SDG 9: Industry, Innovation, & Infrastructure

This module focuses on SDG 9 which aims to “build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.” The stories cover the inequalities in digital infrastructure between rural and urban areas and gender inequalities in terms of internet access in Afghanistan. The activities include case study analysis, data analysis, and policy analysis.

Link to Subjects	Government, Social Studies, Technology		
Link to Indiana High School Core	Social studies (5.2, 5.4, 5.6). See the standards section below	Link to International Baccalaureate	Systems, development, globalization. See the standards section below
Story	Story #1: How Rural Students Are Left Behind in the Digital Age Story #2: Afghan Girls Struggle with Internet for Online Classes		
Activities	Activity #1: SDG 9 Case Studies	Activity #2: Exploring Internet Access in Rural and Underdeveloped Nations	Activity #3: Exploring Digital Infrastructure Initiatives in countries with poor access to the internet
Type of Activity	Case Study	Data Analysis	Policy Analysis
Time of Activity	1 class	1 class	2 classes

Key Questions & Terms

Key Questions	Key Terms
How does the lack of quality broadband internet affect our lives?	Digital Divide Broadband Internet
What role does the internet play in national economic success? How does that translate to personal success for its citizens?	Internet Access Disparities Industry, Innovation, and Infrastructure

What are governments doing to help their citizens get access to the internet?	Government-Sponsored Initiatives Stakeholder Engagement

Story Summaries

Story #1: How Rural Students Are Left Behind in the Digital Age

Rural students face educational setbacks due to the rural broadband gap, hindering access to high-speed internet at home. Teachers like Lydia Weiso and Maria Villalpando Lopez employ creative solutions, but slow speeds and unreliable connections persist. Without broadband, students miss out on digital learning opportunities critical for success in the modern economy. Original link: https://bit.ly/4cd4ewK; Archived link: https://bit.ly/3Xe8nwf.

Story #2: Afghan Girls Struggle with Internet for Online Classes

In Afghanistan, girls face challenges accessing the internet for online classes, hindering their education. Limited connectivity, societal barriers, and safety concerns contribute to their struggle, highlighting the urgent need for improved infrastructure and support to ensure equitable access to education for all Afghan girls. Original link: https://bit.ly/3z6OD3p; Archived link: https://bit.ly/3yRKlge.

Opening Discussion

1. Begin the lesson by asking students if they are familiar with the concept of sustainable development and the United Nations Sustainable Development Goals (SDGs).
2. Explain that today's lesson will focus on SDG 9, which is about Industry, Innovation, and Infrastructure.
3. Write "SDG 9: Industry, Innovation, and Infrastructure" on the board.
4. Discuss with students what they think this goal might entail. Encourage them to share their ideas.
5. Distribute printed handouts containing the major indicators and targets for SDG 9
    a. Use these links to share (original: https://bit.ly/3yXqsEC; archived: https://bit.ly/3yX5ANU)
6. In small groups, ask students to read through the indicators and targets.
7. Encourage each group to discuss what each indicator and target means and how they contribute to achieving SDG 9.
    a. Discussion can focus on Sustainable Infrastructure, Renewable Resources and Internet for all. Ultimately, students will drive the discussion based on their interests and exposure.
8. After discussion, reconvene as a class and have each group share their findings. Facilitate a discussion to ensure understanding of each indicator and target.

Activity #1: SDG 9 Case Studies

In this lesson, students explore UN Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure). They analyze indicators and targets, discuss case studies, and understand how these aspects foster sustainable development. Through group discussions and activities, they grasp the significance of SDG 9 in promoting global progress and inclusivity.

Activity Learning Objectives

1. Define UN Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure).
2. Identify the major indicators and targets associated with SDG 9.
3. Understand the importance of SDG 9 in promoting sustainable development globally.

