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INTRODUCTION

We are extremely excited to share Pollyanna's High School Racial Literacy Curriculum with you.

We believe this curriculum could not have come at a more needed time, a time when the sounds of public debate and activism around racial justice are reverberating across cities, towns, and social media platforms; a time when school boards, educators, parents, and students across the country are debating the place of racial literacy in K-12 classrooms; and a time when our students are more racially diverse, and more engaged in issues of social justice, than ever before in this country's history.

One objective of Pollyanna's High School Racial Literacy Curriculum is to demonstrate that educators do not have to choose between rigorous teaching and teaching for social justice. Educators will find that the lessons in this curriculum use topics of racial and social justice to explore content-area themes and to solidify discipline-specific skills. In addition, every lesson aligns with nationally-accepted, subject-specific standards, along with learning outcomes from the [Learning for Justice Anti-Bias Framework](#).

While each of the eight subjects in this curriculum is unique and discipline-specific, many common themes emerge across these subjects. Food insecurity, for example, shows up in both the Biology Curriculum and the Math Curriculum. Intersectionality is explored in depth in English, Health & Wellness, and History. Immigration rights appear in nearly every subject, including Art and Technology. These common ideas allow students to make thematic connections across disciplines. They also serve as opportunities for educators to collaborate with one another across different departments.

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The Advisory Curriculum is unique in that it has been crafted to teach students the skills to engage thoughtfully, respectfully, and authentically in important conversations about race and social justice. While the lessons in the Advisory Curriculum are designed to be taught in a homeroom or during an advisory period, they have wide applicability across topics and disciplines. For that reason, we encourage educators from every discipline to review the Advisory Curriculum and to consider using activities from these lessons to ground important discussions they plan to have in their own classrooms.

Every lesson in the High School Racial Literacy Curriculum includes a set of Objectives, Key Understandings, and National Standards, as well as a list of important Vocabulary and necessary Materials. Many of these lessons also include Demonstrations of Learning, activities that allow educators to assess their students' progress; Extension Opportunities for educators who want to expand on the topics of a given lesson; and Additional Resources that may be useful for both teachers and students in gaining additional background knowledge. Students may enter the classroom already having absorbed common misconceptions about race and racial literacy. The lessons in the High School Racial Literacy Curriculum are designed to help students uncover, articulate, and deconstruct these misconceptions, many of which are described as "possible misunderstandings" in the Key Understandings section. Most of these lessons also include "possible student responses" to many of the more complex questions students will be asked to consider. These possible student responses may serve as useful exemplars, especially for educators who are new to teaching racial literacy.

You may notice that the language used to refer to people of color sometimes changes from one subject area to another. Terms such as "people of color" and "BIPOC" (Black Indigenous People of Color) have their advantages and disadvantages; furthermore, if history is any indication, these terms will eventually be replaced with others that better reflect the nuanced interplay between collective struggle and individual experience. Whenever possible, we have done our best to refer to specific racial groups in order to reflect the unique experiences of each community. In places where the curriculum emphasizes solidarity among marginalized racial groups, we have deferred to our content creators to use the terms that most resonate with them. Perhaps educators will use this diversity of terms as an opportunity to discuss language, and its changing and imperfect nature, with their students.

ADVISORY

“We must remember that intelligence is not enough. Intelligence plus character—that is the goal of true education. The complete education gives one not only power of concentration, but worthy objectives upon which to concentrate.” -Martin Luther King, Jr.

The Advisory Curriculum is designed to guide students in thinking critically about race, justice, and equity, and to help educators support students as they grapple with these complex issues. It encourages students not to shy away from having difficult conversations and instead equips them with the skills to remain actively engaged in the pursuit of making our world a more equitable and compassionate place.

We are watching generational change happen in real-time; today’s emerging adults are more racially and ethnically diverse than any previous generation in U.S. history (Parker & Igielnik, 2020). While these young adults often regard diversity as a good thing, it can still be difficult to talk about differences and not leave the exchange feeling divided. We can support our students in this endeavor by guiding them to move through conflict mindfully and compassionately, cultivating their active listening skills, fostering their empathy, and providing them with the tools to think critically about today’s most pressing social issues.

For Educators: Structural Overview of the Advisory Curriculum

The Advisory Curriculum moves through eight themes and provides teaching content, activities, videos, and reflection questions to help teachers explore these themes with their students. The lessons in the Advisory Curriculum are designed to equip students with the tools to confront many of the realities and challenges of the modern-day teenager. In particular, the activities in these lessons will guide students in unpacking many complicated concepts they are likely to encounter on social media and in daily discourse, such as privilege, identity-based harm, and cancel culture. Most of these lessons can be adapted to accommodate one or two 50- to 60-minute class periods.

For Parents and Guardians: How to Continue the Conversation at Home

Many of the topics discussed in the Advisory Curriculum have the potential to elicit strong opinions and emotions among students. In addition, discussions around race, identity, and the pursuit of justice often do not have clear or neat answers. Parents and guardians do not need to have all the answers in order to best support their children. Rather, you can support your children by engaging them in compassionate communication and helping them develop the following skills:

1. Cultivating curiosity to know more about themes or topics we may not fully understand yet.
2. Practicing appropriate emotional regulation.
3. Recognizing and understanding that multiple, sometimes contradictory, perspectives can coexist within the context of race and justice.
4. Demonstrating empathy for others and honoring lived experiences that may be different from our own.
5. Recognizing how history, systems, power, and privilege impact individuals differently across the identity spectrum.

When racism manifests in systems of power, those systems must be addressed, reformed, or dismantled as a way to eradicate the harm they perpetuate. There are also ways in which racism, bigotry, and bias are driven by the inability to ask the question, “what is it like to be you?” The purpose of the Advisory Curriculum is to increase students’ social and emotional capacity so that they can listen and communicate for understanding, have sustained and meaningful conversations across differences, and co-create an inclusive school community where all students can thrive and belong. Although it is not easy work, equipping students with these skills will serve them throughout their lives and prepare them for ethical engagement in the world.

Lessons in the Advisory Curriculum

Advisory Lesson 1: Invitation to a Brave Space

Suggested time: 50–60 minutes

This lesson sets the groundwork for how we want students to engage with one another during the school year. Students will practice developing norms for dialogue and learn concrete strategies for upholding such norms while in conversation with one another. Norms for dialogue increase the likelihood that each community member feels supported, has space to grow and develop, and is ready to listen and learn from others. Norms also provide guidelines that groups in dialogue can refer back to during moments of conflict, tension, or disagreement. Given the personal nature of these topics, norms are particularly useful when discussing race and identity. The goal is to stay in community through difficult moments and use our norms to reconnect with one another through shared values and collective purpose.

Advisory Lesson 2: Disrupting Harm: Calling Out and Calling In

Suggested time: 100–120 minutes

Part of the practice of being an inclusive community is actively addressing harmful behavior and disrupting incidents of bigotry, bias, and racism. We want to teach our students to be upstanders, who speak out and take action against unkind and harmful behaviors, yet we often do not teach students the skills to do so or provide them opportunities to practice. This lesson will help students learn to identify microaggressions and other types of identity-based harm, such as bullying or online harassment, and to think through an appropriate response. Students will learn the difference between “calling out” and “calling in,” as well as how to assess which type of response is appropriate for a particular situation. The lesson emphasizes a “call-in” style of engagement for addressing identity-based harm in the context of a trusting community and teaches students to address harmful behaviors while still maintaining relationships and creating opportunities for reflection and repair.

Advisory Lesson 3: Social Media and Social Justice

Suggested time: 100–120 minutes

Many young people turn to social media (e.g., Instagram, TikTok, Twitter, Facebook) to consume news, learn about current events, and develop their values and beliefs about society. Social media has the capacity to be a great tool for social justice or a tool for division and harm. It is important that students develop the skills to be responsible digital citizens and wield social media as a tool for collective good. This lesson explores various pop culture social justice terms and encourages students to reflect on the nuance of language and the meaning, context, and impact of the media we consume and share.

