor their engagement and recognize those who contribute meaningfully. Provide positive reinforcement through praise, feedback, or incentives to promote effective teamwork. Some teachers give stamps to students as they meet goals to provide students with a tangible piece of evidence for their progress.
5. **Use exit tickets:** Exit tickets are a valuable tool to collect quick reflections on both content understanding and collaboration that can inform the next day's teaching.

Be clear on what the learning goal is and whether the assessment focuses on content knowledge, collaborative processes, or collaborative skills.

These quick checks provide valuable feedback about what students are learning and where they are in the process. The information from these quick assessments does not necessarily need to go in the gradebook; ultimately, they can inform upcoming instruction and future group formation, both of which help students learn more (for more information on providing feedback to help students learn, see the Appendix).

Below we share guidance on how to incorporate research on assessment into your practice.

Planning for collaborative assessment. When designing collaborative assessments for learning, consider the different ways students can demonstrate their understanding of the learning objectives both as individuals and collaboratively.

1. **Start with clear learning goals:** Design collaborative assessments that clearly demonstrate what students should know and be able to do, either individually, collectively, or both. Leaving the end product more open-ended can offer room for further creativity, as long as expectations of the end goals are clear.
2. **Design backward:** Plan with the learning goal in mind to create experiences that deepen understanding and produce meaningful evidence of learning.
3. **Expect varied outcomes:** Recognize that student work will take different forms based on individual learners or the groups of learners and their collective understanding.
4. **Inform instruction:** The collaborative assessments should guide teaching and help the groups work and learn together.

Balance individual and group assessment. It is important to have a good mix of both individual and group assessments to keep students engaged while learning. Individual assessments help teachers, parents, and students understand how progress is occurring or where further support is needed. They can also be helpful for thinking about how to structure different groupings, such as strategically bringing in a range of skills or matching students according to their individual proficiency levels. Meanwhile, group assessments offer insight into students' collective performance toward accomplishing a specific task, which can prepare them for real-world team projects in workplace settings. Balance remains key, since there is value to both assessment formats and the experiences they provide.

1. **Document individual thinking before collaboration:** Have students record their thoughts prior to group work to establish baselines and track growth. This pre-assessment work can also help you plan and form strategic groups.
2. **Use checkpoint assessments:** Create regular opportunities to assess individual understanding throughout the collaborative process.
3. **Implement follow-up individual assessments:** Use quizzes, journal entries, or exit tickets after group activities to verify individual mastery.
4. **Capture collective learning:** Design assessments that measure shared group accomplishments and progress, not just individual outcomes. Additionally, provide ample opportunities for reflection throughout the learning activities and at the conclusion so that students can continue to self-evaluate their growth and contributions.

Understand types of collaborative assessments. In the following tables, we provide examples of collaborative assessments that assess three different aspects of collaborative learning: group progress and processes of collaboration, content knowledge to be learned, and collaborative skills. To use the tables, first determine the learning goal to focus on then choose the assessment that best fits that goal. Many of the assessments in the table are formative. While these assessments are labeled under a particular purpose, these assessments can serve a different purpose with small adjustments. Don't be afraid to intentionally modify the assessment to make it work for your purpose.