Teacher preparation

1. Prepare relevant case studies showcasing successful infrastructure projects or innovative initiatives aligned with SDG 9. See examples below in Resources (Activity 1 Case Study Ideas).
2. Prepare printouts or choose visual aids for explaining and linking to SDG 9. See Infographic, original: https://bit.ly/3RoPdjz; archived: https://bit.ly/3yX5ANU. You might also print out the SDG 9 targets and indicators from the same source.

Lesson Flow

1. Present a case study related to SDG 9 by looking at
    a. Rural Areas struggling with Internet Access (Original: https://bit.ly/4cd4ewK; Archived: https://bit.ly/3Xe8nwf) or
    b. The challenges Afghani students face when trying to access the internet (Original: https://bit.ly/3z6OD3p; Archived https://bit.ly/3yRKlge)
2. Working in pairs or small groups, students should respond to the the following questions:
    a. What problems are the people in the story facing?
        i. How do they respond to these problems?
        ii. What principles and ideas shape their solutions/responses to the problems?
        iii. How does this story about the lack of reliable infrastructure relate to other SDGs?
3. In a large group, discuss the answers to these questions, drawing out key concepts:
    a. **Infrastructure development**: Understanding the importance of building resilient infrastructure, promoting inclusive and sustainable industrialization, and fostering innovation to support economic growth and development
    b. **Access to technology**: Recognizing the significance of ensuring universal access to affordable and reliable internet and technology, particularly in bridging the digital divide and promoting digital literacy.
    c. **Sustainable industrialization**: Appreciating the need to promote sustainable industrial practices, including resource efficiency, clean energy adoption, and

responsible consumption and production, to minimize environmental impact and promote economic prosperity.
    d. **Innovation and entrepreneurship**: Embracing the role of innovation and entrepreneurship in driving economic growth, creating job opportunities, and fostering inclusive and sustainable industrial development, particularly in developing countries.
    e. **Infrastructure resilience:** Understanding the importance of building resilient infrastructure to withstand natural disasters and climate change impacts, ensuring continuity of services and safeguarding communities' well-being.
    f. **Global partnerships**: Recognizing the significance of international cooperation and partnerships in supporting infrastructure development, technology transfer, and industrial capacity-building, particularly in developing countries lacking resources or expertise.
4. Divide the class into small groups and assign each group a different aspect of the case study to analyze in relation to SDG 9.
    a. Have groups discuss how the case study aligns with SDG 9 indicators and targets, and what improvements or actions could be taken to further contribute to achieving the goal.
    b. Each group submits their analysis to the teacher in a method they seem fitting (Video, Slideshow, Report).
5. Conclusion:
    a. Summarize the key points discussed during the lesson.
    b. Emphasize the importance of SDG 9 in promoting sustainable development and improving lives globally.
    c. Encourage students to think about how they can contribute to achieving SDG 9 in their future endeavors.

Advanced Approaches

- **Systems Thinking**: Explore the interconnectedness of SDG 9 with other goals, emphasizing the complex relationships between industry, innovation, and infrastructure with issues like poverty, inequality, and climate change.
- **Critical Analysis**: Engage students in critical discussions about the potential drawbacks or unintended consequences of certain industrial practices or infrastructure development, encouraging them to think critically about the trade-offs involved in achieving SDG 9.
- **Interdisciplinary Connections**: Integrate concepts from economics, engineering, sociology, and environmental science to provide a comprehensive understanding of the multifaceted nature of SDG 9 and its implications for sustainable development.
- **Project-Based Learning**: Implement a project-based learning approach where students collaborate on real-world projects related to SDG 9, applying their knowledge to develop innovative solutions and address challenges in their local or global communities.

Activity #2: Exploring Internet Access in Rural and Underdeveloped Nations

Students will explore the role of internet access to support sustainable development. They will engage in comparative data analysis of internet access in different contexts.

