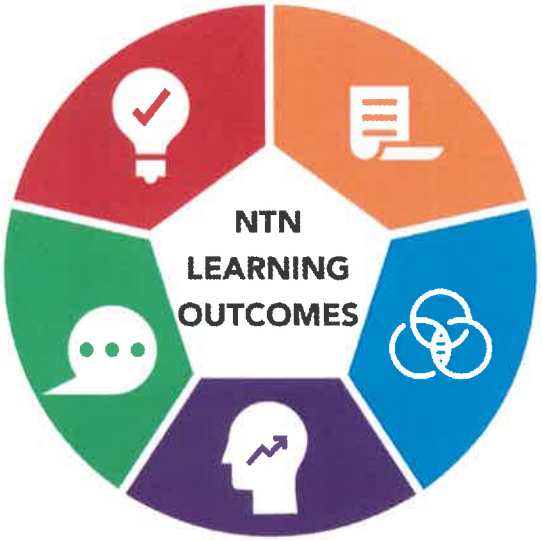
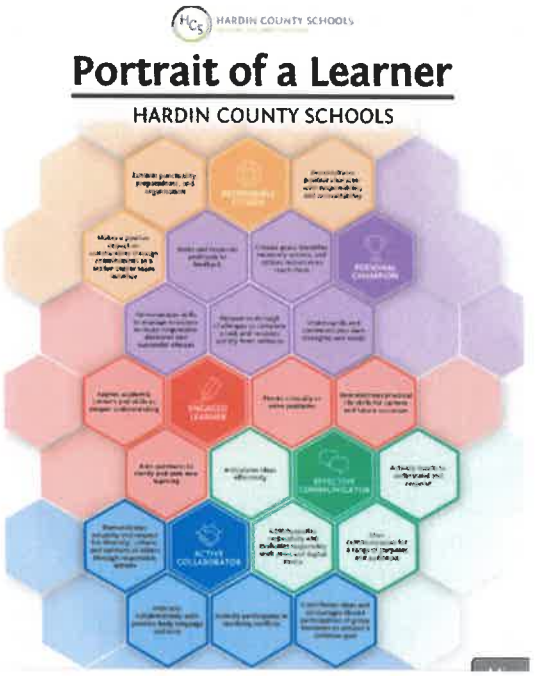


College View

Project/Problem Based Essentials



College View
Project/Problem-Based Essentials
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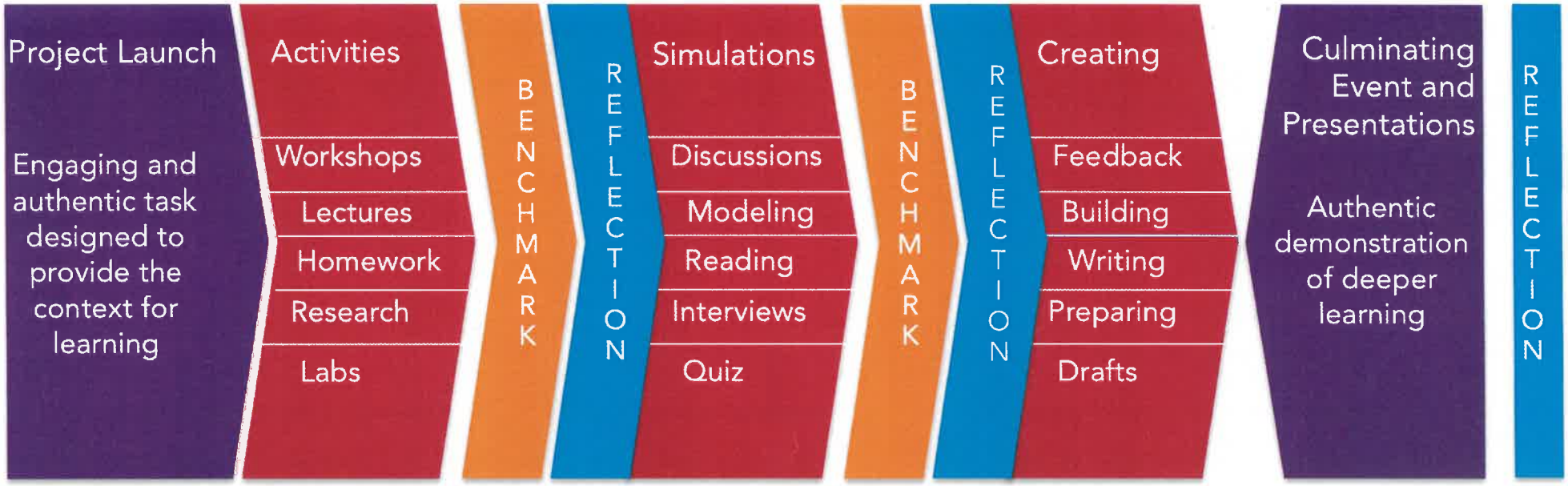
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Doing Projects vs. Project Based Learning

Traditional Unit with Culminating Project



Project Based Learning Unit



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SPECTRUM OF AUTHENTICITY

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	APPLICABLE	PURPOSEFUL	TRANSFORMATIVE
PERSONAL RELEVANCE *Learning focused on topics and problems that impact students' lives and/or community*	PBL Unit has very limited connections to students' assets, identities, or cultures, if any; focusing on required classroom content	PBL Unit attempts to make connections to students' assets, identities, or cultures; focusing on prevalent and current topics	PBL Unit intentionally honors students' assets, identities, or cultures; focusing on topics connected to students' lives and empowering students as active citizens in their local and/or global community
COMMUNITY IMPACT *Connection to local and/or global community. Feedback and collaboration from professional partners*	PBL Unit fulfills classroom requirements and has very limited connections to local and/or global community challenges, if any	PBL Unit is scenario-based and ignites inquiry around local and/or global community challenges. Tasks are designed to mimic real-world practices/ solutions	PBL Unit involves collaboration and input from community partners to investigate local and/or global community challenges. Tasks are designed to be in service of building self-awareness and/or contributions to others
CONNECTIONS TO THE DISCIPLINE *The work of professionals*	PBL Unit occasionally makes space for students to learn about the kinds of reading, writing, and thinking done by professionals and experts in the discipline	PBL Unit moves students on a trajectory towards the kinds of reading, writing, and thinking done by professionals and experts in the discipline	PBL Unit requires students to actively practice, reflect, and critique the kinds of reading, writing, and thinking done by professionals and experts in the discipline
AUDIENCE *Impact of presentation and/or performance of learning*	Culminating event involves teachers and the project rubric as the primary audience	Culminating event involves presentations to classmates and/or parents as the primary audience	Culminating event involves presentations to local and/or global community members as the primary audience

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Asset vs Deficit Based Thinking

Asset-Based	Deficit-Based
Focuses on what students can do: strengths, talents, interests, competencies *You might hear: "Their surveys told me a lot about all the things they're interested in like the social justice issues they care about."*	Focuses on what students cannot do *You might hear: "This class is just so far behind. These students just can't (multiply/read/etc.)"*
Sees students' racial, ethnic, cultural, and linguistic differences as sources of knowledge and strength *You might hear: "Her knowledge of Spanish and navigating another culture will be such an asset for this project."*	Sees students' racial, ethnic, cultural and linguistic differences as problems to overcome *You might hear: "She's just so far behind in English because they don't speak it at home."*
Focuses on opportunities *You might hear: "He does really well when he's collaborating with a group, especially if he has a small chunk he's responsible for and you support him with it. I'm going to ask them to tackle this next content as a group and see if that helps."*	Focuses on problems *You might hear: "He struggles so much I have no idea how we'll get through this next content."*
Supports hope and resilience *You might hear: "They have lots to learn but they're bringing so many assets to the table I'm confident we'll see lots of growth."*	Can lead to hopelessness and burn-out *You might hear: "I just don't even know where to start with this group and it's getting me down."*

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Project Design Tool

The New Tech Network (NTN) Project Design Tool provides teachers with a checklist to design a complete and quality project/problem-based learning units using the Elementary or Secondary NTN Project Planning Toolkit.

Begin with the End in Mind

- ❑ Determine high impact **standards** and **Learning Outcomes** for the foundation of your project's design.
- ❑ Choose specific indicators from the **Learning Outcomes rubrics** to focus on, and use them to write student-friendly **learning targets.**

Design the Project Scenario

- ❑ Design an **authentic scenario** that will require students to master the standards and outcomes you chose, keeping in mind relevance to students, the audience, and the impact the work will have.
- ❑ Write a **driving question/problem statement.**
- ❑ Create an **entry event** that will introduce the project, generate student curiosity and interest, and elicit **need-to-knows**.

Create the Path

- ❑ Determine **benchmarks** that will serve as performance assessments and lead to the **final product/s.**
- ❑ Determine **scaffolding** that will support student mastery of standards and outcomes and lead to the benchmarks and product/s.
- ❑ [Elementary Only] Create a **literacy** and **math** plan to support student growth in those areas, both within and alongside the project.

Plan the Assessment

- ❑ Create **rubrics** that allow you and students to assess progress towards mastery of standards and outcomes.

Assess Your Project Before Launch

- ❑ Obtain **feedback** on your project plan prior to launch.

Unsure about any of these terms? See the NTN Glossary in the NTN Help Center.

This tool is designed to help teachers reflect on and evaluate the content and quality of their project or problem-based unit plan in order to help them refine their current and future instructional design. This

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Project Design Tool

This tool is designed to help you reflect on and evaluate the content and quality of your project or problem-based unit plan in order to help you refine your current and future instructional design. While the focus is instructional, also included are cultural elements that will enable teachers and students to tackle the challenging instructional work of the project and develop students' collaboration and agency skills.

Design Quality: Does your project/problem/learning experience...

College & Career Ready Outcomes	**Authentic**	❑ make connections and demonstrate learning of curricular standards and Learning Outcomes throughout the learning experience? ❑ include family/community partnerships in and out of PrBL/PBL that add value to students' learning?
Meaningful and Equitable Instruction	**Authentic**	❑ focus on topics or problems that impact students' lives and/or their community? ❑ require the construction and presentation of original responses and products? ❑ emulate the work of professionals and involve presentations beyond the classroom setting?
	Active	❑ create and surface students' questions (aka knows/need-to-knows)? ❑ support students in building their cognitive mindsets by driving their own search for answers through inquiry, exploration, and research based on knows/need-to-knows? ❑ encourage students to suggest and make decisions about what occurs in the learning experience?
	Complex	❑ encourage students to use open-ended inquiry to build collaboration, thinking skills, and metacognition? ❑ include tasks designed to push students to an appropriate level of productive struggle?
Supportive and Inclusive Culture	**Relational**	❑ increase student voice through discourse and team agreements? ❑ offer opportunities for students to celebrate one another in success and failure, particularly when risks are taken? ❑ challenge students to problem-solve and reflect with each other through structured opportunities for discussion and critique? ❑ foster a learning environment that feels safe, inclusive, and emotionally supportive by creating ritual and routines that support connection, relationship building, and emotional well-being?
Purposeful Assessment	**Responsive**	❑ utilize consistent assessments and additional data gathering opportunities (pre, during, post) to determine what they know and need to know to inform current and future learning opportunities? ❑ require students to be working on different, appropriately challenging tasks that support their specific needs and communicate high standards and expectations? ❑ support differentiation, promote social discourse, inquiry, and opportunities for skill practice and reflection?

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Project Planning Toolkit

Area	Standards	Student Friendly Learning Targets
Knowledge and Thinking	State content standards	
Agency	NTN Outcomes	
Collaboration	NTN Outcomes	
Oral Communication	NTN Outcomes	
Written Communication	NTN Outcomes	

PROJECT SCENARIO What is the scenario that will guide student inquiry throughout the project?	
DRIVING QUESTION Open-ended, high interest, thought provoking	
PROBLEM STATEMENT Role, task(s), purpose	We are (role)... Who will (task).... So that (purpose)...
WRITTEN PERFORMANCE TASK Individual written performance assessment. See Guide to Written Performance Tasks [Insert driving question as appropriate.] After reading/learning… write… that explains/describes/answers/…	[Insert driving question as appropriate.] After reading/learning… write… that explains/describes/answers/…
CULMINATING PRODUCTS Be sure to allow for student voice ad choice in the products	Presentation: Artifact/s (Group and Individual): Audience:
AUTHENTICITY AND PARTNERS How will you make this project as real-world as possible, and who will help you?	

Rubrics
Link your rubric(s) here.

You can also reference the New Tech Learning Outcome rubrics in the Help Center for help creating your rubric.

PROJECT PHASES: SCAFFOLDING AND BENCHMARKS	• Use NTN Practices Cards to support you with the "Scaffolding" and "Benchmark" components of this Toolkit. They provide processes to scaffold and assess New Tech Learning Outcomes and support the development of a safe, inclusive, and emotionally supportive culture.	
ENTRY EVENT DESCRIPTION AND PLAN What will be the hook to spark curiosity and initiate the inquiry? How will you introduce the students to their role and tasks? Will you use a document to accompany the entry event? What should it include (i.e. academic vocabulary, description of role/tasks)?	Put your entry event here	
ANTICIPATED KNOWS AND NEED TO KNOWS	Knows:	Needs to Knows:
Scaffolding	Benchmark #1 Group/individual submits…	
Scaffolding	Benchmark #2 Group/individual submits…	
Scaffolding	Benchmark #3 Group/individual submits…	
Scaffolding	Benchmark #4 Group/individual submits…	
Scaffolding	Benchmark #5 Group/individual submits…	

Project Calendar by Day (use if needed for your organization and planning purposes)

Day 1	Day 2	Day 3	Day 4	Day 5
Day 6	Day 7	Day 8	Day 9	Day 10
Day 11	Day 12	Day 13	Day 14	Day 15

Day 16	Day 17	Day 18	Day 19	Day 20

Problem Planning Form

Content Standards *Insert your math content standards here* *Insert math Knowledge and Thinking Standards here*	
Learning Outcomes Collaboration Oral Communication Written Communication Agency	
Design the Problem Scenario *Design/Find/Adapt problems with that will allow you to develop and assess the standards and outcomes you determined above. How will you make a problem scenario that will elicit multiple student strategies and allow access for as many students as possible?*	
Anticipatory Planning *What are different ways students might approach this problem? What are potential questions you might ask to push students' thinking for each approach? For more information, see PrBL Card #1 Anticipatory Planning*	Strategy 1 | Strategy 2 Strategy 3 | Strategy 4
LAUNCH *What student-centered practices will you use to help students make sense of the task?* *See PrBL Card #5 Launch for suggestions.*	
EXPLORE *How will you structure work time? (pairs, groups, whole class)* *How will you support equitable group work?* *See PrBL Cards #6-10 for explore and group work strategies.*	
DISCUSS *How will you have students present and discuss their solutions to deepen understanding of the content?* *What connections do you want to highlight or what vocabulary do you want to introduce?* *See PrBL Cards #11-14 for discussion strategies.*	
Assessment *How will you determine if students have learned the intended mathematical standards and the intended mathematical concepts/practices? How will you provide meaningful feedback throughout the learning process?*	

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NTN Collaboration Rubric, High School TEST

Collaboration involves a group and individual's ability to contribute to group tasks and their ability to co-create a safe environment where everyone is and feels welcomed to contribute to the group and the work. Collaboration is defined by research as a process: "Students work in groups to improve their ability to work with others, and the quality of student interactions, therefore, should be the focus of teaching and learning."(Evans, 2020, p5).

Consider how culture shapes interactions. Important to note that while assessing the quality of student interactions cultural differences must be considered. Some differences are verbal, what is considered appropriate communication and sharing of resources, ideas, or efforts; other differences are non-verbal and mediate what is considered appropriate body language, conflict resolution, and task management tactics. Verbal and non-verbal interactions may vary across cultural contexts.

The Individual Collaboration Rubric, both teacher and student facing, focuses on specific aspects of individual collaboration and how individuals interact and share with the group. The number of dimensions (rows) for this rubric makes it unlikely a teacher would use it in its entirety. A teacher and their class might opt to focus on particular rows by project or a school might focus on particular indicators in particular grade levels. Schools may also find opportunities to bring additional collaboration and project management skills to extend this outcome as their students grow as collaborators and we encourage you to do so.

Foundational Questions for Teachers:

Ask Yourself:

- To what degree is my planning informed by students?
- To what degree are my expectations of students informed by the students themselves?
- Can I use these rubrics to build and co-create rubrics tailored to my students' needs?
- What do I need to explicitly teach? What do I need to explicitly model? What do we need to explicitly practice?
- Do students fully understand what the highest level of the rubric looks like and sounds like? How do I know?
- How can I design learning experiences that lift up different cultures, identities, backgrounds, and experiences?
- Where can I give students opportunities to self assess and advocate for their rubric placement?
- Is the outcome open-ended?
- Is the task authentic enough to create opportunities to engage with real-world contexts, tasks, tools, or impact?
- Have I created opportunities to make student thinking visible (through reflections, discussions and metacognitive pauses)

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Individual Collaboration: An individual student's ability to contribute to group tasks.

	Emerging	ED	Developing	DP	Proficient	PA	Advanced
Group Decisions Supports the group in creating and following processes for making decisions	• Primarily advocates for their own perspective • Can describe and use the community agreements		• Participates in processes to help the group make decisions • Shows willingness to compromise or to understand the perspectives of others • Contributes to the development and regular use of community agreements		• Identifies when not all voices have been heard • Identifies areas of disagreement in the group to help focus the conversation • Supports the development and use of community agreements; helps others do the same		• Suggests ways that the group can make decisions when there is a disagreement • Assists the group with the development, use, and refinement of community agreements over time • Seeks out restorative approaches to healing and rebuilding trust when agreements have been broken
Ideation Contributes and supports others in the sharing and development of ideas	• Freely shares ideas with the group • Listens and responds to ideas shared by others		• Shares some ideas that connect to the group's needs • Encourages others to share ideas • Asks questions of the group to better understand their thinking		• Shares ideas that support the group's success while affirming and building upon the ideas of others • Supports others in sharing their ideas • Paraphrases ideas, synthesizes group thinking		• Shares innovative ideas that help push the group's work to a high level • Rephrases thinking and connects ideas to move the group forward • Actively works to ensure the ideas of all are heard and valued, promoting divergent and creative perspectives
Contribution Contributes to the completion of the group's task	• Is able to meet some deadlines • Participates in group meetings		• Is able to meet most deadlines • Comes to meetings mostly prepared • Uses support to improve work over time		• Completes all assigned tasks by or before deadlines • Work meets rubric expectations for proficient or above • Comes to every meeting prepared		• Consistently models high standards for timeliness, quality, and ownership of work • Preparation for meetings surpasses expectations
Team Support Takes action to ensure that each member of the group is successful	• Helps others if asked • Offers resources to the group that may be helpful to their efforts		• Provides feedback on others' work that is kind and helpful • Provides helpful resources and support to individuals in the group • Names challenges that they observe in the group's approach		• Offers feedback to others in the group that is kind, helpful, and specific • Works with individuals to help them find and use the resources they need • Is able to identify when the group is struggling and offers ideas for improvement		• Consistently provides feedback that is kind, helpful, and specific; helps others do the same • Actively checks in to understand how others are progressing, asks how they can be of help, and advocates for those that are not getting the support they need • Assists the group in reflection on their processes and opportunities for improvement such that each voice is heard

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Teachers can be seen...		
Moving Practice from Emerging to Developing	*Moving Practice from Developing to Proficient*	*Moving Practice from Proficient to Advanced*
• Building a culture of collaboration by explicitly and implicitly promoting student interdependence and growth, open-ended inquiry, teamwork, and attention to quality. • Working with students to organize tasks and schedules, set benchmarks and deadlines, find and use resources, and create products. • Scaffolding collaboration skills through targeted instruction, tools, and practices that help students learn and practice strategies for working together in teams. • Defining and reminding students the skills needed to collaborate. • Co-creating anchor charts for feedback. • Co-creating community agreements with students. • Exploring the collaboration rubric with students and creating a student-facing rubric in their own words. • Brainstorming, defining, and assigning roles. • Modeling how to reflect on collaboration.	• Reflecting with teams and calling out highlights and opportunities for improvement. • Helping design problem solving strategies with students. • Brainstorming together, teaching and modeling active listening practices. • Teaching how to ask open ended questions. • Using quick whole group reflections (like a thumb dial) to check in with groups. • Defining and reminding students of the skills needed to collaborate. • Modeling and teaching kind, helpful and specific feedback. • Reminding students of the community agreements. • Examining quality work and defining what makes it good. • Helping to create to-do lists and defining tasks.	• Providing one on one feedback and small group feedback to students. • Building structured time for students to reflect on their collaboration and their team's collaboration. • Modeling and reminding students to use kind, specific, and helpful feedback. • Using examples to push students' thinking about quality work. Allow students to determine what makes it an exemplar. • Teach the elements of crucial conversation or other advanced conversation templates.

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Team Collaboration Checklist A group's ability to productively manage group tasks.		
✔	Behavior	Description
	Equitable Participation	Each member is engaged in the work of the team, and can be seen fulfilling their role. Each member contributes to the discussion depending on their level of ability and needs. Established roles allow for equity in participation.
	Project Management	The team has collaboratively developed a context-specific plan for task completion that is regularly updated and adjusted as needed.
	Making Decisions	The team uses a transparent process, or set of processes, for making decisions that impact the entire group.
	Creating/Using Norms	The team has co-created and is using a set of agreed upon norms that guide the behavior of the team, and meets the needs of all members. The team regularly revisits the norms to assess their effectiveness and to determine whether they are an accurate reflection of the team's behavior to support collaborative, cooperative and inclusive work.
	Intellectual Discourse	The team regularly engages in constructive intellectual discourse aimed at deepening the team's understanding of key ideas and individual perspectives related to the task at hand.
	Passionate Ownership	The team exhibits shared and passionate ownership over the successful completion of the task. All group members are made to feel valuable, that their contributions are meaningful, and their accomplishments are celebrated.
	Conflict Resolution	The team anticipates that conflict may happen, and has a plan for addressing it directly. Group members engage constructively and reference both the plan and their norms when conflict occurs.
	Reflection	The team takes time to reflect on their choices. They reflect on challenges and successes and set goals for the future.

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Oral Communication Rubric, High School

Oral communication involves the ability to communicate knowledge and thinking orally.

Oral communication involves the ability to communicate knowledge and thinking orally. Because assessing oral communication involves live scoring during an occasion in which students interact or present, it is more practical to evaluate students' demonstration of this skill using a checklist.

This scoring tool is divided into two different checklists – 1) Interactive Communication; and 2) Oral Presentations, depending on the context of the oral communication in order to make assessment and grading easier. Choose the relevant checklist and specific relevant dimensions within the checklists that fit what's occurring in your classroom.

Interactive Communication – Focuses on students' interactions with peers and teachers within the classroom, and other school community members (e.g,, children, adults in the community) outside of the classroom in authentic settings. The three major dimensions of interaction that are assessed in this checklist are: 1) Listening and Comprehension; 2) Expressing Own Ideas; and 3) Asking Questions. These interactions may occur in whole-class discussions, small group discussions, and/or direct interactions with adults or other community members in the school or outside of school. NTN recommends that this rubric is used only for self-assessment, as it can be very challenging to assess informal oral communication in an equitable and transparent way.

Oral Presentation - Focuses on the elements of a strong presentation – both at the group level and individual level. This checklist could be used in its entirety OR a subset of specific dimensions relevant to the presentation occasion could be selected. The checklist could be used for providing a group grade on a presentation as well as an individual grade.

Foundational Questions for Teachers:

Ask Yourself:

- How can I create a classroom of oral communicators?
- How can I purposefully incorporate opportunities throughout the day for students to develop their thinking and ideas, and have meaningful conversations?
- What is developmentally appropriate communication for my students? Where are my students' communication strengths? What are their communication growth goals?
- What are the best ways to group/pair students for success?
- What do I need to explicitly teach? What do I need to explicitly model? What do we need to explicitly practice?
- What anchor charts, rubrics and checklists can I co-create with students?
- Do students fully understand what the highest level of the rubric looks like and sounds like? How do I know?
- What culturally relevant books, podcasts, videos and apps can I use to help teach students to communicate thoughtfully?
- How can I design learning experiences that lift up different cultures, identities, backgrounds, and experiences?

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Interactive Communication

An individual's ability to communicate knowledge and thinking through effective informal, pair, and small group conversations

	EMERGING	E/D	DEVELOPING	D/P	PROFICIENT College Ready	P/A	ADVANCED College Level
Listening and Comprehension	• After listening, I recall **some key details and main points**		• After listening, I recall **most key details and main points**		• After listening, I can **synthesize** main points and **reference** key details		• After listening, I can synthesize main points, reference key details, and **evaluate the strength** or value of the ideas
Clear Presentation of Ideas	• I **communicate** some ideas clearly		• I communicate most ideas clearly		• I communicate ideas **clearly**		• I communicate ideas clearly and **adjust when I need to ensure my audience understands me**
Asking Questions	• I ask questions that **repeat stated details or main points**		• I ask questions that **help me get clarity on a topic or a line of reasoning**		• I asks questions that help **develop** or **challenge** a topic or line of reasoning		• I ask questions that develop or challenge a line of reasoning and **explore connections to a larger theme or idea**

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Presentation

An individual or group's ability to communicate knowledge and thinking orally in presentations.

	EMERGING	E/D	DEVELOPING	D/P	PROFICIENT College Ready	P/A	ADVANCED College Level
Clarity	• **Presents** a controlling idea		• Presents a **clear** controlling idea		• Presents a clear controlling idea and **returns to it throughout the presentation**		• Presents a controlling idea that is **consistent, clear, precise, and reflects complexity**
Evidence	• Includes explanations, examples, facts, personal experiences, or findings that **connect** to the controlling idea • Provision of details and explanations show evidence of **general** understanding and **basic** reasoning • **Includes an** alternate perspective when appropriate		• Includes examples, facts, personal experiences, or findings from reading/research/ investigation that **support** the controlling idea • Provision of details and explanations show evidence of understanding and reasoning • Includes **varied** perspectives on a topic or issue when appropriate		• Includes explanations, examples, facts, personal experiences, or findings from reading/research/investigation that **sufficiently** support the controlling idea • Provision of details and explanations show evidence of **internalized** understandings and reasoning • Includes varied perspectives on a topic/issue and responds, **evaluating their logic**		• Includes explanations, examples, facts, personal experiences, or findings from reading/research/investigation that are **significant** and **highly relevant** to the controlling idea • Demonstrate an **in-depth** understanding of the topic • Addresses alternative or opposing perspectives **in a way that sharpens the central message**
Organization	• Sequence/ progression of ideas connects **some** ideas and show **some** relationships		• Sequence/ progression of ideas connects ideas and shows relationships		• Sequence/progression of ideas builds **a clear line of thought from beginning to the end**		• Sequence/progression of ideas builds a clear line of thought and **develop a coherent whole** from beginning to end
Use of Digital Media / Visual Displays	• Digital media or visual displays **connect** to the message		• Digital media or visual displays are **clear and support** the message		• Digital media or visual displays are **diverse,** clear, and support the message		• Digital media or visual displays are diverse, **polished** and **enhance** or **clarify** the message

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Delivery

An individual's ability to deliver knowledge and thinking orally in a way that is comprehensible to the audience.

	EMERGING	E/D	DEVELOPING	D/P	PROFICIENT College Ready	P/A	ADVANCED College Level
Voice and Language	• **Sometimes** adapts speech for the context and task • Voice **sometimes** used to communicate ideas clearly and engage the audience		• **Mostly** adapts speech for the context and task • Voice **mostly** used to communicate ideas clearly and engage the audience		• **Consistently** adapts speech for the context and task, demonstrating command of formal English when appropriate • Voice **consistently** used to communicate ideas clearly and engage the audience		• Uses **sophisticated** and **varied** language that is suited to the purpose, audience, and task, demonstrating command of formal English when appropriate • Voice **consistently** used to communicate ideas clearly and engage the audience; **adjusts** voice as needed to enhance message
Presentation Skills	• **Sometimes** maintains a pace that gives time for audience to understand and engage without feeling rushed • **Sometimes** uses body posture, gestures, and movement to convey own passion for the topic/ideas, emphasize key points, and/or keep the audience engaged		• **Mostly** maintains a pace that gives time for audience to understand and engage without feeling rushed • **Mostly** uses body posture, gestures, and movement to convey own passion for the topic/ideas, emphasize key points, and/or keep the audience engaged		• **Consistently** maintains a pace that gives time for audience to understand and engage without feeling rushed • **Consistently** uses body posture, gestures, and movement to convey own passion for the topic/ideas, emphasize key points, and/or keep the audience engaged		• Consistently maintains pace that gives audience time to understand and engage; **adjusts pace to enhance message** • Consistently uses body posture, gestures, and movement to convey own passion for the topic/ideas, emphasize key points, and/or keep the audience engaged, **adjusting as needed to enhance message**
Interaction with Audience	• Provides a **response that is connected to audience questions** • Response to questions includes a detail, example, or explanations that show **some** understanding of the facts and topic		• Responds to audience questions • Response to questions includes details, examples, or explanations that show understanding of **key facts or important details**		• Provides a **direct and complete response** to audience questions • Response to questions includes details, examples, and explanations that show **understanding** of the facts and topic		• Provides a **precise** and **persuasive** response to questions • Response to questions includes details, examples, and explanations that demonstrate an **in-depth and comprehensive** understanding of the facts and topic

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Teachers can be seen...		
Moving Practice from Emerging to Developing	*Moving Practice from Developing to Proficient*	*Moving Practice from Proficient to Advanced*
• Giving students the opportunity to write their ideas before sharing with a partner or class. • Selecting high engagement topics based on students' interests for discussion, and reading. • Explicitly teaching students about levels of questioning (e.g. Costa's), and modeling and brainstorming questions about a topic together. • Speed dating conversations, about high interest topics. • Provide daily opportunities for discussions in pairs, small groups and whole class.	• Using discussion protocols • Watching videos of famous speeches, TedTalks, etc and analyzing their organization and presentation style. • Fishbowling discussions to give students a model for small group discussion. • Supporting students in reading and listening comprehension through targeted lessons in determining controlling idea, supporting reasons. • Supporting students to evaluate reasoning and craft moves of readings. • Providing student choice of topics or readings.	• Having students watch videos of themselves or peers in a class discussion or presentation, and evaluating their strengths and areas of growth.

