

# Racial Equity Analysis Tool

It is the moral and ethical responsibility and a top priority for Seattle Public Schools to provide Equity Access and Opportunity for every student, and to eliminate racial inequity in our educational and administrative system.

Research indicates that racial disparities exist in virtually every key indicator of child, family, and community well-being. Individual, institutional and structural impacts of race and racism are pervasive and significantly affect key life indicators of success. The **Racial Equity Analysis Tool** lays out a clear process and a set of questions to guide the development, implementation and evaluation of significant policies, initiatives, professional development, programs, instructional practices and budget issues to address the impacts on racial equity. To do this requires ending **individual racism, institutional racism and structural racism**.

The concept of **racial equity** goes beyond formal racial equality — where all students are treated the same — to fostering a barrier-free environment where all students, regardless of their race have the opportunity to achieve. This means differentiating resource allocations, within budgetary limitations, to serve students with the support and opportunities **they need** to succeed academically.

## Why and when should I use it?

- **Use** this tool to create an equity lens for educational leaders:  
The Racial Equity Analysis Toolkit provides a set of guiding questions to determine if existing and proposed policies, budgetary decisions, programs, professional development and instructional practices are likely to close the opportunity gap for specific racial groups in Seattle Public Schools.
- **Apply** the tool to decrease the opportunity gap, and increase positive outcomes for students of color.

Department/Region/School: Science/All District/K-8 Schools

Facilitator: MaryMargaret Welch Date: April 2015 - Present

Committee/Community members: MaryMargaret Welch, Alisha Taylor, Brad Shigenaka,  
Christine Benita, Christine Boyll, and future Adoption Committee membership will be  
finalized by June 13, 2018.

Decision/Policy: K-8 Science Instructional Materials Adoption

Making a new decision? Yes, the Committee will recommend instructional materials for adoption.

Expected Outcomes: Equitable access for all students to current, high quality,  
standards-aligned science instructional materials.

Have you had any Equity Training from SPS? SPS Race & Equity Team training series

How many times have you used the Analysis Tool? Science Alignment Team work 2016-17

## Please mark the type of decision below:

Applicable Policy: No

**Program: Yes**

Professional Development: No

Procedure: No

Budget Issue: No

Hiring and Staffing: No



# Racial Equity Analysis Tool

## Glossary:

**Race:** Race is a powerful social idea that gives people different access to opportunities and resources. Race is not biological but is real. Race affects everyone, whether we are aware of it or not.

**Individual racism:** Pre-judgment, bias, stereotypes about an individual or group based on race. The impacts of racism on individuals include members of certain racial groups internalizing privilege and people of color internalizing oppression.

**Institutional racism:** When organizational programs or policies work to the benefit of certain racial groups and to the detriment of people of color, usually unintentionally or inadvertently.

**Structural racism:** The interplay of policies, practices, and programs of multiple institutions which leads to adverse outcomes and conditions for people of color compared to members of other racial groups. This occurs within the context of racialized historical and cultural conditions.

**Accountable:** Responsive to the needs and concerns of those most impacted by the issues you are working on, particularly to communities of color and those historically underrepresented in the civic process.

**Educational and Racial Equity:** Providing equitable access to opportunities, resources and support for each and every child by intentionally recognizing and eliminating historical barriers, as well as the predictability of personal and academic success based on race, background and/or circumstance.

**Racial Inequity:** When communities of color do not have access to opportunities and a person's race can predict their social, economic and political opportunities and outcomes.

**Stakeholders:** Those student, families and community groups impacted by proposed policy, program or budget issue who have potential concerns or issue expertise. Examples might include: specific racial/ethnic groups, other institutions like Seattle Housing Authority, schools, community-based organizations, staff and families.

**Culture:** The ways that we each live our lives; including values, language, customs, behaviors, expectations, ideals governing childrearing, the nature of friendship, patterns of handling emotions, social interaction rate, notions of leadership, etc.

