Discussion
Evidence-Based Instructional Practices #4

Introduction

While creating a classroom culture that supports students in meeting the intended learning outcomes is critical to establishing equitable learning environments, how teachers and students operate within that environment acts as a powerful means to improve instruction as well. According to Zaretta Hammond and John Hattie, conversations are one of the most powerful practices teachers can use in classrooms to promote higher achievement (Hammond, 2020; Hattie, 2012). The New Oxford American Dictionary defines **discussion** as "the action or process of talking about something in order to reach a decision or to exchange ideas." Also known as discourse, dialogue, talk or conversation, discussion is a pedagogy that empowers and transforms learners, making student learning visible and creating a heightened sense of classroom community (Ostroff, 2020).

Students are more apt to be able to solve their own problems and generate their own questions when first given opportunities to talk and collaborate (Cifone, 2013). Therefore, in meta-analyses conducted by John Hattie, dialogues between and among peers are a powerful way to improve instruction with an effect size of 0.82 - over two years' worth of growth in one year's time (Fisher, Frey & Hattie, 2016). Once students have acquired enough knowledge to begin grappling with relationships between ideas, they reach an ideal place for discussion with peers as they begin to think aloud, listen to others, question, justify and explore (Fisher, et al., 2020).

Discussions can be oral or written, structured or informal, and can be used to address any discipline, text or topic between students and their teachers or peers. When planning instruction, teachers should be mindful of the following:

- Appropriate student group size for the content of the discussion and complexity of the concepts, questions or texts discussed;
- Timing provided to ensure all students have equitable opportunities to share their thinking; and
- Content used within their classroom discussion routines and protocols.

Although many discussion groupings exist in the field today, author and researcher Wendy Ostroff (2020) argues that one of the best classroom arrangements to get students acclimated to discussion structures for the first time, is sitting in a circle so students can maintain eye contact. As teachers initially place members in a group, a go-around strategy to have each person weigh in on their thinking to a specific quote or question helps to practice equal participation and get members accustomed to sharing aloud (Ostroff, 2020). In addition to quotes or questions, some teachers may choose a thinking prompt to provoke deeper thinking and spark dialogue through video clips, articles, cartoons, photographs, problems, artifacts, music or works of art. Thinking prompts engage students, help them make connections and provide background knowledge to deepen thinking (Knight, 2013). Because older students are typically able to attend to tasks for longer periods of time than younger students, no more

than 30-40 minutes is recommended for students ages 9 or younger to engage in discussion with one hour being the maximum amount of time suggested for students over age 10. To better prepare students for engaging in discussion, Ostroff encourages teachers to break younger students into pairs and older students into small groups of 3-4 to prime them for larger, whole group discussions in the future (Ostroff, 2020).

Discussion is most effective when each person in the group has a designated job, and much like the conditions for effective learning environments, feels safe and empowered to contribute meaningful ideas. The discussion leader or facilitator is one role students may assume in discussion circles. Within such circles, the discussion leader rarely offers their interpretation of the text, problem, compelling, question, controversial issue, situation or phenomena, but rather the student summarizes others' ideas and brings the insights back to the discussion purpose, question or textual evidence. Ostroff offers this poignant analogy of building a snowman to demonstrate to students why jobs for all discussion participants are needed and valuable (p.18):

> "First someone puts out a tightly packed snowball (question or idea about the text or problem). As a group, we roll it around a bit and let it gather more snow. If we roll it too much in one direction, it's going to become like a flat wheel. We need to stop now and then, smooth it out, then roll it in another direction for a while (go against the grain of our own thinking). When it feels big enough, we leave the first snowball for the base and start another one for the middle. Likewise, we don't need everyone to put out original ideas. Some members are going to be in charge of rolling or smoothing; some heavy lifters will pick up the middle snowball and connect it to the base-and so on." (Ostroff, 2020).