Activity Learning Objective(s)

1. Students will understand the challenges and successes of limited internet access.
2. Students will compare internet access data between highly developed and limited access countries

Lesson Flow

1. Introduction:
    a. Discuss the importance of internet access.
    b. Ask students about their experiences with the internet and how it has made positive and negative impacts on their lives.
    c. Introduce the concept of digital divide and its significance.
2. Activity: Contrasting Internet Access Across Countries
    a. Divide students into small groups and assign each group two countries: one with highly developed internet access and one with limited access. Be aware that North Korea is the country with the least internet access but they don't release any of their data so their results in the resources below are heavily censored.
        i. World Economic Forum: Where will the next Billion Internet Users Come From? https://bit.ly/4cgBvr2
        ii. Countries with the most internet access: https://bit.ly/4cgSdqc
        iii. Countries with the least internet access: https://bit.ly/4egGGce
        iv. Speed Test Global Index: https://bit.ly/3yXv8dE
    b. Instruct students to research internet access statistics for their assigned countries. Suggested Resources:
        i. Our World in Data: https://bit.ly/ourWorldData
        ii. CIA World Factbook: https://bit.ly/3VfVvmJ
        iii. World Bank: https://bit.ly/3Xhwk5G
3. Data Analysis and Discussion:
    a. Groups analyze collected data and identify differences between the two sets of countries.
        i. Potential Indicator List in Resources
    b. Facilitate a class discussion on the implications of these disparities, focusing on education, economy, and social connectivity.
4. Group Presentations and Reflection:
    a. Each group presents their findings, highlighting differences in internet access and its impact.
    b. Conclude with a reflection on potential solutions to bridge the digital divide.

Advanced Approaches

1. **Case Studies and Analysis**: Allow students to choose countries with poor internet access and conduct in-depth case studies.
2. **Policy Analysis and Debate**: Organize a debate or policy analysis activity where students critically evaluate the effectiveness of digital infrastructure initiatives.
3. **Field Research or Interviews**: Offer students the opportunity to conduct field research or interviews with experts involved in digital infrastructure initiatives.
4. **Interdisciplinary Connections**: Integrate economics, technology, geography, and international relations into the lesson.
5. **Project-Based Learning**: Implement a project-based learning approach where students collaborate to design and implement digital infrastructure projects.
6. **Global Collaboration**: Foster global collaboration by connecting students with peers from countries with varying levels of internet access.

Activity #3: Exploring Digital Infrastructure Initiatives in countries with poor access to the internet

Students will explore how policies support the expansion of technological access in different contexts and how that might support sustainable development with a focus on the role of internet access.

Activity Learning Objectives

1. Students will explore initiatives aimed at improving digital infrastructure in countries with poor internet access.
2. Students will analyze how these initiatives contribute to achieving the goals and indicators of Sustainable Development Goal 9 (SDG 9): Industry, Innovation, and Infrastructure.

Lesson Flow

Day 1: Introduction to Digital Infrastructure Initiatives

1. Introduction:
    a. Introduce the concept of digital infrastructure and its importance in facilitating economic development and innovation.
    b. Provide an overview of Sustainable Development Goal 9 and its focus on industry, innovation, and infrastructure.
2. Research Activity:
    a. Divide students into small groups and assign each group a country with poor internet access (e.g., DRC, Myanmar, Nigeria).
        i. List of current internet infrastructure initiatives in Resources
    b. Instruct students to research digital infrastructure initiatives in their assigned country, focusing on government policies, programs, and investments aimed at improving internet access and connectivity.
3. Group Presentations:
    a. Each group presents their findings to the class, highlighting key digital infrastructure initiatives in their assigned country.
    b. Encourage students to discuss how these initiatives address challenges related to internet access, broadband connectivity, and digital literacy.

