

Please Challenge Me!

Differentiating for Strong Mathematics Students in the Primary Grades

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Principles for Supporting Advanced Learners:

- Cultivate the learners' desire to compete with their own possibilities rather than an established grade-level norm
- Make clear what constitutes 'stretch goals'
- Provide a support system for helping the learner achieve 'stretch goals'
- Balance rigor and joy in learning

Strategies for Supporting Advanced Mathematics Students in the Primary Grades:

Strategy	Description of Strategy	Benefits to Advanced Learner
Rich Mathematical Tasks	Use of tasks that emphasize learning mathematics concepts/skills through problem solving and reasoning with multiple entry points for students at varied levels of understanding	• Allow engagement at varied levels of sophistication • Emphasize critical thinking
Tiered Assignments	Varied levels of activities designed to address a particular instructional goal at different levels of complexity, abstractness, open-endedness, and/or independence	• Can accommodate a wider range of skill levels than a single task • Provide work at an appropriate level of challenge
Opportunities for Student Choice	Students make decisions about the mathematical tasks they will work on and how they will approach tasks. Students are encouraged to choose personally challenging work	• Allow student to take active responsibility for own learning • Encourage metacognition and intellectual risk-taking
Task Extensions	Tasks that are as immediate follow-up to an already completed base task and provide heightened challenge	• Allow for dual engagement in whole class tasks and more challenging stretch tasks

Select References

- Bray, W. (Oct 2009). The Power of Choice. *Teaching Children Mathematics*, 16(3), 178-183.
- Carpenter, T. P., Fennema, E., Franke, M. L., Levi, L., & Empson, S. B. (2015). *Children's Mathematics: Cognitively Guided Instruction* (2nd ed). Portsmouth, NH: Heinemann.
- National Council of Teachers of Mathematics (NCTM). (2014). *Principles to Actions: Ensuring Mathematical Success for All*. Reston, VA: NCTM.
- Thronsdon, J. (May 2014). Knock 'em Down. *Teaching Children Mathematics*, 20 (9), 584.
- Tomlinson, C. A. (2017). *How to Differentiate Instruction in Academically Diverse Classrooms* (3rd ed.). Alexandria, VA: ASCD.
- Tomlinson, C. A. (2014). *The Differentiated Classroom: Responding to the Needs of All Learners* (2nd ed.). Alexandria, VA: ASCD.

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