Brain Research and the Need for Discussion

Traditional school formats for discussion have long been teacher-led where the amount of student talk time is dictated by the instructor and how much they mediate the conversation in allowing students to respond. However, this initiate-response-evaluation (IRE) format does little to promote effective discourse because students are not given opportunities to create their own understandings, and in turn, develop higher-level thinking skills. Unfortunately, this call and response approach makes up a large majority of today's classrooms as some educators are too heavily focused on checking for understanding rather than creating the conditions necessary for deep meaningful discussions. On the other hand, academic conversation, where academic vocabulary specific to an academic discipline is often incorporated, allows for engaged discourse where teaching, modeling and practice of essential speaking and listening skills are taught across the content areas (Hoffer, 2020). One example of this can be found in the Interdisciplinary Literacy Practices within *The Kentucky Academic Standards for Reading and Writing,* where learners are expected to:
- View literacy experiences as transactional, interdisciplinary and transformational (ILP #3);
- Utilize receptive and expressive language arts to better understand self, others and the world (ILP #4);
- Collaborate with others to create new meaning (ILP #6); and
- Apply high level cognitive processes to think deeply and critically about text (ILP #9).

These speaking and listening skills are an integral part of learning at every grade level and content area in supporting students as lifelong learners.

Discussion Purposes

To better understand why discussion is needed in classrooms, it is important to explore the many purposes that discussion can serve. Classroom discussions may be used to (Frazin & Wischow, 2020; Cunningham, 2020; Hoffer, 2020; Herman & Nilson, 2018):

- Analyze or argue;
- Build relationships;
- Encourage active listening;
- Motivate preparation or increase participation;
- Uncover our own bias, values or moral stance;
- Clarify, confirm, clear up or probe;
- Build oral language fluency or academic vocabulary;
- Explore ideas and deepen thinking;
- Prove or debunk a statement or position;
- Transfer knowledge to new contexts;
- Report on completed work or share results of student work;
- Formatively assess participation or where students are along a learning progression;
- Understand another person's perspective by shifting roles or mindsets; or
- Contemplate and weigh evidence.

Social-Emotional Benefits of Discussion

While all of the purposes for discussion listed above are important to developing a safe and collaborative classroom environment, discussion can address students' social-emotional needs as well by building healthy relationships among teachers, students and peers. As students develop relationships and begin to establish friendships, the brain produces serotonin, a hormone that stabilizes mood and brings about feelings of happiness and well-being. By introducing emotions into the learning process, neurotransmitters emerge and increase the likelihood that cognitive material will be easily stored and retrieved (Herman, et al., 2018).

The neurotransmitter dopamine is released in the brain when learning is fun, exciting and enjoyable. This "feel-good" chemical acts as an auto-save feature to make it easier for students to remember information. In addition, as students spend more time talking, they get to know each other better and build a stronger classroom community. This increased knowledge of their peers leads to feelings of empathy, which can positively shift how students interact and think within their classroom environment. Allowing students a small portion of time devoted to self-selected topics that matter most to them (even non-academic "small talk"), gives students a sense that their lives, interests and identities are being honored (Frazin & Wischow, 2020).

Small Talk, Big Impact

Educational research has provided considerable insight into what works when it comes to classroom discourse. When teachers effectively implement talk in classrooms, "small talk" is not time wasted. Given a small amount of time to talk about topics unrelated to the task at hand, research studies by Ariga and Lleras (2011) published in *Cognition* found that productivity increased. Even testing people's ability to stay on task within a 50-minute block of time proved to be more productive with a short break of talking as different stimuli can lead to maintained focus and persistence (Frazin & Wischow, 2020; McTighe & Willis, 2019).

Brain research also is clear on the value of peer discussions (i.e., a brief turn and talk) in avoiding fight-flight-freeze mode where students are anxious and uncertain about what to do and deep learning is impeded. To leverage the chemicals in our brain which maximize memory and focus, teachers set students up for success by allowing them to answer three primary questions during brief turn-and-talks: (1) What am I going to be learning? (2) What strategies will help me learn and (3) How will I be asked to show my learning? Allowing students a few minutes to answer these three questions can help to maximize focus and memory by providing students with a calm anticipation that ultimately saves time in checking in with struggling students who may be unsure of what to do (Benson, 2021).

Collaborative Classroom Conversations

Providing students with opportunities to engage in collaborative conversations is useful for oral language, social, academic and emotional development. English learners are able to engage in conversations which intentionally encourage the ongoing use of academic vocabulary as they talk with classmates. These conversations are crucial in helping all students deepen and clarify their understanding of complex concepts and texts (Frey et al., 2013), and as learners have increased opportunities to discuss what they read, the higher their test scores and overall academic achievement (Hoffer, 2020; US DOE, 2013).

