BUTLER SCHOOL DISTRICT

Grade 7
Tech Trek: Global Edition Curriculum

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Adapted from:
New Jersey Student Learning Standards

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AFFIRMATIVE ACTION COMPLIANCE STATEMENT

The Butler Public Schools are committed to the achievement of increased cultural awareness, respect, and equity amongst our students, teachers, and community. We are pleased to present all pupils with information pertaining to possible career, professional, or vocational opportunities which in no way restricts or limits options on the basis of race, color, creed, religion, sex, ancestry, national origin, or socioeconomic status.

INTEGRATED ACCOMMODATIONS AND MODIFICATIONS

Students with IEPs, 504s, and/or Students at Risk of Failure Students read authentic texts and write authentic pieces at their independent and instructional reading levels. Individualized feedback is provided through conferences and small groups. The teacher utilizes visual and multi-sensory methods of instruction in addition to assistive technology when needed. Students are provided with graphic organizers and other scaffolded material. Modification of content and product may be deemed necessary based on student needs. Students are provided with testing accommodations and authentic assessments.

Gifted & Talented Students Students read authentic texts and write authentic pieces at their independent and instructional reading levels. Individualized feedback is provided to the student through conferences and small groups. Students are engaged through inquiry-based instruction to develop higher-order thinking skills. Activities are developed based on student interests and student goals. Students engage in real-world projects and scenarios.

English Language Learners Students read authentic texts and write authentic pieces at their independent and instructional reading levels. Individualized feedback is provided to students through conferences and small groups. Students are pre-taught vocabulary terms and concepts. Teachers engage students through visual learning, including the use of graphic organizers. Teachers use cognates to increase comprehension. The teacher models tasks and concepts, and pairs students learning English with students who have more advanced English language skills. Scaffolding is provided including word walls, sentence frames, think-pair-share, cooperative learning groups, and teacher think-alouds.

21ST CENTURY THEMES & SKILLS

Embedded in many of our units of study and problem based learning projects are the 21st Century Themes as prescribed by the New Jersey Department of Education. These themes are as follows:
- Global Awareness
- Financial, Economic, Business, and Entrepreneurial Literacy
- Civic Literacy
- Health Literacy

CURRICULUM ADDENDA FOR SPECIAL EDUCATION

This curriculum can be both grade and age appropriate for special education students and serves as a guide for the special education teacher in line with the district's written philosophy of special education, as stated within Policy #6700 concerning Programs for Educationally Disabled Students. Based on the Child Study Team evaluation and consultation with the parent and classroom teacher, an individualized education plan may include modifications to content, instructional procedures, student expectations, and targeted achievement outcomes of this curriculum document in accordance with the identified needs of an eligible student. This educational plan will then become a supplement guide that the classroom teacher, parent, and Child Study Team will use to measure the individual student's performance and achievement.

CURRICULUM ADDENDA FOR ENGLISH LANGUAGE LEARNERS

This curriculum guide is appropriate and is implemented for all students according to age and grade, and is in line with the district's written philosophy of English language acquisition concerning Bilingual Instruction and English as a Second Language Programs. In accordance with the New Jersey Administrative Code 6A:15, the contents herein provide equitable instructional opportunities for English Language Learners to meet the New Jersey Student Learning Standards and to participate in all academic and non-academic courses. Students enrolled in a Bilingual and/or an ESL program may, in consultation with the classroom teacher and Bilingual and/or ESL teacher, receive modification to content, instructional procedures, student expectations and targeted achievement outcomes of this curriculum document in accordance with the students developmental and linguistic needs.

VISION

Over the course of their experience at Richard Butler School, students will embrace their unique talents, cultivate a passion for exploration, and develop the skills needed to thrive in a dynamic and diverse world.

COURSE OVERVIEW:

This dynamic class is designed to engage students in exploring pressing global challenges while harnessing the power of cutting-edge technologies such as drones, 3D pens, 3D printers, Sphero robots, and LEGO Spike Primes. Throughout this course, students will not only gain a deeper understanding of key global issues but will also develop essential 21st-century skills, including critical thinking, problem-solving, and collaborative teamwork.

SCOPE AND SEQUENCE
(*Pacing Guide*)

Module	Estimated Time
Introduction to Global Issues	2-3 weeks
Challenges in the school and community	2-3 weeks
Challenges in the nation	3 weeks
Challenges across the globe	5 weeks

CONTENT STANDARDS (Across content areas)
New Jersey Student Learning Standards- Computer Science and Design Thinking (2020): **8.1.8.DA.1:** Organize and transform data collected using computational tools to make it usable for a specific purpose **8.2.8.ED.1:** Evaluate the function, value, and aesthetics of a technological product or system, from the perspective of the user and the producer. **8.2.8.ED.2:** Identify the steps in the design process that could be used to solve a problem. • **8.2.8.ED.3:** Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical prototype, graphical/technical sketch).

