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| **Effective Mathematics Teaching Practices** |
| **Establish mathematics goals to focus learning**. *Effective teaching of mathematics establishes clear goals for the mathematics that students are learning, situates goals within learning progressions, and uses the goals to guide instructional decisions.* |
| **Implement tasks that promote reasoning and problem solving**. *Effective teaching of mathematics engages students in solving and discussing tasks that promote mathematical reasoning and problem solving and allow multiple entry points and varied solution strategies.* |
| **Use and connect mathematical representations**. *Effective teaching of mathematics engages students in making connections among mathematical representations to deepen understanding of mathematics concepts and procedures and as tools for problem solving.* |
| **Facilitate meaningful mathematical discourse**. *Effective teaching of mathematics facilitates discourse among students to build shared understanding of mathematical ideas by analyzing and comparing student approaches and arguments.* |
| **Pose purposeful questions**. *Effective teaching of mathematics uses purposeful questions to assess and advance students’ reasoning and sense making about important mathematical ideas and relationships.* |
| **Build procedural fluency from conceptual understanding**. *Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems.* |
| **Support productive struggle in learning mathematics**. *Effective teaching of mathematics consistently provides students, individually and collectively, with opportunities and supports to engage in productive struggle as they grapple with mathematical ideas and relationships.* |
| **Elicit and use evidence of student thinking**. *Effective teaching of mathematics uses evidence of student thinking to assess progress toward mathematical understanding and to adjust instruction continually in ways that support and extend learning.* |

National Council of Teachers of Mathematics. (2014). *Principles to actions:
Ensuring mathematical success for all*. Reston, VA: Author.

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