Student Success Skills

Productive Practices (What it **IS**)	Unproductive Practices (What it is **NOT**)
Balanced goals of mathematical learning and performance goals ● Teacher studies the progression of mathematics when considering goals. ● Teachers and students value the learning process. ● Students see effort put forth as a pathway to high levels of learning.	**One-sided goals focused solely on performance or learning** ● Teacher values procedures and computation over conceptual understanding. ● Teachers and students only value the correctness of answers. ● Students and teachers view effort negatively and unnecessary for learning.
High-quality, open mathematical tasks ● Teacher implements tasks that promote conceptual understanding prior to procedural fluency. ● Students embrace challenges as learning opportunities. ● Students make multiple connections and reason qualitatively and quantitatively. ● Students persevere while creatively and critically solving problems.	**Mathematical procedures and memorized facts** ● Teacher values procedures and computation over conceptual understanding. ● Students avoid challenges. ● Students practice procedures without connections to mathematical representations. ● Students express apathy to mathematics, failing to see relevance and connections.
Promote struggle as a means of learning ● Teacher and students recognize struggle as part of meaningful learning experiences. ● Teacher demands engagement instead of tolerating compliance. ● Teacher intentionally acknowledges mistakes using responsive teaching. ● Teacher believes all students are capable of learning mathematics at high levels. ● Teacher maintains rigor in mathematical tasks. ● Technology enhances mathematical concepts and understanding.	**Alleviate struggle as a means of help** ● Teacher and students view struggle as a negative outcome of not knowing or understanding content. ● Teacher promotes compliance instead of valuing engagement. ● Teacher and students view mistakes as rigid and absolute, limiting the learning opportunity of preconceived misconceptions. ● Teacher believes that not all students are capable of learning and demonstrating mathematical understanding. ● Teacher unintentionally decreases rigor and demand. ● Technology is a substitute for the teacher.

Student Success Skills

Productive Practices (What it **IS**)	Unproductive Practices (What it is **NOT**)
Meaningful student discourse • Teacher assumes facilitator role to pose questions in a strategic way that meets students needs, honors students current level of thinking, and progresses their thinking in the search for understanding and skill. • Teacher and students develop mutual respect, utilize strategies to build a safe and supportive culture while constructing viable arguments and critiquing the reasoning of others in a courteous manner. • Students share in the responsibility of listening, questioning, constructing, and critiquing.	**Teacher-directed discussion** • Teacher delivers information to students, with minimal regard for students' prior knowledge. • Teacher directs discussion, asking questions that focus on efficient solution paths with correct answers only. • Students listen and reply directly to the teacher when requested, with little to no peer interaction.
Effectively assess learning and performance goals • Teacher encourages students to set, monitor, adapt, and evaluate goals, valuing the learning process. • Teacher assesses understanding through a variety of methods (i.e. mathematical models, strategies, algorithms). • Teacher and students engage in a feedback cycle to promote growth.	**Assessment focuses on procedures over learning** • Teacher grades using points, focusing on correct/incorrect responses, rather than through the lens of learning gradations. • Teacher assesses skills only, rather than balanced with deep understanding. • Feedback is stagnant, in the form of point deductions, with no reteaching or revisiting concepts.
Grades accurately communicate learning • Teacher monitors and reports mathematical learning and performance goals separate from student success skills and non-academic factors. • Teacher communicates grades that represent an accurate picture of what students know and can to do, allowing students to submit revisions without penalty to promote continuous learning. • Teachers allow students to submit revisions, without penalty, to promote continuous learning. • Teacher promotes equitable grading practices.	**Grade inflation misrepresents learning** • Teacher combines academic and non-academic factors into one report. • Teacher records grades based on lesson progression without instructional adjustments based on student needs, following a rigid timeline for mastery of content. • Teacher records first attempts at learning without resubmissions for learning opportunities. • Teacher applies equal grading practices.