Table 2. Assessments of collaborative group progress and process

Goal of Assessment	Title and Description	Formative / Summative	Feedback to Students	Feedback to Teacher
Monitoring group dynamics	Group Observation Checklist The teacher observes the group during any collaborative task, using a checklist to assess specific behaviors like participation, communication, problem-solving, and role distribution. This tool can be used repeatedly across different group tasks.	Formative	Provides immediate feedback on their collaboration skills, including strengths and areas for improvement.	Provides a consistent method for tracking group dynamics and identifying patterns or recurring issues in group work.
Evaluating individual contributions	Peer Evaluation Form After completing any group task, students fill out an anonymous peer evaluation form. They assess each group member's contributions, collaboration, and reliability. The feedback is aggregated to provide an overview of individual performance within the group.	Formative/ Summative	Reflects on individual contributions and receives feedback from peers, which can motivate improvement and accountability.	Offers insights into group dynamics from the students' perspectives, helping the teacher identify any disparities in contributions or conflicts.
Measuring group progress	Collaborative Task Rubric A rubric is provided before any collaborative task, outlining clear criteria for successful group work such as communication, teamwork, and task completion. The rubric is used to assess the group's performance at the end of the task.	Summative	Provides clear expectations and feedback on how well the group met the criteria. Helps them understand what areas to focus on in future tasks.	Ensures consistent and objective assessment across different collaborative tasks, allows for easy comparison of group performance over time.
Reflecting on group processes	Group Process Journals Each student keeps a journal where they briefly reflect on their group's process after any collaborative task. They note what worked well, what challenges arose, and what they would do differently next time. This reflection helps to internalize learning about collaboration.	Formative	Encourages deep reflection on group processes, helping students identify personal and group strengths and weaknesses.	Provides insights into the group's internal dynamics and processes from the students' perspectives, aiding in targeted interventions if needed.
Assessing group communication	Group Communication Self-Assessment	Formative	Encourages self-reflection on	Offers a snapshot of how the group

	After completing any collaborative task, the group fills out a self-assessment form focusing on communication aspects like listening, idea sharing, and conflict resolution. This self-assessment promotes awareness of effective communication strategies.		communication skills within the group, highlighting areas for improvement.	perceives their communication effectiveness, helping the teacher to guide future interactions.
Continuous feedback loop	Group Exit Tickets At the end of any collaborative task, each student completes an exit ticket where they briefly summarize what the group accomplished, what they contributed, and how well the group worked together. This quick assessment helps to capture immediate reflections and feedback.	Formative	Provides quick and immediate feedback on group performance and individual contributions, fostering continuous improvement.	Allows the teacher to gather ongoing feedback on group dynamics and task completion, helping to identify areas for real-time adjustments.

Table 3. Activities that assess content knowledge

Goal of Assessment	Title and Description	Formative / Summative	Feedback to Students	Feedback to Teacher
Assessing group knowledge	Think-Pair-Share: Concept Clarification Students individually think about a question or problem posed by the teacher, then pair up to discuss their thoughts. Finally, pairs share their conclusions with the class. This activity focuses on clarifying understanding of key concepts through peer discussion.	Formative	Provides immediate feedback on students' understanding and ability to explain concepts to others. Encourages active listening and peer learning.	Allows the teacher to gauge students' grasp of concepts in real-time and identify any misconceptions that need addressing.
Evaluating problem-solving	Collaborative Quiz: Rapid Fire Round In small groups, students answer a series of quick questions or solve problems related to the day's lesson. The quiz is designed to be completed in a short time frame, encouraging collaboration and quick thinking.	Formative	Provides immediate feedback on their knowledge and ability to collaborate under time pressure. Encourages quick recall and teamwork.	Provides a quick check on how well students have understood the day's lesson, highlighting areas that may need more attention.
Testing collaborative skills	Quick Group Discussion: Pop-up Debates Students are randomly assigned to small groups to discuss a prompt or question related to the course material for 10-15 minutes. Each group then shares their conclusions with the class. This exercise tests students' ability to quickly collaborate and articulate their thoughts.	Formative	Provides immediate feedback on collaboration and communication skills. Encourages active participation and engagement.	Observes group dynamics and identifies students' strengths and areas for growth in discussion settings.

Assessing project outcomes	Collaborative Design Sprint: Performance Task In a short time frame (1-2 class periods), students work in teams to create a simple design or solution to a problem related to the course. This could be a prototype, a concept map, or a draft proposal. The focus is on creativity, teamwork, and applying course concepts quickly.	Summative	Evaluates ability to work under time constraints, creativity, and application of knowledge. Offers insights into time management and team coordination.	Provides a snapshot of students' ability to collaborate effectively and apply knowledge in a pressured situation.
Reflecting on team learning	Team Self-Assessment: Quick Reflection After completing a group task, students individually fill out a brief reflection form to assess their own knowledge contributions, what content or new understanding they learned or gained from the collaboration, and what they may still wonder about. This reflection encourages honesty and self-awareness in assessing group work.	Formative	Encourages self-reflection on content knowledge and areas for growth.	Gives the teacher insights into how students perceive their content knowledge, helping to guide future lessons.

