

Lesson Plan

<p>Description</p> <p>In this four-part lesson, students will learn all about health equity, starting by walking through the “seeing over the fence” analogy to understand how equity is different from equality. They will then develop further context for this issue by examining vaccine inequity as a case study. In part 3, one of Science North’s Indigenous Interns interviews a nurse at the Wikwemikong Health Centre on the challenges of achieving health equity in Indigenous communities. In the final section, the Many Nations, One Voice for Wellness team at Telus Spark will take students through a workshop on Dr. Christopher Emdin’s “Science Genius” method with health equity as the theme. Students will learn how to put their thoughts, feelings and experiences about this complex issue into rap and song.</p>	<p>Materials</p> <ul style="list-style-type: none"> A computer or laptop for each student OR classroom projector to work through as a class Headphones if students will complete separately The E-lesson file - available online Writing materials
<p>Big Ideas</p> <p>Part 1: What is Health Equity?</p> <ul style="list-style-type: none"> Equity vs Equality Meaning of health equity and inequity Definition and examples of the social determinants of health and their relation to health inequity <p>Part 2: Inequity Case Study: Vaccination</p> <ul style="list-style-type: none"> Pathogens, antibodies, and how vaccines help our immune system Impact of vaccination on public health Meaning of and reasons for vaccine inequity 	<p>Specific Expectations</p> <p>Grade 7 A3.2 investigate how science and technology can be used with other subject areas to address real-world problems.</p> <p>Grade 8 A3.2 investigate how science and technology can be used with other subject areas to address real-world problems. B1.2 analyse beneficial and harmful effects of developments in cell biology and associated emerging technologies on human health and the environment, while taking different perspectives into consideration.</p>

<p>Part 3: Health Equity in Indigenous communities</p> <ul style="list-style-type: none"> • Causes and impact of health inequity for Indigenous people • Efforts being made to combat inequities and increase access to culturally appropriate healthcare • Steps that still need to be taken to ensure Indigenous people have better healthcare access, experiences and outcomes <p>Part 4: “Science Genius” Workshop</p> <ul style="list-style-type: none"> • Basics of bars and beats • Writing process and tips • Health equity rap performance 	<p>Grade 9</p> <p>A2.3 analyse how the development and application of science is economically, culturally, and socially contextualized, by investigating real-world issues</p> <p>Grade 10</p> <p>B1.3 describe public health strategies related to systems biology (e.g., cancer screening and prevention programs; vaccines against the human papillomavirus [HPV] and measles, mumps, and rubella [MMR]; AIDS education), and assess their impact on society</p> <p>B3.4 explain the general function of some of the systems in the human body (e.g., the function of the circulatory system is to transport materials through the body; the function of the digestive system is to absorb nutrients; the function of the respiratory system is to bring oxygen into and remove carbon dioxide from the body)</p> <p>Grade 11</p> <p>B1.1 evaluate the effectiveness of medical devices and technologies that are intended to aid cellular functions or processes (e.g., insulin infusion pump, chemotherapy)</p> <p>C3.5 describe how different viruses, bacteria, and fungi can affect host organisms, and how those effects are normally treated or prevented (e.g., hepatitis viruses can damage the liver, but vaccinations can prevent infections; streptococcus bacteria can cause respiratory infections, which are treated with antibiotics; ringworm is a fungal infection of the skin, treated with fungicides)</p>
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Introduction

Not everyone is born and raised with the same chances to obtain their best health. Some have inherent advantages while others face barriers. Health inequity is a great source of injustice in our world today, and we need people who understand this issue in all areas of our society. Exploring the many factors that impact one’s chances at good health validates the experiences of different students, raises awareness of different challenges, and helps us all have more compassion for each other.

Action

1. Decide whether there is capacity for students to work through lesson on individual devices/in pairs or whether lesson will be done as a class.

Consolidation/Extension

If students feel comfortable, discussions can be had about their own experiences and knowledge of health equity in real life. They can take their understanding and interpretation of the concepts in this lesson and put them into art. Depending on the student, they may feel comfortable to take this further and perform their creation, or they may choose to simply create.

Accommodations/Modifications

- If internet connection is a concern: Click on the button to download lesson to device, so it can be used offline
- In the top right corner, there is a tab labelled “captions” where transcripts of each voiceover can be found

Assessment

Students can be graded on their artistic creations on the topic of health equity. They can follow the Science Genius workshop to write a rap, or another art form such as a song, a drawing, a poem, a comic or an essay. Depending on the student, they may feel comfortable taking this further and performing their creation or choose to simply create.

Additional Resources

Feedback survey <https://survey.alchemer.com/s3/7094497/IPF-Teacher-Student-Evaluation>
 Kids Boost Immunity Lessons on Global Inequality: <https://kidsboostimmunity.com/articles/unit-plan-global-inequality-6-8>
 Science Genius Method Information: <https://hiphoped.com/science-genius/>

Scienorth.ca/schools

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