So how do educators begin to effectively establish discussion partnerships in their classrooms? Frazin & Wischow (2020) suggest five strategies to build help build positive classroom relationships through talk:

1. Honor the talk that already occurs daily.
2. Acknowledge that "small talk" is huge in maintaining focus and establishing empathetic listening skills.
3. Build strong student partnerships by planning for and explicitly teaching in-depth discussion skills.
4. Help students get to know each other as learners and as people.
5. Use discussion to fuel your teaching. Knowing students' interests, strengths and needs goes a long way in finding ways to motivate individual students (p. 31-43).

By modeling the behaviors and strategies listed above, teachers build positive classroom relationships through talk that lay the foundation for explicit teaching of in-depth discussion skills later.

Explicit Teaching of In-Depth Discussion Skills

In a growing world where students continually hear quick media sound bites and capture their thinking in quick texts or "tweets," fewer discussions are devoted to listening to complex issues and asking probing questions. Schools and districts are faced with an ethical obligation to prepare students for discussions in a civil society rich in diverse experiences, perspectives and needs. However, for students to be motivated to engage in meaty discussions, they must see the content of those discussions as relevant and worthy of their time. Discussions that focus on the "what" in the curriculum are often seen by students as less relevant, do not successfully help students understand the content and result in low student engagement. While some "what" questions are needed to lay a foundation for the context in discussions, the most impactful discussions center around the "why" or "how" (i.e., why a scientific principle is significant in our lives, how our emotions are strongly affected by music or why certain historical events happened as they did) (Tomlinson, 2020). Author Carol Ann Tomlinson (2020) outlines eight steps that educators can take to help students connect to the content and foster relevant, in-depth discussions:

- **Model empathy, respect, appreciation of diversity and an unfailing belief in all students.** This establishes a caring, affirming, secure classroom environment where high expectations are

present. Talking together teaches students diversity, how to treat others with kindness and how to listen and encourage one another (Knight, 2013).

- **Create a climate of mutual respect among all students by developing respectful relationships between the teacher and students.** Talking with and understanding the strengths and needs of individual students regularly and systematically sends the message, "We are stronger and better when we hear and draw on the talents, experiences and ideas each one of us brings to the classroom."
- **Understand the key concepts, principles, ideas and essential questions around which each discipline is organized.** This helps teachers to link students' experiences and interests to their growing knowledge of the discipline, so content feels relevant and meaningful to them.
- **Plan questions that will spark discussion and encourage students to contribute questions.** Intentionally planning for and building in questions throughout the instructional cycle sets the tone from the outset of a study. It also encourages the perspectives of students as they discuss issues worthy of consideration.
- **Model the attitudes and skills that contribute to rich discussions.** The teacher listens intently, uses wait time, looks for meaning in what students say, summarizes and builds new questions from previous responses/questions. This shows students they are valued, respected and the teacher believes in them and the contributions they bring to the learning process.
- **Prepare students for meaningful discussions systematically.** This includes:
  - Establishing norms for respectful conversations and group discussions;
  - Teaching and modeling how to support students' ideas as they speak;
  - Providing dialogue opportunities in various groupings (pairs, small group, and whole class) before expecting students to lead whole group discussions;
  - Demonstrating how to challenge the ideas of others in a respectful way; and
  - Providing feedback to support students' discussion skill development and steps for improvement.
- **Reflect on the quality and effectiveness of the discussions with students.** Students can assess how well they contributed to the discussion, offer feedback on the quality of the discussion and engage in giving feedback to others when appropriate.
- **Search out ways for students to be "drivers" of their own learning.** The end goal is for students to participate in group discussions without the teacher facilitating. Even more ideal is when students can successfully lead the discussion themselves as the teacher observes quietly (Tomlinson, 2020).

As teachers prepare students for meaningful discussions by explicitly teaching and modeling how to support students as they speak, the following table provides some suggested sentence stems educators can use in classrooms based on their intended purpose. These stems are general in nature and can be adapted for use in any discipline.

Figure 5.1: Sentence Stems for Discourse in Any Discipline

Purpose	Suggested Discourse Stems
What to say when we **disagree**...	"That is a valid point, but I think…" "I see things differently based on…" "Then again, we shouldn't forget…" "I understand what you're saying. Have you thought about…?"