8.2.8.ED.7: Design a product to address a real-world problem and document the iterative design process, including decisions made as a result of specific constraints and trade-offs

8.2.8.ETW.3: Analyze the design of a product that negatively impacts the environment or society and develop possible solutions to lessen its impact.

8.2.8.ETW.4: Compare the environmental effects of two alternative technologies devised to address climate change issues and use data to justify which choice is best.

New Jersey Student Learning Standards-English Language Arts (2023):

RI.CI.7.2. Determine a central idea in an informational text and explain how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.

RI.AA.7.7. Trace and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient to support the claims.

W.AW.7.1. Write arguments on discipline-specific content (e.g., social studies, science, technical subjects, English/Language Arts) to support claims with clear reasons and relevant evidence.

W.IW.7.2. Write informative/explanatory texts (including the narration of historical events, scientific procedures/ experiments, or technical processes) to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

SL.PE.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

SL.II.7.2. Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

SL.UM.7.5. Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.

New Jersey Student Learning Standards- Science (2020):
MS-ETS1-1 Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.
MS-ETS1-2 Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.
MS-ETS1-3 Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.
MS-ETS1-4 Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

CAREER READINESS, LIFE LITERACIES, and KEY SKILLS STANDARDS (2020)

- 9.4.5.GCA.1: Analyze how culture shapes individual and community perspectives and points of view (e.g., 1.1.5.C2a, RL.5.9, 6.1.5.HistoryCC.8).
- 9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change, and use critical thinking skills to predict which one(s) are likely to be effective (e.g., MS-ETS1-2).
- 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1).
- 9.4.8.CT.3: Compare past problem-solving solutions to local, national, or global issues and analyze the factors that led to a positive or negative outcome.
- • 9.4.8.GCA.1: Model how to navigate cultural differences with sensitivity and respect (e.g., 1.5.8.C1a). **DEI**
- 9.4.8.GCA.2: Demonstrate openness to diverse ideas and perspectives through active discussions to achieve a group goal.

MODULE TITLE
Unit 1: Introduction to Global Issues
MODULE SUMMARY
Students will embark on an exploration of the interconnected world we live in, focusing on key global challenges and their impacts. Through a combination of engaging activities, discussions, and multimedia resources, students will develop a deeper understanding of various global issues and their implications for individuals, communities, and the planet.

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
Impact and Consequences: Students will explore the wide-ranging impacts of global issues on individuals, communities, and the environment. **Root Causes and Complexities**: Students will analyze factors including social, economic, political and environmental factors. **Global Citizenship:** Students will develop a sense of global citizenship.	- What is a global issue? Why are they important to understand - What are the root causes for global issues? - What are the consequences of ignoring global issues? - How does empathy play a role in understanding and addressing global issues?

STUDENT LEARNING OBJECTIVES

Students are learning to/that…
- **Identify** and define key global issues.
- **Analyze** the root causes of global issues.
- **Explore** the impacts of global issues.
- **Develop** empathy and understanding towards individuals and communities affected by global issues.
- **Formulate** potential solutions to global issues.

SUGGESTED ACTIVITIES

Reflection Journals: Have students keep reflection journals throughout the unit, where they write about their thoughts, feelings, and learning experiences related to global issues. Use prompts to encourage critical thinking and self-reflection.

Virtual Field Trips: Take students on virtual field trips to explore different regions affected by global issues, using technology to immerse them in the challenges faced by communities worldwide.

Global Issue Podcasts: Have students create their own podcasts discussing various global issues and interviewing individuals impacted by these challenges. They can research, script, record, and edit episodes.

ASSESSMENTS OF LEARNING

Formative Assessments:	**Summative Assessment:**
Classroom Discussion	Presentation
Exit Slip	Project
Checklists	Slides
Peer Assessment	
Vocabulary Quizzes	
Rubrics	
Participation and teacher observation	
Mini Whiteboard Responses	
Think-Pair-Share	
Concept Map	
Classroom Poll	
Benchmark Assessment:	**Alternative Assessments:**
Teacher created Assessments	Projects in a different medium
Prerequisite content checks	Portfolios

INSTRUCTIONAL RESOURCES

- Online articles and websites
- Documentaries and multimedia videos

● Guest speakers ● Virtual field trips ● Interactive activities	
INTEGRATED ACCOMMODATIONS AND MODIFICATIONS	
See Appendix A	