Advisory Lesson 4: Repairing Harm Through Healing Centered Engagement

Suggested time: 50–60 minutes

The purpose of this lesson is to teach students that everyone has the capacity to cause harm, intentionally or not, and to model for students how to acknowledge mistakes and work towards repair. Oftentimes, when we feel like we caused someone else harm, we can quickly feel defensive, embarrassed, or even angry. This lesson will guide students through steps for making a sincere apology so that they can respond from a place of compassion and concern rather than react from a place of guilt or shame. This lesson emphasizes maintaining relationships through “oops” moments and provides students with the opportunity to practice repairing with different hypothetical scenarios.

Advisory Lesson 5: Self Awareness and Implicit Bias

Suggested time: 50–60 minutes

The goal of this lesson is for students to deepen their awareness around the existence of biases, reflect on their own implicit biases, and think about the large-scale impact of biases on systems, institutions, and individuals. Developing an awareness of our own implicit biases is key to unlearning racist and prejudiced beliefs that we have unconsciously absorbed from our society and environments. Often implicit biases we hold about different groups of people negatively impact our behavior towards those groups. Implicit biases can perpetuate harmful stereotypes and sustain systems that disproportionately negatively impact people of color and other historically marginalized identities.

Advisory Lesson 6: Understanding Privilege

Suggested time: 50–60 minutes

This lesson offers an introduction to the concept of identity privilege in its many forms, with a particular focus on race and white privilege. Discussions of privilege (particularly white privilege) can evoke strong feelings of shame, guilt, anger, rage, and defensiveness among people from culturally dominant identities. Educators should be sure to have a strong rapport with your students to help them process these feelings as they arise and move them towards a place of understanding and empathy for others. Much of this lesson is taught through silent reflection activities, where students should begin to recognize the culturally dominant identities in their society and identify the ways in which those identities provide societal advantages compared to other more culturally marginalized identities. Students will also be guided in increasing their awareness of the multiple privileged and marginalized identities they hold, and how these identities interact to make up their own unique and individualized selves.

Advisory Lesson 7: Social Awareness and Compassionate Dialogue

Suggested time: 50–60 minutes

This lesson has students explore the differences between a debate style of discourse and a dialogue style of discourse, and identify settings and scenarios when each would be most appropriate. Students will determine their “social locations” in relation to difficult or divisive topics and reflect on how this relates to the idea of privilege. Understanding their “social locations” in relation to potentially challenging or inflammatory topics should help shape the ways students enter and consider their contributions to those conversations, and encourage active listening as a way to deepen understanding of the perspectives, thoughts, and experiences of others. It also encourages students to care for themselves during potentially difficult conversations and build awareness of their own thoughts and feelings during dialogue.

Advisory Lesson 8: Managing Conflict and Self-Regulation

Suggested time: 50–60 minutes

Oftentimes discussing topics related to race, identity, and social justice can elicit strong and sometimes painful emotions. Many of these topics relate directly to the safety, health, and wellbeing of people’s lives and therefore are not academic exercises that can be separated from our social and emotional selves. This lesson is meant to provide students with skills for increasing awareness of their thoughts, feelings, and emotions to help self-regulate their emotional reactions through difficult moments and moments of conflict. The lesson focuses on Howard Stevenson’s method for “resolving racially stressful situations,” and integrates elements of mindfulness to help students recognize and manage their emotions in relation to stressful situations.

ART

“Art has the potential to distill the most complex social challenges down to their most basic and simplest values. Values like love, family, caring for the other, caring for those in need, and fighting the things that cause human suffering.” -Favianna Rodriguez

While traditional art history has often overlooked issues of racial identity, racial literacy is a crucial component of students’ ability to develop and analyze representation in art—both their own art and others’. The Art Curriculum provides a starting point for students to explore the incredible range of artwork by artists of color and to understand the power of art in facilitating racial and social justice. We hope these lessons will engage both students and teachers in deep reflection and critical discussions about identity and equity, while also providing ample opportunity for students to creatively experiment with a diverse array of artistic techniques.

For Educators: Structural Overview of the Art Curriculum

The Art Curriculum, which is designed to supplement courses in studio art or art history, revolves around artists of color who use their art to explore themes of race, representation, power, and justice. Students will explore how their own lived experiences intersect with these themes at the same time that they practice working with a variety of artistic media and techniques. These lessons provide educators with questions meant to generate critical dialogue, prompts and activities to guide students in self-reflection, explanations of the materials and methods for each creative project, and extension opportunities for classroom and asynchronous work.

For educators who may have less experience discussing topics of race and identity in the classroom, we strongly recommend exploring your own identity before leading students through these activities. In addition, we recommend creating your own artwork using the themes and techniques of these lessons in order to demonstrate these techniques to your students. Finally, we suggest developing community norms around how students will engage with these topics, which can be deeply personal, as well as how they will take care of themselves and one another throughout the process of discussing and creating their art.

For Parents and Guardians: How to Continue the Conversation at Home

The best way for parents and guardians to continue the conversation at home is to familiarize yourself with a variety of artists of color. The following is a selected list of artists of color to get you started:

Charles Allston	William Johnson	Jennifer Packer	Henry O. Tanner
Benny Andrews	Lois Mailou Jones	Horace Pippin	Alma Thomas
Elizabeth Catlett	Yuki Kobayashi	Faith Ringgold	James Van Der Zee
Ed Clark	Jacob Lawrence	Bettye Saar	Kara Walker
Beauford Delaney	Norman Louis	Augusta Savage	Charles White
Aaron Douglas	Kerry James Marshall	Amy Sherald	Stanley Whitney
David Driskell	Ayako Miyawaki	Taashi Shuji	Jack Whitten
Ellen Gallagher	Archibald J. Motley Jr.	Lorna Simpson	Kehinde Wiley
Sam Gilliam	Yuki Nishioka	Hughie Lee Smith	Lynette Yiadom-Boakye

When you learn about artists and their inspirations, materials, and methods, share images of their work with your children. Looking at art together can serve as a springboard for discussing how art reflects and reveals issues about race and racial identity.

Art reflects the social fabric of a particular time and culture, and looking at art through the lens of racial literacy helps to illuminate the important role art continues to play in creating a more just and racially conscious society. Furthermore, as we engage with stories told by people of color – stories that have often been ignored – our sense of humanity deepens. By studying artists of color, students of all identities can become more inclusive, more creative, and more attuned to the many voices that make up our rich and diverse culture.

Lessons in the Art Curriculum

Art Lesson 1: Art of Identity—A Self-Portrait Collage Inspired by Deborah Roberts

Suggested time: Four 50-60 minute class periods

Deborah Roberts is a Black American artist who uses collage and painting to create portraits of Black children. Inspired by Deborah Roberts, students will create a self-portrait collage that represents how they see themselves and how they would like to be seen by the world. Students will combine a variety of found images, fabrics, and altered photographs to construct this collage so that it reflects important aspects of their identities. Students will also consider how race, class, and personal history have shaped their identities.

Art Lesson 2: Art of Belonging—Representation and Portraiture with Kehinde Wiley

Suggested time: Four 50-60 minute class periods

This lesson explores the aesthetic, representational ideology, and artistic mastery of Kehinde Wiley. Throughout the lesson, students will have the opportunity to explore representation as it pertains to BIPOC communities. Wiley, an African American artist, reimagines the artwork of European masters of the 16th-19th centuries by positioning men and women of color as the subjects of his portraits. By juxtaposing Wiley's work with their European counterparts, this lesson guides students in exploring themes of race, gender, representation, and institutional power. Students will then design and paint portraits that create affirming representations of themselves and others.

Art Lesson 3: Art of Community—A Quilt Collage Inspired by the Gee's Bend Quilters

Suggested time: Four 50-60 minute class periods

Students will learn the history of the rural community of Gee's Bend, Alabama, a microcosm of Black history in the South. The Gee's Bend quilters combine traditional American quilt patterns with African textile designs to make quilts that are beautiful, functional works of art. Inspired by the Gee's Bend quilters, students will design and create quilt collages using images that represent their personal or family histories.

Art Lesson 4: Art of Storytelling—Race and Power With Kara Walker

Suggested time: Four 50-60 minute class periods

Students will begin by examining silhouettes by the artist Kara Walker, who depicts anti-Black racism and slavery with scenes that draw on racialized stereotypes, caricatures, and mythology. Students will explore and discuss how racial and power dynamics operate in these scenes. Students will then choose their own scenes of racial and power dynamics to depict in silhouettes of their own creation. Finally, students will present their artwork to their peers and reflect on the role art can play in exposing and exploring painful stories of race and power.

