STEAMS National Walking Month Project-Based Lesson Plan (7-12)

Objective: The objective of this interdisciplinary lesson plan is to raise awareness about the benefits of walking and its impact on personal health and community well-being during National Walking Month. Through a STEAMS (Science, Technology, Engineering, Arts, Mathematics, and Social Studies) approach, students will explore the health benefits of walking, technological tools for promoting walking, engineering solutions for walkable communities, artistic expressions of the joy and benefits of walking, mathematical analysis of walking data, and social studies perspectives on the role of walking in urban planning and community health. Suitable for grades 7-12, this lesson plan aims to empower students to become aware of the benefits of walking and active living.

Key Components

Science (S): Understanding the Health Benefits of Walking	❖ Topics: 1. The physiological benefits of walking on cardiovascular health, mental health, and overall physical fitness. ❖ Projects: 1. Investigate the health benefits of walking by reviewing scientific studies and health reports. Conduct experiments to measure the effects of walking on heart rate, blood pressure, and mood. 2. Suggest a plan for a group-wide walking activity to promote physical engagement.
Technology (T): Technological Tools for Promoting Walking	❖ Topics: 1. Technologies and apps that encourage walking, such as pedometers, fitness trackers, and walking route planners.

	❖ Projects: 1. Research various technologies that promote walking and analyze their effectiveness. Learn how to use fitness tracking apps to monitor walking habits and set goals. 2. Create an organizer using digital tools to promote National Walking Month among friends and family.
Engineering (E): Designing Walkable Communities	❖ Topics: 1. Urban design principles that promote walkability, such as safe sidewalks, crosswalks, pedestrian zones, and green spaces. ❖ Project: 1. Study examples of walkable cities and identify key engineering features that support walking. Develop mock proposals for engineering projects that enhance walkability in the local community.
Arts (A): Artistic Expression of the Joy and Benefits of Walking	❖ Topics: 1. Artistic representations of walking through visual arts, music, literature, and performance. ❖ Project: 1. Examine various artistic works that celebrate walking and explore their messages and techniques. Create artworks, songs, poems, or performances that highlight the benefits and joy of walking.

Math (M): Mathematical Analysis of Walking Data	❖ Topics: 1. Data related to walking habits, distances, and health outcomes. ❖ Projects: 1. Gather data from fitness trackers or surveys about walking habits and health metrics. Create charts, graphs, and models to visualize walking data and its impact on health. 2. Create mock proposals on findings based on mathematical reasoning that advocates for more walking initiatives in the community.
Social Studies (SS): The Role of Walking in Urban Planning and Community Health	Topics: ❖ Topics: 1. The social, economic, and environmental impacts of walking-friendly urban design. Use case studies of communities that have successfully promoted walking. ❖ Project: 1. Develop a mock policy proposal that promotes walking and addresses barriers to walkability.

Assessment Criteria

By the end of this lesson plan, students will demonstrate a comprehensive understanding of the benefits of walking and its impact on health, community well-being, and environmental sustainability. Assessment will be based on project completion, research quality, critical analysis, creativity, and the effectiveness of proposed solutions. This STEAMS National Walking Month Project-Based Lesson Plan empowers students to advocate for active living and sustainable urban design, fostering a sense of responsibility for personal health and community well-being.