Day 2: Connecting to SDG 9

1. Discussion on SDG 9:
    a. Review the goals and indicators of SDG 9, emphasizing its relevance to digital infrastructure and internet access.

    b. Discuss how improving digital infrastructure contributes to achieving SDG 9 targets, such as increasing access to affordable and reliable internet connectivity and promoting innovation in technology.
2. Analysis Activity:
    a. Divide students into new groups and provide them with a set of SDG 9 indicators related to digital infrastructure (e.g., broadband coverage, internet affordability, digital literacy rates).
    b. Instruct students to analyze how the digital infrastructure initiatives discussed in Day 1 contribute to achieving these SDG 9 indicators.
3. Group Discussion and Reflection:
    a. Facilitate a class discussion on the connections between digital infrastructure initiatives and SDG 9 goals and indicators.
    b. Encourage students to reflect on the importance of digital infrastructure for sustainable development and the role of international cooperation in supporting these initiatives.
        i. List of current infrastructure in Resources

Advanced Approaches

- **Extended Research and Analysis**: Allow students to conduct more extensive research on internet access disparities.
- **Policy Debate and Simulation**: Organize a policy debate or simulation where students discuss strategies for bridging the digital divide.
- **Multimedia Presentations:** Encourage students to create multimedia presentations to showcase their findings and analysis.
- **Community Engagement Projects**: Engage students in community outreach projects focused on raising awareness about digital inclusion.
- **Cross-Cultural Perspectives**: Facilitate discussions that highlight cross-cultural perspectives on internet access disparities.
- **Policy Recommendations and Advocacy**: Challenge students to develop policy recommendations and advocacy strategies aimed at addressing internet access disparities.

Activity #4: Government-Sponsored Initiatives Simulation to Bridge the Digital Divide

The simulation challenges students to adopt roles representing government agencies, telecommunications companies, non-profit organizations, marginalized communities, and media to collaboratively develop strategies for bridging the digital divide. Through negotiation, discussion, and decision-making, students explore the complexities of policymaking and implementation in addressing internet access disparities.

Activity Learning Objectives

1. Students will understand the complexities of bridging the digital divide by considering different viewpoints, evaluating strategies, and identifying challenges and opportunities.
2. Students will work together to develop solutions for internet access disparities, negotiate compromises, and agree on effective initiatives.
3. Students will assess government-sponsored initiatives for bridging the digital divide, considering factors like feasibility, impact, fairness, and long-term sustainability, and reflect on ethical implications.

Lesson Flow

Day 1: Introduction and Preparation

1. Introduction to the Simulation:
    a. Explain the purpose of the simulation and its focus on government-sponsored initiatives to bridge the digital divide (see Simulation guide in Resources)
    b. Provide an overview of the roles and objectives assigned to each participant (see Simulation guide in Resources).
2. Research and Preparation (60 minutes):
    a. Divide students into groups representing different stakeholders involved in digital divide initiatives (e.g., government agencies, telecommunications companies, non-profit organizations, marginalized communities).
    b. Assign each group to research and prepare strategies and proposals for addressing the digital divide from their respective perspectives.
    c. Encourage students to consider factors such as infrastructure development, affordability, digital literacy, and accessibility in their proposals.

Day 2: Simulation

1. Simulation Setup and Instructions:
    a. Review the format and rules of the simulation.
    b. Explain the roles of each group and the objectives they are expected to achieve during the simulation.
2. Simulation Activity:

    a. Conduct the simulation, allowing each group to present their strategies and proposals for bridging the digital divide.
    b. Encourage students to engage in negotiation, collaboration, and decision-making as they work towards consensus on the most effective initiatives.
    c. Facilitate discussions on the challenges, trade-offs, and ethical considerations involved in policy making and implementation.
3. Reflection and Conclusion:
    a. Conclude the simulation with a reflection session where students share their insights and experiences.
    b. Encourage students to consider the complexities of government-sponsored initiatives and the importance of collaboration and compromise in addressing the digital divide.