**Expected Outcomes:** A measurable result that is planned for, using the racial equity tool.



# Racial Equity Analysis Tool

## STEP 1: Set Outcomes, Identify and Engage Stakeholders

**Leadership sets key racially equitable outcomes and engages stakeholders (SPS staff and community members.)**

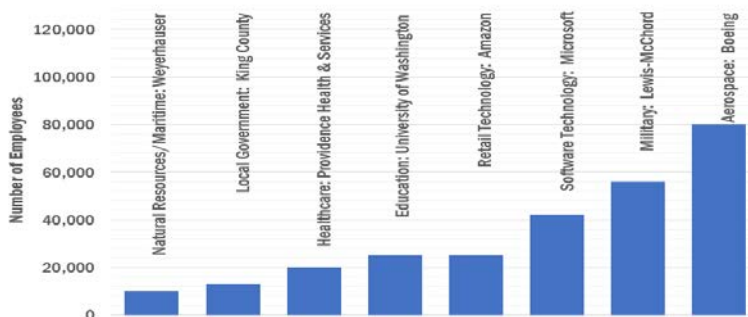
1. What does your department/division/school define as racially equitable outcomes related to this issue?

Seattle Public Schools Science Departments has used this tool to ensure that the Science Materials Adoption Committee members represent Seattle's diverse population. This tool was also used to ensure the Adoption Committee evaluates materials using a racial equity lens. Our goal is to improve accessibility for all students to culturally relevant, rigorous science learning called for by Next Generation Science Standards which the state adopted in 2013, known as the Washington State Science Learning Standards, WSSLS, in order to eliminate the opportunity gap for students of color in regards to STEM careers so that our students are college and career ready.

The WSSLS calls for students to learn science and engineering practices through engaging, culturally relevant content. We have defined racially equitable outcomes for students of color, English language learners, and students with special needs as the increased participation and success in science of these students. Historically, K-8 science has focused on direct instruction, observation and an overemphasis on the scientific method, making it difficult for many learners to access the content. In fact, nationally, we have a crisis in equity in STEM fields, and in our state of Washington there is great disparity between the concentration of STEM-related jobs and a prepared labor pool. The data below quantifies the manifestation of the opportunity gap for students of color locally and nationally at both K-12 and in the workforce:

- Washington 4th grade African American and Hispanic students, respectively, score 31 and 29 points lower on the National Assessment of Educational Progress in Science. (*2015 National Assessment of Educational Progress (NEAP) Nation's Report Card* - <http://nces.ed.gov/nationsreportcard/states/>.)
- Washington's achievement gaps in math and science have not improved in over a decade and are the 12th largest in the nation. If we continue to address the achievement gap at this current glacial rate, it would take 150 years for our African American students to realize the same level of achievement as their peers. (*Center for Education Policy, The Achievement Gap: Slow and Uneven Progress for Students, 2010.*)

### Seattle-Ready STEM Jobs in Our Children's Future

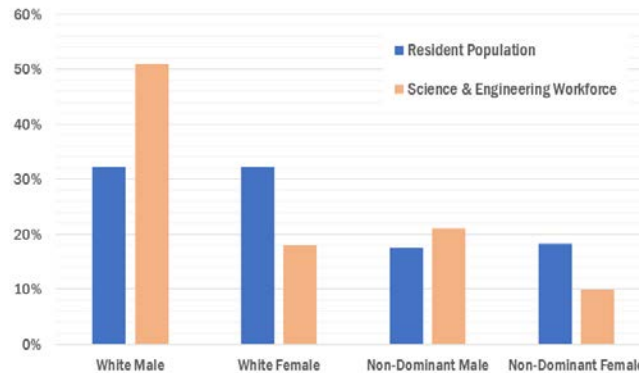


Source: Washington STEM, [www.washingtonstem.org](http://www.washingtonstem.org), 2016.

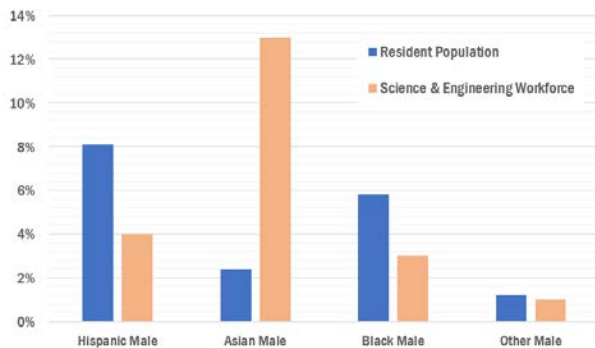
- In 2014, only 43 percent of U.S. high school graduates were ready for college work in math; 37 percent were ready in science. (*The Condition of College & Career Readiness. Iowa City, IA: ACT, Inc., 2014* < <http://www.act.org/research/policymakers/cccr14/readiness.html>>)