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NTN Agency Rubric High School

Based on Shane Safir's 2021 definition, NTN defines **agency** as students' innate capacity to make decisions, set goals, and plan and carry out next steps based on ever increasing funds of knowledge. Students' innate agency is activated in environments where their identities are valued, they feel a sense of belonging, they have the chance to master knowledge and skills over time, they experience self-efficacy, and they engage in intentional goal setting and self-reflection while reflecting on obstacles and how to overcome them.

Classroom Environment and Mindset

NTN recommends using surveys or other tools to ask students to reflect on the classroom environment and whether it activates agency. To collect data on these questions regularly NTN recommends the 5 point Likert scale: (1) Strongly Disagree; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; (5) Strongly Agree. Click the link to the Agency Classroom Environment Student Survey to make a copy for your own classroom.

Foundational Questions for Teachers:

Ask Yourself:

- To what degree is my planning informed by students' survey data, self-reflection, and other information sources?
- Can I use the survey and rubric to build and co-create resources tailored to my students' needs?
- How can I design learning experiences that lift up different cultures, identities, backgrounds, and experiences?
- How can I adjust my classroom environment to better support student agency? What policies, structures, or supports do I need to put into place?
- What do I need to explicitly teach? What do I need to explicitly model? What do we need to explicitly practice?
- Where can I give students opportunities to self assess and reflect?
- Have I created opportunities for students to reflect on their goals, what might prevent them from reaching their goals, and what steps they might need to take?

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	EMERGING	E/D	DEVELOPING	D/P	PROFICIENT	P/A	ADVANCED
Meet Benchmarks	• I show **initial efforts** in trying to meet benchmarks and class assignments with much peer or teacher support and may remember to use resources and supports (e.g. study groups, teacher support, visual benchmarks, project calendars, workshops, tutorials).		• I meet **some** benchmarks and class assignments and may need occasional reminders; uses some resources and supports (e.g. study groups, teacher support, visual benchmarks, project calendars, workshops, tutorials) .		• I **usually complete** most benchmarks and class assignments by using resources and supports when necessary (e.g. study groups, teacher support, visual benchmarks, project calendars workshops, tutorials).		• I achieve my **personal best work on all** benchmarks and class assignments by setting goals, monitoring progress, and using resources and supports (e.g. study groups, teacher support, visual benchmarks, project calendars, workshops, tutorials).
Seek Feedback	• I am **open to feedback** and willing to attempt revisions based on the feedback, **with support.**		• I **accept feedback** and make revisions based on feedback to **improve** the quality of work.		• I **consistently seek, accept** and thoughtfully use feedback to revise and **enhance work.**		• I **consistently seek feedback from various sources** and use feedback to make significant changes to **produce high quality work.**
Tackle and Monitor Learning	• For a task or project, I may **need support in identifying** what is known, what needs to be learned, and how hard it will be. • **I need support** with strategies to tackle the tasks.		• For a task or project, I can **superficially identify** what is known, what needs to be learned, and how hard it will be. • I am **beginning to use** strategies to tackle the tasks with room to grow in consistently monitoring and adjusting these strategies.		• For a task or project, I can **accurately identify** what is known, what needs to be learned, and how hard it will be. • **I use strategies** and steps to tackle the task, consistently monitor how well the approach and effort are working, and make adjustments as needed.		• For a task or project, I **accurately identify** what is known, what needs to be learned, and the effort required for a task or project. • **I select and implement effective strategies**, taking steps to tackle the task; continuously monitors, evaluates, and adjusts based on how well the approach and effort are working

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Teachers can be seen...		
Moving Practice from Emerging to Developing	*Moving Practice from Developing to Proficient*	*Moving Practice from Proficient to Advanced*
• Building a culture of Agency by explicitly and implicitly promoting student growth, and attention to quality. • Working with students to organize tasks and schedules, set benchmarks and deadlines, find and use resources, and create products. • Scaffolding agency skills through targeted instruction, discussion, tools, and practices that help students learn and practice strategies for monitoring their own learning. • Defining and reminding students of the skills needed to take ownership over one's learning. • Co-creating a supportive and inclusive learning environment in which all students feel valued. • Exploring the agency rubric with students and creating student-friendly descriptors. • Modeling how to reflect on Agency. Supporting students in using the Agency Classroom Environment Student Reflection Survey	• Reflecting with students and calling out highlights and opportunities for improvement. • Helping design problem solving strategies with students. • Brainstorming together, teaching and modeling what it means to be an independent learner. • Defining and reminding students the skills needed to have ownership over their learning. • Modeling and teaching kind, helpful and specific feedback and how to apply feedback to improve work. • Reminding students of the community agreements. • Examining quality work and defining what makes it good. • Helping to create to-do lists and defining tasks.	• Providing one on one feedback and small group feedback to students. • Building structured time for students to reflect on their agency and the classroom environment.. • Using exemplars to push students' thinking about quality work. Allow students to determine what makes it an exemplar.

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NTN Written Communication Rubric, Grade 10

Written communication is the ability to effectively communicate knowledge and thinking through writing by organizing and structuring ideas and using discipline appropriate language and conventions.

Foundational Questions for Teachers:

Ask Yourself:

- To what extent do the topics or novels I ask students to write about accurately represent the histories and experiences of their cultures and heritage?
- What mindsets need to be at the forefront?
- Where can I give students opportunities to self assess and advocate for their rubric placement?
    - Where do you see yourself on this rubric and why?
    - What do you need to move to the next level?
- How can I use this rubric throughout the writing process to allow for self-assessment and reflection?

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	EMERGING	E/D	DEVELOPING	D/P	PROFICIENT	P/A	ADVANCED 12 Grade Proficient
DEVELOPMENT *Developing and Conveying Ideas*	• **Begins** to provide background or context information about the topic/issue. • Controlling idea is stated **in parts of the writing.** • **Includes** supporting ideas and evidence that **restate** the controlling idea.		• **Includes** background or context information about the topic/issue • Controlling idea is **clear.** • Includes supporting ideas and evidence that are **relevant** to the controlling idea.		• **Explains** important background or context information about the topic/issue • Controlling idea is clear and **focused** • Includes relevant supporting ideas and evidence that are **connected** to and **strengthen** the controlling idea		• **Thoroughly** explains background and context information about the topic/issue • Controlling idea is clear, focused and **consistent throughout** the writing • Includes **highly** relevant supporting ideas and evidence that are **tightly** connected and strengthen the controlling idea
ORGANIZATION Organizing and structuring Ideas for effective communication	• **Attempts** to group or sequence Ideas and evidence • Uses transitional words and phrases in **some** places to **repeat ideas** or **signal shifts** in ideas. • When relevant, conclusion **restates** or **summarizes** the controlling idea and supporting ideas/evidence. • When relevant, conclusion **summarizes** ideas in ways that **logically follow** from the previously presented ideas/evidence. •		• Ideas and evidence are grouped and sequenced **within or across paragraphs or sections** in ways that **connect some ideas.** • Uses **varied** transitional words and phrases in important places in ways that **connect** claims, reasons, and evidence • When relevant, conclusion summarizes, **pulls ideas together**, and/or **highlights** points in ways that **logically follow** from the previously presented ideas/evidence.		• Ideas and evidence are grouped and sequenced within or across paragraphs or sections in ways that **connect** ideas • Uses varied transitional words and phrases **in important** places in ways that connect claims, reasons, and evidence • When relevant, conclusion summarizes, **pulls ideas together**, and/or **highlights** important points in ways that **logically follow** from the previously presented ideas/evidence.		• Ideas and evidence are intentionally grouped and sequenced within and across paragraphs or sections so that the ideas **build upon each other** and show **clear** relationships. • Uses transitional words and phrases **consistently** across the writing in ways that **clarify** relationships among claims, reasons, and evidence or **complex ideas.** • When relevant, conclusion summarizes, pulls ideas together, and/or highlights important points in ways that logically follow from the previously presented ideas/evidence, and **adds coherence** to the composition

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LANGUAGE AND CONVENTIONS *Using language to skillfully communicate ideas*	• Uses conventions, grammar and mechanics with **some** accuracy so that the **line of reasoning is apparent.** • Uses language and tone that are **generally** appropriate to the purpose , task, audience, and genre. • When relevant, **begins** to include citation(s) of textual evidence	• Uses conventions, grammar and mechanics with some accuracy so that the **message is generally clear** • Language and tone convey meaning and are **mostly** appropriate to the purpose, task, audience, and genre. • When relevant, **cites** textual evidence with some **attention to formatting rules**	• Uses conventions, grammar and mechanics **with accuracy** so that **the message is clear,** even with minor errors. • Language and tone convey meaning and are **appropriate** to the purpose, task, audience, and genre. • Effective language and tone clearly communicates meaning and is well-suited to the purpose, task, audience, and genre. • When relevant, **accurately** cites textual evidence	• **Accurately and consistently** uses conventions, grammar and mechanics so that the message is clear and **focused,** even with minor errors. • **Precise** and **intentional** use of language and tone **skillfully** communicates meaning and is **tailored** to the purpose, task, audience, and genre. • When relevant, **consistently** and **accurately** cites textual evidence

*Controlling idea may refer to a thesis, argument, topic, or main idea, depending on the type of writing
**E.g. accurate use of scientific/technical terms, quantitative data, and visual representations in science; use of multiple representations in math

Teachers can be seen...	
Moving Practice from Emerging to Developing	*Moving Practice from Developing to Proficient*
• Reviewing course curriculum to look for opportunities to augment content coverage with the development of reading, writing, and thinking skills. • Explicitly teaching reading strategies, problem-solving techniques, and questioning skills that foster critical thinking.	• Modeling the thinking tools and processes required for good reading, writing, and problem solving. • Constantly looking for ways to increase the rigor of assignments and projects and to prepare students for college-level academic work. • Organizing classroom inquiry around demanding questions, texts, and projects that require students to master challenging content and apply new skills that are aligned with the standards and other pathway outcomes.

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Student Name: _____ Date: _____ Advisory: _____

The updated pathway to progress document combines elements from New Tech's Agency and Collaboration rubrics to determine the focus of each student's social/emotional journey while enrolled at College View. The primary focus will be on the Individual Collaboration Rubric, which focuses on specific aspects of individual collaboration. The indicators are designed to be simple and accessible to students using the Peer Evaluation Tool. The Agency items indicate the student's ability to take ownership of one's learning. Not all areas listed on the document will be utilized. A student may only have a few collaboration and agency areas to work on while at College View to support their readiness to return to a regular school environment. The number of dimensions (rows) for this rubric makes it unlikely a teacher would use it in its entirety. The student's advisor will work with the student to identify agreed-upon areas that need strengthening as they develop the skills necessary to transition back to a regular school environment.

Link: Agency and Collaboration Foldable Card Index
Link: NTN Culture Practices Cards (Blue)
Link: NTN Learner-Centered Practices (Orange)
Link: NTN Assessment Cards (Red)

	Area	Emerging		Developing		Proficient		Advanced	
☐	Contribution & Development of Ideas -Invite Students Voices to Improve Learning Environments -Co-Create Community Agreements -Think, Pair, Share -Chalk Talk	Ideas lack **supporting** reasoning **Limited** acknowledgement of other's thinking		Shares ideas, and **explains** the reasons behind them **Acknowledges** others' thinking		Provides ideas or arguments with **convincing** reasons **Builds on** the thinking of others		**Acknowledges** the strengths and limitations of their ideas Builds on the thinking of others and **checks back** for agreement	
☐	Equal participation -Text Discussion protocol -Constructivist Listening Dyad	Shares ideas **without listening** or listens **without sharing** ideas		**Allows for** equal participation by both sharing ideas and listening to the ideas of others		**Works to include** others in discussion and **shows interest** in new perspectives		Supports equal participation by **asking** clarifying or probing questions, **paraphrasing** others' ideas and **synthesizing** group thinking	

Student Name: _____ Date: _____ Advisory: _____

	-Think, Pair, Share -Jigsaw -Best Answer Protocol								
☐	Community Agreements -Recognize Your Triggers	Follows community agreements and processes but **only with modeling and/or reminders**		**Understands and follows** community agreements and processes		Understands and follows community agreements and processes and **helps others do the same**		**In addition, initiates** the use of community agreements in each meeting	
☐	Respectful Tone & Style -Peace Path -Restorative Circles -Socratic Seminar -The Best Answer Protocol	**At times**, words and tone indicate respectful intent, but not consistently		Words and tone indicate **respectful intent,** but **might not be sensitive** to others		Words and tone indicate **respect and sensitivity** to others		Additionally, provides **gentle feedback about others' words and tone** to foster an environment of respect	
☐	Positive Body Language/Active Listening -Focus Groups -Community Circles -Peace Path -Fishbowl	**Sporadically** faces speaker, or engages without distraction **some of the time**		**Faces speaker** and is **free of distractions** when others are speaking		When others are speaking, both body language and verbal responses **indicate engagement**		When others are speaking, body language and verbal responses indicate **positive, energetic** engagement	
☐	Work Ethic -Bookend Lessons -Visual Benchmarks -Running Rubrics -W.O.O.P	Completes **only some** assigned tasks		Completes **all assigned tasks by deadline**		Completes all assigned tasks by deadline; **work is quality, and advances the project**		**Models** consistently high standards for timeliness, quality, and ownership of work	
☐	Team Support -Establish Rituals	Either **doesn't help**, or occasionally helps, but **must**		Predictably helps **when asked** by others, but only then		**Always** helps when asked, and **sometimes** offers help		**Actively checks in** to understand how others are progressing and	

Student Name: _____ Date: _____ Advisory: _____

	and Routines -Co-Create Community Agreements -What? So What? Now What? -Critique	**be asked**				to others		how they can be of help	
☐	Meet Benchmarks -Entry and Exit Slips -Running Rubrics -Visual benchmarks -Spiraling the Driving Question	Completes few benchmarks and class assignments and may resist or struggle to use resources and supports (i.e. study groups, teacher support, workshops, tutorials)		Completes some benchmarks and class assignments; and, at the last minute, uses resources and supports (i.e. study groups, teacher support, workshops, tutorials)		Completes benchmarks and class assignments; and often uses resources and supports (i.e. study groups, teacher support, workshops, tutorials)		Completes polished benchmarks and class assignments by using resources and supports when necessary (i.e. study groups, teacher support, workshops, tutorials)	
☐	Seek Feedback -Praise, Question, Suggestion -What? So What? Now What? -Critique -Targeted Peer Assessment -Asset Based Feedback	Rejects feedback and/or does not revise work		Sometimes shows evidence of accepting feedback to revise work, but at times may resist when it's difficult		Consistently shows evidence of accepting and using feedback to revise work to high quality		Consistently shows evidence of actively seeking and using feedback to revise work to high quality	
☐	Actively Participate -Practice Mindful Moments -Community Circles -Start, Stop, Continue	Does not stay focused for the activity/discussion, team meeting, or independent time and cannot resist distraction or does not notice when or why a loss of focus		Stays focused for part of activity/discussion, team meeting, or independent time but does not notice when and why distraction happens		Mostly stays focused on the activity/discussion, team meeting, or independent time and knows when and why disengagement or distraction happens		Actively participates in the activity/discussion, team meeting, or independent time and has strategies for staying focused and resisting most distraction	

COLLE VIEW

Student Name: _____ Date: _____ Advisory: _____

	-Leverage Student Voice to Curate Assessments								
☐	Build Relationships -Co-Create Community Agreements -Storytelling -Community Circles -Community Walk	Does not build relationships with trusted adults or peers to get back on track as needed or to enhance learning		Does not initiate building relationships, but has a few trusted adults or peers to get back on track as needed or to enhance learning		Builds relationships with some trusted adults and peers to get back on track as needed or to enhance learning		Actively builds trusting relationships with adults to enhance learning, and get back on track as needed	
☐	Impact Self & Community -Paseo or Circles of Identity -Think Beyond Deficits -Recognize Your Triggers -Develop Realistic Optimism -Invite Student Voices to Improve Learning Environments -Re-frame Attributes Protocol -Community Walk -Engage in Mindful Breathing/Practice	Identifies the current status of the classroom and home community but not the ups and downs over time		Has limited understanding of individual role in the ups and downs of the classroom and home community		Identifies individual role in the ups and downs of the classroom and home community		Analyzes individual role in the ups and downs of the classroom and home community	

COLLE
VIEW

Student Name: _____ Date: _____ Advisory: _____

	Mindful Moments								

COLLE
VIEW

New Tech Network Practices Cards

Equity-Centered Practices to Foster Equitable Opportunities

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ABOUT US

New Tech Network, a national nonprofit organization, is a leading design partner for comprehensive K-12 school change. Teachers and school leaders are coached to inspire and engage all students in meaningful contextualized and higher-order thinking. The New Tech model combines pervasive project-based learning; an inclusive, supportive, school-wide culture; and the real-world use of technology tools and resources in service of outcomes that matter. The whole school is supported through three key structures: professional development events, coaching, and Echo, the NTN learning management platform.

New Tech Network students consistently outperform national high school graduation and college persistence rates. The network consists of more than 200 schools in 27 States and Australia.

What is New Tech's purpose?

The purpose of the New Tech model is to develop outcomes that matter for each student. The word "each" is underlined to emphasize the intentional and unrelenting focus on addressing needs of every individual. In identifying this purpose, we must also acknowledge and disrupt inequities that contribute to the unequal or disproportionate distribution of resources and opportunities for student success, also known as opportunity gaps.

Fostering Equitable Opportunities

THE REASON FOR OUR MODEL

Why opportunity gaps instead of achievement gaps?

Opportunity gaps are the unequal or inequitable distribution of resources and opportunities that contribute to student success or struggle. Opportunity gaps disproportionately impact under-represented students and families based on race, gender, sexual orientation, ethnicity, socioeconomic status, English proficiency, community wealth, and familial situations.

We realize that much of the educational system is focused on achievement gaps. We believe that achievement gaps would not exist without opportunity gaps and thus, as educators, we should address the gaps in our sphere of influence in order to change achievement.

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THE REASON FOR OUR MODEL

Our model is fundamentally about using research-based strategies to disrupt two specific opportunity gaps:

1. A CULTURE GAP: Students of color, students in poverty and other marginalized students are more likely to experience environments that are not safe, inclusive, or emotionally supportive.

2. AN INSTRUCTION GAP: Students of color, students in poverty and other marginalized students are more likely to experience rote, low-level instruction that emphasizes memorization rather than authentic, complex thinking and problem solving.

NTN believes that the work of disrupting cultural and instructional opportunity gaps is essential. The NTN Practices Cards are a compilation of key cultural and instructional practices aimed at fostering equitable opportunities and cultivating deeper learning conditions that result in "outcomes that matter" for each learner.

These equity-centered practices, curated in card sets, provide different strategies to design and implement learning that embodies authentic, complex thinking and problem solving and creates safe, inclusive and emotionally supportive environments.

RESEARCH

Our equity-centered practices are informed by decades of research and real world implementation and success. We encourage you to engage in your own independent learning or group book clubs around the resources we use.

- Gorski, Paul. *Reaching and Teaching Students in Poverty: Strategies for Erasing the Opportunity Gap.*
- Hammond, Zaretta, and Yvette Jackson. *Culturally Responsive Teaching and the Brain: Promoting Authentic Engagement and Rigor among Culturally and Linguistically Diverse Students.*
- Carter, Prudence and Kevin Welner. *Closing the Opportunity Gap.*
- Putnam, Robert. *Our Kids: The American Dream in Crisis.*
- Schools of Opportunity Rubric: www.schoolsofopportunity.org/selectioncriteria

Deeper Learning at NTN

FIVE KEY CONDITIONS

What is Deeper Learning at NTN?

At NTN, we believe that for deeper learning to result in "outcomes that matter," learning must be **Authentic, Active, Relational, Responsive,** and **Complex.** We call these our Deeper Learning Conditions.

Key cultural and instructional practices that nurture these five conditions must promote safe, inclusive, and emotionally supportive environments and engage learners in active, complex thinking and problem-solving. The practices curated in the NTN Practices Card Deck have been specifically selected to support these types of cultural and instructional practices.

To learn more, search for "Deeper Learning at NTN" in the NTN Help Center.

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Conditions	Description	Recommended Card Sets
AUTHENTIC	Learners are suggesting and making decisions about learning tasks that are immediately applicable and relevant to their lived experience.	
ACTIVE	Learners are engaged in active learning by doing, with a built-in reflection and revision cycle.	
RELATIONAL	Learning environment welcomes a variety of perspectives, encourages risk-taking, and fosters safe, constructive, and supportive collaboration.	
RESPONSIVE	Learners' needs inform the design of support in both individual and group contexts and across all types of experience (thinking, seeing, feeling, doing).	
COMPLEX	Learners are provided an opportunity to struggle productively with complex thinking and problem-solving experiences that are just above their independent level of capability.	

About the Card Sets

SYSTEM OVERVIEW



This resource is a compilation of key cultural, instructional, and reflective practices that support educators in ensuring all learners have access to opportunities. These equity-centered practices, curated in card sets, provide different strategies to design and implement learning that embodies authentic, complex thinking and problem solving and creates safe, inclusive and emotionally supportive environments.

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There Are Three Color-Coded Card Sets

Each card set outlines a collection of equity-centered practices that foster **deeper learning conditions**.



NTN Learning Outcomes (NTLO) Card Index

The NTLO Card Index bridges the gap between the NTN Learning Outcome Rubrics and the NTN Practices Cards. Use the NTLO Card Index to discover specific cultural and instructional practices curated in the three color-coded card sets to scaffold specific skills in the NTN Learning Outcome Rubrics.

What can I expect to find on a card?

- The **"What?" "Why?"** and **"How?"** for each practice.
- A **"Go Deeper"** section with resources to learn more about the practice.
- A **"Reflect"** section with questions to provoke the facilitator's reflection.
- A **"Research"** section that includes literature that supports the purpose and practices in each card set.
- **Icons** on the lower left of each card which indicate specific NTN Learning Outcomes that are addressed through that practice (See "About the Icons" in the **Introduction** card set).

Using the NTN Practices Cards

How?

1. Familiarize yourself with the entire NTN Practice Card Deck

- **Learn about the Why? What? and How? of the NTN Practices Cards.**
- **Explore the three different card sets.** Read through the overview for each card set.
- **Understand the purpose and alignment between the NTN Learning Outcome (NTLO) Card Index and the card sets.**
- **Know where to find the icon key** and other helpful resources.

2. Chat with a colleague or NTN coach to better understand how the NTN Practice Card Deck can support your specific learning environments.

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3. Engage in sense-making before using practice cards with your learners.

- **Reflect and Build Internal-Awareness**
  1. Take time to notice and reflect. Ask yourself: "How do I show up in my work?" "How might my identity and experiences impact the way I design and implement learning for others?"
  2. Unpack these questions using practices such as **"Start with your Why," "The Paseo or Circle of Identity," "Recognize Your Triggers,"** and **"Think Beyond Deficits"** in the **Culture Practices** card set.
- **Listen and Empathize**
  1. Ask yourself: "Who are my learners? Who is the community I serve?"
  2. Find answers from your users by engaging in practices such as **"Focus Group," "Shadow a Student," "Invite Student Voices to Improve Learning Environments,"** and **"Community Walk"** in the **Culture Practices** card set to empathize and deeply understand your learners and community.
- **Define and Personalize**
  1. Ask yourself: "What NTN Learning Outcomes are my students exhibiting well?" "What NTN Learning Outcomes do my students need more support with?" "What am I hearing from students about their specific needs?"
  2. Use the NTLO Card Index to find specific practices to fit the needs of your learners, your grade level, the school objectives, and your learning environment.

4. Decide on how you might use the practice cards.

How the cards are used is largely up to the user. You might:

- Design specific tasks in the Project Planning Toolkit.
- Model practices and engage teachers in professional learning.
- Build school alignment and cohesion around core cultural and instructional practices.

About The Icons

ICON KEY



Explaining the Meaning Behind the Icons on Each Card

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ICON KEY

NEW TECH NETWORK LEARNING OUTCOMES

- Knowledge & Thinking
- Oral Communication
- Written Communication
- Collaboration
- Agency

PREP TIME INVESTMENT

- Small/Little to No Prep
- Medium/ Some Prep
- Large/Thoughtful Time and Prep

FREQUENCY

- All the Time
- Frequently
- Infrequently
- As Needed

Note:

Each practice card provides a recommended frequency of use and an expected prep time investment.

Before designing and implementing all practices, be mindful of:

- Your professional context (e.g. amount of preparation time and type of instructional materials available)
- Your learning environment (e.g. school schedules, daily agendas, and project timelines)
- Your learners' needs (e.g. learners need weekly one-on-one conferring or learners need daily mindfulness practices)

as a guide to specific practices teachers can use to scaffold and assess target indicators in the NTN Learning Outcome Rubrics.

This card index uses color coding:

- Each colorful bible refers to a specific NTN Learning Outcome Rubric
- Color-coded card icons within each section refer to practices in that card set.



The P.B.L. Practices Cards are available in digital format in the NTN Help and Learning Center.

The recommended practices in each table are not an exhaustive list. See "Go Deeper" in each NTN Learning Outcome sections.

the Outcomes That Matter - comprising five research-based NTN Learning Outcomes (NTNLOs):

- KNOWLEDGE & THINKING
- WRITTEN COMMUNICATION
- COLLABORATION
- AGENCY
- ORAL COMMUNICATION

What are the NTN Learning Outcome Rubrics?

The NTN Learning Outcome Rubrics have been developed with Edvation Learning and the Stanford Center for Assessment, Learning and Equity to help guide student growth in the NTN Learning Outcomes. These rubrics are essential components of project-based learning and broader issues-based learning units used by the schools we support. Search "NTN Learning Outcome Rubrics and Templates" in the NTN Help Center.

Reflect on which specific outcomes you would like to focus on with your learners.

- Be thoughtful of your learner's needs and cultural assets as a target specific skills to support them with.

Help your learners understand the NTN Learning Outcome Rubrics.

- Explain that the NTN Learning Outcome Rubrics are used to specify levels of proficiency and to support a shared learning vision. Help learners see it as the other Learning Outcome Rubrics: done-for-you, skills-first ones.
- Work out ways such as "See, Think, Wonder" or "Backward Lessons" to introduce or open further conversations about with learners. (We recommend introducing one element or at a time (e.g. Collaboration). See Learner-Centered and Assessment Practices for more ideas.
- As learners progress, move to more student-centered goals. Use practices such as "W.O.O.P." or "Asset-Based Feedback" to build learning alliances with learners and inform your scaffolding choices. See Culture and Assessment Practices for more ideas.

Take time to get to know the NTN Practices Cards.

- Read the introductions and Overview for each set.

Gather input from all voices to decide on specific skills to target and practices to use.

- Use protocols such as "Fishbowl Groups," "Community Walk" or "Co-Design Learning Environments" to deeply understand which skills and practices would best support your learners. See Culture Practices for more ideas.

Outcome 2: Collaboration

- Use the NTN Learning Outcome Rubric - Domains overview to select the targeted skill you would like to scaffold.
- Choose one or more of the suggested practices from its set or a scaffold or assessment to support the targeted skill. Note that this index is not exhaustive.
- Periodically engage in reflective and collaborative cycles, using the indicators from the NTN Knowledge & Thinking Rubrics. Use practices such as "Praise, Question, Suggestion," "Targeted Peer Assessment" and "Exemplary Work Celebration" to support these processes. See Learner-Centered and Assessment Practices for more ideas.

Use this index to design focused professional learning.

- Use this index to support teachers in their personalized learning and problem-based learning over an in-depth professional learning arc (see 1.5: NTN Learning Outcomes).

Use this index to build alignment.

- Build in alignment for a given project, lesson, semester arc. Your grade-level team or whole staff can identify daily, select practices that target the same skill. Teachers can compare data and reflect upon class and school implementation of practices focused on the same outcomes.
- Build in single practice alignment. Teachers can engage in cycles of learning around a single practice, using the data from learners' use as a reflection of one's practice to get more an open level skills.
- Build in vertical alignment. Each grade level might choose to focus on specific NTN Learning Outcome skills and implement specific common and practices that are aligned and build upon one another.

Collaboration



What?

An individual and group's ability to contribute to group tasks

Why?

Collaboration helps learners develop their academic and social skills and their skills to contribute to a learning community.

