

Student Success Skills

Productive & Unproductive Practices

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Balanced goals of mathematical learning and performance goals	One-sided goals focused solely on performance or learning
High-quality, open mathematical tasks	Mathematical procedures and memorized facts
Promote Struggle as a Means of Learning	Alleviate Struggle as a Means of Help
Meaningful Student Discourse	Teacher-Directed Discussion
Effectively assess learning and performance goals	Assessment focuses on procedures over learning
Grades accurately communicate learning	Grade inflation misrepresents learning

Instructional strategies that support Student Success in Mathematics

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Balanced goals of mathematical learning and performance goals	One-sided goals focused solely on performance or learning
High-quality, open mathematical tasks	Mathematical procedures and memorized facts
Teacher assumes facilitator role to pose questions in a strategic way that meets the student’s needs, honors the students current level of thinking, and progresses their thinking in the search for understanding and skill.	Teacher delivers information to students, with minimal regard for students’ prior knowledge.
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.	Teacher directs discussion, asking questions that focus on efficient solution paths with correct answers only.
Students share in the responsibility of listening, questioning, constructing, and critiquing.	Students listen and reply directly to the teacher when requested, with little to no peer interaction.

Experiences that support Student Success in Mathematics

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Teacher demands engagement instead of tolerating compliance.	Teacher promotes compliance instead of valuing engagement.
Teacher and students recognize struggle as part of meaningful learning experiences. Teacher intentionally acknowledges mistakes using responsive teaching.	Teacher and students view mistakes as rigid and absolute, limiting the learning opportunity of preconceived misconceptions.
Teacher believes all students are capable of learning mathematics at high levels.	Teacher believes that not all students are capable of learning and demonstrating mathematical understanding.
Teacher maintains rigor in mathematical tasks.	Teacher unintentionally decreases rigor and demand.

Environmental factors that support Student Success in Mathematics

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Teacher implements tasks that promote conceptual understanding prior to procedural fluency.	Teacher values procedures and computation practice.
Students embrace challenges as learning opportunities.	Students avoid challenges.
Students make multiple connections and reason qualitatively and quantitatively.	Students practice procedures without connections to mathematical representations.
Students persevere while creatively and critically solving problems.	Students express apathy to mathematics, failing to see relevance and connections.

Assessment practices that support Student Success in Mathematics

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Teacher encourages students to set, monitor, adapt, and evaluate goals, valuing the learning process.	Teacher grades using points, focusing on correct/incorrect responses, rather than through the lens of learning gradations.
Teacher assesses understanding through a variety of methods (i.e. mathematical models, strategies, algorithms).	Teacher assesses skills only, rather than balanced with deep understanding.
Teacher and students engage in a feedback cycle to promote growth.	Feedback is stagnant, in the form of point deductions, with no reteaching or revisiting concepts.
Teacher encourages students to set, monitor, adapt, and evaluate goals, valuing the learning process.	Teacher grades using points, focusing on correct/incorrect responses, rather than through the lens of learning gradations.

Grading and reporting practices that support Student Success in Mathematics

Productive Practices (What it IS)	Unproductive Practices (What it is NOT)
Teacher monitors and reports mathematical learning and performance goals separate from student success skills and non-academic factors.	Teacher combines academic and non-academic factors into one report (letter grade).
Teacher communicates grades that represent an accurate picture of what students know and can do, allowing students to submit revisions without penalty to promote continuous learning.	Teacher records grades based on lesson progression without instructional adjustments based on student needs, following a rigid timeline for mastery of content.
Teachers allow students to submit revisions, without penalty, to promote continuous learning.	Teacher records first attempts at learning without resubmissions for learning opportunities.
Teacher implements equitable grading practices.	Teacher applies equal grading practices.