



SEVEN CLOSURE ACTIVITIES FOR YOUR MATH BLOCK

By: Christa Hagan-Howe

Wrapping up a math lesson is an essential component of a balanced math block. All Learners Network (ALN) names this component Closure. Intentional closure in a math lesson is as beautiful as it is powerful. It is as much an opportunity for class connection as it is for individuals solidifying their understanding of what they have learned. Closure is a time when students make math connections and build community while reflecting on their learning. When we talk about helping all students know and believe that they are mathematicians - this is a key part. The All Learners Lesson Structure consists of four parts: Launch, Main Lesson, Math Menu, and Closure. This lesson structure was strategically created so that all students can learn math and it intentionally allows for community-building, differentiation, and inclusion.

The All Learners Lesson Structure and all of the work that we do at ALN closely align with the Collaborative for Academic, Social, and Emotional Learning (CASEL) 3 Signature Practices Playbook. CASEL outlines that each learning experience needs to be ended in an intentional way through “optimistic closure” (CASEL, 2019). “An OPTIMISTIC CLOSURE is not necessarily a “cheery ending,” but rather highlights an individual and shared understanding of the importance of the work, and can provide a sense of accomplishment and support forward-thinking” (CASEL, 2019). Starting and ending each math block with student discourse reinforces the importance of student-centered learning. Often at ALN, we talk about how whoever is doing the talking is doing the learning. Intentionally allowing students to discuss and summarize what they have learned, through skillful facilitation helps students flex critical mathematical and problem-solving muscles. We know that developing mathematical insights is only part of math learning. All students need to have the opportunity to reflect on their learning, discuss it with their peers, and apply it in various settings (Stanhope, Lair, & Tapper,



2023). Closure also allows teachers to listen, observe, and think about the next instructional steps for their students.

So, how do we do this? How do we ensure Closure for the benefit of our learners? We have a list of possible approaches for you to try out with your students. It is important to acknowledge that it can be challenging to get to Closure when students have just had a robust, meaningful exploration of Math Menu. It can be hard for them to pause what they are doing and move on - we get that. In our work, we have found that Closure does not need to happen every single day. Sometimes, teachers use the next day's Launch to allow for Closure from the previous day's learning. We have also found that the most critical time for lengthy Closure conversations is when nearing the end of a unit to tie up and solidify learning.

Closure Activities

Sharing Out

This is simple yet powerful. Students can “turn and talk” to a partner or share with the larger group.

Examples: *What did you notice (while you were working)? What did you wonder? What questions do you have?*

What I Heard

During the lesson, pay attention to what students are saying. Use one of these as a closure prompt.

Example: *Awa said that adding 9 is just like adding 10 and taking away one. Is this true?*

Menu Callback

Notice student reactions to a particular menu activity, like a game. Use observations to prompt a closure discussion.

Example: *I noticed several of you are getting great scores on the fraction game. Is there a strategy that works best?*

Pushing for Deeper Understanding

When a good portion of the class is coming to a similar conclusion, see if you can get them to think more generally about a concept.

Example: *Carla's group found that three groups of four had the same number as four groups of three. Could we say this is true of every pair of factors? Why?*

Taking the Temperature

This method allows for the group to check in and reflect on how their experiences went. There are a variety of questions that can be asked from the general to the specific. Sometimes, it can be a great time for teachers to share that they noticed where students were persevering through a tricky problem



Examples: *How did Menu go today? What did you think was interesting? Who did you work with? What choices did you make? Why?*
I noticed that a lot of you were having trouble with solving the proportion problem. What did you do to find a solution? How did you keep yourself from not giving up?

Utilizing Program Debriefing Questions

We also know that some math programs include reflection or student debriefing at the end of a lesson. Sometimes teachers can comb through the lesson debriefs to select the questions that will be most impactful for their students in solidifying their learning. This can be a springboard, a place to start when thinking about potential discussion questions for Closure.

Exit Slip

This method requires a little more time than other methods - and can be a powerful way for teachers to gather formative assessments that will inform instruction for the next day. With this approach, students are asked to demonstrate their understanding of a math concept they have just explored. They are given short problems or questions to solve in about five minutes. The teacher collects these, sorts them, and uses them to plan future instruction.

There you have it - seven Closure activities to help your students solidify their learning and understanding. To build on your learning, check out our next steps below.

References

Collaborative for Academic, Social, and Emotional Learning (CASEL) (2019), CASEL's

SEL 3 Signature Practices Playbook,
https://schoolguide.casel.org/uploads/2018/12/CASEL_SEL-3-Signature-Practices-Playbook-V3.pdf.

Stanhope, S., Laird, R., & Tapper, J. (Eds.). (2023). Teaching Math for All Learners: Teaching educators to use effective strategies to help all children learn math.

What Now? Scan the QR code and scroll to the bottom of the post for links to next steps



1. Review the All Learners Lesson Structure and read more about it in chapter two of our book, Teaching Math for All Learners.
2. Read more about the need for discourse in the math classroom here.
3. Bring All Learners Network (ALN) into your school or district for embedded professional development.