High Quality Curriculum & Implementation:

Understanding Culturally Responsive and Sustaining Education (CRSE)

Mathematics Curriculum Review Tool

**Adopting a High-Quality Curriculum is an overall strategy for having high expectations for all students.**

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| **Introduction:** Mathematics curriculum materials are replete with language, mathematical symbols, and visual images (e.g., pictures, graphs, tables). The mathematical symbols in and of themselves are neutral. It is the language and visual images used in a curriculum that have the potential for bias. When using this tool, we will use the term "text" to represent language. For pictures, graphs, tables, etc., we will use the term "images”. | | |
| Category | **Guiding Questions** | **Evidence Collected from Curriculum** |
| **Diverse Identities** | How do the teacher's materials provide guidance on opportunities to engage student and families’ funds of knowledge to enhance lessons? Does the curriculum suggest activities to engage families to share topics of expertise? |  |
| Do the authors of the curriculum have diverse identities? |  |
| How does the curriculum portray diverse ethnicities and nationalities, family structures (e.g. single parents, adopted or foster children, same-sex parents, other relatives living with the family), and differently-abled characters?   * Do text and images in the curriculum positively portray people from diverse groups? * Do the text and images in the curriculum avoid representing people from diverse groups in a stereotypical, foreign, or exotic manner? |  |
| How does the curriculum avoid prejudice, racism, discrimination, exploitation, oppression, sexism, privilege, ableism, and inter-group conflict (Sadker, n.d., Unreality section, para. 1)? |  |
| **Implementation Implications** |  | |

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| Category | **Guiding Questions** | **Evidence Collected from Curriculum** |
| **Cultural Awareness** | How do the teacher's materials provide guidance on customizing and  supplementing the curriculum to reflect the cultures, traditions, backgrounds, and interests of the student population? Does the curriculum prompt the teacher to augment lessons to reflect the student population? |  |
| How do the teacher's materials provide guidance on being aware of one’s biases and the gaps between one’s own culture and students’ cultures? Does the curriculum prompt the teacher to reflect on one’s biases and the gaps between one’s own culture and students’ cultures? |  |
| How does the curriculum highlight non-dominant populations and their strengths and assets, so that students of diverse race, class, gender, ability, and sexual orientation can relate and participate fully? |  |
| **Implementation Implications** |  | |

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| Category | **Guiding Questions** | **Evidence Collected from Curriculum** |
| **Instructional Engagement** | How do the teacher's materials provide guidance on engaging students in culturally sensitive experiential learning activities? Does implementation take into consideration students’ lived experiences (i.e. alternative algorithms)? |  |
| How do the teacher's materials provide guidance on giving students opportunities to contribute their prior knowledge and experience with a topic, not just respond to the text and information presented in class? Does the curriculum acknowledge and value children and family’s experiential knowledge? |  |
| How do the teacher's materials provide guidance on seeing diverse student identities as assets and strengths that can advance individual and group learning, rather than seen as challenges or difficulties to be overcome? Does the curriculum prompt the teacher to embrace and value diversity as positive? |  |
| How does the curriculum make connections to social, political, or environmental issues that may be of concern to students? |  |
| Do the teacher materials offer suggestions to use social-emotional learning (SEL) approaches to draw out and build upon students’ assets to facilitate learning? |  |
| **Implementation Implications** |  | |

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| Category | **Guiding Questions** | **Evidence Collected from Curriculum** |
| **Critical Consciousness** | How do the materials avoid stereotypic depictions in terms of race, gender, sexuality, language, or ability? |  |
| Do materials avoid using text and images that suggest groups of people were order-less or uncivilized as compared to the dominant culture? |  |
| How does the curriculum avoid centering one group’s cultural practices as the standard to which all other are compared (i.e. Euro-centric, male-centric, etc.)? |  |
| **Implementation Implications** |  | |

Adapted From:

Coomer, M. N., Skelton, S. M., Kyser, T. S., Warren, C., & Thorius, K. A. K. (2017). Assessing bias In standards and curricular materials. Equity Tool. Indianapolis, IN: Great Lakes Equity Center.

J. Bryan-Gooden, M. Hester, & L. Q. Peoples (2019). Culturally Responsive Curriculum Scorecard. New York: Metropolitan Center for Research on Equity and the Transformation of Schools, New York University.

Social Emotional Learning and Equity Pitfalls and Recommendations. (n.d.). Retrieved March 3, 2020, from   
<https://nationalequityproject.org/about/social-emotional-learning-equity>

References:

Banks, J. A. (1997). Educating citizens in a multicultural society. Multicultural education series. New York, NY: Teaches College Press

Duncan-Andrade, J. (2007). Gangstas, wankstas, and ridas: Defining, developing, and supporting effective teachers in urban schools. International Journal of Qualitative Studies in Education, 20(6), 617-638.http://doi.org/10.1080/09518390701630767

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Educational Research Journal, 32, 465-491. <http://doi.org/10.2307/1163320>

Mitchell, T. (2015). Identity and social action: The role of self-examination in systemic change. In Association of American Colleges & Universities Online. Retrieved from <https://www.aacu.org/> diversitydemocracy/2015/fall/mitchell

Sadker, D. (n.d.) Seven forms of bias in instructional materials. Retrieved from <http://www.sadker.org/curricularbias.html>