Accelerated Learning Administrative Walk-through High Leverage Practice 1: Establish goals to focus learning

HLP 1: Establish Goals to focus learning		
Teacher Centered	Making Progress	Student Centered
 Students are told the math they did previously and what they'll do next Mathematical practices are not utilized Teacher shows a general rule (procedure) and talks about the point of the lesson 	 Goals are clear, or become clear, in their relation to the mathematics the students have been learning Math practices are discussed Lesson includes an opportunity for students to generalize, explain, and justify solutions Mathematics goal drives the student-led summary 	 Goals of the lesson are clear and connected to the learning progression or become clearly connected Math practices are clearly evident in the lesson and students are able to describe the practice they are doing Students can explain why they are doing a task and how it is related to other areas of math, and/or some important uses All students are engaged in generalizing, explaining, and justifying solutions Math goals drive the student-led summary and the connections



Accelerated Learning Administrative Walk-through

High Leverage Practice 2: Implement tasks that promote reasoning and problem solving

HLP 2: Implement tasks that promote reasoning and problem solving		
Teacher Centered	Making Progress	Student Centered
 The task is unidimensional, may be focused on a specific set of procedures ("I do, we do, you do") Tasks do not support the need for a diverse set of group members' skills Cognitive demand of task is low or the teacher continually lowers the cognitive demand There is heavy scaffolding such that opportunities for problem solving are minimal. 	 Tasks are sufficiently complex and group-worthy The task invites speculation, but the cognitive demand erodes throughout the lesson (heavy scaffolding) The task starts open but students are directed into a single approach to the solution 	 The task draws students into the work to be done (conjectures, notices, wonderments) to drive curiosity The task is rich and challenging, with multiple approaches There are multiple entry points and solution pathways Tasks invite speculation



Accelerated Learning Administrative Walk-through High Leverage Practice 3: Use and Connect Mathematical Representations

HLP 3: Use and connect mathematical representations		
Teacher Centered	Making Progress	Student Centered
 Teacher does not support connections to prior learning The teacher points out that students need this math for the homework or some future test/course The class does a warmup that practices something they will need for the day's lesson Representations are not connected to other representations or to mathematical models, written methods, or strategies 	 How students share out their thinking seems more about turn taking than a genuine consolidation of understanding Teacher shows students how new learning fits in with what they have been learning Students are reminded of the math they did previously and what they will do next Representations may loosely be connected or discussed, or connections are unplanned and not explicitly connected to other representations, models, strategies, etc. 	 Students are making connections to previous knowledge, skills, and understandings ["Ohh"] Students have the opportunity to put the new learning in context with other math they have learned and discuss where the new learning might be useful Mathematical models and representations are explored and connected to the learning and to other representations to drive discussions around big ideas



Accelerated Learning Administrative Walk-through High Leverage Practice 4: Facilitate Meaningful Mathematical Discourse

HLP 4: Facilitate meaningful mathematical discourse		
Teacher Centered	Making Progress	Student Centered
 Classroom arrangement does not support collaborative work Teacher is fixed at the front of the room Lecture prevails rather than an interactive atmosphere Minimal (or no) opportunities for collaboration are provided Teacher provides minimal opportunities for students to share their own thinking or work with their peers The final mathematical authority clearly resides with the teacher 	 Students may be sitting in groups but there is minimal engagement between group members Teacher provides some opportunities for collaboration Exploration time is either too little or too much The teacher lacks the confidence to utilize instructional strategies that relinquish control of the classroom to students Teacher appears to anticipate common student misconceptions but may miss opportunities to surface them in ways that support consolidated understanding Students' arguments are focused on <i>what</i> they did, but not necessarily <i>why</i> they did it 	 The teacher purposefully prompts students to talk about each other's explanations Teacher strategically chooses what students share and there is purposeful sequencing to support the mathematical focus Teacher seems to be more at ease with the management of a problem-centered, collaborative classroom Students question each other, and the teacher encourages this behavior Students' arguments are focused on both how and why Students are positive in their interactions The teacher appears to have established norm/protocol for the learning culture Teacher is purposefully monitoring and selecting student work for presentation with the class



Accelerated Learning Administrative Walk-through High Leverage Practice 5: Pose Purposeful Questions