Art Lesson 5: Art of Persuasion—A Modular Sculpture Inspired by El Anatsui

Suggested time: Four 50–60 minute class periods

El Anatsui recycles materials that people throw away to create beautiful, monumental art that reflects his interest in global consumerism, the history of colonialism, and abstraction. Following a discussion of El Anatsui's art, students will discuss a message they want to convey about an important theme, and then collaboratively design and construct a sculpture using discarded materials.

Art Lesson 6: Art of Celebration—A Monument to Justice

Suggested time: Four 50–60 minute class periods

Monuments and memorials are indicators of history, but they often ignore the histories and achievements of people of color. Students will learn how monuments can be designed to incorporate themes of justice while honoring individuals and communities. By designing their own monuments, students will explore how to represent the ideas, emotions, and messages of a person or event in three-dimensional form. Students will also discover that every family and community has a story worth celebrating. Finally, students will learn about scale and design as they use common materials to create visually interesting monuments.

Art Lesson 7: Art of Protest—Culture Jamming Graffiti Art

Suggested time: Four 50–60 minute class periods

This lesson explores the use of street art for critiquing society and broadcasting subversive messages about race and social justice. Students will examine the works of well-known street artists, such as Banksy, as well as social and political movements that have used street art as a platform for their messages. Students will also learn about the concept of culture jamming, and how this concept has been integrated into many powerful examples of street art. Finally, students will design stencil graffiti art pieces that challenge viewers to look at or think about an aspect of race or social justice from a new perspective.

Art Lesson 8: Art of Activism—Favianna Rodriguez and Printmaking for Social Justice

Suggested time: Four 50–60 minute class periods

Students will learn about Favianna Rodriguez, whose art has come to represent social justice issues such as immigration, economic justice, and racial equity. In addition, Rodriguez's work represents diverse individuals in all their humanity and challenges stereotypes about people of color, particularly immigrants and women of color. Using Rodriguez's art as inspiration, students will learn about the use of printmaking as a tool for activism and create their own monotype prints that address issues of social justice and representation.

BIOLOGY

“If the misery of our poor be caused not by the laws of nature, but by our institutions, great is our sin.” -Charles Darwin

Biology has been used both historically and contemporarily to argue for the existence of concrete, clearly defined races that can be hierarchically ranked. Though early biologists created and legitimized racial categories, modern biology rejects race as a biological reality. This curriculum empowers students to deconstruct race and interrogate racism from a biological perspective, to examine past and present racism in biology, and to actively create an antiracist practice of science.

For Educators: Structural Overview of the Biology Curriculum

The lessons in the Biology Curriculum operationalize the key commitments of the [\(W\)holistic Science Pedagogy](#), a framework developed by [Alexis Patterson Williams](#) and [Salina Gray](#). As Patterson Williams and Gray argue, access to rigorous science curricula – curricula that prepare students to master sophisticated science skills and practices – is not equitably distributed across all students. Their framework proposes five commitments from which rigorous and socially just science education must be developed. These commitments are:

1. An ever-developing commitment on the part of educators to self-awareness, which includes interrogating, confronting, and disrupting oppression and white supremacy in ourselves and our classrooms.

The lessons in the Biology Curriculum require self-awareness on the part of educators as they support students in learning about challenging topics. In addition, educators must be willing to meet students where they are in their own learning about racial justice while also challenging them through discussion and perspective taking.

2. A commitment to science and its practices.

Rigorous science education holds students to the highest standards and includes scaffolding and entry points to support all students in their development as scientific thinkers. These lessons integrate opportunities for students to practice developing scientific arguments, evaluating models, designing investigations, and reiterating a testable definition of racism (see the Appendix: Defining Racism in Lesson 1), requiring students not just to know science but also to do science.

3. A commitment to science as a transformative agent.

Science, and biology in particular, has a history of reinforcing racism. However, there are also ways in which science has challenged oppressive ideologies and served as a force for liberation. The Biology Curriculum asks teachers and students to grapple with science’s messy history while also building an antiracist science practice.

4. A commitment to students’ social emotional wellness.

Some of the topics in the Biology Curriculum may trigger strong emotions among students. Teachers will need to be attentive to the wellbeing of their classroom communities and to their students’ needs when tackling difficult concepts.

5. A commitment to restorative practices.

These lessons require students and teachers to grapple with the perpetuation of racism by biology and science. The first steps toward reconciliation between science as an institution and marginalized communities are acknowledgement and humility, beginning in our classrooms.

Throughout the Biology Curriculum students are repeatedly introduced to a testable definition of racism, and racism is examined as a causative agent behind differences in infectious disease mortality, exposure to environmental toxins, incarceration rates, and other documented phenomena. Lesson 1 and its appendix include detailed guidelines for introducing a scientific concept of racism to students; we strongly encourage educators to review these resources before approaching any of the lessons of this curriculum.

For Parents and Guardians: How to Continue the Conversation at Home

Scientific misconceptions can remain popular in public discourse even after they have been debunked. Such misconceptions include the idea that race is a biological concept and the belief that one's genes predetermine a person's lived experiences. At home, it is worth evaluating your own and your child's pre-existing beliefs about these and other ideas related to race and science. [Angela Saini has written several approachable texts](#), including the book *Superior: The Return of Race Science*, that can help you learn – and unlearn – alongside your child.

The rigorous practice of science is necessary for uncovering and confronting misconceptions about race. To be a racially literate biology student is to develop an antiracist practice of science. Such a practice liberates us from the lies that support the concept of race and requires us to confront the social and cultural foundations for inequality and poverty. Like all good science, an antiracist practice of science begins with questions, arguments, and investigations.

Lessons in the Biology Curriculum

Biology Lesson 1: Can Science Be Racist?

Suggested time: Three to five 50-60 minute class periods

Suggested units: The scientific method, biodiversity

Students are often taught to see science as an objective, morally neutral discipline. Yet science, like any other field, is influenced by bias, culture, power structures, and ideology. As a result, science has the potential both to advance social progress and also to cause harm. Throughout history, science has reinforced racism and other forms of systemic oppression, yet science can also be used to understand and dismantle structural inequities. In this lesson, students will explore these themes as they investigate the biology and the social-historical context of several different pathogens. They will also develop arguments and explanations for how science and racism interact.

Biology Lesson 2: Dirty is Good: Rethinking Microbes Through Nutrient Cycling and Climate Change

Suggested time: Five to six 50-60 minutes class periods

Suggested units: Ecology, biodiversity, sustainability

Climate change is the primary existential threat of our times. Nevertheless, many misconceptions exist about who is to blame for climate change and who suffers the greatest consequences of these changes, now and in the future. This lesson addresses the misconception that human overpopulation is the primary cause of climate change, and demonstrates why carbon emissions instead are the primary culprit. Not only are the predominantly Black and Brown communities of the Global South often blamed for global warming based on specious arguments about overpopulation, but also these communities – along with other marginalized communities in the Global North – are often those hardest hit by the impacts of climate change. In order to explain climate change, and to understand the role of human decisions in mitigating climate change, this lesson explores nutrient cycles and the role of diverse biological communities, specifically soil microbial communities, in perpetuating nutrient cycling.

Biology Lesson 3: Toxins in Our Communities

Suggested time: Five to eight 50-60 minute class periods

Suggested units: The scientific method, biodiversity, ecology

Marginalized communities, including areas where residents are predominantly people of color, people living in poverty, and/or people with lower levels of education, are often targeted as dumping grounds for toxic chemicals. These chemicals often contaminate the surrounding air and water, causing poor health outcomes for local residents. Students will learn how marginalized communities are at higher risk of exposure to toxic chemicals. They will then do an experiment using *Daphnia* to analyze the effect of toxins on organisms and ecosystems. Finally, students will share their data with local stakeholders in an effort to spread awareness of this issue and advocate for change.

Biology Lesson 4: Macromolecules: The Building Blocks of Us

Suggested time: Four to six 50-60 minute class periods

Suggested units: Macromolecules, properties of water

This lesson explores the essential nutrients of life: water and the four macromolecules. Students will learn about these molecules and their roles within the body in the context of culturally nourishing foods. In completing a macromolecules detection lab, students will investigate what makes cultural dishes nourishing and celebrate diverse lived experiences. In addition, students will grapple with the history of nutrition-based experimentation on Indigenous children in boarding schools and on incarcerated people. This lesson provides opportunities for teaching to introduce or review biochemical processes within the body – including osmosis, hydrolysis, and dehydration synthesis – in the context of racial justice and cultural diversity.

