

Healthy Beginnings, Hopeful Futures 8-Step PBLP (Grades 7-12)

Objective: Students will explore how innovation can support early health interventions, maternal and child wellness, and sustainable futures for communities. Using a STEAMS (Science, Technology, Engineering, Arts, Mathematics, and Social Studies) approach, students will develop innovative ideas and interdisciplinary projects that address real-world health disparities and empower communities toward “Healthy Beginnings, Hopeful Futures.”

Round Table

❖ **Opening Discussion:**

- What does a "healthy beginning" look like for a child?
- How can innovation help create long-term, hopeful futures?

- ❖ **Purpose:** Introduce students to the intersection of innovation and public health—highlighting how early interventions and creative solutions can shape generations.

Reflection Point

❖ **Discussion Questions:**

- Who is most at risk of poor health outcomes in your community or around the world?
- What role does innovation play in preventing disease and improving early-life care?

❖ **Materials:**

- Videos from industry think tanks about maternal and child health
- Journal for reflections
- Guest speakers: pediatric nurses, midwives, public health professionals, or health-tech founders

Knowledge Setting

Science (S): Innovations in Child & Maternal Health	<ul style="list-style-type: none">❖ Objective: Understand how scientific advancements improve early-life outcomes.❖ Activity: Research topics such as prenatal vitamins, clean birthing kits, vaccines, and nutrition innovations.
Technology (T): Mobile Health & Access	<ul style="list-style-type: none">❖ Objective: Understand how apps and devices support underserved populations.❖ Activity: Study mobile tools for remote diagnostics, vaccination tracking, or postpartum health monitoring. And the effects of lack of access.
Engineering (E): Designing for Wellness Access	<ul style="list-style-type: none">❖ Objective: Understand the structural solutions that improve access to clean water, shelter, or clinics.❖ Activity: Analyze low-cost, scalable clinic or mobile wellness units for rural areas.
Arts (A): Campaigning for Healthy Futures	<ul style="list-style-type: none">❖ Objective: Understand how visual storytelling drives awareness in healthy beginnings.❖ Activity: Research health awareness campaigns focused on infants and maternal care, and design posters or digital stories.

Mathematics (M): Data & Disparities in Global Health	<ul style="list-style-type: none"> ❖ Objective: Understand global and local health inequalities and industry think tank indexes. ❖ Activity: Analyze charts or key points showing infant mortality, access to prenatal care, or clean water usage.
Social Studies (SS): Policy, Equity & Access	<ul style="list-style-type: none"> ❖ Objective: Understand how policy influences who receives care and how early. ❖ Activity: Compare health systems in different countries or regions and identify key disparities and solutions.
Project Examples	

Progress Map for Project Delivery	<ul style="list-style-type: none"> ❖ Week 1: Project Proposal <ul style="list-style-type: none"> • Students create a written proposal outlining the focus of their project and community benefit. ❖ Week 2: Project Approval and Community Engagement Plan <ul style="list-style-type: none"> • Students submit their proposals and outline how their work will positively impact the community, ensuring alignment with the project's learning objectives and addressing real-world needs. ❖ Week 3: Research Progress Update <ul style="list-style-type: none"> • Students conduct research and gather data related to their chosen focus area. ❖ Week 4: Draft of Final Project <ul style="list-style-type: none"> • Students compile their findings into a draft report or presentation. ❖ Week 5: Final Project Refinement and Approval for Implementation <ul style="list-style-type: none"> • Final feedback is provided, and the projects are presented at a community event involving local leaders and stakeholders.
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Science (S): Health Starter Kits	<ul style="list-style-type: none"> ❖ Project Example: Design a shelf-ready starter kit to support new mothers in underserved areas (including soap, vitamins, health guides, etc.).
Technology (T): Wellness App Prototype	<ul style="list-style-type: none"> ❖ Project Example: Create a prototype for a mobile health device that supports expectant mothers or new parents in remote areas.

Engineering (E): Mobile Health Pod	❖ Project Example: Design a unique multipurpose blueprint for a mobile unit equipped to serve maternal/infant health needs.
Arts (A): Health Begins Here Campaign	❖ Project Example: Design pamphlet infographics promoting "Healthy Beginnings, Hopeful Futures" for World Health Day.
Mathematics (M): Life Expectancy Dashboard	❖ Project Example: Develop a dashboard using global data that compares early life conditions and their long-term effects.
Social Justice (SS): Health Equity Policy Proposal	❖ Project Example: Draft a policy initiative that advocates for improved prenatal and early childhood healthcare in underserved communities.

Community Involvement

- ❖ **Objective:** Combine all subject-based projects into one cohesive health innovation initiative.
- ❖ **Activity:** Partner with local clinics, nonprofit organizations, or health departments. Host a World Health Day innovation fair to share student ideas with healthcare leaders and community members.

Assessment

- ❖ **Objective:** Evaluate students' understanding of health innovation and its interdisciplinary application.
- ❖ **Methods:** Use rubrics that measure innovation, collaboration, problem-solving, community impact, and understanding of health equity.

Feedback Loop

- ❖ **Activity:** Students reflect through a facilitated group discussion or written response.
- ❖ **Journal Prompt:**
 - What does healthcare innovation mean to you now?
 - How can small ideas lead to big changes in health and community well-being?

Resume Integration

- ❖ Survey career interest in healthcare, biotechnology, public health, design thinking, social work, data analytics, civic engagement, and nonprofit innovation. Showcase projects on resumes, highlighting skills in research, innovation, community impact, and advocacy.

For more 8-Step Project-Based Lesson Plans check out our website at www.steamsinitiative.org

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