



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
2021 Volume II: Developing Anti-Racist Curriculum and Pedagogy

Eyes Wide Open: E(race)ing Color-Blindness in the Math Classroom

Guide for Curriculum Unit 21.02.07
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The focus of this curricular unit is twofold. The first is to consider the math classroom as a racialized space. In doing so, the unit will shed light on why math education is not race-neutral and will explain how color-blindness reinforces the oppression of students of color. The unit will examine how color-blindness within mathematics education ignores historical data and blames academic failure on students, their families, and their communities without recognizing the systemic biases that reproduce racial inequality through material stratification, deficiency framing, and reduced access to high quality instruction.

The second part of the unit will consider anti-racist teacher-centered instructional strategies that directly address inequality in math instruction. Among these strategies, the unit will consider teaching for understanding, group participation through complex instruction, culturally relevant pedagogy, and teaching mathematics for social justice. To achieve this, the unit will review a series of activities meant to be interspersed throughout the year in a Geometry classroom. The activities are inspired by the Data Portraits of W.E.B. Dubois and provide a culturally relevant and meaningful way to engage students in mathematics without sacrificing the standards. Students will examine (1) inequality in access to educational resources, (2) overcrowding in large urban schools, (3) hunger and food insecurity within urban settings, and (4) racial inequality in policing as evidenced by traffic violations. Students will create artwork in the form of data portraits as a means of establishing a counter-narrative. Then, the unit will examine a brief race-neutral Calculus lesson on integral approximation and will highlight components that reinforce systemic racism. Finally, the unit will then address what changes must be made within the sample lesson to better address issues pertaining to race in the math classroom.

(Developed for Pre-Calculus, grades 9-12; recommended for Geometry, grades 9-10, and Calculus, grade 12)

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