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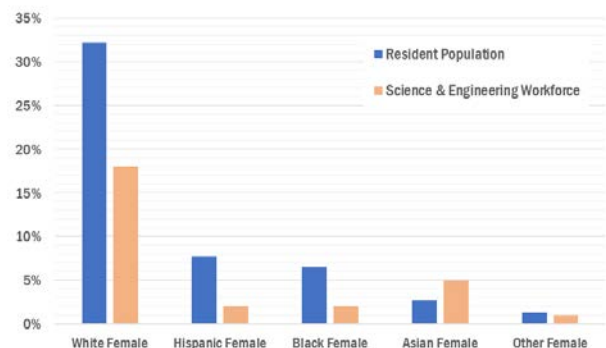
## Diversity in Science



## Non-Dominant Males in Science



## Females in Science



Source: Guterl, Fred. "Diversity in Science: Where Are the Data?" *Scientific American*, 1 Oct. 2014, [www.scientificamerican.com/article/diversity-in-science-where-are-the-data/](http://www.scientificamerican.com/article/diversity-in-science-where-are-the-data/).

The Adoption Committee will select instructional materials that are aligned to the WSSLS. The adopted materials will increase equitable access to all K-8 students and prepare them for success in core science courses in high school and college preparatory science courses (AP/IB). Moreover, the shift in science pedagogy embedded within this alignment provides all students with 21<sup>st</sup> century skills not previously embedded within science coursework, as described in Appendix D of the Next Generation Science Standards. This appendix highlights how these standards have been developed for all students, how these standards can be met and exceeded by students of color, students with disabilities, economically disadvantaged students, and English language learners.

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## 2. How will leadership communicate key outcomes to stakeholders for racial equity to guide analysis?

In order to diversify communication channels and reach the maximum number of stakeholders, channels for communication with stakeholders will include the district Science Adoption webpage, district social media accounts, district newsletters, and printed materials be available in school offices. The SPS Science Program and Adoption Committee will communicate throughout the adoption process key outcomes to all stakeholders to be impacted by the adoption, including racial and ethnic communities as well as families of ELL, Special Ed, and HCC students.

- Application materials for the Science Adoption Committee for staff/teachers and for family/community members will be available to stakeholders through the communication channels above and will be available in four languages on Schoology and will be translatable into district languages on the SPS website. Adoption application deadline will be included on application.
- Selected Adoption Committee applicants will be identified, confirmed, and committee membership will be announced on June 1.
- To ensure input and feedback from all racial and ethnic groups to be impacted by the adoption, as well as families of ELL, Special Ed, and HCC students, the Adoption Committee will engage stakeholder through the completion of a survey that will be communicated through the channels outlined above to elicit qualitative and quantitative data about their perceptions, attitudes, needs, and concerns as they relate to the adoption of science materials. The Adoption Committee will use this data in conjunction with the Race & Equity Analysis Tool and Instructional Materials Evaluation Criteria tool to inform their review and evaluate Instructional Materials for field-testing.
- The Adoption Committee will select and announce the candidate Instructional Materials for field-testing. Field test instructional materials will be on display for public viewing in multiple locations across the district. The Adoption Committee will elicit feedback from families and community members through both electronic and paper channels.
- Input and feedback from teachers about this experience with instruction, assessment, management, and preparation of the candidate instructional materials will be systematically collected throughout the field test and shared at a public hearing. Student feedback, input, and attitudes about engaging in shifts in science practice will be captured throughout the field test process to ensure student voice.
- Adoption Committee synthesizes and analyzes all input and feedback from all stakeholders on candidate instructional materials, including the field-test, and announces their recommendation for adoption to stakeholders via the communication channels outlined above.

## 3. How will leadership identify and engage stakeholders: racial/ethnic groups potentially impacted by this decision, especially communities of color, including students who are English language learners and students who have special needs?

