## Indicator P1.4 Meeting Diverse Needs

Uses an understanding of students' diverse needs to differentiate instruction according to learning preferences and abilities, needs, interests, prior education, cultural beliefs and values, native languages, and life experiences.

| What Effective Math Teachers Know | What Effective Math Teachers Do | ✓ Focus |
|---|---|---|
| **a.** Students need to know WHY something works and have realistic contexts for the math they do in order to stay engaged. | • Consider relevant contexts when presenting math problems.<br>• Present problems which will allow application to students' daily lives. | ☐ |
| **b.** Each class is a unique group of students with varying needs, strengths, and challenges. | • Plan initial class activities and discussions which allow the teacher to learn what students know and help them understand where they need to be and how they can be successful – initial activities may focus on the Standards for Mathematical Practice rather than specific content.<br>• Consider students' culture in designing lessons and activities. | ☐ |
| **c.** Teachers recognize the importance of knowing all students and the impact of class, culture, and language in mathematics learning. | • Spend time getting to know students and their cultural backgrounds through a variety of initial activities (interviews, surveys, discussions, ice breakers).<br>• Draw on students' knowledge (interests, needs, strengths) of mathematical ideas when planning lessons, selecting mathematical tasks, and designing assessments. | ☐ |
| **d.** The Universal Design Principles, when applied consistently during the planning and delivery of lessons, allow more students the chance to engage in and master the work. | • Make materials accessible in a variety of formats, especially if instruction is remote and not all students have access to computer.<br>• Design lesson plans that allow for various approaches in presenting material (video, hands-on activities, text explanations, modeling, online resources such as Desmos Classroom Activities, etc.).<br>• Design classroom activities for engagement by having students explore the content by sight, touch, movement, listening, and creating opportunities for understanding.<br>• Design a variety of assessment activities (project work, oral presentations, power points, teacher-developed quizzes) which allow choice so that students can best show what they know. | ☐ |
| **e.** Teachers recognize the importance of a safe learning community. | • Collaborate with students to develop class norms which assure safety and respect.<br>• Be vigilant in seeing that norms are followed. | ☐ |
| **f.** Teachers know that persons from many cultures have contributed to the study of mathematics. | • Acquaint students with persons from various cultures who have impacted the body of mathematics knowledge.<br>• Use a variety of instructional materials to emphasize the contributions of women, African Americans, and others to the field of mathematics. | ☐ |
| **g.** Teachers recognize that math is a social justice issue and that "educational inequities are historical and systemic" (Aguirre, 2016). | • Critically examine materials for racial, class, gender, cultural, and language bias and to ensure cultural relevance.<br>• Critically reflect on their own backgrounds, biases, cultures, and beliefs when developing new materials.<br>• Do self-reflection to try to eliminate implicit bias in instruction. | ☐ |

**Notes to self**