Advanced Approaches

1. **Complex Scenario Development:** Introduce more complex and realistic scenarios that require students to navigate intricate political, economic, and social dynamics while addressing the digital divide. This could involve incorporating factors such as international relations, trade agreements, and technological advancements.
2. **Role-Playing with Real Stakeholders**: Invite experts, policymakers, or representatives from relevant organizations to participate in the simulation as stakeholders. This provides students with authentic insights into the challenges and considerations involved in policy making and implementation.
3. **Multi-round Simulation**: Conduct the simulation over multiple rounds, allowing students to refine their strategies, respond to changing circumstances, and observe the long-term impact of their decisions. Each round can introduce new challenges, opportunities, or policy developments.
4. **Cross-disciplinary Integration**: Integrate concepts and perspectives from other disciplines, such as economics, technology, sociology, and ethics, into the simulation. This encourages students to consider the broader implications of their decisions and fosters interdisciplinary understanding.
5. **Debriefing and Reflection Sessions**: Incorporate debriefing and reflection sessions after each round of the simulation to facilitate critical analysis, self-assessment, and peer feedback. Encourage students to reflect on their decision-making processes, outcomes, and lessons learned.
6. **Research-Based Advocacy**: Require students to conduct independent research to support their proposed strategies and initiatives. This encourages evidence-based advocacy and strengthens students' research, analytical, and presentation skills.
7. **Simulated Media Coverage:** Introduce a simulated media component where students role-play as journalists, bloggers, or social media influencers covering the simulation. This adds another layer of complexity and encourages students to consider public perception and media dynamics.
8. **Policy Brief Development:** Require students to prepare policy briefs summarizing their proposed strategies and initiatives. This helps students distill complex ideas into concise and actionable recommendations, preparing them for real-world policy advocacy and communication.

9. **External Feedback Panels**: Organize external feedback panels composed of experts, stakeholders, or alumni to provide constructive feedback on students' proposals and presentations. This provides students with valuable insights and enhances the authenticity of the simulation experience.

Resources

Activity 1 Case Study Ideas

- **Masdar City, UAE**: Explore the development of Masdar City, a sustainable urban development project aiming for carbon neutrality. Discuss its innovative infrastructure design, renewable energy initiatives, and sustainable transportation systems.
- **High-Speed Rail in China**: Analyze China's high-speed rail network as a case study of successful infrastructure development. Discuss its impact on economic growth, connectivity, and sustainable transportation.
- **Tesla's Gigafactory**: Examine Tesla's Gigafactory as an example of innovation in the automotive industry. Discuss its role in advancing electric vehicle technology, renewable energy integration, and sustainable manufacturing practices.
- **M-Pesa in Kenya**: Investigate M-Pesa, a mobile money transfer service in Kenya, as an example of innovation in financial technology. Discuss its impact on financial inclusion, economic development, and infrastructure for digital payments.
- T**he Panama Canal Expansion**: Explore the expansion of the Panama Canal as a case study of infrastructure development and international trade. Discuss its economic benefits, environmental challenges, and implications for global shipping routes.

Potential Indicator List

When comparing economic and social success due to low or high internet access, students should consider the following indicators:

1. **Economic Growth**: Compare the GDP growth rates of countries with high internet access to those with low access. Higher internet penetration often correlates with increased economic activity, innovation, and productivity.
2. **Employment Opportunities**: Analyze the impact of internet access on job creation and employment rates. Countries with high internet access may experience growth in online industries, remote work opportunities, and digital entrepreneurship.
3. **Education**: Examine the role of internet access in education, including access to online learning resources, digital skills development, and distance education. Higher internet access can lead to improved educational outcomes and increased access to quality education.
4. **Healthcare:** Evaluate the impact of internet access on healthcare delivery, including access to telemedicine, health information resources, and online medical services. Countries with high internet access may experience improvements in healthcare access and outcomes.
5. **Social Connectivity**: Assess the role of internet access in fostering social connectivity and community engagement. Higher internet access can lead to increased social networking, communication, and civic participation.
6. **Innovation and Entrepreneurship**: Examine the impact of internet access on innovation, entrepreneurship, and economic development. Countries with high internet

access may experience growth in technology startups, digital innovation, and knowledge-based industries.

7. **Digital Divide Mitigation**: Evaluate efforts to bridge the digital divide and promote digital inclusion. Compare policies and initiatives aimed at increasing internet access in underserved communities and reducing disparities in access and usage.