MODULE TITLE	
Unit 2: Challenges in the local schools and community	
MODULE SUMMARY	
Students will explore and analyze local issues that impact both their immediate community and school environment. By examining these issues, students will develop a deeper understanding of their immediate surroundings and how it impacts	
ENDURING UNDERSTANDINGS	**ESSENTIAL QUESTIONS**
Identifying Local Issues: Students will learn how to identify and categorize various local issues. **School Environment:** Students will analyze how local issues manifest within the school setting, including issues related to student diversity, bullying, academic performance, and facilities management. **Community Engagement:** Students will explore ways in which community members, organizations, and schools collaborate to address local issues through initiatives, advocacy, and community service projects. **Problem-Solving Strategies:** Students will develop critical thinking and problem-solving skills by brainstorming solutions, creating action plans, and advocating for positive change in response to local issues.	● What makes our community unique? ● What role do we play in our community's future? ● What are the most pressing issues facing our local schools? ● What are the most pressing issues facing our community? ● In what ways can students work together to improve the school environment? ● How might you or another individual be a positive influence on providing change in our community? ● What role do we play in our nation's future?

STUDENT LEARNING OBJECTIVES

Students are learning to/that…
- **Collaborate** with peers to improve our school community
- **Identify and analyze** local issues that impact our community.
- **Participate** in initiatives to improve our community.

SUGGESTED ACTIVITIES

Sustainable School Challenge: Brainstorm ways to make your school more environmentally friendly (e.g., recycling, reducing energy consumption). Students present their ideas to the school administration.

Community Mapping Project: Create a map highlighting local issues and resources.

Reflection Journals: Have students keep reflection journals throughout the unit, where they write about their thoughts, feelings, and learning experiences related to global issues. Use prompts to encourage critical thinking and self-reflection.

Local issue research paper and photography project: Have students conduct research on a local issue and use photographic pictures as evidence.

Neighborhood project: Students will address environmental issues and foster community service. **Climate**

Local Changemakers: Research local organizations working on global issues. Invite a guest speaker or organize a class visit to learn about their work.

Creating a community survey project: Students design and conduct a survey in their local community to identify key issues. They will develop survey questions, conduct surveys in the community, and collect data to present their findings.

ASSESSMENTS OF LEARNING

Formative Assessments:	**Summative Assessment:**
Classroom Discussion	Presentation
Exit Slip	Project
Checklists	Slides
Peer Assessment	
Vocabulary Quizzes	
Rubrics	
Participation and teacher observation	
Mini Whiteboard Responses	
Think-Pair-Share	
Concept Map	
Classroom Poll	

Benchmark Assessment:	Alternative Assessments:
Teacher created Assessments Prerequisite content checks	Projects in a different medium Portfolios

INSTRUCTIONAL RESOURCES
- Online articles and websites   - Documentaries and multimedia videos   - Guest speakers   - Virtual trips   - Interactive activities

INTEGRATED ACCOMMODATIONS AND MODIFICATIONS
See Appendix A

MODULE TITLE
Unit 3: Challenges in the nation

MODULE SUMMARY
Students will investigate and analyze national issues and events that impact both their country and daily interactions. By examining these issues, students will develop a deeper understanding of the broader context and how it influences their surroundings.

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
Analyzing national issues: Students will recognize the impact of historical events and current trends of our country. **Addressing national issues:** Students will need to use collaboration, active citizenship, and a sense of responsibility towards creating a positive change in our country. **Exploring national issues:** When exploring these national issues will empower the students to advocate for social justice, equality, and a more inclusive society.	- How do national issues impact individuals and communities within our country? - What role does media and technology play in shaping our understanding of national issues? - How can nations protect against cyber threats while promoting technological innovation?

STUDENT LEARNING OBJECTIVES
Students are learning to/that…   **Identify** and describe key national issues affecting our country.

- **Analyze** how national issues impact different communities and individuals.
- **Propose** potential solutions or actions to address national issues in a constructive manner.
- **Communicate** my thoughts and opinions on national issues effectively and respectfully.

SUGGESTED ACTIVITIES

National Issues Research Project: Students select a national issue (e.g., healthcare, education, immigration) and create a multimedia project which includes: research the history, include data, expert opinions, and possible solutions.

Reflection Journals: Have students keep reflection journals throughout the unit, where they write about their thoughts, feelings, and learning experiences related to global issues. Use prompts to encourage critical thinking and self-reflection.

Debate on National Policies: Organize a classroom debate on a national policy or proposed legislation (e.g., climate change policy, education, etc).

Social Media Challenge: Students create social media posts raising awareness about a national issue. They consider target audiences and appropriate messaging for different platforms.