The Adoption Committee will engage stakeholders, including administrators, teachers, families and the community in the instructional materials adoption with a Needs Assessment Survey to assess their needs, attitudes and concerns related to the selection of science instructional materials. To ensure equitable access to the input survey, it will be translated into the district's top four languages, be available in paper form, and open throughout the year so the community has multiple opportunities to access the survey either in paper form or electronically.

Administration, teachers, Seattle Public Schools Communications Team as well as community members will ensure our racial/ethnic groups, including communities of color, impacted by the adoption of new science materials receive and engage with the survey.

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## **STEP 2: Engage Stakeholders in Analyzing Data**

**Stakeholders (SPS staff and community members) gather and review quantitative and qualitative disaggregated data and specific information to determine impacts or consequences.**

1. How will you collect specific information about the school, program and community conditions to help you determine if this decision will create racial inequities that would increase the opportunity gap?

The application process will ensure that the Adoption Committee membership includes representation from Seattle's diverse racial and ethnic communities. The work sessions will be held when the committee members are available to meet. At the first meeting, the newly formed committee will determine future dates and locations to ensure the majority are able to attend. We will work with the ELL Department to have translators and transportation for committee members. The Adoption Committee will analyze qualitative and quantitative data and engage in sense making of patterns and trends from the input survey in order to ensure racially equitable outcomes for the selection of science instructional materials. The evaluation tool used by the Adoption Committee has criteria addressing racial equity to help screen materials; this criterion was developed using multiple resources including Washington Models for the Evaluation of Bias Content in Instructional Materials.

According to a 2017 statewide data survey from Washington STEM, 94% WA voters believe that every child in the state should have access to a high-quality STEM education in Washington's K-12 public schools. 83% believe that a high-quality STEM education is a "necessary part" of the state's obligation to provide "basic education". 88% of WA state residents agree that children who live in poverty have a better chance to break the cycle of poverty if they have a strong STEM education.

2. Are there negative impacts for specific student demographic groups, including English language learners and students with special needs?

Currently not all students receive equitable access to science instruction and materials. This is particularly impactful to our underserved populations of students, including English language learners and students with special needs. The adoption of new science materials will address the need to provide science learning that will include multiple modalities in both instruction and assessment.

Chapter 11 of the NRC Framework for K-12 Science Education acknowledges that in schools serving the most academically at-risk students, there is "today an almost total absence of science in the early elementary grades. This is particularly problematic, given the emerging consensus that opportunities for science learning and personal identification with science—as exemplified in this framework—are long-term developmental processes that need sustained cultivation. In other words, the lack of science instruction in early elementary school grades may mean that only students with sources of support for science learning outside school are being brought into that long-term developmental process; this gap initiates inequalities that are difficult to remediate in later schooling."

According to a study published in 2013 by the ASPIRES Project, a student's science aspirations and views of science are formed during the primary years and solidified by the age of 14. The study concludes that efforts to broaden students' aspirations in relation to science and engineering should begin in the primary grades, and that "the current focus of most activities and interventions – at secondary school – is likely to be too little too late". The research is clear: a strong cradle to career STEM education prepares students for high-demand jobs and contributes to the vitality of their families, communities, and local economies.



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## **STEP 3: Ensuring educational and racial equity /Determine Benefit or Burden Stakeholders (SPS staff and community members) collaborate to analyze how this policy/ decision/proposal/initiative/budget issue will increase or decrease educational and racial equity.**

The Adoption Committee will be comprised of a diverse representation of stakeholders who will engage consistently throughout the adoption process to collaboratively analyze the potential outcomes of decision-making to ensure equity, including:

- The Race Equity Analysis Tool serves to guide the adoption process from communication, evaluation, selection and onto implementation of adopted instructional materials.
- Analyze data collected from the family and community stakeholder input survey.
- Analyze instructional materials using the Instructional Materials Evaluation Criteria Tool, which includes category #3: Accessibility for Diverse Learners and category #4: Evaluation of Bias Content.
- Analyze feedback data from teachers, students, families, and community members about the candidate instructional materials used in the field-test

### 1. What are the potential benefits or unintended consequences?

The adoption of instructional materials will provide a common scope and sequence of instructional units across the grade levels, across the district. The impact of transient students, who are more often students of color, English language learners, and students with lower socio-economic status, will be minimized; therefore, the impact of student learning will be minimized. The adoption of science materials will also ensure, regardless of the schools' demographics, all schools will receive equitable distribution of the same materials. By providing students with aligned core science units in all buildings, students who move schools have less "catching up" to do while already experiencing the significant life change of moving. Teaching a common scope and sequence of units will maximize the teacher's ability to participate in a professional learning community focused on analyzing student work to improve instruction and to shift their practice to align with the new state standards thus providing more equitable outcome for students. As students continue to experience the pedagogical shift of the WSSLS, new instructional materials in K-8 will provide the foundation of science learning for all students to be successful in high school.