Biology Lesson 5: Evolution, Race, and Genetic Diversity

Suggested time: Three to four 50-60 minute class periods

Suggested units: Evolution, biodiversity

In this lesson, students are introduced to phylogenies as a tool for modeling evolutionary relationships, and to the use of molecular data in developing phylogenies. In the opening case study, students will use molecular data to uncover the truth about Thomas Jefferson's relationship with Sally Hemings and her children, exploring topics of race and racism in the process. Students will also use molecular data to explore genetic variation among five human individuals representing three races, discovering along the way that race cannot be determined based on genetic variation. Throughout the lesson, students will use concepts from evolutionary biology to debunk race as a biological concept and consider how we have created social institutions that justify and perpetuate racial inequality.

Biology Lesson 6: Human Evolution, Population Genetics, and Adaptation

Suggested time: Three to four 50-60 minute class periods

Suggested units: Evolution, biodiversity

In this lesson, students will investigate the evolution of skin color along clines and discover how both convergent evolution and the widespread migration of humans throughout the planet account for the phenotypic diversity we see among humans today. Students will explore examples of microevolution among human populations due to unique selection pressures and understand how microevolution is different from macroevolution. Students will learn that the phenotypic traits we associate with race are examples of microevolution, not of macroevolution, and thus why race is problematic as a biological construct for understanding the human species. Students will also learn how to determine whether a trait meets the biological standards required to be designated as an adaptation. Finally, students will disentangle skin color and the other phenotypic traits we associate with race from the evolution of genetic diseases such as sickle-cell anemia, cystic fibrosis, and heritable cancers due to BRCA mutations.

Biology Lesson 7: Gene Technology and Prison Exoneration

Suggested time: Two to three 50-minute class periods

Suggested units: Genetic technology, genetics, molecular and cellular biology

In this lesson, students will learn about the role of DNA fingerprinting in exonerating individuals wrongfully sentenced by the criminal justice system. Students will also examine racial and other inequalities among those incarcerated in the U.S. and discuss the role that race and systemic racism play with respect to criminal justice in this country. Students will then conduct a gel electrophoresis lab to determine whether a fictional incarcerated individual should be exonerated based on DNA evidence. Students are then asked to demonstrate what they have learned by writing a formal lab report on their findings from the gel electrophoresis lab, including making a recommendation about the fictional incarcerated individual and relating these recommendations to what they have learned about racism and racial equity. Students will also learn about the cases of real individuals who have been exonerated using DNA evidence and share these stories with their classmates.

Biology Lesson 8: Gene Technology and the Rise of Garage White Supremacist Geneticists

Suggested time: Two to three 50-minute class periods

Suggested units: Genetic technology, DNA, protein synthesis

This lesson examines gene-editing technology and asks students to consider both the potential benefits and the potential dangers of its application. On the one hand, gene editing is already being used to treat previously irreversible genetic diseases. On the other hand, gene editing is also being used to allow parents to choose the traits of their future children, and, used in this way, this technology has the potential to deepen systemic inequalities and fortify white supremacy. In addition, attempts to “democratize” gene-editing technology have generated intense debates about who should be allowed access to such powerful technology and how such technology should be used. In this lesson, students will discuss these and related questions, using the Netflix docuseries “Unnatural Selection” to help inform these discussions.

ENGLISH

“Many stories matter. Stories have been used to dispossess and to malign. But stories can also be used to empower, and to humanize. Stories can break the dignity of a people. But stories can also repair that broken dignity.” -Chimamanda Ngozi Adichie

English, also known as literacy studies, is the subject area in which students (re)create, analyze, interpret, challenge, augment, and understand stories that are told through texts—novels, poems, drama, film, songs, media, and others. Texts function as mirrors; they remind us that we are not alone as we grapple with our day-to-day questions, struggles, and triumphs. At the same time, texts serve as windows into the lived experiences of other people whose lives may be different from our own. Race and ethnicity are essential elements of identity and, thus, texts grapple with race, either explicitly or implicitly, with or without authorial intent. English classes provide stories and counterstories that encourage students to think about and discuss race and ethnicity, thereby growing their own racial literacy.

For Educators: Structural Overview of the English Curriculum

The lessons in the English Curriculum are divided into four thematic units:

- Unit 1: What are texts and what stories do they tell about race? (Recommended for Grade 9)
- Unit 2: How are stories about race internalized and what is the impact of internalizing racialized stories? (Recommended for Grade 10)
- Unit 3: How do we dismantle racialized stories about ourselves and write our own stories? (Recommended for Grade 11)
- Unit 4: How do we help others dismantle stories about race and write stories about themselves? (Recommended for Grade 12)

Each of these thematic units includes a list of Suggested Reflection Questions specific to that unit’s learning goals. These reflection questions are broad enough that teachers can apply them to the recommended texts for each unit as well as to other texts the teacher may choose to use. The lessons in each unit may be tied to a specific text or they may be open-ended, allowing students and teachers to determine their own texts.

The English Curriculum presumes students have a basic foundation of racial literacy. If your students do not have this foundation, you might consider using elements of Pollyanna’s Racial Literacy Curriculum for Grades K-8 before embarking on any of these lessons; of particular relevance to the English Curriculum are *Grade 6: The Historical Construction of Race and Current Racial Identities Throughout U.S. Society—The Danger of a Single Story* and *Grade 7: What is Race?—How Science, Society, and the Media (Mis)represent Race*. While familiarity with Pollyanna’s K-8 Racial Literacy Curriculum, especially the Grade 6 and Grade 7 units, is highly recommended, it is not required.

For Parents and Guardians: How to Continue the Conversation at Home

Literary and literacy studies help deepen students' critical thinking skills as well as their capacity for creativity, imagination, and empathy. Furthermore, literature encourages students to ask questions about their own lives and about their relationships with others. What does it mean to be human? What does it mean to be part of a racially and ethnically diverse community? What is one's responsibility to support those who are marginalized and made to feel lesser because of their race or ethnicity? When students see their races and ethnicities represented in what they read, the experience can be empowering, indicating that they, too, matter. The act of reading is not a solitary experience but, instead, one that reminds readers that they are connected to something larger and enduring.

At home, the parent or guardian's role is paramount in modeling open and honest discussion about race and ethnicity; children notice adults' reticence in discussing these topics, and racial literacy cannot be built without practice. We first recommend that parenting adults familiarize themselves with the texts in this curriculum. We then recommend you ask your children what resonated or raised questions for them during class. You might continue the conversation by asking your children to expand on their thinking, with questions such as, "What makes you think that?" or "Can you say a little bit more about what you mean?" Students' observations and insights in response to these questions can become a critical foundation for more challenging and complex conversations about privilege, race, and racism.

Literacy, simply defined, is a student's ability to read and write, but true literacy involves effectively communicating about the self in relation to one's community. Because humans are racialized subjects, race – whether named or unnamed – is always a part of English and literacy instruction. In order to be fully literate in a racialized world, one must recognize that racial literacy is literacy.

Lessons in the English Curriculum

English Unit 1, Lesson 1: What Is a Text?

Suggested time: Two 50-60 minute class periods

This lesson introduces students to the idea that texts are not confined to the page. Texts can be maps, films, and even cereal boxes. In short, the world and our communities are one big text. How, then, should we make sense of the texts we inhabit as racialized characters, and what impact do they have on how others see us and our stories?

English Unit 1, Lesson 2: Our Communities as Texts

Suggested Time: One 50-60 minute class period

Through digital maps, students will learn to read and interpret different communities in their city or town as texts, using a racialized lens. Students will examine how the types of businesses in these neighborhoods and the layout of these communities privilege certain racial groups while disadvantaging others.

English Unit 1, Lesson 3: Reflections on Race and Racism

Suggested time: One 50-60 minute class period

After consuming—reading, observing, watching, listening, or examining—a text or a portion of a text, students will take time to write a reflection on the reading using guiding questions. These questions encourage students to examine the ways in which stories are told about racialized lives. The students' written reflections help the teacher assess their comprehension of the text as well as the key understandings and vocabulary for the unit.

