**Implementing the Standards for Mathematical Practices:**

**Curriculum:**

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| --- | --- | --- | --- | --- |
| **Are the Standards for Mathematical Practice included in the written curriculum?** | | | | |
|  | IDK/NO | Minimal | Somewhat | Consistently |
| Do unit maps and lesson plans address the Standards for Mathematical Practice? |  |  |  |  |
| Are all the Standards for Mathematical Practice addressed during the course of the year? Are they appropriately weighted and balanced |  |  |  |  |
| Does the written curriculum emphasize reasoning abstractly and quantitatively? (Standards for Mathematical Practice, #5: Use appropriate tools strategically.) |  |  |  |  |
| Does the written curriculum focus on structures and patterns, extending the process of patterning to more complicated concepts and relationships and introduce algebraic patterns? (Standards for Mathematical Practice, #7: Look for and make use of structure.) |  |  |  |  |
| Does the curriculum include activities that require reasoning? (Standards for Mathematical Practice, #2: Reason abstractly and quantitatively.) |  |  |  |  |
| Is the curriculum organized to incorporate the generalization and applications of mathematical processes through rich tasks appropriate to each grade band and curricular area? (Standards for Mathematical Practice, #8: Look for and express regularity in repeated reasoning.) |  |  |  |  |
| Does the written curriculum include specific activities that require students to construct viable arguments and critique the arguments of others? (Standards for Mathematical Practice, #3: Construct viable arguments and critique the reasoning of others.) |  |  |  |  |
| Does the curriculum provide opportunities for teachers to incorporate productive struggle and perseverance in problem solving within their lessons? (Standards for Mathematical Practice, #1: Make sense of problems and persevere in solving them.) |  |  |  |  |
| Does the curriculum provide opportunities for students to model numerical relationships in a variety of ways? (Standards for Mathematical Practice, #4: Model with mathematics.) |  |  |  |  |
| Does the written curriculum address mathematical terms and critical content vocabulary in a direct and explicit manner? (Standards for Mathematical Practice, #6: Attend to precision.)  Is it addressed in a manner that entails active engagement and goes beyond knowledge of the definition?  Are vocabulary terms identified at each grade level? |  |  |  |  |

**Instruction:**

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| --- | --- | --- | --- | --- |
| **Am I embedding instruction on the Standards for Mathematical Practice?** | | | | |
|  | IDK/NO | Minimal | Somewhat | Consistently |
| If asked, would my students be able to identify the mathematical practices targeted during specific lessons? |  |  |  |  |
| Am I routinely demonstrating modeling in my instruction? |  |  |  |  |
| Do I teach students to identify and use patterns to solve problems? |  |  |  |  |
| Have I provided tasks that require students to apply generalizations from many tasks to investigate, create, and test hypotheses? |  |  |  |  |
| Am I helping students to make sense of problems and persevere in solving them? Am I circulating to ensure that students are getting directive and supportive feedback through questioning to persevere? Am I providing tasks at the appropriate level of challenge? |  |  |  |  |
| Do I provide students access to a variety of tools and model how to use them appropriately? |  |  |  |  |
| Am I guiding discussions through questions and representations in order to teach students to reason abstractly and quantitatively? |  |  |  |  |
| Am I requiring students to justify their answers and engage in discourse with their peers? |  |  |  |  |
| Do I provide instruction on the appropriate use of technology tools and provide opportunities for students to select and use tools as appropriate? |  |  |  |  |

**Assessment:**

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| --- | --- | --- | --- | --- |
| **Am I designing assessments that evaluate students’ skills and abilities related to the Standards for Mathematical Practice?** | | | | |
|  | IDK/NO | Minimal | Somewhat | Consistently |
| Do I require my students to demonstrate their understanding by constructing models? |  |  |  |  |
| Are students required to explain their solution methods, both orally and in writing? |  |  |  |  |
| Do I require students to show their work and/or justify their answers? |  |  |  |  |
| Am I designing assessments that require students to demonstrate precision in both terminology and computation? |  |  |  |  |
| Am I designing assessments that require students to construct arguments? |  |  |  |  |
| Am I designing assessments that allow students to use a variety of mathematical tools? |  |  |  |  |
| Am I designing assessments that evaluate students’ ability to generalize and apply mathematical processes? |  |  |  |  |
| Do I provide assessments that include extended tasks that mirror instructional activities, assessing students’ ability to persevere to solve problems? |  |  |  |  |
| Am I assessing students’ abilities to identify and use patterns in solving problems? |  |  |  |  |
| Do my assessments regularly include open-ended, rich, and cognitively challenging tasks in order to help students make sense of problems and persevere in solving them? |  |  |  |  |
| Do my assessments require precision in vocabulary and accuracy in computation and symbol manipulation? |  |  |  |  |
| Am I designing classroom assessments that require quantitative reasoning as well as procedural fluency? |  |  |  |  |
| Am I designing assessments to include some tasks that require the use of technology? |  |  |  |  |