Purpose	Suggested Discourse Stems
What to say when we want to **affirm** others' ideas...	"My idea is related to _____'s idea…" "I really liked _____'s idea about…" "What _____ said really resonates with me…" "You made a great point about…" "I hadn't thought about that…" "My idea builds on _____'s idea…" "I'd like to piggyback off that idea…"
What to say when we express **cause and effect**...	"The main cause was probably...because…" "I think...led to...which led to…" "I think...was caused by...because…" "The effects of...were...which is evidenced by…"
What to say when we want **clarification**...	"Can you elaborate on that?" "In other words, are you saying…?" "I have a question about…" "I'm not quite clear about…" "Can you explain…?" "Do you mean that…?" "Can you clarify _____ for me?"
What to say when we **connect** learning to other content areas...	"This reminds me of (subject) when we were…" "We also learned about...in (subject). Remember when we…" "There was a strategy we used in (subject) when we were...That might help us think about…" "This strategy works for both (subject) and (subject) because…" "This is similar to what we do in (subject) when we...because…"

*Adapted from content in _Phenomenal Teaching_ (Hoffer, 2020).

Engaging All Students in Discussion

Student-driven discussions often start with an essential question students are motivated to answer (i.e., How can we take action on teen vaping that makes a difference?) and use protocols that allow all students to engage in meaningful conversation and ownership. To foster student responsibility, increase individual student accountability and increase the quality of the discussions students engage in intellectually, researcher Diane Cunningham (2020) suggests educators consider three moves to help elevate student discussions:

Move #1: Teach students how to generate questions and respond. Students are able to effectively generate questions for discussion when they are 1) taught how divergent and convergent (thick and thin) questions are different, 2) provided teacher modeling and examples and 3) given ample time to practice generating questions with others. The divergent thinking that stems from asking divergent questions helps to promote student dialogue and increases creative problem solving (Otroff, 2020).

Figure 5.2: Divergent and Convergent Questions with Examples

Divergent Questions	Convergent Questions
Allow for multiple correct or alternate responses	Call for a single correct response
Ask for opinions or conjectures with rationale	Are factual in nature and can be simple or complex

Divergent Questions	Convergent Questions
Can require evaluation, analysis and application	Involve remembering, explanations or comparing and contrasting

Divergent Examples	Convergent Examples
• What factors are most important to consider when purchasing a new home? • What is the best way to represent this algebraic equation? • What is the best approach to solving the problem of water pollution?	• What is a decimal? • What are protons? • What support does the author provide for the claim she makes in the introductory paragraph? • What type of community do you live in?

Move #2: Have students describe what they would expect to see and hear in high-quality discussions. Simply asking students what they would expect to see in effective discussions does not get at the heart of discourse that includes deep thinking. In order to encourage high-quality discussions from students, they need to see and hear strong models in action. Sharing video clips of high-quality discussions helps students to observe others effectively (Cunningham, 2020):
- Making connections;
- Analyzing;
- Asking probing questions;
- Clarifying;
- Uncovering student assumptions;
- Identifying bias;
- Weighing evidence to draw conclusions; or
- Considering other alternatives or the perspectives of others (Cunningham, 2020).

Move #3: Encourage students to reflect, self-monitor and set goals. After students can identify the criteria for high-quality discussions, they need opportunities to practice and self-monitor the quality of their own discussions. The teacher may provide students with specific criteria to work on, or students may provide feedback to one another in pairs or small groups. Coupling effective discussion criteria with reflection prompts helps students begin to think metacognitively and progress towards high-quality discussions. These reflection prompts can also be used as a lesson/unit wrap-up or formative assessment. Some discussion-focused reflection questions could include (Cunningham, 2020):
- What did your group do well today?
- What thinking skills challenged your group? Why do you think so?
- What part of the discussion process was difficult for you? Easy?
- What goal might your group set for your next discussion?
- What aspect of group discussions are most challenging for you? Why?
- How does sharing the thinking of others out loud help you to understand?
- What new questions did your group raise today?
- What might your group have done differently to improve today's discussion? Why do you think so?

Together, these three moves increase student engagement and ownership, build student efficacy and lead to lifelong thinking skills for all students (Cunningham, 2020).

Importance of Intentional Planning

As mentioned previously, an important step in closing the gap between research and effective classroom implementation is intentional planning on the part of the teacher. In order for educators to gain maximum benefit from evidence-based practices, they must be mindful of and purposeful in their planning. When explicitly teaching in-depth discussion skills, educators need to first think through and intentionally plan for those classroom interactions. As a starting point, teachers will want to plan lessons in terms of time and content around an important text theme, problem, compelling question, controversial issue, situation or phenomenon. For example, elementary teachers may decide to read a text aloud to younger students or review the key ideas before beginning discussions. Older students may need a discussion notebook or question journal to take notes on ideas that emerge as they are listening to others, while younger learners can do the same by drawing pictures of what they think about the text (Ostroff, 2020).