English Unit 2, Lesson 1: Noticing and Reflecting on Our Own Biases as Readers

Suggested time: One 50-60 minutes class period

This lesson explores race as a story that White people have told about people of color, a construct that has evolved over time to include certain groups of people and to exclude – or otherize – other groups of people. Students will consider: How do authors and texts contribute to racial constructs? How do these racialized representations affirm, resist, and complicate our perceptions of race? How are stories about race internalized, and what is the impact of internalizing racialized stories?

English Unit 2, Lesson 2: Surfacing Our Biases in Order to Dismantle Them

Suggested time: Two 50-60 minute class periods

This lesson intentionally utilizes the medium of the graphic novel to underscore that a text can be more than just written words on a page. Gene Yang's *American Born Chinese* engages students on a visual level and invites them to think about how form, structure, shading, and other artistic choices impact how a frame or story is read and interpreted. At the same time, Yang's story tackles the issue of racism, particularly against Asian Americans. The objective of this lesson is to explore how surfacing, acknowledging, and confronting bias – and, by extension, racism – is a necessary step for dismantling systems of oppression. In order to fully appreciate and understand *American Born Chinese*, students must first understand the historical context that undergirds much of what Yang attempts to dismantle in his graphic novel. Day 1 will provide historical context. Day 2 focuses more deeply on the content of Yang's book.

English Unit 3, Lesson 1: Racialized Stories in the Media

Suggested time: Two or three 50-60 minute class periods

This lesson allows students to explore the media and examine portrayals of characters of a specific race or ethnicity. They will consider the context in which these portrayals were created as well as the reception of these portrayals by their intended consumers and by members of different communities.

English Unit 3, Lesson 2: Seminar on *Passing*

Suggested time: One 50-60 minute class period

This lesson on the novella *Passing*, by Nella Larsen, focuses on how biracial and multiracial identities are complicated by structural racism and white supremacy. This text exposes students to the concepts of passing and colorism. Through a guided seminar, students will learn about white supremacy culture and its impacts on and within the Black community. Note that the guiding questions in the seminar can be used for other texts as well.

English Unit 4, Lesson 1: Seminar on Intersectionality

Suggested time: Two or three 50-60 minute class periods

In this lesson, students will learn about the concept of intersectionality. Developed by Kimberlé Crenshaw, the concept of intersectionality reflects a convergence of social identifiers that further privilege or oppress individuals based on certain social norms or systems. Intersectionality is also relational. Students will watch a TED Talk by Crenshaw and then have an opportunity to reflect and share their reactions with one another.

English Unit 4, Lesson 2: Seminar on “Who Said It Was Simple”

Suggested time: Two or three 50-60 minute class periods

This lesson focuses on building student capacity for analyzing poetry and deepening their understanding of intersectionality. Audre Lorde's poem “Who Said It Was Simple” speaks to her lived experiences as a Black lesbian woman. Lorde's poem underscores how dismantling systems of oppression requires an intersectional approach, especially for people who are marginalized in multiple ways.

HEALTH & WELLNESS

“None of us have simple stories. We are as complex as all of the things that have been done to us.” –Alok Vaid-Menon

For some, thriving comes easily, while others have limited access to health. This inequity is the result of living in a society in which our different identities often dictate our experiences of health and wellness. The Health & Wellness Curriculum addresses the origins of these inequities, describes how they impact our health, and provides students with tools to subvert oppressive cultural expectations so that we can all live healthier lives.

For Educators: Structural Overview of the Health & Wellness Curriculum

The Health & Wellness Curriculum challenges students to examine their identities, values, and roles in making healthy decisions. This curriculum encourages students to think about health and wellness holistically – as properties of the physical, emotional, social, and higher self – and through the lenses of health science and social justice. Moreover, many of the lessons in this curriculum include embodied and experiential practices that guide students in cultivating equilibrium within their nervous systems. In this way, the Health & Wellness Curriculum asks students not only to talk about justice, equity, inclusion, and compassion, but also to embody these concepts both inside and beyond the classroom.

Educators can expect that many of the conversations they facilitate in this curriculum will feel incomplete or unresolved to students when class ends; these topics are complex, and our understanding of health and wellness continues to evolve. Given the nuanced and often personal nature of the topics covered in this curriculum, we suggest educators consider ways to create a container so that students feel safe to engage with these topics. We recommend, for example, coming up with community agreements as a class and integrating restorative circles to hold space for difficult emotions and discussions that may arise. We also recommend providing various – and, when appropriate, anonymous – methods for students to engage and ask questions. Finally, we suggest providing students with diverse opportunities to be present for the content, such as one-on-one sessions with the teacher, or the flexibility to step out of the room or utilize fidget tools when triggering topics arise.

The Health & Wellness Curriculum examines both individual and collective experiences of health and wellness so that students can develop skills for cultivating both individual and collective health. Topics of individual health and wellness address social, emotional, and physical wellbeing, while topics of collective health address systems, policies, and cultural attitudes that affect a broad and diverse population. While each lesson in the Health & Wellness Curriculum can stand alone, we believe these lessons will have the greatest impact when taught as a series and in order.

For Parents and Guardians: How to Continue the Conversation at Home

There are many good resources in the field of intersectional health and wellness. We recommend starting with *My Grandmother's Hands* by Resmaa Menakem and *Radical Belonging* by Lindo Bacon, Ph.D. As you deepen your own knowledge of these health topics, consider discussing the following questions with your children:

- How do you define health? How do you define wellness?

- What are the values you embrace as individuals, as a family, and in your larger community that support health and wellbeing for yourselves and others?
- What values do you embrace that conflict with the holistic practice of cultivating a balanced and healthy lifestyle?

Compare and contrast the identities you hold with your child. How do your identities and differences impact your access to health? Use examples from current events and media to reference and start the conversation.

The Health & Wellness Curriculum is designed to support students in becoming more adept at making healthy choices. As part of that process, we hope to empower students to recognize how systemic injustices affect both individual and collective health, and to use their privilege and knowledge to uplift the voices of the marginalized and dismantle barriers to health for themselves and others.

Lessons in the Health & Wellness Curriculum

Health & Wellness Lesson 1: Health Oppression and the Social Construction of Health

Suggested time: One or two 50-60 minute class periods

For most of history, health has been defined through a narrow lens and by groups of medical professionals based on assumptions and biases within the dominant culture. Medical advancements have often depended on unethical experiments performed on people of marginalized identities. In this lesson, students will discover that much of what we think it means to be healthy is in fact socially constructed. These socially constructed ideas about health influence how we see ourselves and others, as well as the choices we make about our own health.

Health & Wellness Lesson 2: Internal, External, and Societal Pressures on Mental and Emotional Wellbeing

Suggested time: One 50-60 minute class period

This lesson examines internal, external, and societal pressures that can affect students' mental health and wellbeing, including many types of systemic oppression. Students will use the stories of others to examine these pressures and reflect on how these pressures have affected their own mental health and wellbeing. Students will learn to recognize the signs and symptoms of different stages along the Emotional Wellbeing Spectrum and discuss resources they can turn to when they are not in a state of emotional balance. This lesson can be paired with a discussion of the characteristics of White Supremacy Culture (see Extension Opportunity), as these characteristics are among the societal pressures that influence mental health and emotional wellbeing.

Health & Wellness Lesson 3: An Introduction to the Embodied Nature of Stress

Suggested time: One to two 50-60 minute class periods

This lesson introduces a mind-body understanding of the impact of stress on our physical and emotional health and explores the chronic nature of societal stressors such as racism. While racism is often examined through an intellectual and analytical lens, the harm racism causes is multidimensional (social, emotional, physical, mental, and spiritual, as well as intellectual) and fragments our relationships with ourselves and others. If our society could "think and analyze" our way out of racist beliefs, biases, behaviors, and systems, with the countless smart people committed to this goal, it would have been accomplished already. This lesson aims to bridge intellectual racial concepts with mind-body exploration of racist oppression in order to support a holistic, intellectual, embodied, and health-conscious approach to dismantling racism.

Health & Wellness Lesson 4: Three Types of Stress and Their Effects on the Body

Suggested time: Two 50-60 minute class periods

In this lesson, students will continue to explore the embodied and experiential effects of race-based stress and trauma. Students will learn about three forms of stress – eustress, chronic or toxic stress, and trauma – and how each of these affects the body. They will also practice techniques for breathing and for mindful awareness. These skills can help students navigate chronic stressors such as racism and cope with disconnection and disembodiment caused by stress and trauma.