Table 4. Activities that assess collaborative skills

Goal of Assessment	Title and Description	Formative / Summative	Feedback to Students	Feedback to Teacher
Assessing group collaboration	Collaborative Concept Mapping In groups, students create a mind map on key concepts from a lesson. Each student contributes ideas, and the group organizes the information together. The focus is on how well the group can synthesize their understanding and create a cohesive map together.	Formative	Provides feedback on group organization, idea integration, and how effectively they collaborate to build the mind map.	Observes the group's ability to communicate and integrate ideas, providing insights into group dynamics and individual roles.
Evaluating group decision-making	Consensus Building Exercise: Group Agreement Task Students are given a scenario with multiple possible solutions. As a group, they must discuss and reach a consensus on the best course of action. The assessment focuses on the group's ability to engage in productive discussion, consider diverse viewpoints, and arrive at a decision collectively.	Formative	Provides feedback on the group's ability to discuss, negotiate, and compromise to reach a consensus.	Assesses the group's decision-making process and the effectiveness of their communication and collaboration.
Testing teamwork effectiveness	Role Rotation Task: Collaborative Role Play In this task, students take on different roles within the group to complete a shared activity (e.g., a discussion, a problem-solving task). Roles might include leader, recorder, presenter, and researcher. After the task, the group reflects on how effectively they collaborated and supported each other in their roles.	Formative	Provides feedback on how well they adapted to different roles and supported each other in the collaborative process.	Provides insight into each student's adaptability and the overall group's ability to function effectively with clear role distribution.
Evaluating group coordination	Collaborative Story Writing: Group Narrative Students work together to write a short story, with each group member contributing a different section. The assessment focuses on how well the group coordinates their efforts to	Summative	Provides feedback on the cohesiveness of the story and how well the group communicated to ensure continuity and unity.	Assesses the group's ability to coordinate and integrate their individual contributions into a single, cohesive work.

	create a coherent and unified narrative.			
Assessing group problem-solving	Escape Room Challenge: Team Problem-Solving Groups work together to solve a series of puzzles or challenges in a classroom “escape room” scenario. The focus is on how well the group collaborates under pressure to solve problems and complete the challenge.	Summative	Provides feedback on their problem-solving process, communication, and how effectively they worked as a team under time constraints.	Observes group dynamics, problem-solving strategies, and how well students manage stress and collaborate in a high-pressure situation.
Reflecting on team collaboration	Group Reflection Circle: Collaborative Reflection After completing a group task, students gather in a circle and take turns reflecting on their group’s performance. They discuss what went well, what challenges they faced, and how they could improve in future collaborations.	Formative	Encourages honest reflection and constructive feedback on group collaboration. Highlights areas for improvement and acknowledges strengths.	Provides insights into group dynamics, individual contributions, and areas where additional support or guidance may be needed.

Self-assessment and peer assessment. Teaching students to self- and peer assess helps them develop valuable skills to reflect on their own work. This process will guide them to become more independent, self-directed learners.

1. **Teach students to use a rubric or checklist independently.** First, have them evaluate their own work (self-assess) and compare the rating they would give themselves with the teacher’s rating of their work to see if they are assessing in the same way.
Once students understand how to use a rubric for self-assessment, you can provide prompts or sentence frames to model the process and expectations for peer-assessment.
2. **Start small with positive feedback.** Ask students to give each other “glows.” Provide students with a list of options (template):
 - Active Engagement: You consistently participated in group activities and maintained focus throughout our collaboration.
 - Contributed Intellectual Ideas: You shared important information, concepts, or creative solutions that advanced our thinking and helped us consider new perspectives.
 - Active Listening: You demonstrated excellent listening skills by making eye contact, acknowledging others’ points, and responding thoughtfully to what teammates shared.
 - Question Quality: Your questions prompted deeper thinking and helped clarify important concepts.

