

5.4

Questioning Across Lesson Phases

(Focus on Productive Struggle)

Instructions: Building perseverance requires support for students as they engage in productive struggle. Use this tool to plan strategies to support students so they will stay with a task. One tendency in teaching is to take away the

struggle—this tool is targeted at *maintaining* the challenge but also at providing encouragement and structures to develop perseverance.

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| **Anticipate student responses** | |
| How might students approach the problem (across the range of learners in your class)? | |
| **Launching the task** | |
| What explicit, specific statements might you make to **encourage** and **motivate** students to invest time in the task (not by telling them that it is relevant to a test or that they will need it for their future)? | |
| **Monitoring the task: Circle/highlight questions you might use.**  **Add ones specific to the task(s).** | |
| ***To get started with the problem:***   * How would you describe the problem in your own words? * What information does the problem give you? * What strategies might you use? * What tools will you need? * What do you think the answer might be? * Others: | ***If a student is stuck:***   * Can you think of other problems like this one? * Could you try it with simpler numbers/shapes/situation? Fewer numbers? * Would it help to create a diagram? Make a table? Draw a picture? * Can you guess and check? * Others: |
| ***As students implement their strategies:***   * Can you explain what you did so far? * Why did you decide to use this method? * Have you thought of all the possibilities? * Why did you decide to organize your results like that? * Do you see a pattern? * Others: | ***If a student has finished (early):***   * What do you notice if … ? * Now that you are done, do you see another way (more efficient way) that you could have solved it? * Would your strategy work with other numbers/different parameters? * Others: |
| **Summarizing the task** | |
| What explicit, specific statements might you make to **recognize** students’ perseverance? | |

*Source: Previously published by Bay-Williams, J., McGatha, M., Kobett, B., and Wray, J. (2014).* Mathematics Coaching: Resources and Tools for Coaches and Leaders, K–12*. New York, NY: Pearson Education, Inc.*

Retrieved from the companion website for *Everything You Need for Mathematics Coaching: Tools, Plans, and A Process That Works: Grades K–12* by Maggie B. McGatha and Jennifer M. Bay-Williams with Beth McCord Kobett and Jonathan A. Wray. Thousand Oaks, CA: Corwi[n, www.corwin.com.](http://www.corwin.com/) Copyright © 2018 by Corwin. All rights reserved. Reproduction authorized only for the local school site or nonprofit organization that has purchased this book.