Health & Wellness Lesson 5: Maladaptive and Adaptive Strategies for Coping with Stress

Suggested time: Two 50-60 minute class periods

This lesson provides an overview of how people cope with stress. Students will learn about maladaptive coping strategies, which can impede long-term health, and about adaptive coping strategies, which provide healthy and sustainable options for dealing with stress. This lesson also introduces students to the changes that take place in the adolescent brain, changes that may influence how teens experience and cope with social and emotional stressors.

Health & Wellness Lesson 6: Healthy Bodies Come in All Sizes

Suggested time: One or two 50-60 minute class periods

Health at Every Size® is the theory by Lindo Bacon, Ph.D. that wellbeing and healthy habits are more important than any number on the scale. Diet culture is a culture of oppression, reinforcing weight-based discrimination in U.S. society, and such discrimination often intersects with racial and gender discrimination. This lesson addresses how health can be experienced at every size and debunks the notion that health is defined by body size.

Health & Wellness Lesson 7: Redefining Beauty

Suggested time: One or two 50-60 minute class periods

Beauty is defined socially, and we absorb these social ideas about what makes someone beautiful. These superficial and subjective standards marginalize people with certain genetic blueprints. In addition, striving to attain impossible ideals of beauty has consequences for our health and wellbeing. This lesson addresses those consequences and presents ways to dismantle narrow standards of beauty.

Health & Wellness Lesson 8: Ancestral Trauma and Radical Empathy

Suggested time: Two 50-60 minute class periods

This lesson is founded on the latest research on historical and ancestral trauma. Students will use this information to reflect on how such trauma manifests and affects us today. Students will also consider how ancestral trauma is connected to racism and other forms of systemic oppression. Finally, students will learn about radical empathy as a tool to aid in our collective healing from ancestral trauma generally, and from racial and systemic oppression specifically.

HISTORY

“History is the fruit of power, but power itself is never so transparent that its analysis becomes superfluous. The ultimate mark of power may be its invisibility; the ultimate challenge, the exposition of its roots.” -Michel-Rolph Trouillot

Historical thinking and racial literacy are critical to teaching and learning in a democratic society. In a digital world where access to information (and misinformation) has changed dramatically, knowledge of what came before and the skill of discernment are paramount. While the topic of race can be uncomfortable, our youth need to develop the courage and the capacity to have these conversations so that they can address the question, “how should we live together?”

For Educators: Structural Overview of the History Curriculum

The History Curriculum consists of eight lessons that teachers can use to enhance their existing curricula in global and U.S. history courses. Since the discipline of history emphasizes the study of change and continuity over time, the eight lessons are organized in a thematic and chronological fashion. They include a wide variety of materials, such as text, video, podcast, graphic history, and published primary sources, and frequently utilize the Harvard Graduate School of Education’s Project Zero “thinking routines,” a collection of questions and steps that scaffold and support student learning. While each lesson stands on its own – and teachers may pick and choose depending on what works best as a supplement to their existing curriculum – the arc of these lessons is intentional and designed to culminate with the most advanced concepts and skills, such as intersectionality and coalition building.

A common misconception is that race is the same as skin color and that humans have always divided people along these lines; this curriculum begins by investigating race as an invention of the modern world (Lesson 1). Race emerged as a social identifier in the late 1400s and 1500s and developed as empires gave way to nation-states and as nation-states restructured the global economy and developed new forms of capital and labor (Lesson 2). The idea of race entered a new stage of development in the 1700s as European Enlightenment thinkers created the racial categories and the corresponding color schemes that evolved into the ones we are familiar with today (Lesson 3).

While Europeans and their settler societies developed a racial hierarchy that suited their colonial purposes, marginalized peoples found ways to navigate and resist the colonial state (Lesson 4). Indigenous peoples mobilized in the struggle for liberation and resisted the abuse of power through both violent and non-violent means (Lesson 5). In the 1800s and early 1900s, formidable challenges to colonial rule developed around the world, and as global white supremacy tightened its grip, those on the margins with access to influential platforms articulated why it was necessary to resist exploitation across the color line (Lesson 6). Well into the 1900s, civil and human rights activists found opportunities for cross-racial solidarity as they built movements not for transactional but for transformational justice (Lesson 7). While overlapping identities such as race and sex added complexities to these resistance movements, they also provided new opportunities to build coalitions for change (Lesson 8).

For Parents and Guardians: How to Continue the Conversation at Home

For parents and guardians, the best way to continue the conversation at home is to begin with your own learning. How do you know what you know, and how do you know what you think you know is true?

The field of historical scholarship is robust, and a lot has changed in the past few decades. A good starting point is Nell Irvin Painter's *The History of White People* and Gary Y. Okihiro's essay, "Third World Studies: An Introduction." As you deepen your own knowledge of history and connect with your children, ask them what they are learning in history class. Follow up by asking, "what makes you say that?"

Historical thinking and racial literacy are lifelong journeys. There will be twists and turns, for rarely is a meaningful journey a linear one. It must, however, start somewhere.

We live in a world where disease and climate change defy political boundaries, where technology has altered space and time. The social, political, and economic systems that originated in the 1500s – and the idea of race that emerged along with them – are struggling to meet the needs of our current moment. Only by understanding what came before can we imagine a new world of possibility.

Lessons in the History Curriculum

History Lesson 1: Visualizing the World and Its Peoples

Suggested time: Two to three 50-60 minute class periods

Suggested units: Ancient world, medieval world, early modern world

Humans in the ancient and medieval world described and imagined peoples in distant lands as curiosities and, in some cases, inferior "barbarians" and "monsters," but they did not yet think in terms of "race." In this lesson, students will explore how the process by which Europeans visualized the world and its peoples – in the form of sculpture and maps – shaped their understanding of race as a construction of power with the ability to influence the early modern world.

History Lesson 2: Global Slave Systems

Suggested time: Two or three 50-60 minute class periods

Suggested units: Early modern world, colonial Latin America, transatlantic slave system

Europeans invented the idea of race when they made contact on a large scale with people living on other continents. Furthermore, they developed racial ideologies – systems of ideas about racial difference – to sustain their colonial projects in the modern world. In this lesson, students will examine enslaved labor, a critical component of colonialism, by considering the connections between the transpacific and transatlantic slave systems. By exploring how a subject like international slaving is defined, they will be able to understand that even the power to shape discourse is not possessed or exercised equally.

History Lesson 3: Science and the Creation of Racial Hierarchy

Suggested time: Two to three 50-60 minute class periods

Suggested units: Enlightenment, imperialism, scientific racism

Enlightenment scientists and scholars sought to understand the world in which they lived, and some turned to racial classification as a means of describing human difference. In this lesson, students will explore how two influential scientists – Carl Linnaeus and Johann Friedrich Blumenbach – played a role in shifting elite, and subsequently popular, discourse from a geographic to a hierarchical ordering of human diversity.

History Lesson 4: Race and the Colonial State: Abina Mansah and the "Important Men"

Suggested time: Five to six 50-60 minute class periods

Suggested units: Industrial revolution, colonialism, abolitionism

European colonial rule over the peoples of Africa, Asia, and the Americas reordered social hierarchies, placing European values and people at the top. In this lesson, students will learn about how marginalized peoples navigated the colonial state by reading a graphic history about a young West African woman named Abina Mansah who was enslaved, escaped to British-controlled territory, and took her former master to court in 1876. The study of this graphic history and the microhistorical method enables students to explore the relationship between power and knowledge in the writing of history.

History Lesson 5: The Legacy of Broken Treaties: Indigenous Resistance to Settler Colonialism

Suggested time: Three to four 50–60 minute class periods

Suggested units: U.S. continental expansion, U.S. Civil War, Indigenous global activism

Like the history of other settler societies such as Canada and Australia, the history of United States territorial expansion is one in which settlers seized control of resources in a region, especially the land, and displaced Indigenous peoples, often through violent means. In this lesson, students will learn about the difficult choices the Oceti Sakowin Oyate (also known as Northern Plain Native Nations) faced when making treaties with the United States in the nineteenth century and will evaluate competing truth claims concerning Indigenous resistance in the twenty-first century.