3. **Gradually scaffold to areas for improvement** by having students give each other “grows” with similar prompts to the glows. Grows are recommendations to help students with next steps. Consider using “I wonder” to help make the feedback less direct, for example:
- Active Engagement: I wonder how we could work together better and maintain focus with the group in our next collaborative session.
 - Contributed Intellectual Ideas: I wonder how we could generate more ideas or build on each other’s ideas in our discussions.
 - Active Listening: I wonder if taking notes would be a way to process the ideas we are generating and show we are valuing each other’s contributions.
 - Question Quality: I wonder if asking more open-ended questions would help us explore possibilities and different perspectives to take our thinking further.

Summary

Assessment is a key practice of teaching that is much more than grading an assignment at the end of a task. It is an ongoing process of checking for understanding to actively support learning. While traditional assessment often examines learners as individuals in collaborative learning, assessment can target both individual and group learning. For example, assessment can be used to evaluate specific skills or concept knowledge before, during, or after a lesson while also assessing learners’ collaborative abilities such as teamwork and communication. Depending on the context, some assessments may prioritize the final product, while others examine the learning process or the progress towards meeting and mastering smaller goals within the overall learning objective. No single assessment will provide insight into all of the dimensions of learning, so it is important to strategically align the choice of what to assess and how to assess with the objectives and goals of the activity.

Getting Started

Assessment is an activity that provides valuable information and can make collaborative learning more successful and impactful. Taking an inventory of what is already done in the classroom and determining what can be repurposed as a collaborative assessment is a great starting point. Create targeted checklists to use when observing groups, listen actively to group discussions, and ask probing questions to identify where students may need help. Exit tickets are useful as well to gather student reflections to inform future instruction.

When planning collaborative assessments, focus on the learning goals, design the assessment with the end goal in mind, and use the assessments to guide instruction. It is important to strike a balance between individual and group assessments by documenting individual thinking before collaboration begins with pre-assessments, using checkpoint assessments during the process, and implementing follow-up assessments after group work concludes.

Other Primers in This Series:

- [Classroom Discourse](#)
- [Collaborative Argumentation](#)
- [Social Regulation of Learning](#)
- [Teacher's Roles in Supporting Collaborative Learning](#)

Related Resources

- [Collaborative Learning Toolkit](#)
- [Feedback: Learner Variability Project](#)
- [Formative Assessment in Action: How Collaborative Protocols Can Elevate Student Learning](#)
- [Foundations of Collaboration](#)

Videos:

- [Classroom Videos of Collaborative Learning](#)

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Appendix: Feedback for Helping Students Learn

Feedback is essential to tell learners a) what they are doing, b) how they are doing, and c) what is next (Hattie & Timperley, 2007). From their review of research on formative assessment and feedback (meta-analysis) Hattie and Timperley identify four levels of feedback:

1. About the task: Whether something is correct or not, or if more information is needed;
2. About the processes that are involved in the task: For example, how to detect errors as you do the task;
3. About self-regulation: For example, how to plan, monitor, and reflect towards the learning goal;
4. About the self as a person: For example, “you are a brilliant student.”

Of the four levels, feedback about “self as a person” is the least effective for helping further learning, as it contains no information related to the task. The first three levels of feedback listed are important to give for different reasons.

Feedback **about the task**, such as telling the student the answer is correct or incorrect, is especially important. Task feedback should be kept simple. If it is complex, it may not be understood. If a student needs more information, then the teacher should give further instruction, not feedback. Feedback can only build on knowledge that a student has; if they don’t have basic knowledge, then instruction is necessary.

Feedback **about processing** or how to understand and manage tasks can give students insights that are generalizable. For example, showing a specific strategy to detect a mistake and provide self-feedback. This type of feedback can help lead to more confidence in the learner.

Feedback about **self-regulation**, such as how to plan, monitor, and reflect towards a learning goal, can help the learner create their own internal feedback routines, which make them a more effective and self-regulated learner (Hattie & Timperley, 2007). In groups, self-regulation is important (see [Social Regulation of Learning](#) for how it relates to other forms of regulation in a group).

If possible, combine the three levels of feedback about the task, processing, and self-regulation for increased positive impact on learning.

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of educational research*, 77(1), 81-112



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