COLLABORATION

Section 1: Individual Collaboration

An individual's ability to contribute to group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
EQUAL PARTICIPATION	"Community Circles" (Essay)	"Talk Equalizer" or "Talk Balancer"
	"Fishbowl"	"Talk Tracker"
	"Jigsaw"	"Constructive Live and Digital Turning"
COMMUNITY AGREEMENTS	"Co-Create Community Agreements"	"Community Circles"
	"Praise Point" or "Appreciation Circles"	"Praise Slips"
	"Praise Point" or "Constructive Circles"	"Praise Slips"
ROLES	"Peer Partners" or "Appreciation Circles"	"Praise Slips"
	"Fishbowl"	"Group Roles"
		"Jigsaw"

COLLABORATION

Section 1: Individual Collaboration

An individual's ability to contribute to group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
CONTRIBUTION AND DEVELOPMENT OF IDEAS	"Co-Design Learning Environments"	"Kindness Community Agreements"
	"Think, Pair, Share"	"Chalk Talk"
RESPECTFUL TONE AND STYLE	"Praise Point" or "Appreciation Circles"	"Socratic Seminar"
	"The Best Answer Protocol"	Establishing a Culture of Critique
POSITIVE BODY LANGUAGE AND ACTIVE LISTENING	"Peer Partners" or "Appreciation Circles"	"Praise Point" or "Appreciation Circles"
	"Community Circles"	"Fishbowl"

COLLABORATION

Section 1: Individual Collaboration

An individual's ability to contribute to group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
WORK ETHIC	"Fishbowl"	"Visual Benchmarks"
	"Basket of Leaders"	"Running Rubrics"
TEAM SUPPORT	"Praise Slips"	"Co-Create Community Agreements"
	"What's So What? Now What?"	"Establishing a Culture of Critique"

COLLABORATION

Section 2: Team Collaboration

A group's ability to productively manage group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
EQUAL PARTICIPATION	"Team Question Circles"	"Think, Pair, Share"
	"Jigsaw" and "The Best Answer Protocol"	"Talk Equalizer" or "Talk Balancer"
PROJECT MANAGEMENT	"Project Team Agreements"	"Visual Team Norms"
	"Visual Backward Planning"	"Running Rubrics"
MAKING DECISIONS	"Co-Design Learning Environments"	"The Best Answer Protocol"
	Goals Selection	"Tuning Protocol"

COLLABORATION

Section 2: Team Collaboration

A group's ability to productively manage group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
PHYSICAL DISPOSITIONS	"Community Circles"	"Project Team Agreements" and "Group Roles"
	"Fishbowl"	"The Best Answer Protocol"
CREATING AND USING COMMUNITY AGREEMENTS	"Developing Group Norms"	"Project Team Agreements" and "Group Roles"
	"Visual Norms"	"Recognition Nominations"
INTELLECTUAL KINDLING	"Tuning Protocol"	"Praise, Question, Suggestion"
	"The Best Answer Protocol"	"Jigsaw," "Carousel Brainstorm," or "Concept Mapping"

COLLABORATION

Section 2: Team Collaboration

A group's ability to productively manage group tasks

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
PERSONAL OWNERSHIP	"Praise, Question, Suggestion"	"The Best Answer Protocol"
	"Best Work Archive"	"Exemplary Work Celebration"
CONFLICT RESOLUTION	"Socratic Circles and Fishbowls"	"Co-Create Community Agreements"
	"Peer Partners" or "Praise Slips"	"Community Circles"

COLLABORATION

REFLECT

- In what ways have learners collaborated in our classroom?
- How are you planning for some of their comprehension to attend helping them take ownership of the work?
- What specific skills will you target with your learners in this year/lesson, etc?
- What's a realistic next step for your learners in terms of more time?
- How are you encompassing multiple and few steps to help learners develop a plan?
- How will learners reflect and share what they are learning?
- How will you be mindful of bringing awareness to power dynamics in group work?
- How will learners share and extend each others' ideas as they collaborate together?

GO DEEPER

- Search "NTN Collaboration Rubric" in the NTN Help Center.
- Search "Collaborative Stems Sheets" in the NTN Help Center.
- Search "How Do I Teach and Assess Collaboration Skills" in the NTN Help Center.
- Search "How to Use Learner Contracts to Support PBL" in the NTN Help Center.
- Search "Glossary of Scaffolding Actions" in the NTN Help Center.

Agency



What?

A combination of academic mindsets and the ability to take ownership over one's learning.

Why?

Through developing agency, learners will be empowered to actively engage, advocate for themselves, and leverage skills needed to thrive.

AGENCY

Academic Mindsets

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
GROWTH MINDSET	"W.O.O.P."	"Learning Pathway" and "Learning Quizzes"
	"Growth Coaching"	"Academic Growth Conferences"
SELF-EFFICACY	"Three Columns Debrief"	"Praise Point"
	"Between Students as Co-Teachers"	"Chat before the Chat"
	"Delayed Grading"	"Backward Lessons"

AGENCY

Academic Mindsets

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
GROWTH MINDSET	"S.O.A.R." and "The Incredible Maker Book"	"Learning Quizzes"
	"Running Rubrics"	"Praise Slips"
SELF-EFFICACY	"Turn to Partner, Collaborate, Report Out"	"Assessment Feedback"
	"Lecture, Seminar"	"Four Years Work Celebrations"
	"Exit Slips"	"Exit Slips"

AGENCY

Academic Mindsets

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
FIRST PERSONAL RELEVANCE	"Left as Assets through Conversation"	"Storytelling" and "Multi Autobiography"
	"Hopes, Fears, Dreams"	"Co-Design Learning Environments"
	"I Used to Think, Now I Think"	"Year-Long Conferences"
	"Best Work Archive"	"Backward Lessons"

AGENCY

Ownership Over Learning

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
SHARP BENCHMARKS	"Start, Stop, Continue"	"Speaking the Learning Question"
	"Running Rubrics"	"Visual Benchmarks"
SEEK FEEDBACK	"Silent Critique"	"What's So What? Now What?"
	"Establish a Culture of Critique"	"Asset-Based Feedback"
TACKLE AND MONITOR LEARNING	"W.O.O.P."	"Where and How to Know"
	"Learning Journeys"	"Bookmark Lessons"

AGENCY

Ownership Over Learning

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
ACTIVELY PARTICIPATE	"Fishbowl"	"Community Circles"
	"Start, Stop, Continue"	"Grade Self-Reflection"
BUILD RELATIONSHIPS	"Connections"	"Community Circles"
	"Storytelling"	"Community Walk"

AGENCY

Ownership Over Learning

NTNLO Rubric Dimensions	Practices Cards to Scaffold Skills	
IMPACT SELF AND COMMUNITY	"The Maker Circle" or "Identity"	"Recognize Your Learners"
	"Strengths Approach"	"Awesome Absolute Protocol"
	Coaches for Learning	"Community Walk"
		"Engage Mindful Breathing" and "Practice Mindful Moments"

AGENCY

REFLECT

- What does it look like for us and for our learners to be more agentic?
- How are you meeting learners at their current mindset level and helping them take the next steps to be?
- Where do learners have choice and ownership in their learning?
- How are you scaffolding and removing the agency so that learners are at the center of learning?
- How are you providing opportunities for learners to deliberately practice and reflect on agency skills?
- How will learners reflect and share what they are learning?
- How will you make space for learners to leverage and name all of the skills/classes they are practicing agency skills?
- How can you ask learners to learn about their classroom's and community's assets, cultures, identities, and perspectives as they practice ownership over their learning (e.g. PBL, Arts, Wellness, etc.)?
- How are you reflecting on your own biases and perceptions of what it looks like to have a student-centered classroom and to take ownership over learning? How does your perception influence how you perceive learners and the way they develop agency skills?
- In order for learners to engage in the ways we do, they must feel belonging and some freedom. In the learning environment, how will you ensure that is the case? Are there learning conditions that enable these mindsets?

GO DEEPER

- Search "NTN Agency Rubrics" in the NTN Help Center.
- See the topics on the "Help Collaborate Learning" Bulletin Board in Agency.
- Search "Glossary of Scaffolding Actions" in the NTN Help Center.

New Tech Network Learning Outcomes Card Index



Connecting the NTN Learning Outcome Rubrics to the NTN Practices Cards

BACK COVER

BACK COVER

and Thinking



What?

The ability to reason, problem-solve, develop sound arguments or decisions, and create new ideas by using appropriate sources and applying the knowledge and skills of a discipline

Why?

To cultivate opportunities for learners to discover the truth in assertions, think critically, become knowledgeable about the world around them, so that they can contribute to a just, democratic and humane society.

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

ENGAGING LEARNING

- "See, Think, Wonder" helps learners analyze the problem
- "Launch" and "Explore" allow learners to make sense of the problem and form solution strategies
- "Concept Mapping" helps learners set constraints, goals and parameters
- "3-2-1 Bridge" helps learners engage in analysis and reflection

REASONING AND MODELING

- "Clothesline Math" supports learners in reasoning and proof
- "Three Act Task" helps learners discuss their concepts
- Debrief helps learners to share strategies, make connections, and clear misconceptions
- "Think Talk" engages learners in communication to plan reasoning and process to model problems

COMMUNICATION AND REFLECTION

- "Jigsaw" helps learners share multiple perspectives
- "Gallery Walk" helps learners share multiple representations and ways to show a solution and reason with it
- Should time to use multiple representations (graphs, formulas, diagrams) to help explain reasoning
- "Think Share Pair" helps learners share what is relevant and meaningful

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

EXPLANATION THESIS

- "Consensus Attainment" helps learners understand argumentative text
- "Jigsaw" engages discussions around examples of relevant argumentative text
- "Concept Mapping" helps learners generate and arrange written story descriptors
- "See, Think, Wonder" helps learners understand a relevant and clear argument/thesis

CLAIMS SUPPORTING IDEAS

- "Concept Mapping" helps learners generate specific textual claims
- "Chalk Talk" engages non-verbal discussions to generate their claims
- "Four Corners" helps learners clearly explain how evidence supports the argument/claim
- "Card Sort" helps learners identify and share ideas that will support the argument/claim
- "The Best Answer Protocol" supports learners to generate counterclaims
- "Four Corners" allows students to argue/counter to physically locate their position on a continuum
- "Chalk Talk" helps learners to respond to questions or counterclaims
- "Jigsaw" helps learners develop and respond to questions or counterclaims

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

EVIDENCE

- "Socratic Seminar" helps learners clarify/explain their evidence
- "Concept Attainment" helps learners understand clear evidence
- "Card Sort" helps learners arrange and use sense of relevant and clear evidence
- "Concept Mapping" helps learners make sense of evidence and use it to strengthen their argument/thesis

ANALYSIS OF EVIDENCE

- "Written Performance Tasks" helps learners explain relevant evidence
- "Jigsaw" helps learners describe relation of non-relevant evidence
- "Error Level 5 Test" helps learners analyze evidence in a text
- "Think, Feel, Share" helps learners distill, explain and analyze evidence with a partner

ANALYSIS AND SYNTHESIS OF SOURCES

- "Socratic Seminar" helps learners clearly explain their evidence
- "Concept Attainment" helps learners understand clear evidence
- "Card Sort" helps learners arrange and make sense of relevant and clear evidence
- "Concept Mapping" helps learners make sense of evidence that is strengthen the argument/thesis

KNOWLEDGE & THINKING

ENGLISH: Textual Analysis (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

ARGUMENT THESIS

- "Think Pair Share" helps learners share evidence
- "Text Discussion Protocol" provides opportunities for text analysis and collaboration
- "Jigsaw" helps learners share multiple perspectives
- "Establishing a Culture of Critique" provides opportunities for learners to give feedback on each other's arguments/thesis

CLAIMS SUPPORTING IDEAS

- "Text Discussion Protocol" helps learners analyze the central ideas or themes and their development and interaction over the course of the text(s)
- "Think, Feel, Care" helps learners to analyze ideas with multiple perspectives
- "Card Sort" helps learners identify the most significant and specific claims/ideas that will form their argument/thesis
- "Concept Mapping" helps learners collaborate to arrange their claims and supporting ideas

ANALYSIS OF CLAIMS

- "Three Levels of Text" helps learners discuss the author's point of view or purpose in a text
- "Think, Feel, Care" helps learners consider the author's point of view in a given system
- "Think Pair Share" helps learners share their multiple perspectives
- "Black Party Protocol" uses quotes from text to help learners analyze author's point of view

COUNTERCLAIMS

- "Socratic Seminar" helps learners develop and respond to counter arguments
- "Text Discussion Protocol" provides opportunities for text analysis and collaboration
- "Establishing a Culture of Critique" allows learners to give and receive feedback on their arguments/thesis

KNOWLEDGE & THINKING

ENGLISH: Argumentation/Explanation (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

ARGUMENT THESIS

- "Text Discussion Protocol" provides opportunities to analyze arguments/thesis
- "Think Pair Share" helps learners articulate an argument/thesis
- "Concept Mapping" helps learners generate and arrange claims/descriptors
- "Think, Feel, Care" helps learners analyze multiple perspectives in developing an argument/thesis

CLAIMS SUPPORTING IDEAS

- "Concept Attainment" helps learners develop definitions for each claim
- "Card Sort" helps learners arrange and organize the argument/claim
- "The Best Answer Protocol" helps learners answer questions with supporting claims
- "Chalk Talk" helps learners explain and analyze the definitions of a concept/claim to new concepts
- "Relational" helps learners act with respect to questions or counterclaims
- "Socratic Seminar" allows for civil responses and feedback to claims and counterclaims
- "Four Corners" gives learners opportunities to physically respond to questions or counterclaims
- "Chalk Talk" helps learners to respond and respond to claims through written dialog

KNOWLEDGE & THINKING

ENGLISH: Argumentation/Explanation (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

EVIDENCE

- "Text Discussion Protocol" helps learners refer to the most significant evidence
- "Concept Attainment" helps learners define appropriate evidence
- "Card Sort" helps learners sort and rank evidence by relevance
- "The Best Answer Protocol" asks learners to explain evidence and rationale

ANALYSIS OF CLAIMS AND DISPROVES

- "Concept Mapping" helps learners organize their thinking about claims and counterclaims
- "3-2-1 Bridge" asks learners to explain their understanding of claims and counterclaims about a given topic
- "Text Discussion Protocol" helps learners identify problem, how evidence supports the argument/claim
- "Think, Feel, Care" helps learners practice claiming perceptions and drawing conclusions

KNOWLEDGE & THINKING

SCIENCE: Argumentation/Explanation (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

ARTICULATING A SCIENCE-RELATED ISSUE

- "See, Think, Wonder" helps learners think through science-related issues
- "Text Discussion Protocol" helps learners engage in a science-related issue
- "Chalk Talk" provides opportunity to share an issue for complex research projects
- "Think, Feel, Care" helps learners see multiple perspectives to articulate a science issue

ARGUMENT THESIS

- "Concept Attainment" helps learners understand examples of a clear and unclear argument/thesis
- "Jigsaw" helps learners unpack models of clear and specific argumentation
- "Establish a Culture of Critique" allows learners to give and receive feedback on their argument/thesis
- "Targeted Peer Assessment" allows learners to give feedback on their argument/thesis

CLAIMS SUPPORTING IDEAS

- "3-2-1 Bridge" helps learners share explicit claims about their new understanding
- "Elbow Partly" uses text to help learners understand specific and sign-from claims when
- "The Best Answer Protocol" helps learners share specific claims to support the argument/thesis
- "Socratic Seminar" gives learners opportunity to share claims when speaking to support the argument/thesis

KNOWLEDGE & THINKING

SCIENCE: Argumentation/Explanation (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

CLARIFICATION

- "See, Think, Wonder" helps learners think through science-related issues
- "Chalk Talk" asks learners to respond or their own point on questions and counterclaims

EVIDENCE

- "Socratic Seminar" gives learners a chance to cite specific evidence to a claim/counterclaim
- "Text Discussion Protocol" helps learners unpack evidence in text

ANALYSIS AND SYNTHESIS

- "The Best Answer Protocol" helps learners explain the strengths and limitations of evidence
- "Four Corners" asks learners to physically embrace and explain evidence

CONCLUSION

- "Think Pair Share" helps learners discuss/articulate unanswered questions
- "Stand to Think" is a process that helps learners reflect and make conclusions

KNOWLEDGE & THINKING

SCIENCE: Scientific Research (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

DEVELOPING A SCIENCE-RELATED ISSUE

- "See, Think, Wonder" helps learners ask relevant/content-information that supports a question
- "Think, Feel, Care" helps learners analyze multiple perspectives in developing a question

DEVELOPING AND USING MODELS

- "Concept Attainment" shows learners examples and non-examples of accurate models to help them develop their own understanding of the concept
- "Jigsaw" helps learners collaborate with others to understand and develop accurate models

PLANNING INVESTIGATIONS

- "Text Discussion Protocol" has learners unpack hypotheses about an investigation
- "Chalk Talk" helps learners collaborate synchronously to develop a hypothesis about a question

DESIGNING THE INVESTIGATION

- "Start, Stop, Continue" allows learners to develop/clarify/make decisions about a project
- "Visual Benchmarks" helps learners collaborate and manage their investigation

KNOWLEDGE & THINKING

SCIENCE: Scientific Research (Grades 6-12)

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

COLLECTING DATA

- "Jigsaw" helps learners collaborate to collect appropriate and relevant data
- "Concept Mapping" helps learners organize and collect data

ANALYZING THE DATA

- "Worth One Dollar Talking" helps learners identify patterns in data
- "See, Think, Wonder" helps learners analyze data

DEVELOPING EXPLANATIONS

- "Text Discussion Protocol" helps learners generate explanations from text
- "Think, Feel, Care" helps learners practice generating explanations

PLANNING EVIDENCE-BASED CONCLUSIONS

- "The Best Answer Protocol" helps learners develop strong evidence-based conclusions
- "Socratic Seminar" provides opportunities for learners to make/refine claims/conclusions

COMMUNICATING RESULTS

- "I Used to Think, Now I Think" helps learners clear communication
- "Establishing a Culture of Critique" helps learners give and get peer and group feedback

BEFORE IMPLEMENTING KNOWLEDGE & THINKING

Understand Alignment between Knowledge & Thinking Rubrics with College and Career Readiness Assessments (CRAs)

- The Framework for the Grade 12 Knowledge and Thinking and Written Communication Rubrics are vertically aligned and therefore can assess learner's trajectory towards college readiness starting in middle school.
- Periodically, you may wish to create a task that allows you to collect learners' artifacts to analyze and/or finalize your Knowledge and Thinking and Written Communication rubrics in order to assess where they are in grade 12 college readiness standard. This is called a CRA.

Engage in Learning around Disciplinary Literacy

- What are aspects in your discipline read, write, and communicate? For example: what are some text types and writing that you?
- How is reading + writing connected in your discipline (and/or different from other disciplines)?
- How do the NTN Learning Outcome Rubrics help us and learners talk about and reflect on learning in and across your discipline?

Go Deeper:

- Search "Guide to Individual Written Performance Assessments" in the NTN Help Center.

BEFORE IMPLEMENTING KNOWLEDGE & THINKING

Understand differences between Written Performance Tasks and College and Career Readiness Assessments (CRAs)

	Written Performance Tasks	College and Career Readiness Assessments
Purpose	Assess some aspects of learners' Knowledge and Thinking and Written Communication skills (e.g. a few dimensions or a few rubrics)	Assess some aspects of learners' Knowledge and Thinking and Written Communication skills across a variety of tasks to assess progress towards College and Career Readiness
Duration	Frequently but typically 1-3 weeks	Depends, but typically 3-6 weeks
Point in Process	Typically near the end of a unit, usually a final product	Typically mid-year and at the end of a unit, usually a final product
Revision	Some revision and editing included as part of the writing process	Multiple revision opportunities to build towards college readiness standard

KNOWLEDGE & THINKING

REFLECT

- How has scaffolding knowledge & thinking rubrics changed how you might scaffold other NTN Learning Outcomes?
- How are learners engaging in knowledge & thinking in your classroom?
- How are you mirroring learners as they core problems in real life and helping them have ownership over those skills?
- What specific skills will you target with your learners in this process? Why?
- How will learners reflect and share what they are learning?
- How will you anticipate any errors or misconceptions and help learners overcome those as well?

GO DEEPER

- Search "NTN Knowledge and Thinking Rubrics" in the NTN Help Center.
- See the "Glossary of Scaffold and Assessment" in the NTN Help Center.

Oral Communication



What?

An individual's ability to effectively communicate knowledge and thinking, and engage in clear and thoughtful dialogue through group conversations and presentations.

Why?

Oral communication skills are vital for a learner's social academic success. Effective verbal communication empowers learners to advocate for themselves, ask relevant questions, and communicate clearly.

ORAL COMMUNICATION

Section 1: Interpersonal Communication

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

LISTENING AND COMPREHENSION

- "Peace Pass" and "Restorative Circles" help learners actively listen
- "Co-Create Community Agreements" helps learners actively listen
- "Three Levels of Text" and "Text Discussion Protocol" helps learners actively listen and learn
- "Creative Conflict," "Black Party," and "Think Pair Share" help learners listen and learn from each other

CLEAR PRESENTATION OF IDEAS

- "Storytelling" asks learners to share their experiences with others
- "The Best Answer Protocol" asks learners to provide clear, concise, and relevant answers
- Fishbowl discussions or conference formats help learners practice clear communication
- Conferences and presentations help learners practice their learning in a panel

ASKING QUESTIONS

- "Community Walk" encourages learners to participate in community conversations
- "Focus Group" encourages learners to participate in community conversations
- "Circles and Norms" helps learners to listen, respond, and ask clarifying questions
- "See, Think, Wonder" sets the stage for asking questions

ORAL COMMUNICATION

Section 2: Presentation

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

CLARITY

- "Storytelling" helps learners practice planning their narratives
- Use discussion circles or conferences to help learners build clarity
- "Jigsaw" or "Think Pair Share" helps learners practice communicating clearly
- "Creative Conflict," "Restorative Circles," and "Text Discussion Protocol" helps learners practice communicating clearly
- "Restorative" helps learners practice communicating actions clearly

EVIDENCE

- "Create an Learning Environment" asks learners to share evidence
- "The Best Answer Protocol" asks learners to share facts and research to support their argument
- Model what quality evidence and demonstration in a topic looks like
- "Socratic Seminar" uses group dialogue and critical thinking to build evidence for an argument

ORGANIZATION

- Use "Concept Mapping" to help learners organize their thoughts
- "Start, Stop, Continue" helps learners and teams create routines and norms to support a flow of learning
- Use graphic organizers and sentence starters to help learners organize their thoughts
- "Speed Up the Clock" Questions helps learners practice organizing answers to the learning questions

ORAL COMMUNICATION

Section 2: Presentation

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

USE OF DIGITAL MEDIA & VISUAL DISPLAYS

- Provide models of digital media as well as displays that are appropriate for learners' tasks and develop tools for real stage
- "Peace, Question, Suggestion" gives learners practice in presenting their products using digital media for peer feedback
- Learners use Conferences as the use of digital media helps students practice presenting with a full team of information
- Clickers and Socrative Jump "Audio and Video Feedback" can allow parents to give critique or participate with appropriate digital media

ORAL COMMUNICATION

Section 3: Delivery

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

LANGUAGE USE

- "Storytelling" helps learners practice appropriate language and style
- Use videos to build learners' unconsciously of appropriate language and style
- "Presidio Culture" helps learners engage in peer group communication activities to improve language use
- Create in and walk or peer behavior activities to support language use

PRESENTATION SKILLS

- "Socratic Seminar" helps learners practice their clear attitude and tone
- "Peace, Question, Suggestion" helps learners practice clear, concise delivery
- Create an environment where a good presenter looks like and sounds like
- Conferences gives opportunities for learners to practice their clear to a panel

INTERACTION WITH AUDIENCE

- "Storytelling" builds presentation and presenting as a answering questions fear and anxiety
- "Fishbowl" helps learners practice answering questions in real-time
- "Circles and Norms" helps learners anticipate and address questions in real-time
- "Concentric Circles" helps learners practice presenting their ideas and answering questions

ORAL COMMUNICATION

REFLECT

- How are learners engaging in oral communication in your classroom?
- How are you currently balancing the interactions between teacher and learner talk in the classroom?
- What specific skills will you target with your learners in this process? Why?
- What is a realistic next step for your learners in terms of their levels?
- How will you anticipate any errors or misconceptions and help learners overcome those as well?
- How will learners reflect and share what they are learning?
- How will you identify and address cultural assets in learners' language, and what role does this play in their oral communication skills?
- How will you identify and address cultural assets in learners' language, and what role does this play in their oral communication skills?

GO DEEPER

- Search "NTN Written Communication Rubrics" in the NTN Help Center.
- Search "Glossary of Scaffold and Assessment" in the NTN Help Center.

Written Communication



What?

The ability to effectively communicate knowledge and thinking through writing by organizing and structuring ideas and using discipline-appropriate language and conventions

Why?

Building written communication skills empowers students to effectively communicate their ideas, share their voice, and advocate for their learning

WRITTEN COMMUNICATION

NTN-D Rubric Dimensions | Practices Cards to Scaffold Skills

DEVELOPMENT

- "Chalk Talk" helps learners to collaboratively develop, refine, and sharpen writing purpose / ideas
- "Establish a Culture of Critique" and "Targeted Peer Assessment" engage learners in peer critique and help learners plan their drafts
- For the authentic writing purpose / ideas (e.g. "Where I come from" poem)
- "Visual Benchmarks" helps learners monitor the progress of their written performance task

ORGANIZATION

- "Concept Attainment" helps learners identify connections to form the "over-riding" claim
- "Concept Mapping" helps learners organize ideas and claims in coherent way
- Support learners with word walls or graphic organizers and sentence starters
- "Collaborative" gives learners opportunities to receive individual feedback on their writing

LANGUAGE CONVENTIONS

- "Author Study" provides learners opportunities to apply the knowledge of appropriate language, style and conventions
- Help learners use appropriate tools to skillfully enhance their work (e.g. a word bank, personal spell check)
- "Chalk Talk" helps learners to collaboratively develop and refine their ideas about audience and task to understand
- "Circles and Norms" "Feedback" allows recorded work, or to

WRITTEN COMMUNICATION

REFLECT

- How are learners engaging in written communication in your classroom?
- How are you currently balancing the interactions between teacher and learner talk in the classroom?
- What specific skills will you target with your learners in this process? Why?
- What is a realistic next step for your learners in terms of their levels?
- How will you anticipate any errors or misconceptions and help learners overcome those as well?
- How will learners reflect and share what they are learning?
- How will you identify and address cultural assets in learners' language, and what role does this play in their oral communication skills?

GO DEEPER

- Search "NTN Written Communication Rubrics" in the NTN Help Center.
- Search "Glossary of Scaffold and Assessment" in the NTN Help Center.

ROW 12

Culture Practices



Cultivating Equitable Learning Environments through a Supportive and Inclusive Culture

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Culture Practices

OVERVIEW

This set of cards provides culture practices that support communities who actively commit to cultivating a supportive and inclusive culture. One that:

- Fosters a relationship-rich environment focused on belonging, care, community and growth
- Creates opportunities for all learners to explore and sustain their cultural assets and identities
- Affirms the cultural identities of learners and deepens the understanding of the diverse identities of others
- Fosters a learning community focused on collaboration and learner voice based on learner feedback and needs
- Supports social-emotional well-being of all staff and learners
- Creates an asset-based mindset and the belief that all students can achieve at high levels

OVERVIEW

Each of the Culture Practices reflects an underlying shift in the way learners and facilitators cultivate an equitable learning environment. The Culture Practices Cards are grouped in the set by these key shifts:

Adopt an Asset-Based Mindset - These self-reflective practices help learners shift from a deficit-based mindset by examining the deeply held beliefs, behaviors, and practices that influence their perspectives, work and interactions with others.

Cultivate a Learning Community - These practices help shift power dynamics from a teacher-centered environment to a learner-centered environment. In this space, each learner is an active contributor in the community.

Engage in Restorative Discipline - These practices help shift traditional discipline practices to those that center humanity and prioritize social, academic, physical and emotional well-being.

Support Social-Emotional Well-Being - These practices help shift toward processes that empower learners to self-regulate their emotions and manage their thoughts and feelings to return to an integrated brain state.

Research

- Ladson-Billings, G. *The Dreamkeepers: Successful Teachers of African American Children*
- Paris, D. *Culturally Sustaining Pedagogy: A Needed Change in Stance, Terminology, and Practice*

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CULTURE

Start With Your Why



What?

A process to help participants set an intention for their work.

Why?

To help participants create a shared understanding of common goals, beliefs, and/or interests. To bring awareness to prior experiences and biases that may impact the work.

NTLO

FREQ.

PREP

NO. 1

How?

1. Provide a prompt.

- Examples for younger learners: "Why do you like__?" "Why are you interested in __?" "Why does __ make you curious?"
- Examples for older learners: "Connect to why you are in this school. Why is education valuable or not valuable to you at our school?" "Why is this topic worth learning more about?" "Why is this important or not important to you?"
- Examples for adult learners: "Connect to why you are an educator and what you hope to achieve for all students." "What is your why for being an educator at your school? For your learners? Why project-based learning?"

2. Ask learners to reflect, write, draw, or brainstorm their answer in other ways, then synthesize into a clear statement.

3. Set an intention.

- Examples for younger learners: "How would you like to explore your curiosity for this topic?"
- Examples for older learners: "How can learning be meaningful for you in this class?"
- Examples for adult learners: "How is your 'why' reflected in your work?"

4. Share (Optional).

Create opportunities for learners to share their answer with others. Reflect on implications for self-growth, collaborative work and community goals.

Practices to Consider:

- You might use the **"Constructivist Listening Dyad Protocol"** to support equitable dialogue grounded in the benefit of the listener (see **Learner-Centered Practices**).
- You might use **"Chalk Talk"** to encourage written communication and silent reflection (see **Learner-Centered Practices**).

REFLECT

- What implications does this discussion have on your own work in leading others?
- How will you ensure this process affirms learners' identities and assets?
- How will you ensure learners revisit their intention throughout the year?

GO DEEPER

- See Zaretta Hammond's *Culturally Responsive Teaching and the Brain* (read Chapter 2 or 4).
- Watch Simon Sinek's video "Golden Circle."

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CULTURE

The Paseo or Circles of Identity



What?

A process to build self-awareness and initiate dialogue around issues of identity, diversity, beliefs, and values.

Why?

To help learners understand how their values shape their expectations for themselves and for others. To help learners become aware of the unconscious biases that influence how they approach their work and engage with others. To take action based on their new learning.

NTLO

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NO. 2

How?

1. **Frame the activity** with your learners.
2. **Each learner draws a web of circles** on a piece of paper with their name in the center of the web.
3. **Each additional circle should contain a word or phrase that captures an element of their identity** (e.g. race, gender, sexual orientation, ethnicity, socioeconomic status, language proficiencies, abilities, and familial situation).
4. **Ask each learner to individually reflect on their web of circles.** Use the prompts below to guide their reflection:

Prompts to Guide Reflection:

- What does your identity teach you about "appropriate" behaviors? Intelligence? Respect? Success? Socioeconomic status? Race?
- How has your identity shaped your beliefs around how learners should learn and behaviors you believe every learner should exhibit? How did you come to believe these things?
- How does your identity impact the way you engage with learners who are similar to you? Different than you?

5. **(Optional) Engage learners in a Learner-Centered practice** such as **"Constructivist Listening Dyad Protocol," "Fishbowl," or "Chalk Talk"** to unpack their web of circles (see **Learner-Centered Practices**). Be sure to refer to co-created agreements to support this process (see **"Co-Create Community Agreements"** in **Culture Practices**).
6. **Debrief**

- How does understanding our own and/or each other's identities impact our culture?
- What will you do differently as a result of engaging in this activity?
- How will you process the emotions that surfaced for you as a result of this dialogue?