History Lesson 6: Drawing the Global Color Line: W. E. B. DuBois and “The Souls of White Folk”

Suggested time: Two to three 50–60 minute class periods

Suggested units: New imperialism, anti-imperialism, immigration restriction

Sociologist W. E. B. Du Bois, who declared that the problem of the twentieth century was the “problem of the color line – the relation of the darker to the lighter races of men in Asia and Africa, in America and the islands of the sea,” recognized earlier than most that race was a global phenomenon. In this lesson, students will explore how the idea of “Whiteness” emerged as a transnational form of racial identification by analyzing “The Souls of White Folk.” Students will then examine how Whiteness materialized in Australia and the United States in the form of immigration policy and law.

History Lesson 7: Cultivating Empathy: The Radical Solidarity of Yuri Kochiyama

Suggested time: Three to four 50–60 minute class periods

Suggested units: Mass incarceration of Japanese Americans, civil rights movements, Third World Solidarity movements

As one of the 120,000 Japanese Americans that the United States government incarcerated during World War II, Yuri Kochiyama developed a social consciousness that later informed her sense of justice. In this lesson, students will examine how and why Kochiyama’s worldview evolved as a result of her proximity to people of different racial and ethnic backgrounds, most notably, the civil rights leader Malcolm X. By exploring the meaning of solidarity in the context of twentieth-century liberation movements, students will develop an appreciation for the complexity of identity while cultivating their own sense of empathy.

History Lesson 8: Borderlands and the Emergence of Chicana Feminism: Recognizing Intersectionality and Building Coalitions for Change

Suggested time: Three to four 50–60 minute class periods

Suggested units: Women’s liberation, Latino activism, gay liberation, Third World solidarity movements

Like other women of color in the United States, Chicana feminists forged intersectional identities as they participated in a social movement for racial, gender, and class equality. In this lesson, students will explore the concept of “borderlands” and how Chicana feminism emerged from the Chicano movement in the late 1960s and 1970s. Students will discuss how an intersectional framework provides creative pathways for building coalitions for social justice.

MATH

“Give light, and people will find the way.” -Ella Baker

Mathematical knowledge is a powerful tool for understanding, analyzing, and addressing the injustices and inequities that impact people across the planet. We believe that teaching students to develop deep mathematical ways of thinking through issues of racial and social justice empowers them to become more engaged members of society and better prepares them for college, careers, and adult life. All students, regardless of background, can benefit by grappling with the question: how does race impact my life and the lives of people around me? The Math Curriculum provides students with authentic opportunities for this personal exploration while enriching them as critically numerate people.

For Educators: Structural Overview of the Math Curriculum

The Math Curriculum consists of eight lessons teachers can use to enhance their existing curricula in Algebra, Geometry, and Statistics courses. These lessons are not designed to be taught in any particular order; rather, they can supplement or replace existing content across these subject areas.

All lessons in the Math Curriculum include extensions and opportunities for more advanced learners, as well as suggestions for how the lessons can be shortened or expanded to fit time availability. Additionally, each lesson is designed so that students can apply multiple strategies to solve problems, develop an array of possible solutions based on their mathematical approaches, and draw their own conclusions about the thematic questions at the heart of each investigation.

The Math Curriculum addresses a variety of sensitive topics that may elicit emotional responses from students. Rather than avoiding these topics, it is recommended that you engage in the [pre-work necessary to support students](#) as they participate in difficult conversations. It is best to start with your own reflections about how these topics make you feel and to be aware of your potential triggers so you can manage your own reactions in the classroom. Developing trusting, personal relationships with and between students is also essential, as is having community norms or agreements in place. Finally, have a plan for students who may need additional support, which might include having a school counselor available, establishing clear guidelines about taking brief breaks from the classroom, and following up with specific students after class.

For Parents and Guardians: How to Continue the Conversation at Home

For parents and guardians, one of the best ways to augment your child’s learning is to show interest in seeing their work and to ask them to describe what they have been thinking and learning about in math class. The Math Curriculum is designed to help students draw their own conclusions about thematic social issues; therefore, students should be able to articulate the conclusions they have reached and defend the mathematical analyses they used to develop these conclusions.

Math has long been used to help solve real-world problems so that people can enjoy healthier, longer, more connected lives. Furthermore, math has the potential to help us address today’s most complex challenges and advance equity for individuals and communities across the planet. Across nearly all categories that measure health and wellbeing – including safe and affordable housing, access to quality education and health care, and economic opportunity – racially disproportionate outcomes persist. When we empower our students to use mathematical knowledge to envision a more just, equitable society, we all benefit.

Lessons in the Math Curriculum

Math Lesson 1: Racial Disparities in Deaths from the COVID Pandemic

Suggested time: Two 50-60 minute class periods

Suggested unit: Algebra I; this lesson can also be adapted for a Statistics course

This lesson draws from a March 2021 research study on the disproportionately high COVID-19 mortality rates within Black communities in the U.S. First, students will calculate and make sense of ratios between age-adjusted mortality rates for Black and White individuals in the U.S. Then they will create and analyze scatterplot graphs that explore the relationship between disparate mortality ratios and a State Racism Index. Through these data-driven activities, students will come to understand that the nationwide racial disparities in COVID mortality cannot be explained as the sum of individual actions but rather are symptoms of structural racism.

Math Lesson 2: Healthy Food for Healthy People: Addressing Food Deserts and Food Insecurity in BIPOC Communities

Suggested time: Three to five 50-60 minute class periods

Suggested units: Algebra I, Algebra II, Geometry, or Pre-Calculus (Day 3 is appropriate for Algebra II or Pre-Calculus, but it can be adapted for Algebra I or Geometry students)

This lesson explores the pervasiveness of food deserts across the United States, focusing specifically on the lack of access to affordable, healthy foods for people living in low-income BIPOC communities. Day 1 includes two activities that help students explore these issues by making sense of data that has been disaggregated by race. Day 2 asks students to apply a racial equity lens while using mathematical concepts to determine where a new supermarket should be built. Day 3 focuses on one strategy to address the problem of food deserts – the construction of a community garden – and engages students in an open-ended, “low-floor, high-ceiling” math task that can be adapted for a wide range of learners.

Math Lesson 3: Locked Out Twice: The Racial Geography of Voter Disenfranchisement and Prison Gerrymandering

Suggested time: Three to five 50-60 minute class periods

Suggested units: Ratios and proportions, graphing coordinates on a cartesian plane

This lesson explores just some of the contemporary manifestations of a racist legacy of denying voting rights to many people of color in the United States, and to Black people especially—a legacy that includes the three-fifths clause in the U.S. Constitution and Jim Crow disenfranchisement laws. Today, many policies and practices related to the prison system serve to inequitably inflate the representational power of rural, predominantly White communities. The first part of the lesson explores racial disproportionality in voter disenfranchisement. The second part focuses more specifically on prison gerrymandering, and why this practice benefits White rural communities at the expense of urban communities of color.

Math Lesson 4: The Racial Wealth Gap: Why Does It Exist and How Can We Eliminate It?

Suggested time: Three to five 50-60 minute class periods

Suggested units: Algebra I (substitution, evaluating equations, order of operations) or Introductory Statistics (analyzing graphs, confidence intervals)

This lesson explores the racial wealth gap in the United States. Day 1 introduces the topic of wealth and focuses on historical data comparing the median net worth of White and Black families. Day 2 debunks some of the myths surrounding the causes of the racial wealth gap and investigates wealth disparities between married households of different racial backgrounds. Day 3 explores the use of Baby Bonds to help close the racial wealth gap. Throughout this lesson, students will develop an understanding of how structural racism has created the racial wealth gap and thus requires structural solutions if it is to be eliminated.

Math Lesson 5: A Dream Deferred for Young Immigrants

Suggested time: Two to four 50-60 minute class periods

Suggested unit: Algebra I

This lesson provides students with an opportunity to learn about the Deferred Action for Childhood Arrivals (DACA) program, which currently supports over 700,000 people brought to the United States as children without documentation. The first part of this lesson explores the impact on both individuals and our broader society of a July 2021 court ruling that DACA is unconstitutional. The second part of this lesson has students imagine that they are helping to plan a protest in support of DACA, for which they need to determine how to maximize attendance given a variety of outreach options and constraints.