Considerations for Distance and Blended Learning Settings

In distance or blended learning settings, planning and communication are requisites when including discussion in synchronous sessions with students. A question of the day can be used for shared discussion and writing where parents lead the discussion, write what is dictated by their child and send a photo of the writing to the teacher. Teachers then check what has been shared with them to follow up with questions in online chats and begin brainstorming future discussion topics. Synchronous sessions (also known as live or concurrent sessions) with students should **prioritize** the time for discussion, connection and interaction. As teachers plan lessons, they should be thinking about the learning experiences students need that will best prepare them for interactive, virtual discussions (i.e. equitable discussion protocols, written tasks, brief videos, or readings) (Fisher et al., 2020; Hammond, 2020).

Structures and Routines for Promoting Equitable Conversations

There is an old adage in education, "Whoever is doing the talking is doing the learning." While research from the *U.S. Department of Education* (2013) indicates students with higher achievement scores have engaged in meaningful discourse more often, historically marginalized students (e.g., introverted students, students with disabilities, English learners and students of color) are not typically leveraged in classroom discussions and need talk structures to confidently share and have their voices heard. Discussion strategies such as *turn-and-talks* or *think-pair-shares*, while useful, do not always help facilitate deep thinking or what some experts in the field refer to as "cognitive chewing." These protocols offer a structure or process, so all participants take turns discussing, speaking and listening. While the overly structured nature of protocols may seem stifling to free-flowing discussion, the opposite is in fact true. Because most protocols are timed, all students, including those students typically left out of conversations, are given opportunities to contribute. English-speaking, extroverted students with mainstream background knowledge are no longer able to dominate classroom discussions where discourse protocols are the norm (Hammond, 2020).

Structured protocols can promote equitable participation, increase individual student accountability and help create more culturally responsive discussions (Hammond, 2020), but learning how to spark rich student conversations can sometimes be a difficult art for educators (Hoffer, 2020**). While some students are naturally lovers of talk, most students benefit from structures and protocols to help ideas surface and to promote fertile thinking.** When selecting a protocol, Hoffer (2020) suggests three crucial factors for consideration: (1) **Groupings** - What size grouping will be best based on my purpose? (pairs, triads, whole class, etc.) Paired discussion groupings can help raise the level of individual student accountability and engagement rate in the classroom as a whole since all students are participating at

once; however, teachers will need to decide which grouping best matches their purpose and learning outcome for a given lesson. (2) **Timing** - How long will discussions last? (one lesson, several days of lessons, etc.) Meatier discussions on complex or controversial topics may need to carry over into multiple lessons for students to inquire and fully express their thinking. (3) **Content** - What structures will be most successful to support students as they grapple with understanding? (Hoffer, 2020).

While there are many discussion protocols commonly used across the field of education, not all protocols provide the structures for equal participation or for all students to share their thinking with cultural responsiveness in mind. Teachers should consider selecting talk structures and tools that: (1) honor the ethnic, racial, and linguistic background knowledge individual students bring to the discussion; (2) provide marginalized students with increased access to discussion flow; (3) allow students agency in leading the conversation; and 4) leverage everyday communication modes to give students a strong cognitive workout. Careful selection of structures with these criteria in mind will ensure that:

- Students feel socially and emotionally safe to share in classroom conversations in the future;
- Teachers are responsive to students' interests and knowledge base; and
- Students feel empowered and equipped to be facilitators of their own learning conversations.

When choosing a discussion protocol for classroom instruction, teachers should first consider the intended purpose. Various discussion formats have a place in classrooms at differing times and some formats work better than others depending on the intended learning goal or purpose (Novak & Slattery, 2017). Figure 5.3 below provides a few examples of protocols teachers could incorporate in their classrooms to increase accessibility and engagement for all students:

Figure 5.3: Equitable Protocols for Use in Any Discipline

Discussion Protocol	Purpose	Description
Dyads	Provides a social emotional grounding to the beginning of the day or class period	Dyads are a listening and talking exchange structure in which each speaker is listened to for a designated amount of time without interruption.
Tea Party	Used with quotes and images that help students curate information	Tea Party is a movement structure in which participants select a quote or image and share how it connects to their work or a specific text by mingling with pairs or triads around the room.
Tuning Protocol	Helps students revise and improve work in preparation for whole or larger group discussions	Tuning Protocols are a collaborative reflection structure where student work is shared and examined; collecting feedback to improve student outcomes in the classroom.
Text Rendering Strategy	Allows students to activate background knowledge, explore new ideas and make connections using grade level texts	The text rendering strategy is an information processing strategy where participants respond to a text using a predetermined set of symbols established by the facilitator.
Kiva	Helps teachers to formatively assess which students can make text-based connections, take the conversation deeper or identify	In Kiva, four students are seated in a center square with four additional students seated behind them (representing the spokes of a wheel). The four students in the center square begin the discussion

Discussion Protocol	Purpose	Description
	real-life connections to academic concepts	topic/questions. After a period of time, the teacher cues students from behind to move into the square and take the discussion deeper, building on what has been said. New students move into the "wheel spoke" seats and the cycle repeats.
Graffiti Tag Billboard	Stimulates thinking before or after a conversation by leveraging students' preference towards multimodal expression	Students use doodles, collage, written words, sketch noting or other visual forms of expression to "tag" the "billboard" much like a Chalk Talk where students circulate the room adding on to the thinking or ideas of others already posted. Where Chalk Talks are traditionally in written narrative form, Graffiti Tag Billboards allow for visual or tactile representations.
Talking Chips	Used to promote equal participation within a group or avoid one student from dominating the conversation	Each student is given an equal quantity of chips. When a student wishes to speak they place a chip on the table. No one is allowed to speak unless their chip is on the table. Once a student uses all of his or her chips to speak, their only option is to be a listener in the group (Novak & Slattery, 2017; Hoffer, 2020; Hammond, 2020).

Discussion Strategies to Support Formative Assessment

Evidence of student learning is a key component of the formative assessment process because it informs student and teacher decisions about next steps to move students toward their learning goals. This starts with eliciting meaningful evidence that can be used to interpret student learning and inform next steps. Because meaningful evidence is elicited primarily through formative assessment, educators must be deliberate in selecting an assessment type that matches their intended grain size and purpose. Within the context of classroom discussion, both performance and ipsative assessments are often used to measure student participation, engagement, communication skills and understanding of the content being discussed.

Performance Assessment

Not all assessments require the traditional pencil and paper tests many educators grew up with in their own schools. Many of the discussion strategies found in today's classrooms allow students to apply more interdisciplinary concepts and skills through performance assessments. Performance assessments require students to pull from content, skills and concepts that are difficult to replicate through paper-pencil assessments. When teachers embed discussion as a means to assess student understanding in their classrooms, students are more likely to see that what they are learning is relevant, demonstrate transfer of their learning to new tasks and be more motivated to continue learning at deeper levels. While there are many performance assessment strategies available for teachers to choose from, debates and Socratic seminars are two strategies that feature discussion and can be utilized in face-to-face, remote and hybrid learning environments (Fisher, Frey, Bustamante, & Hattie, 2021).

Debates

According to Hattie's research, formal discussions, such as debates and Socratic seminars, have an effect size of 0.82 and have a strong potential for accelerating student learning. Intentionally planned out debates challenge students to consider controversial topic nuances, use formal reasoning and formulate arguments. Debate strategies can stimulate student interest and intrigue using friendly controversy (Marzano, 2017). While debates in the distance learning classroom can be synchronous or asynchronous, it is important for teachers to ensure protocols and procedures in the synchronous or face-to-face setting are explicitly modeled, practiced and understood by all learners. Debate performance should be based on success criteria and can be co-constructed with students. Giving students time to craft arguments for both sides of the debate helps to increase student engagement and responsibility while ensuring students effectively generate evidence of learning (Fisher et al., 2021).

Socratic Seminar

Another formal discussion strategy is the Socratic seminar. A Socratic seminar is a fishbowl structure in which a small group of students discuss a predetermined topic while the remaining students observe and take notes. The inner circle of students discusses the topic (the fishbowl) and asks/answers questions while students in the outer circle are listeners. Within the seminar, the facilitator asks open-ended questions based on a text or problem while students listen closely to the participants' conversations to think critically for themselves and synthesize their own understandings. After a round of discussion, students in the outer circle trade places and roles with students in the inner circle as the discussion continues. Through this structured discussion, students learn to pose questions and civilly add on to the thinking of others. Teachers may find it helpful to use a reflection or single-point rubric based on co-constructed success criteria to assess student learning. If teachers choose to engage students in a reflective assessment of the seminar, the assessment should be based on pre-established learning goals and success criteria and consider the following questions:
- To what degree did the text or problem dominate the discussion?
- Which students individually participated in the conversation? Which students did not?
- To what extent did students grow in their understanding of the topic? (Fisher et al., 2021).