REFLECT

- How will you ensure participants feel safe, included, and emotionally supported to engage in this process? What will you do to follow-up on the conversations?

GO DEEPER

- This resource was adapted from National School Reform Faculty. Learn more about this protocol at www.nsrfharmony.org

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CULTURE

Asset Mapping



What?

A process to build awareness of cultural assets and identities within a community and use that new insight to affirm, honor, and extend those knowledge, skills and attributes within the learning environment.

Why?

To build awareness of the unique knowledge, skills and attributes each and every learner brings to the community.

NTLO | FREQ | PREP | NO. 3

How?

1. **Prepare learners by framing the practice.** "As we engage in collaborative work, we run the risk of thinking about learners and one-another in a deficit-based way, focusing on what we/they can't do vs. what we/they can do. When we shift to an asset-based approach, it is important that our efforts focus on what learners can do and recognize that a learners' areas of growth are the result of faults in the learning environment (e.g. lack of access to opportunities, gaps in curriculum) and not faults in the learner."
2. **Ask learners to reflect on assets that their community brings,** identifying positive knowledge, skills, mindsets or other characteristics that contribute to the classroom/school.
   - Knowledge: concepts, principles, information
   - Skills: ability to use and apply knowledge
   - Attributes: qualities or characteristics
3. **Ask learners to affinity-map similar cultural assets together and categorize them,** naming each category.
4. **After learners have created an affinity-map, ask:** "What could you do to add to this list? How will you keep this list at the forefront as you engage with others in your community?"

Practices to Consider

- You might pair this practice with the **"Re-Frame Attributes Protocol"** (see **Culture Practices**).
- You might engage in a **"Focus Groups," "Community Walks," or "Storytelling"** to build an empathy muscle (see **Culture Practices**).
- You might consider how educators can **"Establish a Warm, Demanding Stance"** to combat deficit-thinking (see **Culture Practices**).

REFLECT

- How will you ensure participants feel safe to engage in this process?
- How will you ensure learners are mindful of their own identities and biases as they engage in this process? You might engage learners in "The Paseo" prior to engaging in this practice (see Culture Practices).
- How will you ensure learners feel supported to engage in this process? What will you do to follow-up on the conversations?

GO DEEPER

- Read Zaretta Hammond's *Culturally Responsive Teaching and the Brain* (Chapters 2-4).

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CULTURE

Recognize Your Triggers



What?

Self-reflection on social triggers.

Why?

To become aware of unconscious triggers that influence how you respond to others.

NTLO | FREQ | PREP | NO. 4

How?

1. **Reflect on your common triggers** using the **Social Interaction Elements Table** below so that you can recognize them. Pay attention to signs and emotions early on.
2. **Anticipate situations** that might trigger you. Label your feelings.
3. **Continuously reflect** on your common triggers and how they show up in your work.

Social Interaction Elements Table

STANDING: The fear that one would be expelled from a group (such as being fired, evaluated poorly by the principal, ostracized by peers because of doing things differently)

- One's sense of importance relative to others. How one believes others in the group perceive him, her or they.

CERTAINTY: The fear of embarrassing oneself in a given situation. The feeling of being out of control or unable to be safe because of venturing into the unknown with new teaching practices, etc.

- One's need for clarity and predictability in a social situation in order to make accurate social moves. Also refers to one's ability to predict.

CONTROL: The fear of someone telling you what to do, where to go, and how to behave that is inconsistent with your values.

- One's sense of control over their life and the perception that one's behavior can have a positive effect on the outcome of a situation rather than something out of their control having more influence.

CONNECTION: The fear of being an outsider and excluded.

- One's sense of connection to and security with another person, one's family, or one's peer group.

EQUITY: The threat can come when one feels their group is being subjected to unearned disadvantage or someone is receiving unearned advantage. It may also be associated with distancing oneself from unearned advantage.

- Having a sense of fair, just, and non-biased exchange between people.

Practices to Consider:

- You might use a **"Constructivist Listening Dyad Protocol"** or **"Think, Pair, Share"** to engage in dialogue around this topic (see **Learner-Centered Practice**).
- You might use **"The Incredible 5-Point Scale"** or **"S.O.D.A."** to regulate emotions if you are triggered (see **Culture Practices**).
- You might use the **"Re-Frame Attributes Protocol"** to reflect on ways triggers might have impacted responses to students. (See **Culture Practices**).

GO DEEPER

- This resource is adapted from Zaretta Hammond's *Culturally Responsive Teaching and the Brain*.

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CULTURE

Storytelling



What?

Asking learners (and their families and communities) to share stories about who they are, their academic histories, etc.

Why?

To help you learn about an individual's strengths, needs, backgrounds, values, and mindsets.

NTLO | FREQ | PREP | NO. 5

How?

1. **Determine open-ended questions** that elicit stories, such as, "Tell me about a time you felt really successful at school," or, "Describe a time you felt supported at school to do your best work." "Describe a time where you felt care and belonging."
2. **Determine how** you will gather stories.

You might...

- Start the year with a project, possibly school-wide, that includes getting to know students or communities via storytelling.
- Try engaging students in **"Hopes and Dreams"** (see **Culture Practices**).
- Use empathy interviews or focus groups to elicit student voice (see **"Empathy Map Canvas"** or, **"Focus Group"** in **Culture Practices**).
- Provide surveys, community circle check-in questions, journals, or other reflection tools to elicit stories.

REFLECT

- Making time to ask for and listen to stories can be challenging. How will you make space to engage in this practice? What might you need to give up?
- What structures, rapport and agreements need to be in place to ensure learners can show up with their full selves to share their stories?
- Listening to others' stories is a privilege. How will you honor their voices and intentionally lift up their stories? How will you utilize what you've learned to inform your work? How will you leverage their stories to cultivate equitable learning environments?

GO DEEPER

- Read "Making Stories Inclusive and Equitable" at www.practice-space.org/storytelling-guide/

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CULTURE

Empathy Interview



What?

An active listening process to deeply understand the challenge the person is facing.

Why?

To ensure the designer grounds their work in a deep understanding of the needs, assets, and perspectives of the person they are designing for/with.

FREQ. PREP. NO. 6

How?

1. **Reflect on the task.** What do you need to know in order to complete your work? Whose perspectives do you need to hear from in order to accomplish your work?
2. **Ask for an interview** from someone whose perspectives can best inform the work, being intentional about giving equitable opportunities for diverse voices and perspectives to be heard.
3. **Craft a few questions** to guide the interview.
4. **During the interview, actively listen, gain perspectives and observe the interviewee's behaviors.**
5. **Reflect on what was heard** and thank the interviewee for their perspectives and time. If possible, compensate the interviewee for their support and efforts.
6. **Debrief to inform your own next steps.**

Variation: You might try using the Empathy Map Canvas to help synthesize your observations and draw out unexpected insights. See "Go Deeper" below.

REFLECT

- How does the information gathered from this empathy interview inform your work?
- What new insights or perspectives were gained from this empathy interview?
- How does this process help you design more equitable learning environments?

GO DEEPER

- This empathy map was taken from the people at XPLANE who developed the Gamestorming toolkit. Read the article "Updated Empathy Map Canvas".
- Learn more about Empathy Interviews at Stanford D.School's website.

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CULTURE

Focus Groups



What?

A group interview of students, teachers, leaders, families, or community members.

Why?

To build empathy and an understanding of others' feelings, perspectives and needs by hearing about their experiences.

NTLO

FREQ

PREP

NO. 7

How?

1. **Participants set an intention for the focus group.** What is an overarching question or concern you hope to learn more about? Whose perspectives and voices do we need to hear from in order to address the question or concern?
2. **Participants generate a set of open-ended questions** that elicit important information about your overarching question or concern. See "Go Deeper" below to find examples of open-ended questions.
3. **Determine when and how the focus group will be conducted,** as well as debrief the data gathered.
4. **After engaging in the focus group, debrief with participants.**
   - What new insights did you learn about yourself and about those in the focus group?
   - What implications do you now have on your work moving forward?
   - What supports do you need?

Practices to Consider:

- You might use the **"Fishbowl"** protocol to facilitate the conversation (see **Learner-Centered Practices**).
- You might consider using using the Empathy Map Canvas tool to capture the discussion (See "Empathy Interview" in Culture Practices).

REFLECT

- What challenges might you face in implementing this practice and how will you overcome them? What supports might you need?
- How can you use this practice to invite authentic experts and community voices to enhance your project?
- How will you leverage what you've learned from this process to improve your work?
- What new insights and perspectives have you gained from listening to others?

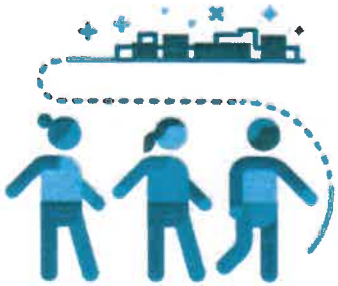
GO DEEPER

- Learn more about a School Climate Questionnaire on the Teaching Tolerance website: www.tolerance.org

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CULTURE

Community Walks



What?

Walk through different neighborhoods in your community.

Why?

To learn about the lives of those in your community and empathize with community members' experiences. To understand the cultural assets and the emotional concerns of your schools' diverse learners and families.

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NO. 8

How?

1. **Discuss intentions and goals for the community walk.** How does this community walk have an intentional, authentic connection to the work participants are engaging in?
2. **Ask: "How will this community walk impact your work?"**
3. **Be mindful of building internal awareness and asset-based mindsets before learners engage in this activity.** (See **"The Paseo," "Asset Mapping"** or **"Recognize Your Triggers"** in **Culture Practices**).
4. **Ask local students, families, or community members** to lead teachers in a walk around the community.
5. **Debrief with participants**

- What new insights did you learn about yourself and the community you serve?
- How will this experience help you understand the needs of your community? What implications might this have on your work?

Variations:

- During the community walk, meet with local students, families, or community leaders to learn about their insights and concerns (see **"Focus Groups" in Culture Practices**).
- During the community walk, ask questions of students, families, or community members to learn more about their experiences and neighborhoods (see **"Storytelling"** in **Culture Practices**).

REFLECT

- How did this community walk strengthen your participants' understanding of the community they serve? How did it strengthen yours?
- How will you ensure that participants continue to connect with what they heard from their community as they engage in their work?

GO DEEPER

- Learn more about Community Walks at Teaching Tolerance: www.tolerance.org

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CULTURE

Shadow a Learner



What?

An observational exercise to develop and strengthen empathy for the perspective and experience of another.

Why?

To listen and deeply understand another learner's experiences and perspectives. To inform practice and recognize gaps and inequities within structures, systems, and practices in a learning environment.

NTLO

FREQ.

PREP

NO. 9

How?

1. **Prep:** Create learning goals. What do you hope to learn from shadowing a learner? Choose a learner to shadow for a day. Engage in self-reflection to question assumptions and build an asset-based mindset. (See **"The Paseo," "Asset Mapping"** in Culture Practices).
2. **Shadow:** Spend the day shadowing the learner. Capture observations along the way, ensuring your observations are factual, and grounded in actions and evidence seen.
3. **Reflect:** Based on your observations, where are the areas to celebrate? What are common patterns? Are there any gaps or inequitable opportunities present in the learning environment? If yes, what might be the root cause of them and what are the implications for your work?
4. **Act:** Based on your observations and findings, design an actionable step or plan for making changes in your learning environment. Consider co-designing this plan with the learner you shadowed. (See **"Co-Design Learning Environments"** in **Culture Practices).**

REFLECT

- Did this practice challenge any of your previous assumptions about the student or the learning environment?
- How might you use what you have learned to improve learning for all students?
- How might your own experiences as a student impact your observations and interpretations?

GO DEEPER

- Visit Shadow a Student at www.shadowastudent.org

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CULTURE

Establish a Warm, Demanding Stance



What?

Hold learners to high standards, convince them of their own brilliance, and help them to reach their potential in a disciplined and structured environment.

Why?

To foster an atmosphere of belonging and connectedness where learners can engage and bring their full selves as active contributors in the community. To build a foundation of trust and mutual respect so that collegial conversations and learning allyship is possible.

NTLO

FREQ. PREP. NO. 10

How?

1. **Build relational trust and rapport**
   - Explicitly build in incremental moments to listen to your learners.
   - Weave storytelling into lessons to share personal experiences and struggles (see **"Storytelling"** in **Culture Practices**).
   - Bond over similar interests and incorporate them into projects.
   - Make an effort to connect with learners outside of the classroom.
   - Help learners get unstuck.
2. **Use verbal and non-verbal communication** to express care and warmth (e.g. through genuine smiles, a warm and firm tone of voice, etc.).
3. **Show competence** through your teaching.
4. **Articulate high standards,** and then follow that with the emotional support and the scaffolding necessary to achieve those high standards.
5. **Acknowledge that productive struggle will happen** and affirm it when it does.
6. **Share power and foster learner agency** (see **"Lift up Assets through Co-Facilitation," "Co-Design Learning Environments"** in **Culture Practices**).

REFLECT

- How would you describe your current stance in the classroom?
- How might your learners describe it, and how might you find out what they think?
- What prework might you need to engage in to authentically practice a warm, demanding stance? (See **"Think Beyond Deficits"** or **"Recognize Your Triggers"** in **Culture Practices**)

GO DEEPER

- See the chapter titled "Establishing Alliance in the Learning Partnership" in Zaretta Hammond's *Culturally Responsive Teaching and the Brain.*
- See Edutopia's article "Warm Demander: An Equity Approach"

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CULTURE

Discover Learners' Interests



What?

A plan to get to know your learners and their interests throughout the year.

Why?

Knowing your learners' interests allows you to build relationships and trust so learners feel connected to what they are learning which allows them to take academic risks.

NTLO

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PREP

NO. 11

How?

1. **Establish time in your class setting for "getting to know you" moments.** These moments can be during social or academic tasks, and make note of responses - this is data too! See **"Community Circles", "Connections", "Storytelling"** and **"Routines and Rituals"** in **Culture Practices** and **"Math Autobiography"** in the **PrBL Practices set.**

2. **Give a Student Interest Survey early in the school year.** Things to include are hobbies, favorite books, extracurricular activities, health issues/allergies, technology they have at home, other responsibilities like jobs or watching their siblings after school, and what name/pronouns they prefer to be called.

   Elementary: Include a Show & Tell or "Student of the Week" in which learners present a "Me Bag" to the class to get to know each other better.

3. **Store survey data in a readily usable way.** Spreadsheets could be a good option as it can be updated throughout the year with new data.

4. **Have regular check-ins with learners throughout the year.** Ask learners about their experience after each problem or project to monitor how things are going for them. You can do this in a reflection journal or in more formal feedback as a class. See **"Praise, Question, Suggestion"** in **Learner-Centered Practices** and **"Conferencing"** in ***Assessment Practices.***

REFLECT

- Making time for getting to know learners and their interests and tracking that data can be challenging. How will you make that time? What might you need to give up?
- How will you utilize what you've learned from learners to inform your work and curriculum planning? How will you leverage their personal data to cultivate equitable learning environments?

GO DEEPER

- This card was adapted from a Cult of Pedagogy blog on relationship building.

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CULTURE

Co-Create Community Agreements



What?

A consensus-driven co-created process that identifies what each and every learner in the group needs in order to collaborate and feel supported and included.

Why?

Collaborative agreements can generate active cooperation, collective sense-making and equitable inclusion of voices. Ensuring each and every learner has an opportunity to co-create shared processes for engaging in learning is a key component to equitable learning environments.

FREQ. PREP. NO. 12

How?

1. **Define two different types of agreements:**
   - **Relational** - How we want to be in relationship with each other (e.g. speak your truth; listen fully; seek out multiple perspectives).
   - **Operational** - Procedures or structures (e.g. start and end on time; end with clear next steps).
2. **Explore the purpose of community agreements and how they will support collective goals.**
3. **As a group, begin brainstorming community agreements** that will help achieve collective goals.
4. **Combine and generalize the agreements** with a discussion.
5. **State all of the final agreements positively** and have few in number.
6. **Display agreements, incorporate them in practice and reflect regularly.**

Variations

- For younger learners, consider a read aloud to guide conversations around setting classroom agreements.
- Use small adhesive pads for learners to write their agreements on.
- Engage in a **"Chalk Talk"** protocol to generate ideas (see **Learner-Centered Practices**).
- Begin with **"Hopes and Dreams"** protocol (see **Culture Practices**).

Before constructing agreements, assess the conditions that will influence the process: What is the group's experience with community agreements? What is the group's existing culture?

REFLECT

- How are you providing opportunities for learners to deliberately practice and reflect on their agreements?
- How are you modeling the agreements for them? Are there opportunities for revision, if needed?
- How are all learners holding themselves and each other accountable?

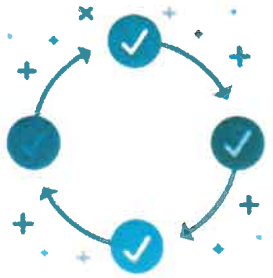
GO DEEPER

- See National Equity Project's "Developing Community Agreements"

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CULTURE

Establish Rituals and Routines



What?

Repeated rituals and routines that reinforce values or mindsets.

Why?

Repeated rituals and routines develop shared agreements and ways of learning with one another. When rituals and routines are intentionally co-developed with each and every voice in the community, belonging, care and connectedness is fostered and cultural assets and identities are honored.

NTLO

FREQ

PREP

NO. 13

How?

1. **Make space with your community** to co-develop a set of values, mindsets, etc. that you want to practice on a regular basis. Consider the cultural assets and identities, interests, and core values of the community and how rituals and routines might honor and validate them.
2. **Co-create repeated rituals or routines** that reinforce those values, mindsets, etc. For example, you might start a certain portion of the day with recitation of inspirational poems or quotes, watch or listen and respond to TED talks or songs that reinforce values, or have rituals around affirming learners' belonging and importance in the classroom community. Or you might use routine mindfulness or centering techniques as part of transitions.
3. **Model, explain why the routines/rituals are important,** and have learners practice the routines/rituals, and/or share expectations for rituals/routines. As needed, return to those expectations or have learners practice again (see **"Co-Create Community Agreements"** in **Culture Practices**).

REFLECT

- How will you ensure all learners have a voice in the process to co-create rituals and routines?
- What might prevent you from regularly integrating a particular ritual or routine, and how might you overcome that challenge?
- How and when are you engaging in active reflection around the structures and systems of your learning environment?
- How can you incorporate student voice and choice in your routines? (See **"Co-Design Learning Environments"** in **Culture Practices**).
- How can you support students to hold themselves accountable to those expectations? What scaffolds can you design to help students build the skills necessary to foster the desired learning environment?

GO DEEPER

- See "The First Six Weeks" by Responsive Classroom www.responsiveclassroom.org/the-first-six-weeks-of-school/
- See the chapter titled "Creating a Culturally Responsive Community for Learning" in Zaretta Hammond's *Culturally Responsive Teaching and the Brain*.
- Read Edutopia's Article "Routine, Ritual, and School Community"

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CULTURE

Community Circles



What?

A ritual and routine that involves learners collectively connecting, reflecting, and developing social and emotional learning skills.

Why?

Routine community circles support the cultivation of belonging, care and community within a learning environment. Agreements and co-facilitated discussions in circles build relational trust between community members and make space to value for cultural assets, identities and voices.

NTLO

FREQ.

PREP

NO. 14

How?

Tips

- Co-design agreements for engaging in community circles.
- Incorporate rituals and routines (see **"Establish Rituals and Routines"** in **Culture Practices**).

For younger learners...

1. **Start with a Greeting:** Learners greet each other by name.
2. **Sharing:** Learners share information about important events in their lives. Listeners often offer empathetic comments or ask clarifying questions.
3. **Group Activity:** Everyone participates in a brief, lively activity that fosters group cohesion and helps learners practice social and academic skills.
4. **Message:** Learners read and interact with a short message written by the facilitator or another learner. The message is crafted to help learners focus on the work they'll engage in that day. Use this as an opportunity to emphasize learning outcomes or project benchmarks.

For older learners...

1. Begin with a check-in question or greeting practice to help you and learners get to know each other and build trust. Be sure to participate in this process.
2. Follow with a lesson, mindfulness activity or reflection to support social and emotional learning, discuss and attend to healing to the classroom community, have fun, or reflect on academics.

REFLECT

- How might you need to introduce circles in order to build buy-in?
- How might you develop the practice slowly over time?
- How might you invite learner voice to co-design the meetings?
- How can you incorporate knowledge and thinking in your circles/morning meetings?

GO DEEPER

- See Responsive Classroom: www.responsiveclassroom.org
- See "Teaching Restorative Practices with Classroom Circles" at www.healthiersf.org

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CULTURE

Lift Up Assets through Co-Facilitation



What?

Processes to distribute power in the learning environment.

Why?

To collaboratively share learning in the community. To foster a culture of belonging, care, community and growth for adults and students.

NTLO

FREQ

PREP

NO. 15

How?

1. **Take time to get to know your learners' strengths, cultural assets, passions, identities, etc.** (see **"Establish a Warm, Demanding Stance"** in **Culture Practices**).
2. **Intentionally make connections between learners' strengths, cultural assets, passions, identities, etc. and desired learning outcomes and processes** (e.g. academic content, professional learning goals, PBL/PrBL Unit).
3. **Invite learner(s) to co-facilitate** an upcoming whole group/small group lesson or professional learning experience.
4. **Prior to engaging in co-facilitation, set aside time to collaboratively generate ideas** for the lesson or professional learning experience (see **"Co-Design Learning Environments"** in **Culture Practices**).
5. **Help each learner design** the lesson, activity, or assignment that they are interested in facilitating. Provide feedback and direct support.
6. **Create authentic opportunities for learners to engage** in co-facilitation or peer-to-peer support. You might create small group rotations where learners can lead a small group around a specific Need-to-Know. You might co-facilitate a Community Circle. (See **"Knows and Need-to-Knows"** and **"Community Circles"** in Culture Practices).
7. **Support each learner in their facilitation process**, being mindful of asking how the learner would prefer to be supported and how they would like to engage in reflection and feedback after the facilitation process (see **"Asset-Based Feedback"** in **Assessment Practices**).

REFLECT

- How can you intentionally build in time to become an ally for each learner?
- What obstacles might prevent you from co-facilitation and how will you overcome them?
- How will you get to know your learners' strengths, cultural assets, passions, identities, etc.? How will you welcome all learners to have opportunities to co-facilitate?

GO DEEPER

- See Emdin, C. (2016). Seven Cs for Effective Teaching. ACSD Educational Leadership. 7(1) Retrieved from https://www.ascd.org/el/articles/seven-cs-for-effective-teaching

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CULTURE

Hopes and Dreams



What?

Learners share what they hope to learn and accomplish.

Why?

To create space to listen to learners' interests, fears, and/or passions about the endeavor they are about to embark on. To help facilitators be responsive to how and what they design. To lift up unique cultural assets, identities, and experiences.

NTLO

FREQ.

PREP

NO. 16

How?

For younger learners you might:

1. Ask learners to think about what kinds of things they hope to learn and accomplish in school. Model this by sharing your own ideas through a think aloud.
2. Ask learners to draw, individually journal, or verbally share their ideas.
   - You might need to distinguish between in-school and out-of-school activities.
   - You might need to clarify the language of "hopes" and "dreams."

For older learners you might:

1. Engage learners in a quick write about their hopes and dreams.
2. Have learners respond to prompts:
   - What was something you accomplished and felt proud of last year?
   - What was something you found difficult or didn't work well for you?
   - What do you think is most important for you to work on this year?
   - What is something you hope to learn and do this year?

Variation: Hopes and Fears Protocol

- Ask learners to write down their hopes and fears for the day/period/school year.
- If time permits, have learners share with a partner.
- Have learners call out fears and hopes as the facilitator lists them for the group.
- End with a discussion: "Did you notice anything surprising or interesting? Did you learn anything new? In order to address our fears and achieve our hopes, what agreements and/or processes will we need?"

REFLECT

- How will you provide opportunities for learners to achieve their desired hopes for the year as much as possible?
- How can you leverage passions and interests to drive learning?
- What are some new insights you learned through this process?
- How can you connect learners' hopes and dreams to developing collaborative agreements? (See **"Co-Create Community Agreements"** in **Culture Practices**.)

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CULTURE

Co-Design Learning Environments



What?

Structured exchanges that co-develop learning environments to be more responsive to learners' assets, identities and needs.

Why?

To enable open communication that invites multiple perspectives on ways to improve the schooling environment. To foster a culture of belonging, care, community and growth. To honor learner voices and leverage their ideas to shape the learning environment.

NTLO | FREQ. | PREP | NO. 17

How?

There are many ways to co-design learning environments with learners. Two practices you might try are co-generative dialogues and surveys.

Co-Generative Dialogues:

1. **Schedule time outside of the classroom setting,** such as before school or during lunch, to meet with learners.
2. **Invite learners who are otherwise not connected to one another to join the group;** they may be from different social, racial, or ethnic groups, or they may perform at different academic levels.
3. **Arrange the physical space so that everyone is seen.**
4. **Thank each learner for coming and explain the purpose of the meeting.** "I have invited you to meet me today to help me become a more effective facilitator/leader."
5. **Establish a safe space for each and every voice.** You might set some ground rules, create collaborative agreements, or provide snacks to thank learners for their contributions.
6. **Create a plan of action to improve the learning environment together and follow through.** You might ask learners to identify a positive practice enacted by a facilitator that he/she/they and others can do more often.
7. **Set a date to meet again to reflect on the plan of action.** Repeat this process until it becomes ritualized (see **"Establish Rituals and Routines"** in **Culture Practices**).

Surveys:

1. **Create a survey to gather learner input.** You might craft a survey to ask learners for feedback after completing a project or to assess the school and classroom culture (see **NTN Culture Survey**).
2. **Spend time thoughtfully analyzing the data.** You might use a **Learner-Centered Practice** card such as **"Chalk Talk," "Start, Stop, Continue," "What? So What? Now What?," or "See, Think, Wonder"** to unpack the data.

REFLECT

- How will you be mindful of lifting voices of those who are typically not heard?
- How will you leverage these exchanges to improve your practice in service for each and every learner to thrive?

GO DEEPER

- See the Chapter 5 in Zaretta Hammond's *Culturally Responsive Teaching and the Brain.*
- See Chapter 4 in Chris Emdin's *For White Folks Who Teach in the Hood...and the Rest of Y'all Too*
- For leaders, see Chapter 8 in Shane Safir's *The Listening Leader*

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CULTURE

W.O.O.P.



What?

W.O.O.P. (Wish, Outcome, Obstacle, Plan) is a practical, accessible, evidence-based activity that helps learners set goals.

Why?

To build learner agency and develop a step-by step plan to achieve goals.

NTLO

FREQ

PREP

NO. 18

How?

1. **Set time aside with learners to engage in W.O.O.P.**
2. **Share purpose for W.O.O.P. with learners.** "W.O.O.P. is a process that will help you with goal setting. We are more likely to accomplish our goals if we identify them, think about possible obstacles for achieving our goals, and plan for how we might get around those obstacles."
3. **Ask learners to identify a wish/goal they want to achieve.**

WISH - What is an important goal that you want to accomplish for this project? Your goal should be challenging but feasible.

4. **Ask learners to imagine one positive outcome of achieving this goal and one obstacle that stands in the way.**

OUTCOME - What will be the best result from accomplishing your goal? How will you feel?

OBSTACLE - What is the main obstacle that might prevent you from accomplishing your goal?

5. **Ask learners to make a plan for how they can get around that obstacle.**

PLAN - What's an effective action to tackle the obstacle? Stated as a "when...then.." What supports might you need to carry out this plan?

6. **Debrief and set a date/time to revisit W.O.O.P.**

REFLECT

- What does it look like and sound like when learners are taking ownership over their learning?
- How are you meeting learners where they are to help them have ownership over this skill?

GO DEEPER

- This resource was taken from Character Lab. Learn more at www.characterlab.org/activities/woop-for-classrooms/

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CULTURE

Project Team Agreements and Group Roles



What?

A consensus-driven co-created process that identifies what each and every learner in a project group needs to be supported and included throughout the duration of a problem or project.

Why?

To establish a culture of belonging, care, community and growth and build learners' skills in being "a supportive member" of a group.

NTLO



FREQ. 

PREP 

NO. 19

How?

Early in a project or problem, learners should create their team agreements and define their group roles:

Team Agreements are usually defined by the project team in two ways:

- **Relational agreements** help a team decide how they want to relate to each other. "How do we ensure everyone feels included? heard?"
- **Operational agreements** help a project team find solutions to problems that may arise. "What do we agree are appropriate levels of communication to and from each member?", "How do we make decisions as a group?" See **"Co-Create Community Agreements"** in **Culture Practices**

Group Roles help learners build skills for collaboration. Roles should:

- Be specific to your content area and tasks and processes for a given project.
- Provide opportunities to leverage learners' assets as well as practice new skills, with care and well-being in mind.
- Be real world roles that scaffold equitable participation in project work:
  - Documentarian: Develops a log for tracking anecdotes, research information and progress.
  - Apprentice: Establishes a schedule of routines and procedures for the group.
  - Time Manager: creates physical or digital space for managing deadlines for completing tasks.

Note:

- Build time for team check-ins to revisit Team Agreements and Group Roles and revise as needed.
- Team agreements and Group Roles are tools to help learners build skills in a collaborative classroom. Just like any skill learners need to acquire, it takes modeling, support, practice, assessment and feedback.

REFLECT

- How are you providing opportunities for project groups to deliberately practice and reflect on their team agreements and group roles?
- How can team agreements & group roles be leveraged outside of a project?

GO DEEPER

- See **"How do I use team contracts to support collaboration in PBL?"** for application of agreements and roles on a Team Contract in the NTN Help Center.
- See **"How do I teach and assess collaboration skills?"** and the NTN Collaboration Rubric in the NTN Help Center.



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CULTURE

Re-Frame Attributes Protocol



What?

A process to reflect on how your actions, beliefs, and feelings towards others impact your work.

Why?