To ensure that this adoption does not result in the unintended consequence of perpetuating the current educational and racial inequities in our district, the adoption committee must analyze how the adoption process and implementation of the adopted materials will:

- Include sustainability of teacher supports, including materials, technology, instruction, and pedagogy
- Provide continued ongoing professional learning for teachers around shifting classroom instruction and pedagogy to equitable teaching practices, including learning opportunities that support teachers in developing and maintaining a growth mindset
- Include an ongoing data collection from students, teachers, and other stakeholders about attitudes and perceptions of science learning and teaching as a result of the adoption. Analysis and evaluation of this data must be used for ongoing modification and optimization of the adopted instructional materials to ensure equitable learning outcomes for all students over time.

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2. What would it look like if this policy/decision/initiative/proposal ensured educational and racial equity for every student?

By increasing access of all students to science, particularly students of color, English language learners, and students with special needs to science, Seattle Public Schools will continue to prepare students for STEM fields. As previously mentioned in Step #1: students of color have inequitable STEM field and college preparatory classes. The adoption of high quality, culturally responsive, standards-aligned instructional materials, that feature culturally relevant science phenomena and engineering design opportunities, will empower students to see themselves in a potential STEM-field career. The pedagogical methods embedded in the aligned instructional materials will support students in “thinking like a scientist/engineer” as they learn how to “figure out/problem solve” instead of simply “learning about”. Accordingly, this can increase the educational opportunities of these students, including increased access to college preparatory science classes (AP/IB), as well as increased opportunities to colleges, universities and STEM fields.



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## **STEP 4: Evaluate Success Indicators and/or Mitigation Plans**

**Stakeholders (SPS staff and community members) identify ongoing measures of success or mitigation plans for negative impacts**

1. How will you evaluate and be accountable for making sure that the proposed solution ensures educational equity for all students, families and staff?

The Science Program, as well as individual teachers and schools will continue to assess the successes of all students in science learning. The completion of science summative assessments of student learning from each unit will provide quarterly student growth data and can be disaggregated for racial and ethnic groups, English language learners, and other underserved student groups. The WCAS high-stakes assessment also provides an opportunity for teachers, schools, and Seattle Public Schools to evaluate the performance of different student groups on an WSSLS-based test. This data will inform teacher professional development learning in which teachers work together to refine, and improve shared pedagogy, instruction and materials through collaboration.

2. What are specific steps you will take to address impacts (including unintended consequences), and how will you continue to partner with stakeholders to ensure educational equity for every student?

To continue to improve learning for all students, particularly the impact on students of color, English language learners, students with disabilities, and other student populations, the SPS Science Program, teachers, and schools will continue to qualitatively and quantitatively monitor the science achievements of all students using the formative and summative assessment systems provided by the instructional materials programs. The SPS Science Program will engage Special Education and ELL teachers through professional learning resources and opportunities in increasing embedded strategies to support students served in these programs and to engage in the aligned science coursework.

To continue to improve science education in Seattle Public Schools for all students, the SPS Science Program will implement data driven gap-closing measurable outcomes such as

- implementation of science discourse strategies to increase student voice for sense-making and development of academic language
- launching units with culturally relevant science phenomena to provide equitable pathways to learn science content in the unit
- embedded formation assessments providing frequent feedback for both students and teachers.

The SPS Science Program will continue to seek resources for equitable teacher supports to implement the adopted science instructional materials, and maintain a robust student data gathering system to inform any optimization of materials. We will continue to elicit feedback from our stakeholders on student learning and attitudes to ensure equitable outcomes for students in our highly impacted communities before, during, and after implementation of the adoption of materials.