Some of these indicators will be easily searchable using the resources provided. Others would need more time to find and analyze. Teachers should be prepared to facilitate students to find the information by looking at the sources as preparation for the activity.

National Internet Initiatives

Here are examples of countries with poor internet access and their efforts to improve digital infrastructure:

India: Digital India Initiative: Launched in 2015, this initiative aims to transform India into a digitally empowered society and knowledge economy. It includes programs to expand broadband connectivity, improve digital literacy, and promote electronic governance. Source: https://bit.ly/3RmzFN2

Democratic Republic of the Congo (DRC): National Broadband Strategy: The DRC government has developed a National Broadband Strategy to improve internet access across the country. This strategy includes initiatives to expand broadband infrastructure, increase affordability, and promote digital literacy. Source: https://bit.ly/3x28gt7.

Myanmar: Telecommunications Sector Reform: Myanmar has undergone significant reforms in its telecommunications sector, including the liberalization of the industry and the issuance of new licenses to increase competition. These reforms aim to expand internet access and improve connectivity nationwide. Source: https://bit.ly/3VDK3mm.

Nigeria: Nigeria National Broadband Plan: The Nigerian government has implemented a National Broadband Plan to increase broadband penetration and improve digital infrastructure. The plan includes targets for expanding broadband coverage, reducing internet costs, and promoting digital inclusion. Source: https://bit.ly/45B88h3; https://bit.ly/4bUONto.

Ethiopia: Ethiopian National Broadband Strategy: Ethiopia has developed a National Broadband Strategy to accelerate the rollout of broadband infrastructure and improve internet access. The strategy focuses on expanding network coverage, reducing costs, and promoting digital skills development. Source: https://bit.ly/3VCvAH5.

Bangladesh: Digital Bangladesh Vision: The government of Bangladesh has launched the Digital Bangladesh Vision to transform the country into a knowledge-based society. This initiative includes projects to expand broadband connectivity, enhance digital literacy, and promote e-government services. Source: https://bit.ly/3VAjfTW.

Pakistan: Pakistan Vision 2025: The government of Pakistan has set ambitious targets for improving digital infrastructure and expanding internet access under its Pakistan Vision 2025 plan. Initiatives include efforts to increase broadband coverage, promote e-commerce, and enhance cybersecurity. Source: https://bit.ly/45lO5mv.

Kenya: Kenya National Broadband Strategy: Kenya has developed a National Broadband Strategy to improve internet access and connectivity nationwide. The strategy focuses on expanding broadband infrastructure, promoting digital inclusion, and supporting innovation in the digital economy. Source: https://bit.ly/3yVeqLX.

Simulation: Bridging the Digital Divide – Government-Sponsored Initiatives

The simulation could mimic the US, another country or a fictional country. More research on the specific civil rights laws would be needed, but could be fun. Defining the legal boundaries of a fictional country could also be engaging for students.

Format:

- The simulation will consist of two rounds, each lasting approximately 30 minutes.
- In each round, groups representing different stakeholders will present their strategies and proposals for bridging the digital divide.
- After each round, there will be a discussion and negotiation phase where groups can collaborate, provide feedback, and adjust their proposals based on input from other stakeholders.

Rules:

1. Respectful Communication: All participants must engage in respectful and constructive communication throughout the simulation.
2. Role Engagement: Each participant must actively fulfill their assigned role and contribute to the group's proposals and discussions.
3. Time Management: Groups must manage their time effectively to ensure they can present their strategies within the allocated time frame.
4. Collaboration and Negotiation: Groups are encouraged to collaborate with other stakeholders, negotiate compromises, and seek consensus on the most effective initiatives for bridging the digital divide.
5. Decision-Making: At the end of each round, groups will collectively vote on the proposals presented and select the initiatives they believe will have the greatest impact on addressing the digital divide.