To help you think beyond deficits. To re-frame how you think about other's behaviors.

NTLO

FREQ

PREP

NO. 20

How?

1. **Explain the attributes** that you have about the individual.
2. **Reflect on your feelings and thoughts** when working with the individual. Take into account the potential for misinterpretations resulting from deficit thinking, prejudice and over-generalization.
3. **Consider alternative explanations** by reviewing your documentation and reflections.
4. **Share your reflections** with a colleague, family members, and/or community members. If the individual is a learner, meet with family members to learn more about the expected and observed behaviors in the home.
5. **Make a plan** to change the environment, your actions, and/or expectations for the individual.
6. **Continuously revisit this process** to reassess your attributions and progress.

REFLECT

- After engaging in this process, did you notice any assumptions, prejudices, and biases that might have affected your previous interactions and expectations for this specific person?

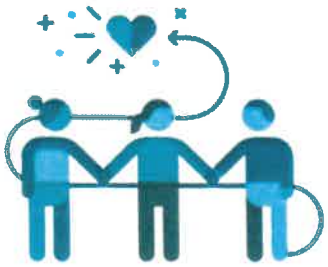
GO DEEPER

- This resource is adapted from *Culturally Responsive Teaching and the Brain*. Learn more about Checking Unconscious Bias at www.crtandthebrain.com
- Engage in a **"Focus Group," "Storytelling,"** or **"Community Walk"** to learn more about others and practice an empathy muscle (see **Culture Practices**).

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CULTURE

Peace Path



What?

The Peace Path is a step-by-step conflict resolution activity that teaches social and emotional skills.

Why?

To engage in dialogue that honors multiple perspectives.
To engage in healing through open, respectful and assertive communication.

NTLO | FREQ. | PREP | NO. 21

How?

Create the Peace Path:

1. **With learners, share the purpose for the Peace Path** and preview an example of an existing Peace Path. (see **"Go Deeper"** for ideas).
2. **Collectively decide on a location** to curate your Peace Path. This could be inside or outside of the classroom.
3. **Collectively decide on "I-Statements"** to guide the dialogue through the Peace Path process. (Examples: I feel__ when people__. I need ___. In the future, will you? I know that I ___. I apologize. Next time I will__).
4. **With your learners, create physical reminders and agreements** of each step in the path (e.g. painted images, cards, etc.).
5. **Practice the Peace Path and engage in role-playing.** (See **"Fishbowl"** in Learner-Centered Practices)

Process to Engage in the Peace Path:

1. **Learners take turns sharing their feelings** and repeating the other learner's feelings.
2. **Learners take turns sharing their needs** and repeating the other learner's needs.
3. **Learners take turns discussing ways to solve the problem** and form an agreement.
4. **Learners take turns sharing how they know** that the conflict has been resolved.

REFLECT

- How will you set up the agreements and structures for using the Peace Path?
- If learners can't solve the problem or conflict on their own, how will you guide them further?
- How will you check back in with learners on their use of the Peace Path?

GO DEEPER

- Learn more at Soul Shoppe's *Peace Path Guidebook*

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CULTURE

Restorative Circles



What?

A restorative justice practice where learners circle up and respond to a series of questions and discuss them in order to repair harm. They are a second step after community circles have been established as a routine.

Why?

To rebuild community and address harm when community trust, agreements, etc. have been broken or violated. To foster a culture of belonging, care, community and growth through active dialogue and reflection.

NTLO



FREQ

PREP

NO

22

How?

1. Before the circle:

- Figure out who was most affected and invite them to participate in the dialogue. Note that restorative circle participants need to agree to be there.
- Talk with each person beforehand — especially those who are affected in harmful ways — to help them begin the process of telling their story.
- Create, discuss, and ask learners if they can agree to norms or agreements for circles, like "Speak from the heart," "Say just enough," "What is said in the circle stays in the circle" and "Listen from the heart."
- Use a talking stick or an object as a way to ensure that every voice is valued and no one is interrupted.
- Organize learners to sit in a circle, and ensure the discussion is led by a circle facilitator.
- Make sure everyone understands what to expect.

2. The circle dialogue:

- Use the restorative questions (see below). Ask each person in turn.
- Facilitate and prompt as necessary. Avoid going into counseling mode and avoid problem solving for learners.
- Use the question answers to help those who were affected build a plan for repairing harm, with supports needed and accountability measures.
- Actively support learners in documenting who was involved, any plans agreed on, accountability measures, supports needed, etc.

3. After the circle:

- Follow up on the agreements and keep track of their status.
- Avoid going into counseling mode and avoid solving the problem for the participants.

4. Restorative Questions: From your point of view, what happened? How have you and others been affected? What feelings or needs are still with you? What would you like to happen next?

GO DEEPER

- This resource was adapted from "Teaching Restorative Practices with Classroom Circles" at www.healthiersf.org
- See the resources at www.centerforrestorativeprocess.com

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CULTURE

Connections



What?

A quick opportunity to welcome learners into the room and connect to one another with low social risk. Connections can also allow students to transition mentally and emotionally into a new or different setting and into or out of the content of the day.

Why?

To help learners feel belonging, care and community within the classroom in order to guide them to more rigorous work and ownership over their own learning.

NTLO



FREQ.



PREP.



NO.

23

How?

1. Invite learners to help choose Connections with you. Learners can pick them from a set of cards or popsicle sticks with titles written on them.
2. Connections can be playful energizers, "Getting to Know You" activities, discussion debriefs or light reflections after a rigorous class period.

I Statements:

- Learners stand in a circle or stay at their seats. When an "I statement" is read that they relate to, they stand at their desk, raise their hand or take a step into the circle. Pause. Learners return to the circle, sit down or lower their hand. Repeat. Some "I statements" to try are: I am an only child. I have more than 3 siblings. I have at least one pet. I don't like change. Avoid questions that divide students by socioeconomic status/class or require social risk.

  For an Elementary variation: Instead of "I statements" say "A Great Wind Blows... for those who dislike chocolate." Each time learners stand if the statement applies to them and then sit back down. Repeat with other "I statements" as time allows.

Opening questions to get learners chatting:

- Have a question posted for class to read. Allow think time or write time and then share answers in groups. If you could go back or forward in time, where would you go? Why? "If you could meet one person, who would it be and why?"

REFLECT

- What structures, rapport and agreements need to be in place to ensure learners can show up as their full selves to connections?

GO DEEPER

- See **"Connections Ideas and Resources"** in the NTN Help Center and **"Rituals and Routines"** and **"Storytelling"** in **Culture Practices** for more ideas to welcome learners into a space.
- See Cult of Pedagogy's blog on **Ice Breakers that Rock** www.cultofpedagogy.com



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CULTURE

The Incredible 5-Point Scale



What?

The Incredible 5-Point Scale is used to assist learners in becoming aware of their emotions and helping them advocate for what they need to self-regulate.

Why?

The Incredible 5-Point Scale allows learners to reflect on how they are feeling. It helps the learner be proactive about attending to their needs so that they can engage in the learning. This process also builds awareness for the facilitator and provides data for the facilitator to adjust learning to be responsive to the needs of the learners.

NTLO | FREQ. | PREP | NO. 24

How?

1. **Introduce the scale** to learner(s). Explain what each level on the scale means.
2. **Model determining where you are** on the scale.
3. **Discuss how you might move** down to blue or green (1 or 2) if you rise above those levels. Discuss how a level 5 will require help from someone else.
4. **Describe when and how to use the scale.** See examples below.
5. **Review and reflect** on the use of the scale with learners. Adjust as needed.

With learners in the classroom, you might:

- Ask learners to reflect on where they are on the scale during Community Circles (see **"Community Circles"** in **Culture Practices**).
- Keep a large version of the scale at the front of the room or small versions on learner tables. Ask learners to track where they are and check in with them as needed.
- Create a "calming corner" with the scale and suggestions and activities for moving down the scale like:
  - Have putty, glitter jars, or stress balls available
  - Use weighted lap pads, allow heavy work (lifting books, wall leaning, jump frog)
  - Have soft seating/bean bag chairs/exercise balls
  - Allow learners to use headphones or hoodies, practice mindfulness
- Use the scale with individual learners, focusing on a particular transition, behavior, etc.

REFLECT

- What support will learners need to use the scale effectively?
- How will you ensure you reflect on and return to the scale with learners?

GO DEEPER

- This resource is taken from "The Incredible 5-Point Scale" by Kari Dunn Buron. Learn more at: www.5pointscale.com

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CULTURE

S.O.D.A.



What?

S.O.D.A. (Stop, Observe, Detach, Awaken) is a self-regulation strategy.

Why?

To support social and emotional needs and to become more emotionally regulated. To cultivate an environment where learners' needs are honored. To build awareness of when logical thinking is shut down by the brain's reaction to the feeling of real or symbolic threat (aka an amygdala hijack).

NTLO | FREQ | PREP | NO. 25

How?

When you notice signs of an impending "amygdala hijack" (you might feel flushed, your vocal cords tightening, etc.), use the S.O.D.A. strategy to regulate your emotions.

1. **Stop:** Cease activity and pause rather than continuing what you were doing or how you were reacting.
2. **Observe:** Rather than reacting, breathe out and in. Notice what is going on. Silently narrate what is happening, using neutral terms.
3. **Detach:** Either mentally or physically, disconnect from what's happening. Literally step away. Think about something beautiful or calming. Try to refrain from worrying about being right, etc.
4. **Awaken:** Awaken to the other person's perspective. Consider what they might be thinking or feeling.

REFLECT

- What are your physical signs of an "amygdala hijack"?
- How can you ensure you remember the S.O.D.A. strategy in a heated moment?

GO DEEPER

- This strategy was taken from the chapter, "Preparing to Be a Culturally Responsive Practitioner" in Zaretta Hammond's *Culturally Responsive Teaching and the Brain*.
- Read VeryWell Mind's "Amygdala Hijack and the Fight or Flight Response" at www.verywellmind.com

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CULTURE

Engage in Mindful Breathing



What?

A powerful meditation practice to help focus attention on breathing and restore a regulated brain state.

Why?

Focusing on the breath is particularly useful because it serves to relieve stress, anxiety and negative emotions - which allows learners to access a calm, regulated brain state so that they can access their prefrontal cortex and be ready to engage in learning.

NTLO | FREQ. | PREP. | NO. 26

How?

There are many mindfulness breathing practices that help learners... Here are a few practices you might guide learners through:

For younger learners...

- **Count to Five (From *Breathe Like a Bear*):** "Take a breath in and think ONE...TWO...THREE...FOUR...FIVE. Take a breath out and think ONE...TWO...THREE...FOUR...FIVE."
- **Be a Bumblebee (From *Breathe Like a Bear*):** "Sit up tall. Make bumblebee wings by sticking your elbows out to the sides. Wiggle your wings all around, and flap them up and down. Take a big breath in and buzz as you let it out. Now make big circles in the air with your bubble bee wings. Make circles one way, and then make circles the other way. Take a big breath in, and buzz as you let it out. Now shake out your wings, take another long breath, and let it all the way out!"

For older learners...

- **Box Breathing:** "Let out all of the air in your lungs to the count of four. Keep your lungs empty for a count of four. Inhale for a count of four. Keep your lungs full for a count of four."
- **Wave Breathing:** Standing still let your hands come to rest on the front of your thighs. Start noticing your breath. Now, as you inhale slowly, reach your chin forwards, glide your hips backwards, and lean your upper body forwards, creating an arch through your back. Pause for a moment, and then as you breathe out slowly, let your head relax downwards, bring your tailbone gently under and forwards, and round your back, coming gradually back into an upright position. Do this for around 8 breaths. This is a lovely way to extend and mobilize your spine. As you move, pay attention to the movement in your spine, and to how you feel your weight through your heels.

(Note that mindfulness practices can be challenging and that the goal isn't to get it right, but simply to try to notice if you get off track. Note that learners shouldn't be forced to close their eyes or stay still as that can activate trauma.)

REFLECT

- How will you make the time for these important practices?
- How might mindfulness breathing support your learners social-emotional well-being?

GO DEEPER

- Learn more about Somatic Mindfulness Exercises at PsychCentral.com

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CULTURE

Practice Mindful Moments



What?

A powerful meditation practice to help restore kindness, empathy and openhearted feeling.

Why?

To help learners access a calm, regulated brain state so that they can access their prefrontal cortex and be ready to engage in learning.

NTLO

FREQ.

PREP

NO. 27

How?

Explain the reason for the practice, set clear expectations, and model. *(Note that mindfulness practices can be challenging and that the goal isn't to get it right, but simply to try and notice if you get off track. Note that learners shouldn't be forced to close their eyes or stay still as that can activate trauma.)*

There are many mindfulness practices that help learners access a calm, regulated brain state. See "Go Deeper" to learn more. Here are a few practices you might guide learners through:

- **Five Senses:**
  - 5 - "Notice 5 things you can see."
  - 4 - "Notice 4 things you can feel."
  - 3 - "Notice 3 things you can hear."
  - 2 - "Notice 2 things you can smell."
  - 1 - "Notice 1 thing you can taste."
- **Grab and Let Go:** Begin by standing and letting your eyes defocus. Slowly breathe in as you step the left leg forward, planting your heel first, then your whole foot. Let your weight move forward onto your left foot, without letting the right foot leave the ground. At the same time, reach forward with the right arm, fingers outstretched. As your left foot lands, close your hand into a fist as though you are grabbing something. Pause for a moment. Slowly breath out as you step back again, bringing your foot and arm back to the original position.

  Do this movement on one side for one or two minutes, and then switch to the other side. Try to keep your attention in the three parts of this movement: your breath, your hand/arm, and your foot/leg.
- **R.A.I.N.:**
  - R - Recognize what is going on.
  - A - Allow the thoughts, emotions, or sensations we have recognized to simply be.
  - I - Investigate with kindness. You might ask yourself, "What most wants attention? How am I experiencing this in my body?"
  - N - Natural awareness, which comes from not identifying with the experience.

  Learn more about Somatic Mindfulness Exercises at PsychCentral.com

REFLECT

- How will you make the time for these important practices?
- What kinds of mindfulness practices might reinforce your goals for learners?
- How might mindfulness support your learners social-emotional well-being?

GO DEEPER

- Visit www.mindful.org/tara-brach-rain-mindfulness-practice/
- Read Teaching Tolerance's "Mindful of Equity"
- Read Edutopia's article "Mindfulness in High School"

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Learner-Centered Practices



Cultivating Equitable Learning Environments Through Meaningful and Equitable Instruction

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NOT SURE WHERE TO START?

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Overview

This set of cards provides practices in support of communities who actively commit to meaningful and equitable instruction that:

- **Engages learners in authentic complex thinking and problem-solving**
- **Emphasizes equitable collaboration and discourse**
- **Extends and builds learners' knowledge, skills, and mindsets – including their ability to critically examine systems (and system inequities) and engage in positive change**
- **Encourages diverse voices and perspectives**
- **Is culturally responsive to learner needs**
- **Centers learner assets and voices**

OVERVIEW

Each of the Learner-Centered Practices reflects an underlying shift in the way learners and facilitators cultivate their day-to-day instruction.

From Teacher-Centered to Learner-Centered - The practices curated in this set cultivate a learning environment where communities take ownership of their learning and center the instructional approach on authentic, complex thinking, and problem-solving. When designed with an intentional focus on encouraging cultural assets and identities, these practices can be highly responsive and lead to sustained learner assets and growth in learning outcomes across all subgroups.

Culturally Sustaining Approaches - The practices curated in this set encourage opportunities to extend and build learners' knowledge, skills, and mindsets – including their ability to critically examine systems (and system inequities) and engage in positive change.

Research/Supporting Resources

- Hammond, Zaretta. *Culturally Responsive Teaching and the Brain.*
- Gorksi, Paul. *Reaching and Teaching Students in Poverty.*
- Gibbons, Pauline. *Scaffolding Language, Scaffolding Learning.*
- Walqui, Aida et al. *Scaffolding the Academic Success of Adolescent English Language Learners.*

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LEARNER-CENTERED

3-2-1 Bridge



What?

A routine to activate prior knowledge, uncover initial thoughts, ideas, questions, and understandings about a topic and then connect them to new thinking after some instruction.

Why?

This routine helps learners develop understanding of their thinking over time.

NTLO | FREQ. | PREP. | NO.

1

How?

Initial Responses to the Topic	New Responses to the Topic
3 Thoughts/Ideas	3 Thoughts/Ideas
2 Questions	2 Questions
1 Analogy	1 Analogy

Bridge

Explain how your new responses connect to your initial responses.

1. **Facilitator asks learners** to write their initial 3-2-1 responses to a topic on paper.
2. **Learners then interact with a resource to unpack the topic** such as reading an article, watching a video, or engaging in another Learner-Centered practice.
3. **After the experience, learners complete another 3-2-1.**
4. **Learners individually reflect on the prompt:** "Explain how your new responses connect to your initial responses."
5. **Learners share with a partner the answer to the prompt:** "Explain how and why your thinking may have shifted." (Make it clear to learners that their initial thinking is not right or wrong, it is just a starting point.)
6. **As a whole group,** debrief to share ideas and questions raised by the experience.

REFLECT

- What articles, videos, or activities might be appropriate for 3-2-1 Bridge?
- How can you utilize this process to help uncover misunderstandings, build empathy, or understand multiple perspectives?
- If new understandings differ with prior knowledge, how will you help participants navigate the potential internal conflict?

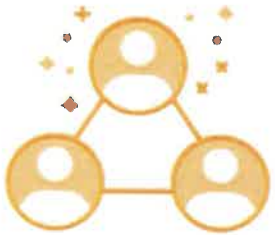
GO DEEPER

- This Thinking Routine was taken from Harvard Project Zero. Learn more at www.pz.harvard.edu/resources/3-2-1-bridge

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LEARNER CENTERED

The Best Answer Protocol



What?

A structured protocol to help learners answer a deep question.

Why?

Provides opportunities for learners to share their learning, perspectives and values from each other. Engages learners in constructive dialogue towards a common understanding or consensus about a topic.

NTLO

FREQ. PREP. NO. 2

How?

1. **Facilitator prepares a question** with which learners frequently have difficulty.
2. **Learners form groups of 4** and assign themselves to letters A, B, C, and D.
3. **Facilitator provides a question** to learners. They may or may not have resources to research the answer to the question.
4. **Learners spend 5-10 minutes** discussing their answer to the question.
5. **Person A writes notes** about the group's answer.
6. **Person A gives notes** to Person B. Person B then shares the group's idea to the class.
7. **Person B from each group** stands up and reads the answer from his/her/their group. Person C in every other group writes a synopsis of what Person B from each group shared.
8. **Groups use notes** from Person C to evaluate which group had the best answer. Provide a limited time for discussion so that conversation is directed and efficient.
9. **Groups decide** why they like the answer they chose, and Person D writes down the group's rationale. A group may choose their own answer, as long as they justify why.
10. **Person D uses notes** to share out their group's best answer and rationale with the rest of the class.

REFLECT

- This protocol requires that learners are very clear on the directions. How might directions be shared and reinforced? What agreements are needed?
- What kind of question would generate the right amount of discussion/thinking and be worthy of the time needed for this protocol?

GO DEEPER

- Read NTN's "A Protocol for Crushing the Critical Thinking Questions" at www.newtechnetwork.org

New Tech Networ

LEARNER-CENTERED

Block Party



What?

A text-based protocol for learners to engage with a variety of texts, poems, articles, or whole books.

Why?

Gives space for learners to unpack text, provide their own reasonings, and collaboratively share ideas and questions.

NTLO

FREQ. PREP. NO. 3

How?

1. **Facilitator writes quotes** on index cards prior to the session. You may choose one quote per learner, or repeat some quotes.
2. **Learners randomly select** quotes/cards and spend a few minutes reflecting upon their quote's meaning for them and their work (3 minutes).
3. **Learners mingle** and share quotes in pairs. Learners are encouraged to share with 3 other participants in 5-minute segments (15 minutes).
4. **(Optional) Form triads or quads** and share quotes and insights about the text and its implications for our work. Extension: Speculate on the purpose/origin of the text (12-15 minutes).
5. **As a whole group,** share ideas and questions raised by the experience. This can be done popcorn style or as a round, but is usually not a conversation (10-12 minutes).
6. **The facilitator shares** the source of the quotes, posting the link, distributing the article, etc., for future work (1 minute).
7. **Debrief the process** (5 minutes).

REFLECT

- What texts might be appropriate for a Block Party?
- What challenges might you face in implementing Block Party and how might you overcome them?
- How can you use this practice to help learners learn something about themselves and/or about others?
- What quotes might you choose to help learners critically examine systems and inequities in the topic they are learning about?
- How does your selected text respond to the social times of the society?

GO DEEPER

- This resource is adapted from National School Reform Faculty. Learn more about "Block Party" at www.nsrfharmony.org

New Tech Networ

LEARNER CENTERED

Card Sort



What?

Learners sort cards with information or vocabulary into meaningful groups.

Why?

Gives space for learners to provide their own reasonings and promotes self-assessment; serves as a formative assessment.

NTLO

FREQ. PREP.

NO. 4

How?

1. **Decide which concepts or terms** you want learners to learn and prepare cards with the name of each concept or term. Make enough sets of cards for pairs or trios of learners to use.
2. **Have learners sort the cards** into meaningful groups or matches. Depending upon the level of learners' experience with this practice, you may want to model the conversation learners will have with one another to determine how to sort their cards or how to match them. A "closed" sort means that the facilitator provides the categories for sorting. (Example: please sort using the following categories: nouns, verbs, and other.) An "open" sort means that learners create the categories themselves.
3. **Discuss the categories or matches.** Ask groups to explain how they decided to sort their cards.

REFLECT

- How can you use this practice to help learners learn something about themselves and/or about others?
- What challenges might you face in implementing Card Sorts and how might you overcome them?
- How can you utilize Card Sort to support students in their understanding of key vocabulary and project terminology?
- How will you ensure there is equitable dialogue where each and every learner's voice has an opportunity to share their thoughts?
- What concepts or terms are learners sorting and how might that engage their thinking about power and equity and the disruption of oppression?

GO DEEPER

- Search "Card Sort" on The Teacher Toolkit website. Visit www.theteachertoolkit.com/

New Tech Networ

LEARNER CENTERED

Chalk Talk



What?

Learners respond to prompts in writing and then respond to what other students said, also in writing.

Why?

Allows learners to articulate, expand on, and revise their knowledge.
Allows learners to connect with and gain insights from each other.

NTLO

FREQ.

PREP.

NO.

5

How?

1. **Create questions, prompts, ideas or math problems** to post on pieces of chart paper around the room, creating various stations. (Images, documents, or quotes may also be used.)
2. **Learners silently move from one poster to another** to analyze what is posted and record their individual response(s) on the chart paper or their own sheet.
3. **After 3-5 minutes, have groups rotate to the next station** and repeat until all groups have visited each station, still silently responding in writing. Learners can also respond to what others have written.
4. **Allow learners to view all the responses** when finished.
5. **Reflect as a class** to discuss what they noticed, any connections, and wonderings.

REFLECT

- What agreements might be needed to set or model to help guide this activity?
- In what ways can accountability be created for individual input and participation?

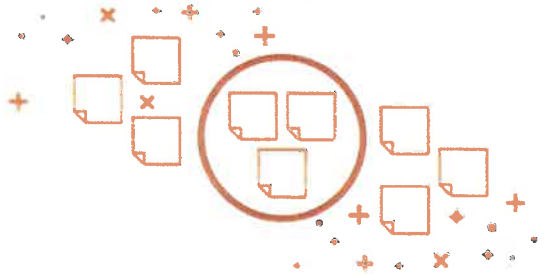
GO DEEPER

- See EL's resources on chalk talks at www.eleducation.org/resources/chalk-talk
- Search "Chalk Talk" on the National School Reform Faculty website at www.nsrfharmony.org

New Tech Netw

LEARNER CENTERED

Affinity Mapping



What?

A protocol to help organize answers or connect ideas and create themes after answering a question or a brainstorm.

Why?

Affinity Mapping helps learners think creatively, synthesize information into new themes and categories and make connections between their ideas.

NTLO

FREQ. PREP. NO. 6

How?

1. **Hang pieces of chart paper on a wall** in the room so that small groups can gather around the paper. Give sticky notes to each learner in each group.
2. **Ask a question or allow learners to brainstorm** on a topic adding sticky notes with answers or ideas to the chart paper. Learners should be working silently.
3. **Have the learners organize ideas** by themes or categories. Remind learners to remain silent as they move the notes around. Directions might sound like this: "Which ideas go together? As long as you do not talk, feel free to move any sticky note to any place." Learners may also add ideas in this stage.
4. **Ask learners to discuss themes** and categories and come up with a name for each one.
5. **Have each small group share their ideas.** Gather that data, and have an open discussion using questions such as the following to help learners make connections:
   a. What themes emerged? Were there any surprises?
   b. How did this expand your knowledge on the topic or your notion of what the question at the beginning asked you to consider?

REFLECT

- How can you use this practice to help learners discover something about themselves and/or about others?
- How will you ensure there is equitable dialogue where each and every learner's voice has an opportunity to share their thoughts?

GO DEEPER

- This protocol was adapted from the School Reform Initiative. To find more protocols like "Affinity Mapping" go to www.schoolreforminitiative.org
- See **"Chalk Talk"** and **"Start, Stop, Continue"** to connect other Learner-Centered Practices to this protocol.

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LEARNER CENTERED

Concept Attainment



What?

Facilitator introduces new concepts through providing learners with a series of examples and non-examples.

Why?

Learners make connections and develop their own definitions.

NTLO

FREQ. PREP.

NO. 7

How?

1. **Provide learners** with a series of examples and non-examples of an important academic term or idea. (Consider examples and non-examples that will help shape student thinking.)
2. **Ask learners** to develop common definitions of the important academic term or idea from the examples.
3. **Test and refine those definitions** through looking at more examples until learners are able to name the idea.
4. **Ask learners** to capture, share, or communicate the common definition and refinements to the definition.

REFLECT

- What challenges might you face as you try to implement Concept Attainment?
- What might you need to prevent or overcome those challenges?
- What kinds of examples and non-examples did you provide? How did those examples and non-examples help learners grasp a deeper understanding of the topic?
- Every learner's own experiences, perceptions, and knowledge will impact their definition. How can you leverage this opportunity to build empathy and active listening amongst your learners?
- How will you create space for multiple perspectives and voices to be heard?
- How does the selected examples and non-examples help learners critically examine systems and inequities in the topic they are learning about?

GO DEEPER

- This resource is adapted from The Cult of Pedagogy. Learn more at www.cultofpedagogy.com/concept-attainment/

New Tech Netwo

LEARNER-CENTERED

Concept Mapping



What?

Learners make meaning of a concept through generating and arranging vocabulary/ descriptors.

Why?

Provides opportunities for learners to be leaders of their own learning and leverage their own background knowledge and expertise.

NTLO

FREQ. PREP. NO. 8

How?

1. **Select a topic, concept, or issue** for which you want learners to map their understanding.
2. **Generate**: Ask learners to generate a list of ideas and initial thoughts that come to mind when they think about this particular topic/issue. Be mindful of the importance of building awareness of multiple perspectives.
3. **Sort**: Ask learners to sort their ideas according to how central or tangential they are. Place central ideas near the center and more tangential ideas toward the outside of the page.
4. **Collect**: Ask learners to connect their ideas by drawing connecting lines between ideas that have something in common. You might have learners provide explanations and reasoning for why they believe the ideas are connected.
5. **Elaborate**: Ask learners to elaborate on any of the ideas/thoughts they have written so far by adding new ideas that expand, extend, or add to your initial ideas.
6. **Continue generating, connecting, and elaborating new ideas** until learners have a good representation of their understanding.

REFLECT

- What concepts might be appropriate for Concept Mapping?
- What agreements are needed to ensure equitable voice and participation?
- How will you scaffold this practice to make it accessible to all learners?
- How can you use this practice to help learners learn something about themselves and/or about others?

GO DEEPER

- See iMindQ. Learn more at www.imindq.com/uses/concept-mapping
- This practice was taken from Harvard Visible Thinking Routines. Learn more at www.visiblethinkingpz.org

New Tech Networ

LEARNER CENTERED

Constructivist Listening Dyad Protocol



What?

To create a safe space to become better at listening and talking in depth. A dyad is for the benefit of the speaker, not the listener.

Why?

To construct meaning through language by talking and being listened to. To challenge our listening habits of interjecting, overriding, or tuning out.

NTLO

FREQ. –

PREP. –

NO. 9

How?

GUIDELINES

- Each person has equal time to talk.
- The listener does not interpret, paraphrase, analyze, give advice, or break in with a personal story.
- Confidentiality is maintained.
- The speaker does not criticize or complain about a listener(s) or about mutual peers during their time to talk.

1. **Review purpose and guidelines for the protocol.**
2. **Ask learners to get into groups of two.**
   - You might ask learners to share with a "shoulder" partner.
   - You might ask learners to find someone they feel comfortable sharing confidential stories with.
   - You might ask learners to share with someone they would like to learn more about.
3. **Each person will have 2 minutes to respond** to a prompt (you can alter the time based on your needs).
4. **Debrief with learners.** See suggested prompts below.
   - What came up for you using this structure?
   - What came up for you reflecting on the prompt?
   - What worked for you? What was difficult for you?

REFLECT

- How will you ensure participants feel safe to participate in this practice?
- What types of agreements need to be in place prior to engaging in this activity? How will you ensure learners hold themselves to these agreements?
- How will you ensure learners are ready to be vulnerable to share their thoughts with others?
- What types of prompts are appropriate for this practice?

GO DEEPER

- This resource is adapted from National School Reform Faculty. Learn more at www.nsrfharmony.org

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LEARNER CENTERED

Fishbowl



What?

A group of learners have a conversation in an inner circle while learners in an outside circle observe.

Why?

Used to model effective interpersonal communication and support learners' interaction around important content.

NTLO

FREQ. –

PREP. –

NO. 10

How?