Ipsative Assessment

No matter the type of assessment, observable evidence of what students know and can do in relation to the learning expectations are the basis for high quality assessment practices. While not a widespread term used in today's classrooms, *ipsative assessments* compare students' present performance to past performance. Often this is measured in pre- and post-assessment data; however, when considering discussion assessment strategies, goal-setting conferences and video diaries often emerge as they easily measure change over time. While formative assessment practices encourage teachers to make adjustments in their classroom instructional practices through ongoing checks for student understanding, students are able to use the data collected from ipsative assessments to inform their learning practices as well. When teachers intentionally build in time for individual student reflection and feedback, ipsative assessments help students to:
- set goals for themselves;
- make adjustments to the strategies they employ or questions they ask in the classroom; and
- gain deeper insight into their personal progress and areas of needed growth (Fisher et al., 2021).

Goal-Setting Conferences

Following a period of remote and hybrid learning where potential student learning loss may exist, there is often a need for acceleration techniques to bridge student learning gaps. Learning goals alone aren't

enough; there needs to be intentional planning and structured time to go with them. With an effect size of 0.51, clear goal intentions have the potential to accelerate student learning when student motivation and ownership are key considerations. Because clear learning goals are a critical component of effective student-teacher goal setting, conferences can be a beneficial ipsative assessment strategy as teachers and students record the progress being made towards reaching those goals at regular intervals using tools such as tables, graphs and anecdotal notes. When teachers provide clear and specific feedback to students linked to their personal learning goals, students accelerate more quickly toward reaching the intended learning outcomes. Goal-setting conferences are powerful in motivating students to move closer to the intended learning outcomes when the embedded goals:

- Build competence;
- Provide choice and autonomy;
- Align with students' interests; and
- Change the perception of themselves.

Teachers should steer students away from performance goals such as, "*I want to get all 4s on my lab assignments*." and encourage students to establish goals connected to mastery of personal learning goals such as, *"I want to promote deeper thinking with the types of questions I ask my classmates during discussions."* Both content and personal learning goals can be discussed together during goal-setting conferences. Goal-setting conferences provide time for emotional check-ins, build teacher-student relationships and help students set short- and long-term goals to visualize where they are along a learning progression (Fisher et al., 2021 p. 86).

Video Diaries
Student and teacher capacity for using digital platforms has grown as distance and blended learning platforms have become commonplace in Kentucky schools. Video diaries are one such digital platform students (and teachers) can use to create and revisit throughout the school year. Students are able to watch previous video entries and reflect on changes they see in themselves while noting concepts that remained the same. Teachers are able to use video diaries to capture and observe cognitive growth in student understanding over time. Video diaries help teachers learn about their students as individuals while documenting the misconceptions, progress and understandings of their students. These visual records are invaluable evidence to share at parent-teacher conferences or to celebrate student growth (Fisher et al., 2021). For additional guidance on the formative assessment process in supporting classroom discussion visit the Eliciting Evidence of Student Learning section of the [Model Curriculum Framework](#).

Sources for Discussion Protocols
Below is a list of possible discussion protocol resources educators may use to help students process their learning and begin to think deeply about content. These protocols may be used to elicit discussion before, during or after instruction. Teachers do not have to use all of the discussion protocols listed below but should choose those that best meet the needs of their students.

- EL Education Classroom Protocols: https://curriculum.eleducation.org/sites/default/files/curriculumtools_classroomprotocols_053 017.pdf
- National School Reform Faculty: https://nsrfharmony.org/protocols/
- School Reform Initiative: https://www.schoolreforminitiative.org
- Teaching and Learning Lab at Harvard Graduate School of Education: https://www.gse.harvard.edu/sites/default/files/Protocols_Handout.pdf

- Visible Thinking Routines:
  http://www.visiblethinkingpz.org/VisibleThinking_html_files/03_ThinkingRoutines/03c_CoreRoutines.html

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