Roles:

1. **Government Agencies**: Responsible for developing and implementing policies and initiatives to improve internet access and digital inclusion. Focus areas may include infrastructure development, funding allocation, and regulatory frameworks.
    a. Insights and Strategies:
        i. Developing policy frameworks to incentivize infrastructure development.
        ii. Allocating funding for broadband expansion projects.
        iii. Implementing regulations to ensure equitable access and affordability.
    b. Group-Specific Questions:

        i. How can we prioritize funding allocation for broadband infrastructure in underserved areas?
        ii. What regulatory measures can we implement to encourage telecommunications companies to expand network coverage?
        iii. How can we ensure that digital inclusion initiatives are accessible and affordable for marginalized communities?
2. **Telecommunications Companies**: Responsible for providing internet services and infrastructure. Focus areas may include expanding network coverage, improving broadband speeds, and reducing internet costs.
    a. Insights and Strategies:
        i. Expanding network coverage to underserved areas.
        ii. Offering affordable internet packages and improving service quality.
        iii. Investing in technological advancements to enhance broadband speeds and reliability.
    b. Group-Specific Questions:
        i. What strategies can we use to expand network coverage in rural and remote areas?
        ii. How can we make internet services more affordable for low-income households without compromising profitability?
        iii. What investments should we prioritize to improve broadband speeds and reliability in urban centers?
3. **Non-profit Organizations:** Responsible for advocating for digital inclusion and providing support services to underserved communities. Focus areas may include digital literacy programs, community access centers, and advocacy for policy reform.
    a. Insights and Strategies:
        i. Providing digital literacy training and support programs for marginalized communities.
        ii. Establishing community access centers and mobile internet facilities.
        iii. Advocating for policy reforms to address digital inclusion barriers.
    b. Group-Specific Questions:
        i. How can we design digital literacy programs that cater to the specific needs and challenges of different demographic groups?
        ii. What resources are needed to establish community access centers in underserved areas, and how can we secure funding?
        iii. What policy changes should we advocate for to improve internet access and digital inclusion for marginalized communities?
4. **Marginalized Communities**: Represent individuals and communities affected by the digital divide. Focus areas may include addressing barriers to access, affordability, and digital literacy within marginalized populations.
    a. Insights and Strategies:

        i. Identifying barriers to internet access, such as affordability, lack of infrastructure, and digital literacy.
        ii. Advocating for initiatives that address specific needs and priorities of marginalized groups.
        iii. Participating in decision-making processes to ensure inclusivity and representation.
    b. Group-Specific Questions:
        i. What are the main barriers preventing members of our community from accessing the internet, and how can we address them?
        ii. What types of internet access initiatives would have the greatest impact on improving our community's well-being and opportunities?
        iii. How can we ensure that our voices are heard in discussions and decisions regarding internet access initiatives?
5. **Media and Public Opinion**: Represent the media and public opinion influencers. Responsible for raising awareness about the digital divide, advocating for policy action, and shaping public discourse on digital inclusion issues.
    a. Insights and Strategies:
        i. Raising awareness about the importance of bridging the digital divide.
        ii. Advocating for policy action and holding stakeholders accountable.
        iii. Shaping public discourse on digital inclusion issues and promoting community engagement.
    b. Group-Specific Questions:
        i. How can we raise awareness about the digital divide and its impact on different communities?
        ii. What messages and strategies can we use to mobilize public support for government-sponsored initiatives?
        iii. How can we hold policymakers and stakeholders accountable for their commitments to bridging the digital divide?

Standards

SDG 9 State Standards

For Indiana State Standards for Social Studies:

- Standard 5.2: Analyze the development and impact of industrialization, infrastructure, and technological advancements on societies.
- Standard 5.4: Investigate the role of innovation in shaping economic growth and development.
- Standard 5.6: Examine the impact of infrastructure on social, economic, and political systems within and among countries.

For International Baccalaureate (IB) standards:

- Transdisciplinary Theme: How we organize ourselves.
- Key Concepts: Systems, development, globalization.
- Related Concepts: Industry, innovation, infrastructure.
- Approaches to Learning (ATL): Research skills, communication skills, critical thinking skills.