1. **Set up the room.** Arrange chairs in the space in two concentric circles. The inner circle may be only a small group or even partners.
2. **Select a topic and prepare for the discussion.** Explain the activity to learners. Ensure they understand the roles they will play.
3. **Discuss roles and agreements.** The group in the inner circle interacts, possibly a discussion protocol or a role play "script." Give each learner in the outer circle a list of aspects of group interactions they should silently observe and comment on. You might consider having learners complete a graphic organizer or prepare feedback for a particular member in the inner circle.
4. **Debrief.** Ask learners of the outer and inner circle to reflect and share what they observed based on the prompts you gave. Make sure all learners have equitable opportunities to participate.

Variation - User Experience Fishbowl:

What? Share know-how gained from the experience of using or trying something with a larger community of people.

1. **Seat users of the process/resource/etc. you'd like to learn more about in the inner circle.** Ask them to describe their experiences with honesty, talking to each other as if the outer circle didn't exist. Have the inner circle discuss until they are done.
2. **Learners in the outer circle spend a few minutes creating questions** and asking them to participants in the inner circle.
3. **Inner circle and outer circle discuss freely** until all the questions are answered.
4. **Have outer circle reflect.** "Based on what was heard, what will this mean as you refine, scale, or implement the process/resources?"
5. **Debrief the process.**

REFLECT

- How will you ensure there is equitable dialogue where each and every learners' voice has an opportunity to share their thoughts?
- How can you use this practice to help learners learn something about themselves and/or about others?

GO DEEPER

- "Fishbowl" is adapted from Facing History. Learn more at https://www.facinghistory.org
- "User Experience Fishbowl" is adapted from Liberating Structures. Learn more at www.liberatingstructures.com

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LEARNER CENTERED

Four Corners



What?

Four Corners is an interactive way to respond to questions that involves physical movement.

Why?

Four Corners is an interactive question response activity that involves physical movement.

NTLO | FREQ. | PREP. | NO. 11

How?

1. **Prepare:** Generate open-ended questions that have good potential for discussion and can be answered several ways. Often, these might be in the form of statements with which the learners can agree or disagree. You should also generate 2-4 answers.
2. **Introduce statements or questions:** Project your question, or post it on your board. When you present the question to the learners, tell them that they should not move immediately. Ask learners to take a moment to reflect on their answer and rationale first before moving to a corner. You might have learners journal their answers.
3. **Move:** Announce the location for each answer, and have the learners move to the corner that corresponds to their own answer.
4. **Learners discuss & share:** At their corners, provide them with a prompt to discuss their answer with someone else (2-3 minutes). Have one or two groups from different corners share their thinking with the whole class.
5. **Repeat steps 2-4:** This is a time that you might want to debrief the question, or move on to the next question, depending upon how the rest of your lesson will go.

REFLECT

- How will you ensure there is equitable dialogue where each and every learners' voice has an opportunity to share their thoughts?
- What scaffolds might be needed to support interpersonal communication?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How will the questions you choose help engage learners' thinking about power and equity and the disruption of oppression?

GO DEEPER

- This resource is adapted from Facing History. Learn more at www.facinghistory.org/resource-library/teaching-strategies/four-corners

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LEARNER CENTERED

Jigsaw



What?

Learners are divided into small groups; each group learns a portion of content. Then learners meet with others who learned different content and share what they learned.

Why?

Allows learners to connect with and learn from each other and build interdependence.

NTLO

FREQ. PREP.

NO. 12

How?

1. **Explain the jigsaw process.** Let learners know how they will be accountable to their expert groups and how they will be accountable for what was shared by others in the home group.
2. **Arrange learners into expert groups.** Provide different text or materials for each expert group.
3. **Ask learners to read or review materials independently,** looking for key points, new information, or answers to questions to share with their expert groups.
4. **Have learners meet in expert groups,** share their individual responses, and come to consensus about the best responses. Have learners check that response with you and then have learners capture or summarize their learning in a way they can readily take back to their home groups.
5. **Have learners go to a home group** with representatives from each expert group. If necessary, remind learners how they will be individually accountable for knowing what was shared by others in the home group. Each person will then share what they learned in the expert group with the home group.
6. **Have learners independently capture or summarize** what they learned from others in the home group.

REFLECT

- What challenges might you face as you try to implement Jigsaw in the classroom, and what might you need to prevent or overcome those challenges?
- Jigsaws take time to learn how to do well. How will the process be repeated so everyone can master it?
- How will you scaffold this practice to make it accessible for all of your learners?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How do the selected texts help learners critically examine systems and inequities in the topic they are learning about?

GO DEEPER

- Learn more at www.jigsaw.org

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LEARNER CENTERED

Knows and Need-to-Knows



What?

Processes to understand learners' prior knowledge and elicit questions around a given topic.

Why?

Understanding learners' prior knowledge and questions allows a facilitator to personalize and adapt the learning experiences to support individual needs. This allows learners to drive the inquiry process.

NTLO

FREQ. –

PREP –

NO 13

How?

There are many ways to collect Knows and Need-to-Knows. Below are a few practices you might try:

Share a Resource

1. Share an entry document, problem statement, artifact, book, video, or driving question to spark Knows and Need-to-Knows. Consider using a **Learner-Centered Practice** such as **"Chalk Talk," "Block Party,"** or **"Think, Feel, Care"** to unpack the resource.
2. Ask learners to share Knows and Need-to-Knows. Use **"Think, Pair, Share"** to help learners reflect and share their thoughts.
3. After collecting Knows and Need-to-Knows, collect learner input on authentic Next Steps that will support a learner-driven inquiry process.

Engage Small Group Collaboration

1. Have learners individually separate their Knows and Need-to-Knows by logistics, content, and skills.
2. Ask learners to share their Knows and Need-to-Knows with a partner. Ask them to notice which ones are similar or different.
3. Have those partners find another pair to combine their list with. That group of 4 will find another group of 4 to combine their list.
4. Debrief and share lists as a whole class.
5. Collect learner input on authentic Next Steps that will support a learner-driven inquiry process.

Leverage Storytelling

1. Invite a community partner, expert, or a focus group to share their story with the whole class. Prepare the guest(s) and your learners beforehand with the purpose of the visit. See **"Storytelling," "Focus Group,"** or **"Community Walk"** in **Culture Practices.**
2. After actively listening, ask learners to share Knows and Need-to-Knows. Use **"Think, Pair, Share"** to help learners reflect and share their thoughts.
3. Collect learner input on authentic Next Steps that will support a learner-driven inquiry process.

REFLECT

- How will you be mindful of your learners' needs as you design this process?
- How will you revisit Knows and Need-to-Knows throughout the project?
- How can project groups manage their own Knows and Need-to-Knows lists?

GO DEEPER

- Search "Knows and Need-to-Knows Project Roll Out" in the NTN Help Center

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LEARNER CENTERED

Praise, Question, Suggestion Protocol



What?

A process to provide constructive peer critique.

Why?

To optimize critique and feedback in preparation for revision of work. It should be used after a draft of what will become a finished product is complete. The focus is on offering feedback that is beneficial to the author.

NTLO

FREQ. PREP.

NO. 14

How?

BEFORE YOU BEGIN:

- Provide agreements/norms for engaging in critique and feedback. See **"Establishing a Culture of Critique"** in **Assessment Practices.**
- Provide time guidelines to keep feedback effective and focused.
- Feedback can be written on sticky notes/supporting document and given to the author.

1. **Provide product descriptors and rubrics** as clear guidelines of the expectations and criteria for the piece of work that will be critiqued. (For example, a particular section of the project rubric.) If the work is written, providing copies for the critique group is helpful.
2. **The first learner presents a draft** of his/her/their work and offers a focus question(s) to the group.
3. **The group provides specific praiseworthy comments** that help the presenter with his/her/their work.
4. **Next, the group asks clarifying and probing questions** to get a better understanding of the presenter's work.
5. **Lastly, the group offers helpful and specific suggestions** based off of the criteria from the descriptors and rubrics. Feedback should relate to the focus question(s) identified by the presenter.
6. **After each member of the group has offered feedback,** the presenter thanks the group and reflects aloud on suggestions he/she/they want to implement.
7. **Others then present their work** in turn and cycle through the feedback process.

GO DEEPER

- See EL Education: "Management in the Active Classroom"

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LEARNER CENTERED

See, Think, Wonder



What?

A structured routine to help learners make careful observations and thoughtful interpretations.

Why?

To stimulate curiosity and set the stage for inquiry.

NTLO

FREQ.

PREP

NO. 15

How?

1. **Ask learners to make observations on a resource** like artwork, image, artifact, topic, article, quote, work sample, etc.
2. **Ask learners to use the prompts** to unpack what they see, think, and wonder about the resource.

   See: What do you see? (I see...) This is a moment to describe what is seen in the resource, avoiding judgments or assumptions.

   Think: What do you think about that? (I think...) This is a moment to make sense of what is seen. Encourage learners to provide reasoning and rationale for their interpretations.

   Wonder: What does it make you wonder? (I wonder...) This is a moment to discuss connections or implications to the driving question or other Need-to-Knows.
3. **Debrief**

Variations:

- Ask learners to share in pairs, small groups, or as a whole class.
- Ask learners to write down their responses.
- Try the same process through **"Hear, Think, Wonder."**
- Use these prompts with **"Chalk Talk"** in **Learner-Centered Practices.**
- Consider using this practice in the Project Entry Event to spark inquiry and interest.
- Consider using this practice to elicit student knows and need-to-knows. See **"Knows and Need-to-Knows"** in **Learner-Centered Practices.**

REFLECT

- What scaffolds will you provide to help participants engage with this practice?
- How might you use this practice to build understanding of multiple perspectives?
- How can you use this practice to help learners learn something about themselves and/or about others?

GO DEEPER

- This Thinking Routine is adapted from Harvard Project Zero. Learn more at www.pz.harvard.edu/resources/see-think-wonder

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LEARNER-CENTERED

Socratic Seminar



What?

A learner-centered discussion where learners make meaning of a rich text.

Why?

Socratic Seminars are a tool for equitable dialogue that promote critical thinking and allow learners to share their voice around a common topic.

NTLO

FREQ. =

PREP. =

NO. 16

How?

1. **Select a rich text** and develop some intriguing, open-ended questions.
2. **Give learners time** to prepare for the seminar by reading the text and annotating, responding, or writing.
3. **Review discussion agreements** with students and review effective discussion strategies or provide sentence starters as needed. You might have learners set a goal for the seminar using the Oral Communication rubric.
4. **Pose an open-ended discussion** for learners to start the seminar, and then have learners discuss. If ensuring everyone has a voice is an issue, you might give tokens to learners and have them "spend" a token every time they say something.
5. **Have learners** go back to the agreements and discussion strategies and reflect on the effectiveness of the Seminar and whether or not they met their goals.

REFLECT

- What challenges might you face as you implement Socratic Seminars in the classroom?
- What might you need to prevent or overcome those challenges?
- What agreements are needed to ensure equitable voice and participation?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How does the selected text(s) help learners critically examine systems and inequities in the topic they are learning about?
- How does the selected text(s) respond to or build learners' knowledge, skills, and mindsets?

GO DEEPER

- Watch Socratic Seminar in action on the Teaching Channel: https://www.teachingchannel.org
- Learn about Socratic Seminar at Facing History: www.facinghistory.org

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LEARNER-CENTERED

Start, Stop, Continue



What?

An action-oriented technique that encourages learners to design practical ideas.

Why?

Focus the team on creating a list of concrete actions it can take to improve.

NTLO

FREQ. PREP. NO. 17

How?

1. Prepare
   - Facilitator sets up three posters on the wall: one for start, one for stop, and one for continue.
   - Facilitator explains the steps and purpose.
2. Ideation (10-15 minutes)
   - Facilitator hands out sticky notes to learners. Learners should place their sticky notes on the appropriate poster boards on the wall.
3. Grouping (10-15 minutes)
   - Learners group sticky notes into logical themes. Learners can use markers to draw circles around related sticky notes. Facilitator encourages learners to stand up and move from poster to poster to make this part interactive and fun.
4. Optional Dot Voting to Prioritize Discussion (5-10 minutes)
   - Facilitator tells each learner that they have a certain number of votes that they can use to indicate their preference for a sticky note or group. Make sure learners understand that they can distribute their votes as they wish. For example, one participant could place all their votes on a single sticky note or distribute their votes evenly across many sticky notes.
   - Facilitator has the learners walk up to the poster boards and vote on sticky notes or groups.
   - After voting is complete, the facilitator should sort the sticky notes based on the number of votes each received. This sorted list represents the collective prioritization of the sticky notes.
5. Discussion (20-40 minutes)
   - If dot voting was used, then the team should discuss the sticky notes in prioritized order. If dot voting was not used, the facilitator can choose the order of discussion. The facilitator can optionally choose to time the discussion of each individual sticky note as well (5 or 10 minutes). The advantage of this approach is that it tends to keep the conversation on topic and moving at a faster pace.

GO DEEPER

- This resources was taken from Retrium. Learn more at www.retrium.com

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LEARNER CENTERED

Text Discussion Protocol



What?

Learners are divided into pairs or groups; each silently listens to or reads a text. Each learner has a turn to share their thoughts on a discussion point.

Why?

Text Discussion Protocol allows learners to connect with and learn from each other. It promotes equitable discourse and engages active listening and participation.

NTLO



FREQ.

PREP.

NO. 18

How?

1. Text discussion protocol is best for groups of three or four. Select a rich text and determine what to have learners focus on.
2. Ask learners to read, or listen while you read aloud.
3. As they read or listen, ask them to consider the following discussion points: 1) connections to something they've done, seen, thought, felt or experienced, 2) key points, 3) an idea to explore further, etc.
4. After learners have captured their thoughts, each member will take up to two minutes to share one of the discussion points.
5. Group members have three minutes to respond to what was said. This process will repeat for each group member.
6. Steps 4-5 can be repeated multiple times, sharing a different discussion point each time.
7. Ask learners to reflect on the protocol and what they learned.

REFLECT

- What challenges might you face as you try to implement text discussion protocol in the classroom?
- What might you need to prevent or overcome those challenges?
- How can this process support equal participation and active engagement?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How does the selected text(s) help learners critically examine systems and inequities in the topic they are learning about?
- How does the selected text(s) respond to or build learners' knowledge, skills, and mindsets?

GO DEEPER

- Try other protocols like **"Three Levels of Text"** and **"Block Party"** in **Learner-Centered Practices.**
- Visit School Reform Initiative for other protocols to support equitable dialogue: www.schoolreforminitiative.org/protocols/

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LEARNER-CENTERED

Think, Feel, Care



What?

A routine to consider the diverse perspectives held by the various people who interact within a particular system.

Why?

To help learners understand that the variety of people who participate in a system think, feel, and care differently about things based on their positions in the system. This routine fosters perspective taking, raises questions, and reveals areas for further inquiry.

NTLO

FREQ. PREP. NO. 19

How?

1. **Provide learners a text, image, or artifact** to explore the perspectives of a person within a particular system. Examples of systems: a school, a community, a habitat, a company, a country, etc.
2. **Ask learners to consider what each person within the particular system might think, feel, and care about.**

   Think: How do you think this person understands the system they are in and their role within it?

   Feel: How do you think this person feels about the system they are in and their position within it?

   Care: What do you think are this person's values, priorities, or motivations with regard to the system they are in? What do you think is important to this person?
3. **Debrief.**

Note:

- It is important to push learners beyond stereotypes and to try to imagine the lived experiences of particular people. Practices you might try to build this skill: **"The Paseo"** and **"Asset Mapping"** in Culture Practices.
- It is important that learners feel safe to show up in these conversations and that the facilitator creates and maintains a safe space to participate. Practices you might try to build a safe space; **"Recognize Your Triggers," "Co-Create Community Agreements,"** or **"Storytelling"** in **Culture Practices.**

REFLECT

- How might you lead participants in a discussion that addresses assumptions and where they might come from? How might you encourage participants to challenge their assumptions?
- How will you prepare for and frame this process so that participants engage in safe, inclusive, and emotionally supportive dialogue?
- What processes will you take to ensure you are thoughtful of the text, images, and/or artifacts you choose to help participants explore the perspectives of a person?

GO DEEPER

- This Thinking Routine was taken from Harvard Project Zero. Learn more at www.pz.harvard.edu/resources/think-feel-care

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LEARNER-CENTERED

Think, Pair, Share



What?

Think, Pair, Share (aka turn and talk) is a simple social talk structure that gets learners thinking and engaging with a partner.

Why?

It's a powerful tool to encourage learners to connect with and learn from each other. It promotes equitable discourse and engages active listening and participation.

NTLO

FREQ. PREP. NO. 20

How?

1. **Create a question or prompt** that requires learners to reflect on, expand, or synthesize their knowledge and thinking.
2. **As needed, review Think, Pair, Share structures** or expectations with learners.
3. **Ask learners** to quietly reflect or write about the question/prompt. If helpful, provide sentence starters to enourage the process.
4. **Have learners share** their thinking with a partner. Divide the time to ensure each learner has a chance to share.
5. **Provide gentle accountability** by asking a few random learners to share what their partners said.

REFLECT

- How will you ensure there is equitable dialogue where each and every learner's voice has an opportunity to share their thoughts?
- How can you use this practice to help learners learn something about themselves and/or about others?
- What challenges might you face as you try to implement this strategy in the classroom? What might you need to prevent or overcome those challenges?
- What types of agreements need to be in place prior to engaging in this activity? How will you ensure learners hold themselves to these agreements?

GO DEEPER

- See the protocol in action at EL Education: www.eleducation.org/resources/classroom-protocols-in-action-think-pair-share

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LEARNER-CENTERED

Three Levels of Text Protocol



What?

A multi-layered learning tool designed to deepen understanding of a text and explore implications for learners' work.

Why?

When learners have trouble with reading comprehension, it can affect their performance in many subjects. This protocol strengthens skills by asking learners to respond to 3 levels of the text: literal (level 1), interpretation (level 2), and implications (level 3).

NTLO | FREQ. | PREP | NO. 21

How?

GUIDELINES

- Establish agreements prior to discussion.
- Ensure you have a facilitator/timekeeper (who also participates).
- Stick to the time limits. Each round takes up to 5 minutes per person in a group. Emphasize the need to watch air time during the brief group response segment. Do 1-3 rounds. Can be used as a prelude to a text-based discussion or by itself.

1. **Have small groups sit in a circle** and identify a facilitator/timekeeper.
2. **Have learners read the text** and identify passages that they feel may have important implications for their work (if they have not done so ahead of time).
3. **Do 1-3 rounds.** A round consists of one person using up to 3 minutes to:
   - Level 1: Read aloud the passage they have selected. If another learner has previously read one of your passages, select another to read.
   - Level 2: Say what they think about the passage (interpretation, connection to past experiences, etc.).
   - Level 3: Say what they see as the implications for his/her/their work.
4. **The group responds** (up to 2 minutes) to what has been said.
5. **Debrief the process** after all rounds have been completed.

REFLECT

- How can you ensure there is equitable voice and a safe space for engaging in challenging topics?
- What types of agreements need to be in place prior to engaging in this activity? How will you ensure learners hold themselves to these agreements?
- How does the selected text(s) help learners critically examine systems and inequities in the topic they are learning about?
- How does the selected text(s) respond to or build learners' knowledge, skills, and mindsets?
- How can you use this practice to help learners learn something about themselves and/or about others?

GO DEEPER

- This resource is adapted from School Reform Initiative. Learn more at www.schoolreforminitiative.org/doc/3_levels_text.pdf

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LEARNER-CENTERED

What? So What? Now What?



What?

An opportunity for learners to connect to one another and to each other's work, while at the same time allowing all group members to get useful feedback.

Why?

To access peer feedback around a current challenge or success and reflect on new insights and possible next steps.

NTLO

FREQ. PREP. NO. 22

How?

1. Outline a Challenge or Success (5 minutes)

- Learners individually outline a current challenge or success related to their work. They answer 2 questions: What? (What did I do? What am I working on?) and So What? (Why is this important to me?)

2. Feedback Rounds (15 minutes each round)

- The first presenter explains what they've written to their group, ending with a focus question. Learners in the group take notes/write questions.
- Group asks 2 or 3 clarifying questions (only).
- Individuals in the group talk amongst themselves, while the presenter listens into the conversation, taking notes and considering new insights and possible next steps. The presenter is silent during this step. The group takes up each of the following questions in some way, along with any other focused discussion the presenter has asked the group to have.
  - "What I heard the presenter say was..."
  - "Why this seems important to the presenter is..."
  - "What I wonder is..." or, "The questions this raises for me are..."
  - "What this means to me is..."
  - "What I might suggest is...
- Reflection by the presenter to the group. Now What? Repeat for each learner in the group.

3. Debrief

- Examine the process with the whole group. Did we stick to the protocol? Did we answer each presenter's focus question? How could we improve this process in the future?

GO DEEPER

- This resource is adapted from School Reform Initiative. Learn more at www.schoolreforminitiative.org/doc/what_so_what.pdf

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LEARNER-CENTERED

MicroLabs



What?

A highly structured protocol in which learners are divided into pairs or triads; each listens to or answers a question. Each learner has a turn to share their thoughts while their partners listen.

Why?

To allow learners to connect with and learn from each other. This protocol promotes equitable discourse and active listening skills as well as gives an opportunity for the speaker to process their thinking out loud.

NTLO



FREQ.

PREP.

NO.

23

How?

1. **Learners group in triads or pairs and read the first question or passage.** You may opt to read it aloud for them. Offer a minute to think and/or write in preparation. (whole group)
2. **Each learner will have one minute to respond** to the question or passage. While one learner is speaking, the other two in the group will actively listen without asking questions.
3. **When a minute is up, the next learner speaks.** (It may be helpful to have a chime or audible signal for the group.)
4. **Emphasize the importance of honoring the speaker and time,** both bringing responses to a close when time is called and allowing for silence when a responder does not fill their time. The purpose of the listener is to allow the speaker to share their thinking uninterrupted and process their thoughts.

Option: Ask participants to number off within their triad #1, 2, and 3. You might vary the order of each round. For example, begin with person #1, then #2, then #3. On the second question/passage, begin with #2, then #3, then #1 and so on. This protocol is particularly good for beginners as they learn how to use discussion protocols.

REFLECT

- How can this process support equal engagement and active participation?
- How can you use this practice to help learners discover something about themselves and/or about others?

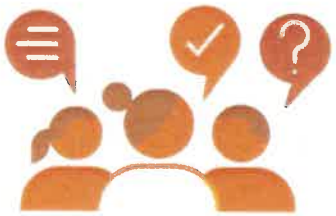
GO DEEPER

- This resource was adapted from the National School Reform Faculty. Learn more about "Microlabs" at www.nsrfharmony.org
- Try other protocols like **"Text Discussion Protocol"** and **"Block Party"** in **Learner-Centered Practices.**

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LEARNER-CENTERED

Learner-Centered Workshops



What?

Workshops in the PBL/PrBL environment are defined as group learning in response to learner identified "Need to Know", in order to complete a project benchmark or scaffold, or to support skills that learners are practicing. It's the "right support, just in time".

Why?

Allows for more personalized instruction, choice by groups, variation within a project, and differentiation.

NTLO

FREQ. PREP. NO. 24

How?

Planning

- **Consider content for workshops** based on predicted learner Need to Knows, new course content or NTN Learning Outcome skills that learners traditionally struggle with and may need practice or differentiation.
- **Consider a plan for all learners.** Is this a whole class workshop or small group? What will learners do who aren't in the small group? Will the workshop be offered multiple times or in different ways / at different levels?
- **Consider the amount of information and length of workshop.** Workshops should be short in duration (10-20 minutes) and weave new knowledge with prior knowledge.
- **Incorporate Learner-Centered Practices Cards into workshops** to help engage learners in the workshop time.

Implementation:

- **Let learners know the process** by which they might attend workshops: voluntary, mandatory, rotating groups, etc.
- **Workshops can be:**
  - facilitated by a learner or an adult facilitator.
  - support for a project team that needs skill building in project and group management.
  - support for learners who are not ready to work independently or extensions for learners who are ready for additional challenges.

REFLECT

- What challenges might you face as you implement Learner-Centered Workshops in the classroom?
- What might you need to prevent or overcome those challenges?
- How can you use student led workshops to help learners discover something about themselves and/or about others?

GO DEEPER

- For best practices within workshops read the chapter "Information Processing to Build Intellective Capacity" in *Culturally Responsive Teaching and the Brain*.
- It is important that facilitators create and maintain a safe space to participate and learn. See **"Lift Up Assets Through Co-Facilitation", "Co-Design Learning Environments"** in **Culture Practices.**

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Assessment Practices



Cultivate Equitable Learning Environments through Purposeful Assessment

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Overview

This set of cards provides practices in support of communities that actively commit to cultivating purposeful assessment. One that:

- Emphasize peer feedback, reflection, and revision
- Informs instruction and emphasizes learner growth and intrinsic motivation
- Prioritizes asset-based feedback to further build on learner strengths and support growth over time

OVERVIEW

Each of the Assessment Practices reflect an underlying shift in the way students and teachers approach assessment.

Focus on Feedback - These practices help shift a higher percentage of classroom interactions from transfer of information to feedback on performance. These practices innately shift power-dynamics in the classroom by centering self-reflection, learner voices and peer feedback as key drivers of formative assessment. When implemented with an asset-based mindset, and culturally sustaining approach, these practices affirm and extended cultural assets and identities and leverage learner voices to inform revisions in work.

Assess for Learning - These practices help shift from a culture where assessment is an evaluation of learning to a culture where assessment stimulates and informs learning. These practices emphasize reflection and center growth in the learning process

Grade for Equity - These practices help shift grades as a single evaluation of learning to an emphasis on performance and growth across important knowledge and skills over time. These practices also shift power-dynamics in the classroom by centering learners as active contributors and co-conspirators to their final grade. These practices center transparency in grading and alliance between learners and facilitators to inform final grades.

Routinely Calibrate Assessments to Inform Instruction - These practices help educators leverage learner work and quality criteria to reflect and build a collective understanding of how to improve the design and facilitation of their instruction. These practices center assessments to inform teacher instruction which allows instruction to be responsive to learner needs.

Prioritize Performance Assessment - These practices help shift the type of assessments learners most regularly engage in from those that only involve low level reproductions and regurgitation to those that require higher level creation, synthesis, and evaluation.

Research

- Feldman, Joe. *Grading for Equity.*
- Berger, Ron. *Leaders of Their Own Learning.*
- Darling-Hammond, Linda and Adamson, Frank. *Beyond the Bubble Test: How Performance Based Assessments Support 21st Century Learning.*
- Gorski, Paul. *Reaching and Teaching Students in Poverty.*
- Hammond, Zaretta. *Culturally Responsive Teaching and the Brain.*
- Banks, C. & Banks, J. (1995) Equity Pedagogy: An Essential Part of Multicultural Education.

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ASSESSMENT

Asset-Based Feedback



What?

Feedback protocol that reinforces academic mindsets by centering learner assets, affirming learner identities and promoting self-concept.

Why?

To give learners useful feedback while affirming and lifting up cultural assets. To build awareness of the unique strengths and skills each and every learner bring to the community. To shift away from deficit-based approaches that place blame on the learner(s) rather than on the inequities in the learning environment (e.g. lack of access to opportunities, gaps in curriculum).

NTLO	FREQ.	PREP	NO.
		-	1

How?

1. **Start by checking in** with the learner with a ritual that builds relational trust and space for active listening to the learner (See **"Establish a Warm, Demanding Stance," "Storytelling," "Hopes and Dreams"** in **Culture Practices**).
2. **Review the reason for the meeting.** State your belief in the learner's ability to learn/grow and provide specific evidence.
3. **Review the task.** Ask the learner to reflect on what they know and need to know about the task and/or what might be easy or challenging. Reaffirm your belief in the learner's ability to achieve the task while acknowledging the challenging parts.
4. **Review what successful outcomes** would look like and where the learner is (e.g. using the appropriate rubric indicator). Give specific, helpful and concise feedback for achieving the described outcomes, while building on student assets.
5. **Create space for the learner** to restate what they heard, ask clarifying questions and share their thoughts on what success looks like. Ensuring this dialogue centers student voice and ownership over learning.
6. **Provide opportunities to support the learner,** encouraging their growth and reinforcing your belief in the learner.
7. **Determine when and how** to revisit the task and check in on how things are going.

REFLECT

- How will you create time and space for feedback like this?
- How will you articulate your belief in each learner in a way that's concrete and specific?
- How will you capture what you have gained from this conversation to inform your instruction so that it is responsive to the learner's needs and growth?
- How will you ensure you actively embody an asset-based mindset while you engage with the learner?

GO DEEPER

- See the chapter "Establishing Alliance in the Learning Partnership" in Zaretta Hammond's *Culturally Responsive Teaching and the Brain.*
- Read *Education Week's* article "Asset-Based Coaching: Focusing on Strengths"

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ASSESSMENT

Audio and Video Feedback



What?

Recording feedback on a particular assignment or activity rather than providing written feedback.

Why?

To provide a substantial amount of learner feedback in a format that includes social cues which improve learners' understanding of the feedback. To build relational trust in a learning alliance. To support revision through active dialogue.

NTLO

FREQ.

PREP.

NO. 2

How?

1. **Use a learner-friendly rubric, learning targets, or other criteria to help you provide kind, specific and helpful feedback.** Ensure you have already established agreements with learners and developed a shared understanding of what quality feedback looks like. See **"Establish a Culture of Critique"** in **Assessment Practices.**
2. **Take time to read through the assignment** prior to recording individualized feedback. Write comments, highlight text, or make notes on items you would like to share with the student.
3. **Use a learner-friendly platform to record concise and clear audio or video feedback to share with the learner.** Make sure to start and end with positive feedback that affirms the learner's cultural assets, strengths and skills.
4. **As you record, you might include specific screenshots of the pieces of work, quotes, or particular sections that help clarify your feedback.**
5. **Set time aside for students to process and reflect on the feedback they receive.** Provide space for learners to ask clarifying questions. Build in specific "Rituals and Routines" within your day to create structures and agreements for learners to develop this self-assessment skill. Throughout this process, make sure to check-in with learners and ask what you can do as the learner's ally. See **"Conferencing"** and **"Asset-Based Feedback"** in **Assessment Practices.**

REFLECT

- How are you taking time to build a learning alliance with your learners so that you are responsive to their needs, affirm and extend their cultural assets and identities, and hold high-expectations for their work?
- What types of individualized feedback connect to the learner's own goals?
- How can you leverage feedback to build trust and rapport?