HLP 5: Pose purposeful questions		
Teacher Centered	Making Progress	Student Centered
 The teacher both asks and answers his or her own questions Learning is passive Teacher asks "fill-in-the-blank" questions or basic computation Teacher asks low-level questions (recall) Teacher provides little or no wait time OR calls on the first student to raise their hand The teacher does all of the summarizing The teacher continually rephrases or revoices student responses The teacher calls on individual students until a student provides the response they were looking for. 	 Students do not readily question or critique the reasoning of their peers The teacher provides minimal opportunity for students to reflect on their learning Students are narrowly focused on their own responses rather than the responses of their peers The teacher gathers data during the investigation but appears to rely on volunteers during the discussion (rather than purposefully selecting student responses) Students seem reliant on teacher affirmation of their approach 	 Students are engaged in questioning the reasoning of their peers Students are thinking about efficiency and are naturally wondering about generalizations The authority seems to reside in their reasoning and defense (rather than the teacher) Classroom culture seems to have fostered curiosity and sense making, which is reflected in both the questions students pose to one another and in the questions that students think about themselves. Students build on one another's strategies/thinking and generate and defend arguments



Accelerated Learning Administrative Walk-through High Leverage Practice 6: Build Procedural Fluency From Conceptual Understanding

HLP 6: Build procedural fluency from conceptual understanding		
Teacher Centered	Making Progress	Student Centered
 Teacher asks for explanations of procedures, application of rules, or use of definitions The teacher guides students toward one strategy The teacher leads the whole class in developing reasoning and justification for correct solutions Students look only to the teacher or text to validate mathematical correctness 	 Teacher's questions probe reasoning about mathematical representations, and why solutions make sense Questions build on what students start but tend to channel students' thinking toward a preferred strategy or method of solution The teacher entertains alternative methods and solutions, so long as students can justify their reasoning 	 Teachers ask for conjectures and justification for conjectures Students are encouraged to question and extend their own thinking to make connections Students are given the opportunity to reason/discover concepts with explicit closure to the lesson by the teacher



Accelerated Learning Administrative Walk-through High Leverage Practice 7: Support Productive Struggle in Learning Mathematics

Instructions: Record evidence of this practice.

HLP 7: Support productive struggle in learning mathematics		
Teacher Centered	Making Progress	Student Centered
 Teacher provides examples of how to solve the task in advance of engaging students in solving the problems Teacher gives too many hints and/or answers questions for the students Teacher does not provide adequate time for consolidation of learning (closure) Summary consists of a whole-group share-out with no time for processing and the share-out is dominated by a small set of student volunteers Opportunity for reflection on learning is nonexistent 	 Teacher provides adequate <i>individual</i> think time, which provides access and promotes productive contributions during group work BUT not all individuals appear to be legitimately attending to it The teacher prolongs the length of time utilized to launch/pose the problem, and as a result, students appear to lose interest in attending to it when given the opportunity to engage in solving 	 Students exhibit perseverance through engagement in learning tasks Students are comfortable making mistakes, critiquing and questioning each other, and analyzing errors Students understand their challenge and appear to be intent on attending to it Teacher provides adequate individual think time Students leverage time given to deepen mathematical understanding

• Teacher, support professionals, or other students solve the problem for the student



Accelerated Learning Administrative Walk-through High Leverage Practice 8: Elicit and Use Evidence of Student Thinking

Instructions: Record evidence of this practice.

HLP 8: Elicit and use evidence of student thinking

Teacher Centered

- Teacher relies on a consistent (and small) group of volunteers in whole group or small group formative assessment
- Students ask to check answers or how to complete task
- The teacher demonstrates and justifies correct methods and solutions
- Students look to the teacher or text to validate correctness

• Teacher gathers data during investigation but appears to rely on volunteers (rather than purposefully selecting and sequencing stared thinking)

Making Progress

- Students are held accountable for learning (e.g., actively involved in share-out, taking notes, critiquing, asking questions), but the nature of the questions does not necessarily demand stronger argumentation
- Teacher provides minimal opportunity for students to reflect on their learning
- Students are focused on procedures
- The teacher leads the whole class in developing reasoning and justification for correct solutions but students look to the teacher or text to validate correctness

• Teacher provides opportunities for additional thoughts/insights and questions

Student Centered

- Mathematical proficiency appears to be evolving over time
- Teacher anticipates, notes, and fully addresses common student misconceptions
- Teacher purposefully works at prompting and making student reasoning and thinking public
- Students ask not just how to do something but also expect each other to explain why it works.
- Students argue the validity of a mathematical statement or solution through reasoning and justifying
- When students have solved a problem or come to a solution, students tend to believe they are correct and are ready to present their reasoning