Math Lesson 6: Addressing the Rise of Hate Crimes Against Asian Americans

Suggested time: Three to four 50-60 minute class periods

Suggested unit: Algebra I; this lesson can also be adapted for a Statistics course

This lesson explores the rapid rise in hate crimes against Asian Americans since the coronavirus pandemic began. In the first activity, students use historic rates of anti-AAPI hate crimes to predict expected rates in 2020 and 2021. Students then compare their predictions to the actual data. The second part of the lesson is based on a survey that was conducted to better understand why some people stigmatize Asian Americans as being “COVID-19 risks” in order to more strategically address some of these root causes. Students are encouraged to develop and carry out a plan of action to reduce anti-AAPI bias and behaviors within their school or local community.

Math Lesson 7: The Legacy of Housing Discrimination and a Path Towards BIPOC Home Ownership

Suggested time: Two to four 50-60 minute class periods

Suggested unit: Algebra I or higher

The first part of this lesson explores redlining, a procedure that was used to legally discriminate against homebuyers and homeowners of color and contributed significantly to segregation and wealth inequality, particularly for Black communities. To understand how redlining functions, students will play a simulated “homebuying game” in which some will have an unfair advantage and others will not be able to win. The second part of this lesson explores a contemporary strategy for addressing the harms of housing discrimination: the use of homeownership vouchers to help increase homeownership rates in communities of color. Students will work in groups to allocate funding to different neighborhoods in a fictitious city, justifying their allocation plans using mathematical evidence and racial equity principles.

Math Lesson 8: Racial Disproportionality in Police Killings and Use of Force

Suggested time: Three to five 50-60 minute class periods

Suggested units: Algebra I, Statistics

This lesson uses data to explore racial disproportionality among the victims of police killings and police use of force. First, students will investigate data that show Black and Latinx people are killed by police at rates that are disproportionate to their overall representation in the U.S. population. Second, students will examine data that debunk the misperception that police kill more Black and Latinx people because they commit more crimes. Third, students will write and solve algebraic equations to determine the reduction in police killings of Black and Latinx people required to achieve rates proportionate to White people. Finally, students are encouraged to creatively share their findings about this topic through several possible project ideas.

TECHNOLOGY

“By pulling back the curtain and drawing attention to forms of coded inequity, not only do we become more aware of the social dimensions of technology but we can work together against the emergence of a digital caste system... which includes a social and technical apparatus that governs all areas of life.” -Ruha Benjamin

In our technology-obsessed society, it is enticing to embrace the idea that advances in computing, artificial intelligence, data analysis, robotics, and other areas of technology universally improve people’s lives. Young people, in particular, are often infatuated with technology, as they have been raised in a world where tech platforms are more powerful than many nations. But has technological change universally benefited everyone? If not, in what ways does technology increase power for some people while causing harm to others? For people of color, immigrants, youth, and others from historically marginalized backgrounds, how does technology often serve as an instrument of oppression? And are there ways technology can be leveraged to facilitate greater equity and justice? These are some of the guiding questions that students will explore in the Technology Curriculum.

For Educators: Structural Overview of the Technology Curriculum

The Technology Curriculum consists of eight lessons that educators can use to simultaneously accomplish three goals:

- Help students advance their computer-based technology skills.
- Strengthen students’ capacity for collaborative and creative critical thinking.
- Empower students to explore and communicate their ideas about how technology can be used to advance racial justice.

Each lesson in this unit stands alone; the Technology Curriculum does not need to be taught in any particular order, and there are very few prerequisite skills students must have to actively participate. All lessons can be scaled back to fit into a few class periods or expanded into a week (or more) of activities. Collectively, these lessons provide students with opportunities to explore topics of racial justice while developing technological expertise using common online tools and programs.

For Parents and Guardians: How to Continue the Conversation at Home

For parents and guardians, consider asking students to walk you through the activities they have engaged with in class and to explain what they have learned and what they are thinking about. In addition, ask your students how this experience feels for them and empathize with their responses.

Moving forward, you can demonstrate curiosity by raising questions about how technologies you encounter might be harmful for particular individuals or groups of people, including people of color. Such questions might sound like:

- I wonder if they have more ticketing cameras installed on traffic lights in low-income versus high-income neighborhoods?
- I wonder how the technological resources of schools with parent-teacher associations differ from those in

schools without parent-teacher associations?

- I wonder how facial recognition technology might impact my own experiences and the experiences of others who look different from me?

Human brilliance is the driving force behind technological innovation. The machines, apps, programs, and devices we build have the potential to heal and help all people thrive. If our students become inspired to develop and leverage technology to bring about more just, safe, vibrant communities, then we have a bright, collective future to look forward to.

Lessons in the Technology Curriculum

Technology Lesson 1: What Are Implicit Racial Biases, and How Can We Overcome Them?

Suggested time: One or two 50-60 minute class periods

In this lesson, students are introduced to the concept of implicit bias. Students will take an online Implicit Association Test created at Harvard University and then reflect on what their aggregated data suggest about their own and others' racial biases. Additionally, students will have an opportunity to explore strategies for reducing racial bias and to present what they have learned to their peers.

Technology Lesson 2: #NoTechForICE: Stopping Tech Companies From Building Digital Border Walls

Suggested time: Two or more 50-60 minute class periods

In this lesson, students investigate how large technology companies profit from government contracts to build digital border walls, and how these agencies are utilizing technology to surveil, monitor, detain, and ultimately deport immigrants. Working on a team, students will conduct research and then share their findings with their peers and community members, highlighting opportunities to speak out about these harmful uses of technology.

Technology Lesson 3: How Racially Biased Algorithms Used in Predictive Policing Harm Communities of Color

Suggested time: One or two 50-60 minute class periods

In this lesson, students explore how algorithms are being used by police departments to predict where crime is likely to occur and who is likely to commit it. Students will watch a short documentary about how the Los Angeles Police Department is using this approach, and why Black community members feel it is harmful and unfairly targets people who have not committed crimes.

Technology Lesson 4: Creating a Digital Archive for Racial Justice Movements

Suggested time: Two to five 50-60 minute class periods

This lesson provides students with the opportunity to create digital archives about topics related to racial justice. To populate their archives, students will have the option to curate existing materials through research from other websites or to produce original content related to an issue impacting their lives, school, or community. Students will develop both technical skills and a deeper understanding of the topic they choose for their archives.

Technology Lesson 5: Hashtag Activism: Confronting Racial Injustice One Tweet at a Time

Suggested time: One or two 50-60 minute class periods

This lesson explores how young people of color, and Black activists and students in particular, have used hashtags both to raise awareness of racial injustices and also to mobilize people to act. Students will research racial justice hashtags, share what they learn using a communication platform of their choice, and develop their own hashtags in response to racial justice issues that have impacted their lives and communities.

Technology Lesson 6: Harmful Police Surveillance in BIPOC Communities

Suggested time: Two to three 50-60 minute class periods

This lesson explores different ways police departments use technology to surveil people. First, students will watch short videos that provide a historical context for modern surveillance of BIPOC communities and activists. Then students will research surveillance technologies and use creative media to communicate key concepts and information with peers.

Technology Lesson 7: Coded Bias: Facial Recognition and the Policing of Black Bodies

Suggested time: One or two 50-60 class periods

In this lesson, students are introduced to the growing use of facial recognition technology and learn about how “coded biases” in algorithms often lead to the misidentification of Black and darker-skinned individuals. Additionally, students will explore how facial recognition technology is used by police in Detroit, Michigan through a citywide initiative called Project Green Light that has been heavily criticized for misidentifying innocent people as criminals and targeting Black Lives Matter demonstrators, immigrants, and students. The lesson uses real data from Project Green Light to teach students how to make an original Google Map.

Technology Lesson 8: Digital Prisons and Alternatives to eCarceration

Suggested time: Three to five 50-60 minute class periods

In this lesson, students learn about how technology is used to create digital prisons. Known as eCarceration, enforcing digital prisons involves the use of electronic monitoring and surveillance technologies (such as ankle bracelets) that are increasingly common as alternatives to physical detention. First, students will learn about the technology that is being used for these purposes. Then students will hear and read first-person stories from people who have been in digital prisons and learn why their experiences were so harmful. Next, students will investigate alternatives to eCarceration. Finally, students will develop a digital comic strip, an animation, or a podcast in order to creatively share the story of someone who has experienced electronic monitoring.

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