GO DEEPER

- Read Chronicle's article "How to Give Your Students Better Feedback With Technology".

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ASSESSMENT

Best Work Archive



What?

A running collection of learners' best work and performance highlights.

Why?

To help learners consider and curate what they think is their best work. To amplify learners' excellence and support the ownership of their own growth. To shift attention away from grades and towards performance and growth. To make learning visible and build awareness of how growth and efforts are perceived in the learning environment.

NTLO

FREQ.

PREP.

NO. 3

How?

1. **Determine a collection strategy.** Potential strategies could include a Google Drive folder, a digital portfolio, or simple manila folders in a file cabinet. Whatever strategy best fits your style and class is the one to use.
2. **Build the collection habit.** Regularly ask learners to consider what their best work is so far in your class, starting early to lower the stakes about what gets collected. Reinforce this habit by regularly reviewing learners' folders, adding supportive comments, and encouraging learners to update if they have not done so in awhile.
3. **Ask for reflection.** As learners submit items, create the expectation that they do some sort of reflection as to why that work is their best. Encourage them to reflect on both the product and the process.
4. **Curate Growth.** Emphasize the curation of multiple "bests" as a way for learners to reflect on and showcase their growth over time.

REFLECT

- What kinds of work samples are learners selecting as their best work and why? How will you use this data to inform your work?
- How well do learners' self-selected work samples reflect your goals for them in class? How well do they reflect their goals?
- How can you leverage the Best Work Archive to support conferencing and goal setting?
- How will you use this practice to celebrate and share learning?

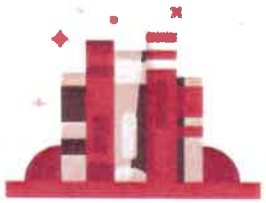
GO DEEPER

- Read *An Ethic of Excellence* by Ron Berger
- See Edutopia's article "3 Tools for Creating Digital Portfolios"

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ASSESSMENT

Bookend Lesson



What?

A lesson that includes learner reflection on a targeted outcome (e.g. an indicator from the NTN Learning Outcome rubrics) before, during, and after a learner-centered activity.

Why?

Support learners in developing knowledge, skills and agency as they monitor and assess their own learning.

NTLO

FREQ.

PREP

NO. 4

How?

1. **Select one to three key indicators** (bullets) from appropriate NTN Learning Outcome rubrics or other targeted outcomes for the learning/task.
2. **Unpack the indicator(s)** with learners, as needed.
3. **Ask learners to reflect on their own growth in the indicator(s),** acknowledging the strengths and prior experiences they have with that skill.
4. **Ask learners to pre-assess themselves** on the indicator and set a goal for how they would like to work on the indicator during the lesson.
5. **Engage learners in a learner-centered activity.** See Learner-Centered Practices card set.
6. **Pause midway during the learner-centered activity** and remind learners about their goals to allow them time to revisit goals and then resume activity.
7. **After the completion of the learner-centered activity, ask learners to reflect** on the goal they set and self-assess their progress on the indicator they chose to work on. See **"Think, Pair, Share"** or **"Constructivist Listening Dyad Protocol"** in **Learner-Centered Practices** to have learners process their growth with a peer. Use **"Conferencing"** or **"Asset-Based Feedback"** in **Assessment Practices** with each learner to support their individual reflection.

REFLECT

- What indicators might you ask learners to focus on? How do those indicators help learners build upon their knowledge, skills and cultural assets?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How does this process shift power dynamics in the learning environment from teacher-centered to learner-centered?
- How can you leverage the opportunities available in this practice to be a warm demander? (See **"Establish a Warm, Demanding Stance"** in **Culture Practices**)

GO DEEPER

- See Edutopia's article "Scaffolding Student Reflections + Sample Questions"

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ASSESSMENT

Conferencing



What?

Structured or semi-structured check-ins to assess progress, provide formative feedback, and motivate productivity.

Why?

Builds relationships and connections with learners. Provides useful insights into learner thinking and informs instruction. Creates opportunities to promote reflection and revision of work while affirming learner assets and promoting a positive self-concept.

NTLO

FREQ.

PREP

NO. 5

How?

1. **Identify a product or task that learners will need formative feedback on.** This could be a group or individual product from the project. You might ask learners to share input on what they would like formative feedback on.
2. **Build an agenda that makes time for conferencing** by looking for moments when learners not in the conference have meaningful tasks to accomplish. Conferencing can be a great way to provide some structure and reflective pauses during "project work time."
3. **Decide on a focus and a format.** To keep your conferencing efficient and effective, it is useful to decide on a structure or format in advance. Common formats include check-in questions, assessment or reflection with a project rubric, or progress on key project next steps.
4. **Ask learners to prepare for the conference** by requesting their input on the focus, goals, and format. It is important to build learner ownership and trust and rapport in the practice of conferencing.
5. **Keep a running record of the conferencing conversations** to provide continuity when you conference throughout the year.
6. **If applicable, co-create goals with learners.** See **"W.O.O.P."** in **Culture Practices.**

REFLECT

- What will it take to implement Conferencing in your classroom, and what challenges will you need to overcome?
- What supports will learners need to reflect and conference effectively?
- How can you build in rituals and routines that create time and space for conferencing? (See **"Establish Rituals and Routines"** in **Culture Practices.**)
- How will you center learner voices so that they lead the discussion? (See **"Invite Student Voices"** in **Culture Practices.**)

GO DEEPER

- See Ron Berger's book *Leaders of Their Own Learning*

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ASSESSMENT

Establish a Culture of Critique



What?

A structure to provide self, peer, and group feedback.

Why?

Help all learners build agency and feel heard and valued by providing space for constructive feedback cycles.

NTLO

FREQ. PREP NO. 6

How?

1. **Set agreements and structures** for providing kind, specific, and helpful feedback.
2. **Define what each term means** with the class (e.g. What does it mean to give kind feedback?)
3. **Provide a model product or rubric** to inform feedback.
4. **Provide sentence frames** to help learners articulate their feedback (see examples below).

CELEBRATIONS	WONDERINGS
• I like _____ because _____. • My eye is really drawn to _____. • You do a good job of _____. • What really stood out was _____.	• I wonder _____. • Tell me more about _____. • Can you explain why _____? • It's difficult for me to understand _____ because _____.

5. **Use a model product to help learners practice** giving feedback. Develop a collective understanding of how to give quality feedback.
6. **Once learners have a collective understanding of agreements, structures, and processes** for providing quality feedback, give learners time to engage in self, peer, and/or group feedback. You might consider putting learners in small groups or partners to give feedback. Consider using **"Targeted Peer Assessment," "Chalk Talk," "Praise, Question, Suggestion,"** or **"Think, Pair, Share,"** to engage in critique. (See **Assessment and Learner-Centered Practices.**)

REFLECT

- How will you ensure learners' cultural assets and identities are considered when creating agreements and structures for providing kind, specific, and helpful critique?
- How will you continue to use this process to calibrate on agreements for critique?
- How can this process help learners learn something new about themselves and/or about others?

GO DEEPER

- See Ron Berger's *Leaders of Their Own Learning* and "Austin's Butterfly"
- Watch Edutopia's video "Critique Protocol: Helping Students Produce High-Quality Work"
- Visit EL Education's resources on *Leaders of Their Own Learning*

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ASSESSMENT

Targeted Peer Assessment



What?

A process to support peer review and formative feedback at key moments in a PBL/PrBL Unit

Why?

To provide early and targeted feedback from peers that increases the quality and amount of that feedback. To sharpen learners' understanding of performance expectations and allow peers to learn from assessing others.

NTLO



FREQ.

PREP

NO. 7

How?

1. **Identify a worthwhile task or project artifact for peer assessment.** Feedback is easier to give and more appreciated when it is connected to a compelling piece of work that the creator cares about.
2. **Select a focus.** Use a project rubric, checklist, or other quality indicators to support agreements for peer assessment.
3. **Determine the timing and purpose for peer assessment.** How will peer assessment support individual and/or collective growth in the outcomes for the task or project artifact? What kind of peer assessment will be authentic to the needs of the learners receiving the assessment?
4. **Build a culture of feedback and model the skills for quality feedback.** Modeling the kinds of feedback you are looking for can clarify expectations. Constant reflection helps build ongoing improvement and understanding of how to give quality feedback.

REFLECT

- What key skills and content are essential for learner reflection?
- How can this process help learners learn something new about themselves and/or about others?

GO DEEPER

- Read Edutopia's article "Putting Students in Charge of Their Learning"
- See Austin's Butterfly: Building Excellence in Student Work www.vimeo.com/38247060

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ASSESSMENT

Entry & Exit Slips



What?

Small assessments that happen throughout the course of the project.

Why?

To capture "in-the-moment" feedback about learner's progress.

NTLO

FREQ.

PREP.

NO. 8

How?

1. **Think about key rubric indicators,** standards, learning targets, etc. where you need "in-the-moment" feedback about learner knowledge and skill.

2. **Start or end the class** with questions that will help you gauge learner understanding and mastery. (For example, you can ask differentiated questions written out on chart paper or projected on the board.) Try prompts like:

- What are three things you learned, two things you're still curious about, and one thing you don't understand?
- How would you have done things differently today if you had the choice?
- What I found interesting about this work was...
- Right now I'm feeling...
- Or skip words completely and have students draw or circle emojis to represent their assessment of their understanding.

3. **Provide learners opportunities to unpack prompts.** In addition to a traditional paper exit ticket, you might try to capture answers through a **"Think, Pair, Share,"** a digital journal or discussion board, or through non-verbal gestures.

Tip: A quick way to see the big picture — if you use paper exit tickets -- is to sort the papers into three piles: Learner exhibits mastery; some mastery; and learner needs more support. The size of the stacks is your clue about what to do next. (See **"Post-Project Work Sort"** in **Assessment Practices.**)

REFLECT

- What prompts could you use to capture learner thinking in tomorrow's lesson?
- How could you use Entry & Exit Slips to "catch" learners growing and activate their agency?
- How are you involving students in unpacking their Entry & Exit Slips? How can you empower and activate student agency through this process?

GO DEEPER

- See Ron Berger's *Leaders of Their Own Learning*
- Read Edutopia's article "7 Smart, Fast Ways to Do Formative Assessment."
- Read Edutopia's article "56 Examples of Formative Assessment."

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ASSESSMENT

Exemplary Work Celebration



What?

Curate products and performance tasks in visible places throughout the school building.

Why?

To emphasize a culture of learning where extrinsic motivators are de-emphasized. To create opportunities for learners to showcase their growth and accomplishments and in turn affirm their cultural assets, identities, and promote self-concept.

NTLO



FREQ.

PREP

NO. 9

How?

1. **Design projects, problems, and tasks** that allow learners to demonstrate their thinking and learning through meaningful work artifacts.
2. **Use NTN Rubric indicators, state standards, and local quality criteria** to create rubrics that help articulate dimensions of work quality.
3. **At the end of projects, curate performance tasks and/or other pieces of quality work that highlight a variety of skills** or illustrate important concepts. (Learners should be involved in identifying these exceptional pieces.)
4. **Review the chosen performance tasks and/or other pieces of quality work with learners,** calling attention to important elements of quality, modeling kind critique language, and prompting the creators to share about their creation process.
5. **As much as possible, create ways to lift up work from all learners over the course of the year,** helping each learner see themselves as capable of creating exemplary work. Depending on the spaces available to curate work, you may decide to highlight a piece of work from each learner from each PBL Unit, rotating their work after the completion of each PBL Unit. It is important that all learners have their strengths and growth celebrated over the course of the year.

REFLECT

- How can this process help learners learn something new about themselves and/or about others?
- What steps will you take to deeply understand your learners' assets and identities so that you can affirm and lift up their excellence throughout the year?

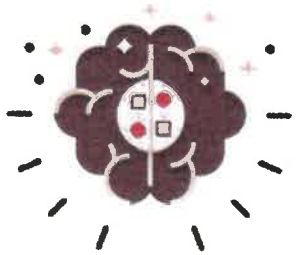
GO DEEPER

- Read Chapter 6 in Ron Berger's *Leaders of Their Own Learning*
- See how others celebrate and share their learning at Shareyourlearning.org

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ASSESSMENT

I Used to Think... Now I Think...



What?

At the end of the day or task, learners reflect on their learning.

Why?

To help learners reflect on their thinking about a topic or issue and explore how it has changed. To consolidate new learning as learners identify their new understandings, opinions and beliefs. To encourage learners to develop their reasoning abilities and to recognize cause and effect relationships.

NTLO | FREQ. | PREP. | NO. 10

How?

1. **Have learners end the day** or task with a formative assessment, either in writing or orally.
2. **Explain to learners** that the purpose of this activity is to help them reflect on their thinking about the topic and to identify how their ideas have changed over time.
3. **For example:**
   - When we began this study of ____, you had some initial ideas about it. In just a few sentences, please write what you used to think about ____. Take a moment to think back... and then write down your response to "I used to think..."
   - Now, I want you to think about how your ideas about _____ have changed as a result of what we've been studying/doing/discussing. Again, in just a few sentences, write down what you now think about _____. Start your sentences with, "But now, I think..."
4. **Have learners share** and explain their shifts in thinking. At first, have learners share with the whole group so you can push thinking/ask for evidence. Once learners become accustomed to explaining their thinking, they can share with one another in small groups or pairs. See **"Think, Pair, Share"** or **"Constructivist Dyad Protocol"** in **Learner-Centered Practices**.

REFLECT

- When might this reflection technique serve as a useful assessment?
- When could you use this reflection technique to "catch" learners developing in their knowledge, skills, and mindsets? How will you use this opportunity to celebrate their growth?

GO DEEPER

- See www.visiblethinkingpz.org for more on Visible Thinking Routines.
- See "I Used to Think..., Now I Think..." at Harvard Project Zero: www.pz.harvard.edu/resources/i-used-to-think-now-i-think-vt

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ASSESSMENT

Learning Quizzes



What?

The use of regular quizzes as learning activities rather than for measurement or grading.

Why?

To engage learners in active recall through quizzes as an assessment OF learning not merely FOR learning.

NTLO

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NO. 11

How?

1. **With learners, engage in dialogue** about the value of quizzing as an active recall of knowledge from memory and connection of ideas across multiple topics/skills as a learning strategy. Be clear about the use of quizzing throughout the learning process. You might invite learners to share their experiences with quizzes to support the shift to quizzes as a learning activity rather than for measurement or grading. (See **"Storytelling"** and **"Think, Pair, Share,"** in **Culture Practices**.)
2. **Identify important facts and ideas** that will engage learners in critical thinking authentic to the targeted learning outcomes. This can be done as part of the project planning process, in tandem with the knows, need-to-knows process (See **"Knows and Need-to-Knows"** in **Learner-Centered Practices**).
3. **In your PBL Unit or course, map out when learners will be introduced to those important facts and ideas.** Be mindful of when in the learning process they might start to forget that new information. You might use the "Create the Path" section of the NTN Project Planning Toolkit to help you map out quizzes to support key moments of active recall. You might invite learners to share key moments they would like to engage in learning quizzes in their PBL Unit or course (See **"Visual Benchmarks"** in Assessment Practices).
4. **Design numerous opportunities for learners to engage in learning quizzes throughout the PBL Unit and course.**

   Reminder: Quizzes should be low stakes; they are not about the grade. What is most important is the effortful retrieval (e.g. retrieving knowledge from memory after enough time that the retrieval requires effort), with learning and reflection spaced out throughout the process of the PBL Unit. As learners engage in these quizzes, continue to build awareness in possible changes in perception around quizzing and assessment by emphasizing process, growth, and reflection.

REFLECT

- What key ideas and concepts do you want to make sure learners move into their long-term memory? How will you design learning quizzes to support each and every learner towards the desired outcomes?
- How are you designing learning quizzes to be responsive to learners' needs?

GO DEEPER

- See Make it Stick: The Science of Successful Learning at www.makeitstick.net
- See resources on www.retrievalpractice.org
- Read NTN's article "Reconsidering the Role of Quizzing in PBL"

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ASSESSMENT

Spiraling the Driving Question



What?

Learners answer the project driving question multiple times with increasing formality (e.g. class discussion, quick-write, written performance task) and increasing specificity from the prompt.

Why?

To engage ongoing formative assessment related to key PBL outcomes and aims. Learners are able to see the growth and evolution of their understandings of key PBL concepts.

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NO. 12

How?

1. **Review the project map or calendar. Identify 2-4 places where it would be useful to elicit learners' thinking about the project driving question.**
2. **Consider a variety of ways learners might share their thinking about the driving question at varying levels of formality and formats.** Keep in mind that you may ask them a very general driving question early on and a much more specific version by the end as you get further into the big ideas in the project. For example, early in the project you might ask, "Why do you think snow melts faster from some surfaces than others?" Whereas later that question can evolve to, "How can thermodynamics help design a structure that provides animals a safe and comfortable place to rest during dangerous weather?" Special attention should be given to providing learners "low stakes" opportunities to share their thinking early on — both to increase engagement and the insights you can encourage in their thinking.
3. **Connect or organize learners' sequence of attempts at answering the driving question to show growth and/or support critical thinking process.** For example, you could point learners back to earlier drafts of their written performance tasks or other "pre-writing" that they have done in low stakes settings like journals, think-pair-shares, etc., and compare their previous answers to the driving question to those reflected in their final products.

REFLECT

- When is the earliest in the project learners could have an answer to the driving question?
- Where are moments when their learning will likely result in a new or deeper take on the driving question?
- How will you provide opportunities for learners to build and show understanding of the driving question throughout the project?

GO DEEPER

- Check out Edutopia's article "Low Stakes Writing and Critical Thinking."

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ASSESSMENT

Visual Benchmarks



What?

A visual timeline of a PBL Unit's tasks and benchmarks.

Why?

To create clarity on projected timeline, deliverables and benchmarks. To help learners understand the process of the PBL Unit, where their individual or group progress lies in that process, and authentic next steps within that process. To create opportunities for reflection of knows, need-to-knows, and co-design of the PBL Unit that is responsive to learners' needs.

NTLO



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13

How?

1. **Build out the "Create the Path" portion of the NTN Project Planning Toolkit** or otherwise determine the key milestone moments in the project. It is common to have sections for the project launch, key project benchmarks (typically 2-4) and the culminating event.
2. **Create a physical version of the "Create the Path" to display in your classroom.** Often visual benchmarks occupy a front whiteboard or bulletin board in the room. You will also want to create markers to represent each group's progress or have groups create their own.
3. **Regularly reference and ask learners to reflect on the visual benchmarks** by connecting Need-to-Knows and workshops to current Next Steps, by having groups update their progress as well as reflect and share on the strategies and actions that have helped them move forward successfully.

REFLECT

- How are you helping learners engage with the visual benchmarks so that they have clarity on the PBL Unit process and learning outcomes?
- How might you help learners keep track of where they are in the PBL Unit and understand what they need to do next in their learning?
- This practice emphasizes the importance of making learning visible so that the progression of the PBL Unit will truly be responsive and authentic to the learners engaging in that work. How will you alter the timeline, benchmarks and/or deliverables to be responsive to your learners? How will you know when you need to make changes?

GO DEEPER

- Search "NTN Project Planning Toolkit" or "NTN Curriculum Frameworks" in the NTN Help Center.

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ASSESSMENT

Delayed Grading



What?

Withholding a grade and only providing feedback on the initial attempt(s).

Why?

To shift emphasis away from judgment and towards reflection, learning and growth. To create multiple opportunities for learners to understand a topic through revision and feedback.

NTLO

FREQ.

PREP

NO. 14

How?

1. **With learners, identify an upcoming piece of work worth revising multiple times.** For PBL Units, this might be the final products or written performance tasks.
2. **With learners, co-develop an understanding of criteria and outcomes for the piece of work.** You might use a rubric to create shared expectations for the piece of work.
3. **After learners have made an initial attempt or first draft of the piece of work,** make space for learners to receive quick feedback either from their peers or from yourself. You might leverage quick critique processes such as **"Think, Pair, Share"**, **"Targeted Peer Assessment"**, **"Audio and Video Feedback"** or **"Asset-Based Feedback"** (See **Learner-Centered** and **Assessment Practices**).
4. **After engaging in the quick feedback,** create opportunities to discuss patterns or trends with the whole class. What patterns in the work should be celebrated and shared with others?
5. **With learners, determine when the piece of work will receive a grade.** This can be based on the number of attempts, reaching a particular level, or some other criteria that aligns with collective goals for the PBL Unit or course.

REFLECT

- How are you making timely, accurate, and useful feedback a core part of the learning experience?
- How might this practice disrupt the "traditional" grading processes and create a learning environment that honors growth and feedback?
- How will you be mindful of co-constructing criteria for feedback and grading purposes with your learners?

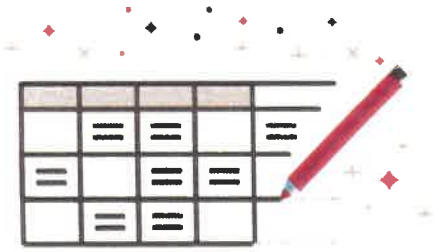
GO DEEPER

- See the **"Conferencing"** and **"Audio and Video Feedback"** cards in **Assessment Practices** for ways to make your feedback more effective and efficient.

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ASSESSMENT

Running Rubrics



What?

Building a collection of feedback on a print or digital version of the rubric through regular conferencing and other assessments.

Why?

Using a rubric to capture ongoing conversations about progress helps learners understand criteria for the task and what next steps they might take to move their work forward. To help learners take action on feedback.

NTLO

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NO. 15

How?

1. **Create an authentic rubric for an upcoming PBL Unit or task.** Search "Rubric" in the NTN Help Center for a host of resources to help you create an authentic rubric. See "Go Deeper." If possible, co-create the rubric or revise an existing rubric with your learners to ensure the criteria is clearly understood by all those engaging with it.
2. **With your learners, decide how to curate and engage with the rubric** so that it is most responsive to those utilizing it. Will the rubric be a hard-copy document or will it live electronically? How will you and your learners use the rubric to engage in shared dialogue about feedback and growth?
3. **With your learners, determine when check-ins with groups and/or individuals around their PBL Unit or task will happen** in the project timeline. Make sure to leverage project benchmarks as key moments to provide feedback (See Visual Benchmarks).
4. **Meet with groups and/or individuals to support progress on their PBL Unit or task.** Use the rubric to engage in a shared dialogue and to guide understanding of the group or individual's progress. Document notes, progress and next steps to revisit the next time you conference with the group or individual.
5. **Keep rubrics in a shared space where they will not get lost.** This can be a shared folder in Google Drive, a physical folder, or some other tool of your choice.

REFLECT

- What data might you need to help you determine what indicators you will focus on? (Data can be formal or informal.)
- What kind of feedback is most effective in helping learners? How will you ensure learners have a voice in how they want to progress in their PBL Unit or task?
- How are learners engaging in their own self-assessment?
- What are you learning in your check-ins that you will need to consider in the future?
- How will you keep the rubric alive for yourself and learners?

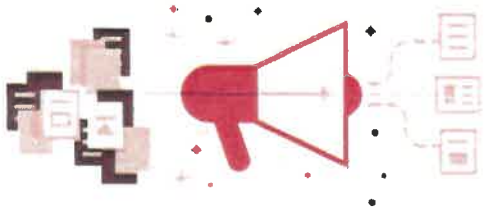
GO DEEPER

- Search "NTN Learning Outcome Rubrics and Templates" in the NTN Help Center
- Search "NTN Rubric Principles, Practices, and Examples" in the NTN Help Center
- See The Cult of Pedagogy's Single Point Rubric at www.cultofpedagogy.com/single-point-rubric/

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ASSESSMENT

Grade Selectively



What?

A practice to reduce grading time by allowing learners to pick a representative example from a larger set of work to turn in for a grade.

Why?

To build student reflection, meta-cognition, motivation, and ownership of learning. To reduce grading time and disrupt the practice of excessive grading.

NTLO

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NO. 16

How?

1. **Determine or be on the lookout for activities where learners are doing multiple examples of a similar type of thinking.** Common examples include daily "bell-ringer" activities, regular journal prompts, and other rituals and routines.
2. **Rather than grading each of the activities separately, do a quick check** to ensure learners are building fluency with the practice. You might try **"Post-Project Work Sort"** in **Assessment Practices** to gather an understanding of the learners' comprehension of the practice.
3. **Once learners have had multiple opportunities to engage in the practice,** set aside time for learners to pick a representative example or set of their work to turn in for a grade.
4. **Make time for learners to self-assess their progress** on the practice and reflect on the representative example or set of work they have decided to turn in for a grade.
5. **As you grade their representative example or set, if you have concerns about whether the example is truly a representative of their work, find time to check-in and discuss the work with the learner.** See **"Conferencing"** in **Assessment Practices.**

REFLECT

- What are you currently grading and why?
- Are there moments in the PBL Unit or course where you are assigning learners multiple versions of the same sort of task for practice? How might you use this practice to grade selectively and reduce grading time?
- How are you making space for learners to reflect on the quality of their work and make intentional choices about which piece of work best represents their learning and process?

GO DEEPER

- Check out the Cult of Pedagogy's "Cut Grading Time in Half" resource. www.cultofpedagogy.com/cut-grading-time-in-half/

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ASSESSMENT

Create Local Anchors



What?

Identifying learner work samples that illustrate "proficiency" using NTN rubrics or other quality criteria.

Why?

To use for curriculum design, calibration with colleagues and as learning models for learners to improve their overall proficiency.

NTLO

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NO. 17

How?

1. **Design projects, problems, and tasks that allow learners to demonstrate their thinking and learning through meaningful work artifacts.**
2. **Use NTN Rubric indicators, state standards, and/or other quality criteria to design rubrics** that help articulate dimensions of work quality. You might co-design these rubrics with your learners.
3. **At the end of projects, collect pieces of learner work that represent varying levels of performance.** In particular, look for work samples that represent "Proficient" levels of work against the NTN Rubric as well as samples that illustrate common ways in which work is "approaching proficient." Ideally, having multiple samples for each helps create a broader sense of what proficiency looks like in your class and subject area.

You might use this practice...

- During project design as a way to stay connected to "the end in mind" for learner performance.
- In collaborative sessions with colleagues where you calibrate expectations for quality.
- As learning models shared with learners to illustrate your expectations as well as to demonstrate how there can be "multiple paths to proficiency".

REFLECT

- How are you setting time aside to calibrate your assessments with colleagues?
- How might you begin to build department and grade level "anchor sets" to ensure common expectations for quality?

GO DEEPER

- Try a Calibration Protocol at www.qualityperformanceassessment.org

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ASSESSMENT

Post-Project Work Sort



What?

Sorting key learner work products into piles as a way of analyzing work samples for patterns and insights going forward.

Why?

Engaging in post-project reflection is an efficient and concrete way to inform instruction. It helps determine learners' needs and modifications to meet those needs. It encourages ways to refine or revise future PBL Units, and provide insights into learning task design, scaffolding, and learner progressions around key outcomes.

NTLO

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NO. 18

How?

1. **Use NTN Rubric indicators or other quality criteria to sort learners' work into specific piles.** For example, you might sort into whether or not they approached, met, or exceeded the learning target.

2. **After sorting learners' work, consider the following prompts:**

- What patterns do you see?
- What distinguished high from medium? Medium from low?
- What small adjustment to the task or the scaffolding might have made the biggest difference in what students produced?
- How did the task influence student work quality?
- Where, over the course of the task, did you see the clearest evidence of your targeted schoolwide learning outcomes?

REFLECT

- After completing this process, what are implications for your work moving forward?
- Where do the work samples illuminate strengths in the design and instruction? Gaps?
- Consider what indicated the rating of high/medium/lows. Were learners aware of those measures and how they were going to be rated?
- How did the task embrace and extend learners' cultural assets?
- How was this task responsive to learners' needs, identities, cultures, etc.?
- Consider what criteria indicated the ratings for the work samples. Were learners aware of these measures and how their work was going to be rated?

GO DEEPER

- Try EL Education's "Sorting Student Work Protocol"

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ASSESSMENT

Learner-Led Conferences



What?

Learners lead a conference to share evidence of their learning and goals for the future with allies (e.g. families, teachers, principals, coaches, mentors) that will proactively support them towards those goals.

Why?

To create opportunities for learners to self-reflect and take charge of their learning. To lift up learner voice and cultivate agency. To engage families and other allies in deeper conversations about a learners' passions, assets, areas for growth, and hopes for the future.

NTLO | FREQ. | PREP. | NO. 19

How?

Prior to the Learner-Led Conference

1. **Support learners in reflecting on their own learning** and gathering evidence to support their reflection, as well as goal setting.
2. **Have learners draft and practice what they will present.** Consider using models and critique to help learners prepare for their conference. See **"Establish a Culture of Critique"** in **Assessment Practices.**
3. **Inform families and other allies of the process and purpose of Learner-Led Conferences.** Ensure learners have a voice in who they want to invite to the conference.

During the Learner-Led Conference

1. **Introduction:** Learner provides an overview of the process and offers agreements for the conference.
2. **Presentation of Work Samples:** Learner shares work samples and describes their assets, goals and areas for growth. Families and other allies are active listeners, being aware of biases and other perceptions that may interfere with deeply listening to the learner.
3. **Learners' Open Dialogue:** Families and other allies respond to the learner's presentation, expanding and clarifying learner's thinking and providing additional perspectives. Be mindful of asset-based feedback and use strengths to inform suggestions and feedback.
4. **Co-Create Next Steps:** Families and other allies review learner's goals and collectively determine action steps with the learner. Be sure to outline clear supports and timelines for action steps.
5. **Debrief:** Learner closes the conference with a response to the time spent together and ideas discussed. Learners might answer, "What are my next steps going forward? How am I feeling about the action steps? How am I feeling about the overall conference?"

REFLECT

- What will it take to implement this in your learning environment, and what challenges will you need to overcome?
- What supports will learners need to reflect and set goals effectively?