ASSESSMENTS OF LEARNING

Formative Assessments:	**Summative Assessment:**
Classroom Discussion	Presentation
Exit Slip	Project
Checklists	Slides
Peer Assessment	
Vocabulary Quizzes	
Rubrics	
Participation and teacher observation	
Mini Whiteboard Responses	
Think-Pair-Share	
Concept Map	
Classroom Poll	

INSTRUCTIONAL RESOURCES

- Online articles and websites
- Documentaries and multimedia videos
- Guest speakers
- Virtual trips
- Interactive activities

INTEGRATED ACCOMMODATIONS AND MODIFICATIONS
See Appendix A

MODULE TITLE
Unit 4: Challenges across the globe

MODULE SUMMARY
Students will explore various global issues that impact societies and environments worldwide. The goal is to enhance students' understanding of these issues, promote critical thinking, and encourage active participation in solutions.

ENDURING UNDERSTANDINGS	ESSENTIAL QUESTIONS
Analyzing global issues: Students will recognize the impact of historical events and current trends of our country. **Cultural Awareness**: Understand and appreciate diverse cultures, traditions, and perspectives, fostering tolerance and respect for global differences. **Environmental Sustainability:** Comprehend the significance of environmental conservation and sustainable practices in preserving our planet for future generations. **Global Citizenship:** Embrace the concept of global citizenship, understanding one's interconnectedness with the world and the responsibility to contribute to a more just and equitable society.	- What is a global issue? Why are they important to understand - How are local events and issues connected to global challenges? - How do different cultures and communities experience global issues differently? - How can individuals make a difference in tackling global challenges? - What role do media and technology play in raising awareness of global issues? - Can innovation and technology be used to solve global problems?

STUDENT LEARNING OBJECTIVES
Students are learning to/that…   **Identify** and describe key global issues.   **Understand** the causes and effects of these issues.   **Develop** a sense of global citizenship by recognizing one's responsibility to contribute to a more just and sustainable world.

- **Advocate** for social justice, environmental sustainability, and human rights through informed actions and civic engagement
- **Propose** informed solutions to address these challenges.

SUGGESTED ACTIVITIES

Public Service Announcements (PSAs): Students research and create short PSAs raising awareness about a global issue they care about.

Reflection Journals: Have students keep reflection journals throughout the unit, where they write about their thoughts, feelings, and learning experiences related to global issues. Use prompts to encourage critical thinking and self-reflection.

Global Issue Gallery Walk: Set up stations around the classroom or school with information, pictures, and statistics about different global issues. Divide students into small groups and have them rotate through each station, discussing what they learn and jotting down questions or observations.

Design a Sustainable City: Students research sustainable cities around the world. They then design their own model city, incorporating features that address environmental and social challenges.

ASSESSMENTS OF LEARNING

Formative Assessments:
Classroom Discussion
Exit Slip
Checklists
Peer Assessment
Vocabulary Quizzes
Rubrics
Participation and teacher observation
Mini Whiteboard Responses
Think-Pair-Share
Concept Map
Classroom Poll

Summative Assessment:
Presentation
Project
Slides

INSTRUCTIONAL RESOURCES

- Online articles and websites
- Documentaries and multimedia videos
- Guest speakers

● Virtual trips ● Interactive activities
INTEGRATED ACCOMMODATIONS AND MODIFICATIONS
See Appendix A

Appendix A

Special Education:
Provide modified notes and access to extra copies online
Provide oral reminders and check student work during independent work time
Model skills/techniques to be mastered
Check and sign assignment planner
Preferential seating
Pair visual prompts with verbal presentations
Modified or scaffolded homework and classwork
Extended time as needed
Provide graphic organizers and study guides

English Learners:
Provide scaffolded assignments and assessments
Pair visual prompts with visual presentations
Check and sign assignment planner
Native Language translation (peer, online assistive technology, translation device, bilingual dictionary)
Extended time for assignment and assessment as needed
Highlight key vocabulary
Use graphic organizers
Provide verbal and written directions
Preferential seating with a English-speaking peer

At Risk of Failure:
Check and sign assignment planner
Encourage class participation and reinforce skills
Model skills and assignments
Extended to time to complete class work
Preferential seating
Provide extra help outside of class and 1:1 instruction when needed
Communicate regularly with students' other teachers
Provide positive feedback for tasks well done
Encourage student to proofread assessments and projects and ask for teacher proofreading of large writing assignments

Gifted and Talented:
Pose higher-level thinking questions
Provide higher level reading and writing materials for literacy based activities
Probe student to extend thinking beyond the text or connect two or more texts
Provide alternate or project-based assessments and assignments

Students with 504 Plans
Provide extended time as needed
Modify length of writing assignment
Provide short breaks within the lesson
Provide scaffolding for students
Utilize graphic organizers