

## STEAMS Barbara Rose Johns Project-Based Lesson Plan (6-8)

**Objective:** The objective of this lesson project is to engage middle school students (grades 6-8) in a comprehensive exploration of Barbara Rose Johns' role in the fight for educational equality. Through the integration of Science, Technology, Engineering, Arts, Math, and Social Studies (STEAMS), students will gain an interdisciplinary understanding of civil rights activism, history, and its impact on education.

### Key Components

<b>Science (S): Physiological Aspects of Social Justice and Civic Responsibility</b>	Topics: <ul style="list-style-type: none"><li>❖ Explore the scientific and psychological aspects of social justice.</li><li>❖ Discuss the role of civic responsibility in addressing inequality.</li></ul>
<b>Technology (T): Digital Storytelling and Online Exhibits</b>	Topics: <ul style="list-style-type: none"><li>❖ Create digital narratives and design online exhibits highlighting Barbara Rose Johns' activism.</li></ul>
<b>Engineering (E): Designing Civil Rights Monuments</b>	Topics: <ul style="list-style-type: none"><li>❖ Engage students in designing civil rights monuments.</li><li>❖ Apply engineering principles to create models or drawings of monuments commemorating Barbara Rose Johns' contributions.</li></ul>
<b>Arts (A): Visual Arts and Protest Art</b>	Topics: <ul style="list-style-type: none"><li>❖ Integrate arts by having students create protest art inspired by the civil rights movement.</li><li>❖ Create visual art projects that convey messages related to equality and justice.</li></ul>
<b>Math (M): Analyzing Educational Inequality Data</b>	Topics:

	<ul style="list-style-type: none"> <li>❖ Apply mathematical concepts to analyze data related to educational inequality.</li> <li>❖ Explore statistical data on educational disparities and visualize the information.</li> </ul>
<b>Social Studies (SS): Barbara Rose Johns and the Civil Rights Movement</b>	<p>Topics:</p> <ul style="list-style-type: none"> <li>❖ Explore the historical and social context of Barbara Rose Johns' activism.</li> <li>❖ Discuss her impact on the civil rights movement and educational equality.</li> </ul>

<b>Resource Needs</b>
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<b>1. Planning and Research:</b>	<ul style="list-style-type: none"> <li>❖ Materials:</li> <li>❖ Technology:</li> <li>❖ Experts/Community Resources:</li> </ul>
<b>2. Science Component:</b>	<ul style="list-style-type: none"> <li>❖ Lab Equipment:</li> <li>❖ Materials:</li> <li>❖ Technology:</li> </ul>
<b>3. Technology Integration:</b>	<ul style="list-style-type: none"> <li>❖ Devices:</li> <li>❖ Software:</li> <li>❖ Technical Support:</li> </ul>
<b>4. Engineering Design and Prototyping:</b>	<ul style="list-style-type: none"> <li>❖ Materials:</li> <li>❖ Tools:</li> <li>❖ Technology:</li> </ul>
<b>5. Arts and Design Elements:</b>	<ul style="list-style-type: none"> <li>❖ Art Supplies:</li> <li>❖ Multimedia Tools:</li> <li>❖ Technology:</li> </ul>
<b>6. Mathematical Calculations:</b>	<ul style="list-style-type: none"> <li>❖ Calculators:</li> <li>❖ Tools:</li> <li>❖ Technology:</li> </ul>
<b>7. Social Studies Connection:</b>	<ul style="list-style-type: none"> <li>❖ Reference Materials:</li> <li>❖ Guest Speakers:</li> <li>❖ Field Trip:</li> </ul>

## Assessment Criteria

<b>Science:</b>	Understanding of Barbara Rose Johns' role in the civil rights movement.
<b>Technology:</b>	Effective use of technology for digital storytelling and online exhibits.
<b>Engineering:</b>	Creativity and functionality in designing civil rights monuments.
<b>Arts:</b>	Quality of political cartoons and invention illustrations.
<b>Math:</b>	Accurate application of mathematical concepts in analyzing educational inequality.
<b>Social Studies:</b>	Understanding of the historical and social impact of Barbara Rose Johns.