GO DEEPER

- See Ron Berger's book *Leaders of Their Own Learning*
- Read Teaching Channel's article "A Step-by-Step Plan for Student-Led Conferences at the Elementary Level"
- See Edutopia's article on "Having Students Lead Parent Conferences"

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ASSESSMENT

Written Performance Tasks



What?

Individual, project-embedded assessments that require learners to articulate and apply their knowledge through writing.

Why?

To allow facilitators to support and assess learners' deep content knowledge and disciplinary literacy skills through the creation of quality performance tasks. To provide learners with opportunities to be creative, self-reflective, engage in feedback cycles, and share their learning.

NTLO | FREQ. | PREP. | NO. 20

How?

1. **Select important content** that is worth additional time and consideration in order to go deeper - and where it will be valuable to get a window into learner thinking. Consider reviewing appropriate power standards and NTN Rubrics (**Knowledge and Thinking and Written Communication**).
2. **Consider how learners might show their knowledge** about this topic through writing. For early primary, note that "writing" might be a combination of dictation, letters, invented spelling, drawing, etc. Could learners write a narrative, an expository piece, or an argumentative piece? What Written Communication rubric skills could you assess?
3. **Consider how to embed the writing** into the PBL Unit or Problem-Based Unit. Is it a project benchmark? An individual final product that goes with the group final product? Or could learners write individual pieces in combination with a group product? For example, in a math class, it might be a write-up of a problem solution or important concept.
4. **Craft a clear prompt** that elicits the kind of thinking about content and the literacy skills you're targeting. For example: After reading... write... that argues/describes/compares/etc.... Support your answer with evidence from...
5. **Plan how you will scaffold** content knowledge and literacy skills, based on the rubric skills you selected and/or a sample you create.

REFLECT

- How will you create an authentic and relevant written performance prompt that connects to your learners' lives and community?
- How might you leverage learners' voices to decide how they might show their knowledge?

GO DEEPER

- Search "Draft Skeleton Outlines" in the NTN Help Center.
- Search "Written Performance Task" in the NTN Help Center.
- Search "Guide to Written Performance Assessments" in the NTN Help Center.

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Problem-Based Learning Practices

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PRBL CORNERSTONES:
1. Anticipatory Planning
5. Launch
7. Explore
13. Discuss

NOT SURE WHERE TO START?
3. Math Autobiography
4. Multiple Ability Orientation
15. Restating

Math Practices

OVERVIEW

This set of cards provides Problem-Based Learning Practices that support communities who want to work to disrupt instruction gaps.

Students of color, students in poverty, and other marginalized students are more likely to experience rote, low-level instruction that emphasizes memorization rather than authentic, complex thinking and problem solving.

In order to disrupt these instructional gaps, Problem-Based Learning Practices focuses on NTN's three key shifts for mathematics:

- Improve Mathematical Self-Regard
- Emphasis on Discourse
- Emphasis on Inquiry

More information on these three shifts can be found in the NTN Help and Learning Center.

Problem-Based Learning consists of anticipatory planning plus three typical classroom phases: Launch, Explore, and Discuss. This structure supports the three key shifts of improving self-regard, emphasizing discourse, and emphasizing inquiry.

PROBLEM-BASED LEARNING PRACTICES OVERVIEW

A Problem-Based Lesson begins with a Launch, where the problem is introduced in a learner-centered way to support students in making sense of the problem as well as building interest and excitement.

Next is Explore, where learners have time to try potential solutions in pairs or small groups. This phase creates a math classroom centered on student thinking and shared ideas by giving individuals and groups by giving students time to come up with their own solution strategies. This is also a time for learners to practice their collaboration and discourse.

Finally, all students engage in a whole-class Discussion. During this time, learners share strategies and make connections and generalizations. This is a time to share academic vocabulary, formal notation, and make explicit connections to prior topics and standards. By drawing connections between strategies, learners strengthen and deepen their understanding of the content.

These points are the cornerstone cards of the PrBL deck. The other cards support learners' group work, status, and discussion skills and can also be used independently to build these skills.

Problem-Based Learning Practices are intended to directly cultivate the following **NTN TEACHER COMPETENCIES:**

- Teachers implement learner-centered practices within projects/problems that are responsive to student needs and that actively support mastery of learning outcomes.
- Teachers design and implement culturally sustaining projects/problems that promote authentic, complex thinking.

RESEARCH:

Strength in Numbers. Horn, Ilana.
Designing Groupwork. Cohen, Elizabeth G. and Lotan, Rachel A.
5 Practices for Orchestrating Productive Mathematics Discussions. Smith, Margaret S. and Stein, Mary Kay.
Culturally Responsive Teaching and the Brain. Hammond, Zaretta.

MATH

Anticipatory Planning



What?

Creating questions in advance to push learners' thinking without undermining productive struggle or using direct instruction.

Why?

Eliminating productive struggle creates dependent learners who wait to be told what to do rather than building problem solving skills. Teachers must resist the urge to "save" learners, because productive struggle increases learning and builds independence.

Key Shifts

Inquiry

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NO. 1

How?

1. **Choose a problem for students.** Ensure the problem is open-ended and that all learners can start a strategy (even an incorrect one).
2. **Solve the problem yourself** in several ways (you can also do this with colleagues). Include common misconceptions.
3. **Write questions** for each strategy that you can use to push learners who attempted that strategy. Consider:
   a. For younger learners, ask them to draw a visual of the problem.
   b. Is there a way to help learners see a pattern? Ask learners "Can you try that with all the possibilities?" or "Can you arrange your work in a way that might help you see a pattern?"
   c. Is there a misconception or circumstance where this strategy won't work? Ask learners "How do you know that works?" or "Can you check your answer?" to allow them to correct their thinking.
   d. Is there a more sophisticated way to solve the problem? Ask learners "Do you notice any steps that are repeated?"
   e. Don't give advice in disguise: "Have you tried..." because these questions reinforce reliance on the teacher for steps.
4. Carry the questions around and **explain** to learners that you are not giving instructions because you believe in learners' problem solving abilities.

REFLECT:

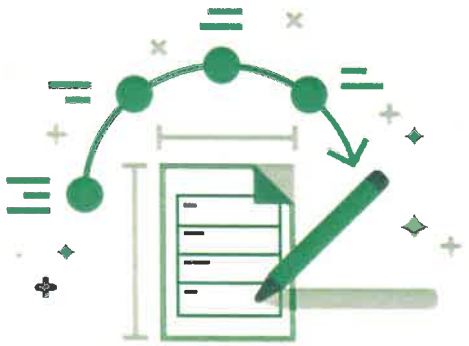
- How can you acknowledge the discomfort or frustration of learners who are growing in their independence and help them see value in overcoming challenges independently?
- How can you tell when a learner's struggle becomes unproductive?

GO DEEPER:

- Read Zaretta Hammond's book "Culturally Responsive Teaching and the Brain" (Ch. 1).
- This strategy is adapted from NCTM's "Thinking Through a Lesson" protocol.

MATH

Page Setup



What?

A routine for learners to organize their work.

Why?

To make expectations clear for classroom routines and support learning. This page setup creates a space for learners to record their individual thinking, strategies from their group work, and key points from the class discussion.

Key Shifts

Self Regard

NTLO

FREQ.

PREP.

NO. 2

How?

1. **Show learners** the preferred page setup and guide them through dividing their paper accordingly. Depending on your classroom structures, you could also hand out a pre-divided page. See sample below:

WARMUP
INDEPENDENT WORK
GROUP WORK
DISCUSSION

2. **Discuss** with learners what they might write in each section. When starting out, it might also be helpful to pause after group work or class discussion to share what learners have recorded in each section. Note: The focus should be on students capturing and making sense of their own learning rather than copying things down.
3. Use this page setup on a daily basis. At the beginning of the year, learners start by writing down the strategies they used on their own, with their group, and a new strategy presented during the discussion. With fading scaffolding, learners can include important ideas from each strategy and use colors or words to show connections between the different strategies.

REFLECT:

- How can you maintain productive struggle while scaffolding and explicitly teaching learners how to record their thinking and the thinking of their group members or classmates?
- How can you adapt this page setup to support all of your classroom routines and structures?

GO DEEPER:

- How can you use this page setup to scaffold a mathematical writing task?

MATH

Math Autobiography



What?

An activity where students write a narrative detailing their prior experiences with the subject of mathematics.

Why?

Learners make sense of their experiences in the subject and teachers gain a deeper understanding of learners' past history to inform their teaching.

Key Shifts

Self Regard

NTLO

FREQ.

PREP.

NO. 3

How?

Ask students to write their history of experiences in math inside and outside of class. This might include how math is used in their homes, communities, or work, as well as their experiences - good and bad - in math classes throughout their lives. Some prompts may include:

a. What do you read, write, or think about in your home and community?
b. How is math important in your culture/ethnicity?
c. What are your histories and past experiences with math?
d. What aspects of math do you most enjoy?
e. What aspects of math do you most dislike?
f. What was the first time you had to practice or use math outside of school? Describe this experience.
g. In which ways do you learn math best?
h. How could math support your future goals in life?

REFLECT:

- How can you adapt your teaching based on students' responses to the questions?
- How can you respond to the stories students share in a meaningful way to make them feel heard?
- How would you respond to these questions? Is it similar or different to your students?

GO DEEPER:

- This practice and these questions are adapted from *Cultivating Genius* by Gholdy Muhammad (Ch. 4).

MATH

Multiple Ability Orientation



What?

A strategy to expand learners' ideas of what skills are necessary in math class and identify their strengths and growth areas before launching a problem.

Why?

Traditionally, skills like speed and accuracy have been given excessive priority in math classrooms. By intentionally valuing other skills, teachers provide more opportunities for success and present a more accurate depiction of the field.

Key Shifts

Self Regard

NTLO

FREQ.

PREP.

NO. 4

How?

1. **Choose a task** that requires multiple types of mathematical skills. For example: organizing information, questioning or skepticism, finding multiple solution paths, modeling, explaining, estimating, or visuals.
2. **Solve the problem** in as many ways as possible (See **Anticipatory Planning, PrBL card**). Make a list of skills that will be shared with students.
3. **Share the list of multiple abilities** with learners before launching the problem. Say "None of us has all these abilities; Each one of us has some of these abilities" (Cohen). To broaden what it means to be 'smart' in math, be clear and relentless about the fact that each person has value to add to the group's work and learning, and that everyone can grow.
4. **Have learners identify** at least one area that is a strength and one area of growth. Learners can record these notes as a reminder to themselves and their group members.
5. **Point out** when learners are demonstrating these skills during work time and how they contribute to the group's mathematical progress (See **Status Interventions, PrBL card** for more details - these two strategies complement each other well).

REFLECT:

- How can you change classroom structures to explicitly value a variety of skills on a daily basis?
- Is there a skill that you'd like to incorporate more into your classroom? What problem can you edit or design to incorporate this skill?

GO DEEPER:

- Read *Designing Groupwork* by Elizabeth G. Cohen and Rachel A. Lotan (Ch. 10) or *Strength in Numbers* by Ilana Horn (Ch. 3)

MATH

Launch



What?

A strategy to introduce a problem in a learner-centered, inquiry-based way.

Why?

In order for learners to engage meaningfully in a cognitively challenging task, they need time to process and make sense of the problem. This also builds excitement, engagement, and interest in the task.

Key Shifts

Inquiry • Self Regard

NTLO	FREQ.	PREP.	NO.
			5

How?

1. **Consider the type of task and how learners can make sense of it** while still maintaining productive struggle. Some suggestions:
   a. See, Think, Wonder, Think, Feel, Care, Knows and Need to Knows **(See Learner-Centered Practices Cards)**
   b. No numbers to start - show the premise of the problem without giving any of the numbers. This works well for story or word problems.
   c. Show the task and ask one or two learners to explain what they need to find in their own words.
   d. Show a video or demonstration. For example, if the task is about how many stacked cups are needed to reach the teacher's height you could have a few cups available to stack.

NOTE:

The goal is not to "get learners started" by showing the first step or an example problem. The goal is to spark inquiry, maintain productive struggle, and allow learners to pursue multiple solution strategies.

REFLECTION:

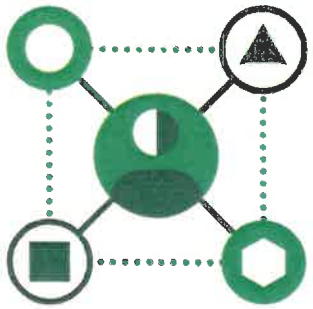
- How can you get your learners interested and excited in the problem during your launch?
- Which learners are not usually engaged in school? How can you find out about their interests and motivations to engage them more?

GO DEEPER:

- See Michigan State article on Launch:https://connectedmath.msu.edu/curriculum-design/philosophy/launch/

LEARNER-CENTERED

Which One Doesn't Belong?



What?

A strategy to facilitate rich discussions and teach argumentation.

Why?

Deepen learners' understanding of concepts through justifications and arguments based on the properties of the images shown.

NTLO

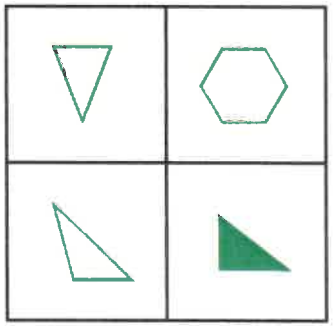
FREQ.

PREP.

NO. 6

How?

1. **Present an image** with different numbers, shapes, objects, graphs, etc. (See example below. Find more images at www.wodb.ca)
2. **Ask learners,** "Which one doesn't belong?"
3. **Have learners work individually or in groups** to discuss which one doesn't belong.
4. **Ask learners to share their answer** and provide reasoning for their response.



REFLECT

- What are some questions, prompts, or images that will provoke active and responsive instruction aligned to your learning outcomes?
- How can you use this practice to help learners learn something about themselves and/or about others?
- How will you ensure there is equitable dialogue where each and every learner's voice has an opportunity to share their thoughts?

GO DEEPER

- See Which One Doesn't Belong: www.wodb.ca
- Purchase *Which One Doesn't Belong* at Stenhouse publishers. www.stenhouse.com/content/which-one-doesnt-belong

MATH

Explore



What?

Opportunity for learners to explore solution strategies that may or may not be correct in small groups, asking questions of each other and the teacher.

Why?

To create a math class centered on learner thinking and ideas, learners need time to come up with their own solution strategies. Learners can also practice their collaboration and oral communication in a low stakes setting.

Key Shifts

Collaboration • Inquiry

NTLO	FREQ.	PREP.	NO.
			7

How?

1. After **the "Launch"** (See **PrBL card**), **give learners time to work on the task.** Begin this time with a few minutes of individual think time, then have groups work together. During this time, answer questions and support group work and productive struggle.
    a. If a group is struggling to get started or is stuck, use the questions from **Anticipatory Planning** (See **PrBL, card**).
    b. If a group is struggling with their collaboration, remind them of **Group Roles** (See **PrBL card**) or **Co-Created Community Agreements** (See **Culture Practices, card**).
2. **The task can be an open-ended math task or a another learner-centered activity** like a **Card Sort** (See **Learner-Centered Practices, card**) or **Clothesline Math** (See **Learner-Centered Practices, card**)
3. **Notice what strategies learners are trying and choose groups or learners to present their thinking to the class.** Let learners know in advance and give them time to write their work on a front whiteboard. Learners can also present their work using a doc cam or poster paper. For younger learners, they can explain their thinking for you to record on a poster.
4. **Not all groups need to complete the task or have a correct strategy before engaging in class discussion.** "Rough draft thinking" is often more interesting, and instructive. Students will finish their strategy during the discussion.

REFLECT:

- What support do learners need to learn the skills to collaborate effectively?
- How can you encourage all students to share ideas and thinking without relying on a few students with high academic status?

GO DEEPER:

- Read *Designing Groupwork* by Elizabeth G. Cohen and Rachel A Lotan. (Ch. 2).

MATH

Group Roles



What?

Concrete and explicit expectations for the role each group member plays to contribute in group collaboration.

Why?

To give participants explicit instruction on how to successfully interact with a group and contribute to the group in a productive way. With roles, groups can function more equitably and effectively, which leads to deeper learning.

Key Shifts

Collaboration

NTLO	FREQ.	PREP.	NO.
			8

How?

1. **Decide what group roles work for your grade level and class structures.** Make sure all group roles are equal in status and contribute to the mathematics (e.g., a "recorder" doesn't necessarily contribute mathematically if they only write down what is said).
2. **Introduce group roles one at a time** and give all learners an opportunity to practice before bringing in the next role.
3. **Give examples** and sentence starters when introducing a group role.
4. **Give feedback** and highlight exemplary quotes from the roles to support growth. Show explicitly how each role contributed to math learning.

Example roles: Resource Monitor/Liaison - Responsible for collecting and putting away supplies, and the only person who can ask the teacher a question (to ensure learners ask their group members first). Sounds like: "What materials do we need for this problem?","Does anyone have any questions?"

Skeptic - Responsible for questioning the group's strategy. Sounds like: "How do we know this works?", "Why did you...?"

Manager - Responsible for making sure everyone in the group understands the group's strategy and can explain it. They also ensure everyone is working on the same problem at the same time. Sounds like: "Can you practice explaining our strategy?", "What problem are we on?"

Coach - Responsible for making sure everyone participates and gets the conversation started. Sounds like: "Let's share in this order...", "What was your strategy?"

REFLECT:

- How can you support learners who are struggling with group roles?
- How can you leverage group roles in other classroom structures or practices?

GO DEEPER:

- These group roles are adapted from *Strength in Numbers* by Ilana Horn. (Ch. 5).

MATH

Participation Quiz



What?

A group quiz focused on assessing learners' group work and providing feedback to improve.

Why?

To provide opportunities for learners to focus on practicing their group work skills and receive feedback on their progress. This is a more formal way to center important feedback to improve everyday collaboration.

Key Shifts

Collaboration

NTLO | FREQ. | PREP. | NO. 9

How?

1. **Make sure you have a group-worthy mathematical task** - one that focuses on a central mathematical concept and has multiple solution paths. The task should not be so difficult that learners will need a lot of teacher support.
2. **Introduce the participation quiz** - review group work expectations, agreements, and/or group roles that you will be looking for. This can be used in combination with Bookend Lessons (See **Assessment Card or Running Rubric Card).**
3. **Launch the task.** (See **Launch, PrBL Card**).
4. **Observe the group work.** Take notes on what each group is doing well and what they could improve. Try not to get caught up in helping specific groups so that you can focus on observing as much as possible.
5. **Give feedback** midway through and/or at the end of group work time. For example, say "Group 2 did a great job leaning into the center and asking questions, but they can improve by inviting all group members to share their thinking." Focus feedback on actions within learners' control - for example, they are responsible for inviting all group members to share, but cannot control if other group members do not share.
6. **Learners can self-evaluate** using a rubric or set goals for themselves.

REFLECT:

- How can you give feedback in a way that will be most actionable given your classroom structures and routines?
- How can you provide scaffolding for areas in which many learners are struggling?

GO DEEPER:

- Read *Strength in Numbers* by Ilana Horn (Ch. 5).

MATH

Shuffle Quiz



What?

A routine to ensure all learners are participating in the mathematical discussion and can explain the group's strategy.

Why?

One concern with group work is that a few learners will solve the problem with others not participating mathematically. This "quiz" ensures all learners can explain the group strategy.

Key Shifts

Collaboration • Inquiry

NTLO

FREQ.

PREP.

NO. 10

How?

1. **Write questions that check learners' understanding of each strategy.**
2. **Let learners know that there will be a Shuffle Quiz** before starting group work and that the Manager (See **Group Roles, PrBL card**) should raise their hand when all group members are prepared to explain the group strategy.
3. When a group calls, **randomly (you can "shuffle" cards) ask a question for each person to answer individually.** For example, you might ask one learner "Why did you divide by 7?". Then ask another learner "How do you know this strategy works?". Learners should not help each other during the quiz, because each individual should understand the strategy.
4. **If not all group members are able to answer their question, the group tries again.** It is important to emphasize that this is a group responsibility. Avoid blaming (or allowing students to blame) an individual. Learners can use the strategy of Restating (See **PrBL card**) to prepare.
5. **Groups who have passed the shuffle quiz can work on an extension problem.**
6. Since the focus is on learning and collaboration, **give groups as many opportunities as they need.** Provide scaffolding if groups are struggling through specific support on the problem or by changing the questions.

REFLECT:

- How can you create a classroom culture that emphasizes that groups succeed or fail together?
- How can you use group agreements or roles to ensure equitable participation?
- How can you differentiate questions amongst different groups and group members?

GO DEEPER:

- Read *Strength in Numbers* by Ilana Horn (Ch. 5).

MATH

Status Interventions



What?

A teacher move to raise the academic status of low status learners in order to show them and others how their strengths are valuable and important.

Why?

When a learner is perceived by themselves and others as being "bad at math" (low academic status), they are less likely to participate. By explicitly naming this learner's mathematical strengths, teachers can raise their academic status.

Key Shifts

Self Regard

NTLO

FREQ.

PREP.

NO. 11

How?

1. **Consider a learner who has low academic status in class.** What are their mathematical strengths? Consider things like making connections with visuals, asking important questions, or identifying knows/need to knows. It's important to make sure that the strength being highlighted is specific to a particular ability or skill, that the praise is public, and that the ability/skill is relevant to the group task. (See **Multiple Ability Orientation PrBL cards)** for more examples.
2. **Publicly point out this strength when the learner is demonstrating it** and show how it pushes forward the class learning. For example, you might say, "The way Milena organized the information into a table helps us find the slope". This can occur during group work time (See **Explore, PrBL cards**) or class discussion (See **Discuss, PrBL cards**).
3. **Repeat this process**, it will take time to disrupt learners' perceptions of each other and themselves, which may have been forming for years.

REFLECT:

- How can you change the types of problems or classroom routines you use so that many types of strengths are necessary for accomplishing the work?
- How might your experiences of mathematics have impacted your idea of what it means to be good at math? How can you expand that to include a wider variety of strengths?
- Which learners can you focus on to learn about their mathematical strengths?

GO DEEPER:

- Read *Strength in Numbers* by Ilana Horn (Ch. 3) or *Designing Groupwork* by Elizabeth Cohen and Rachel Lotan (Ch. 10).

LEARNER-CENTERED

Clothesline Math



What?

A number line that makes the facilitation of class discourse on number sense much more efficient and effective.

Why?

A powerful tool to teach number sense. It can help develop conceptual understanding of numbers and other key mathematical ideas.

NTLO

FREQ.

PREP.

NO. 12

How?

1. **Create a long hanging number line** (clothesline) in your classroom.
2. **Have benchmark numbers** and a few blank cards available.
3. **Learners use a recording document** to create their own number line.
4. **Give a learner or a group** a set of numbers or expressions (typically a set of 2 or 3) which are written on folded paper (cards) to be properly placed on a hanging number line (clothesline). The group may add, move, remove or create numbers as needed.
5. **Ask the class** if they agree with the group's response on the clothesline. Discuss the disagreements and errors. Class discussion offers opportunities for learners to clear up misconceptions before committing the answer to static paper.

REFLECT

- What type of supports will learners need to engage in this type of learning?
- How can learning be extended and challenged through this practice?
- How will you ensure there is equitable dialogue where each and every learner's voice has an opportunity to share their thoughts?

GO DEEPER

- See Clothesline Math: www.clotheslinemath.com

MATH

Discuss



What?

An opportunity for learners to share strategies, make connections, and generalize. Teachers share academic vocabulary, formal notation, and make explicit connections between topics and standards.

Why?

By making connections, learners strengthen and deepen their understanding of the content and add formal language, notation, and generalizations with teacher support.

Key Shifts

Inquiry • Collaboration

NTLO

FREQ.

PREP.

NO. 13

How?

1. During group work (See **Explore, PrBL card**), **choose a few learners or groups to share their work to the class.** Choose multiple solution strategies and misconceptions from Anticipatory Planning (See **PrBL card**). Discussion can take place at any time during the lesson when multiple groups would benefit from seeing a particular strategy or misconception.
2. **Give students time to display their work** before calling the class' attention.
3. **Review agreements** for creating a safe and productive space for discussions. (See **Co-Create Community Agreements, Culture Practices card**)
4. **Have learners or groups present multiple strategies.** During presentation, learners should consider these questions:
   a. Can audience members restate a strategy their group did not try? (See **Restating, PrBL card**)
   b. How are the different strategies connected?
5. After each presentation, **give time for the audience to ask questions, restate the strategy, and share connections.** (See **Warm Call and Restating PrBL cards**).
6. **Supply relevant vocabulary or conventions** as they appear. This is the time to make specific connections and generalizations. After multiple presentations, ask "If we were doing a similar problem or explaining the steps to someone, what would they be?"
   a. For a more structured conversation, see Concept Attainment, Praise, Question, Suggestion, and Four Corners, (See **Learner-Centered Practices cards**).
7. For a more structured conversation, see Learner-Centered Practices cards, Concept Attainment, Praise, Question Suggestion or Four Corners.

REFLECT:

- How can you ensure all learners feel safe and have the opportunity to present their ideas and participate in the discussion?
- How can you center student ideas and thinking and reduce teacher talk time?

GO DEEPER:

- See *5 Practices for Orchestrating Productive Mathematics Discussions* (Ch. 5).

MATH

Favorite Mistake



What?

A routine where you choose a "favorite mistake" and the class works together to understand the mistake and how it helps learners understand mathematics.

Why?

This routine helps normalize making mistakes in math class and emphasizes how mistakes can actually be helpful in deepening understanding.

Key Shifts

Inquiry

NTLO | FREQ. | PREP. | NO. 14

How?

1. **Create a safe classroom environment:** explicitly discuss with learners their thoughts and feelings about making mistakes (especially in math) and the messages we receive about making mistakes. Make an anchor chart of the ways learners can support each other while discussing mistakes and words/actions to avoid (See **Co-Create Community Agreements, Culture Cards**). Learners will need to explicitly talk about what went wrong in the problem, but the emphasis should be on understanding the mathematical thinking behind it (why it made sense) and then examining why it doesn't work.
2. **Choose a favorite mistake** from class work, homework, or write your own. The mistake should contribute to a deeper understanding of the mathematical concept (not an arithmetic error or careless mistake).
    a. Consider sharing the mistake anonymously, presenting it as something several people did, or discussing with the learner whose work will be chosen in advance.
3. **Present the mistake to the class, asking learners to explain the reasoning behind it and identify why it is a mistake.** Learners can also try to describe why they think it is the teacher's favorite. Make connections to the concept and how it deepens understanding.
    a. You can also structure this as a Chalk Talk (See **Learner-Centered Practices Card**)

REFLECT:

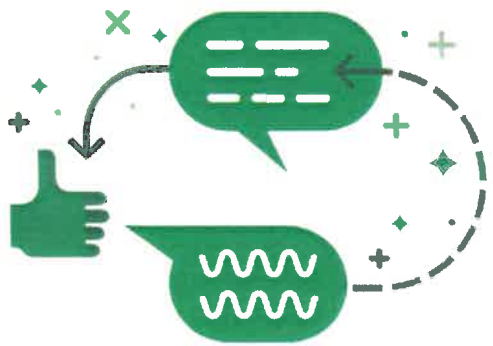
- How can you normalize making mistakes in class?
- How can you model making mistakes as a teacher?
- Did learners gain deeper understanding of the concept? Why or Why not?

GO DEEPER:

- Watch this strategy in action here: https://learn.teachingchannel.com/video/class-warm-up-routine.

MATH

Restating



What?

Learners say another learner's idea in their own words to practice active listening and emphasize important ideas for classmates who may not understand yet.

Why?

Listening to understand and explain is an important skill that requires practice. It also demonstrates respect for another learner's ideas. Finally, it helps emphasize important concepts while centering student voice.

Key Shifts

Self Regard • Collaboration

NTLO

FREQ.

PREP.

NO. 15

How?

1. When an important idea is surfaced during group work (See **Explore, PrBL card**) or class discussion (See **Discuss, PrBL card**), **pause the conversation and ask another learner to restate the idea to highlight its importance.** This can occur in a small group or during a discussion with the whole class.
    a. This strategy can be used in combination with Warm Call (See **PrBL card**), and as a Status Intervention (See **PrBL card**) if the learner whose idea is being restated is one with low academic status.
2. **Encourage learners to use this strategy on their own** when preparing for a **Shuffle Quiz** (See **PrBL card**) to ensure every student understands and can explain the group's strategy.

REFLECT:

- What support might learners need to improve their listening or restating skills?
- How will you tell if learners are improving over time?
- How can you ensure you're equitably choosing students to call on?

GO DEEPER:

- Read *5 Practices for Orchestrating Productive Mathematics Discussions* (Ch. 6).

MATH

Warm Call



What?

Learners are asked a question and have time to rehearse their response before being called on randomly (alternative to a "cold call").

Why?

This strategy combines scaffolding with gentle accountability for sharing mathematical thinking. Learners have think time and a low stakes practice opportunity. It disrupts status by having a wider variety of learners share their thinking in class.

Key Shifts

Collaboration • Self Regard

NTLO

FREQ.

PREP.

NO. 16

How?

1. **Establish a safe environment for sharing.** Discuss fears about sharing ideas with the class, specifically in math. Practice this routine with fun questions or while reviewing familiar concepts. Consider creating an anchor chart of supportive and respectful feedback.
2. **Let learners know that you will be randomly choosing someone** to share their thinking about a specific question (You can use technology such as an online randomizer or a physical method like popsicle sticks or playing cards).
3. **Share question and ask learners to discuss thinking with a partner.** (See **Think-Pair-Share, Learner-Centered Practices Card**). Make sure both partners get the opportunity to speak and ask each other questions. Learners can also write their responses to prepare to share.
4. **Randomly choose someone to share with the whole class.** From the beginning, make sure you establish that the learner chosen must share an idea (even if it's a partial or "rough draft" idea) or question. They can also share something their partner said. If necessary, the learner can have another moment to practice with their partner before they share with the class.

REFLECTION:

- How can you bring a warm and demanding stance to this routine and find balance between scaffolding and building positive relationships with learners while still holding them to a high standard?
- What skills do learners need to be able to create a safe space for each other?