

#### **SUBJECT FOCUS**

Media and Digital Literacy, Performing Arts, English Language Arts, Science

## THINKING PRACTICE

Collaborating Around Computing

#### COMPUTATIONAL THINKING STRATEGIES

Decomposition, Abstraction

#### **MATERIALS**

Select an excerpt from a play dealing with social issues. You may wish to check the following websites to begin your search:

- Canadian Plays for Middle School Students
- Canadian Plays by Indigenous **Playwrights**
- English plays based on social issues

You can also use a short film or an excerpt from a film to engage your students. You can explore the National Film Board database for Canadian short films on 50 different social issues.

- Films about Canadian social issues
- Films about social issues in **Indigenous Communities**
- Films about social issues in Indigenous voices and reconciliation

#### Sticky notes

Computers with access to the Internet (optional)

Student Handouts and Capture Sheets

- Theatre Roles
- Play/Film Analysis
- Putting on a Play Workflow
- Skit Effectiveness Rubric

#### LESSON TITLE

## Dramatically Change the World

Guiding Question: How Could We Improve the World?

### **Ignite Curiosity**

- How did you feel when you saw, read, or acted in a play? Why did you feel that way?
- Can theatre inspire you to take action?
- What role do the arts play in improving the world?

In this activity, students will use the computational thinking strategies of abstraction and decomposition to explore how theatre and drama impact community activism. In THINK, students will watch excerpts from a short film and/or ready parts of plays that have addressed social justice issues. Students will read through career profiles of the different roles they are to simulate: producer, director, actor, or publicist. They will then be divided into small groups and assigned one of the four roles. In SOLVE, students will be introduced to the computational thinking strategies of decomposition and abstraction to develop a workflow for their roles. In CREATE, students will use these strategies to create and perform a five-minute skit that is meant to inspire activism around a simulated ecological crisis. In CONNECT, students will gain insight into how drama can connect with and change a community for the better. They will gain an in-depth understanding of related careers and how companies seek to inspire community activism and affect local change.

**Teacher note:** You may choose any other play/film script that addresses some form of injustice.

#### Students will be able to:

- Evaluate roles within a community theatre,
- Analyze and interpret literature that addresses social justice issues, and
- Create a five-minute skit that brings awareness to an important social issue.





Students begin by reading through samples of plays or watching short films that have addressed social issues like race and poverty to understand how theatre can provide a powerful platform for community change. Then, they will research career profiles of the different roles they are to simulate: theatre producer, director, actor, and marketer/public relations specialist.

1 Read the following scenario to students:

In this activity, you will take on various roles within a community theatre production group challenged to address a local issue: climate change and youth. Your goal is to inform community members about the issue and inspire them to take action by creating and marketing a play. Let's see how you do!

- 2 Divide students into groups of 4.
- **Distribute** the <u>Theater Roles</u> student capture sheet and encourage students to explore the career profiles of the roles they will simulate: theatre producer, director, actor, and marketer.
- 4 Provide each student group with copies of one of the following career profiles from the Government of Canada Job Bank (you may choose to print out the profiles ahead of time or direct students to the Government of Canada Job Bank website):
  - Producers and Directors
  - Actors
  - Public Relations Specialists/Marketers
- **Students will record** the primary responsibilities of each career on the <u>Theater Roles</u> student capture sheet.
- **Distribute the passages** or screen short movies from the lists provided in the materials section at the start of the lesson. Instruct students to assign parts to group members and read the passages aloud or watch and record their observations.
- **Instruct** groups to record the issues and their evaluations of each example on their Play/Film Analysis student capture sheet.
- 8 Conclude with a class discussion by asking the following questions:
  - What issues are at the heart of each play?
  - Was the play effective at making you feel like you wanted to address these issues? Why or why not?
  - How do you think you can use the computational thinking strategy of abstraction to summarize the plot of a play?
  - Why do you think plays are "decomposed" into smaller parts called acts and scenes?







Students will use the computational thinking strategies of decomposition and abstraction to develop a workflow for their respective roles. Then, they will combine their workflows with the goal of bringing awareness and inspiring action on the issue of local pollution.

- As a class, review the strategies of decomposing and abstracting with students. Use these questions to guide your discussion:
  - What is decomposition? What is abstraction?
  - What are some of the ways that you use abstraction and decomposition in your daily life?
  - How are abstraction and decomposition involved in writing and performing plays?
  - How are abstraction and decomposition involved in issues affecting our communities, such as pollution?
- **Provide** each student with a copy of this article about Canadian youth and climate change (you may choose to substitute this article with one of your choice). Pass out three sticky notes to each student. Instruct students to read the article in groups and work together to develop one action-based solution to the water crisis on each sticky note. When students have completed their sticky notes, ask groups to post them in a centrally accessible location.
- **Quickly review** student responses with the class, making sure to combine redundant and similar answers into groups
- Place students in new groups of four, ensuring that each student came from a different home group. Each student will be their group's "expert" on the occupation they researched and will take this role in the group moving forward.
- **Direct** students to their <u>Theater Roles</u> student capture sheet. Based on the responsibilities they have identified for their assigned role, students must decompose and abstract these responsibilities into the most important tasks their role must complete. Then, they must create a workflow for their assigned role that will enable them to accomplish these tasks.
- **Distribute** the <u>Putting on a Play Workflow</u> student capture sheet. First, students should complete the Individual workflow table individually for their respective role. Then, students should come together as a group to create a group workflow so that all members of the theatre company will be able to do their tasks and work together to put on the play. Remind students that their goal is to decompose the complicated tasks of putting on a play into a list of steps that they can follow to successfully accomplish this big, important task.





Students will use their combined workflows as a basis for crafting a five-minute skit that is meant to serve as an advertisement to the local community about the play.

- 1 Students will use the computational thinking strategy of abstraction to create a five-minute skit that highlights the most important and compelling thematic elements of their play to make sure that the advertisement is effective at communicating the issue of local pollution while also marketing the play.
  - Groups should ensure that their skits address the most important tasks and concerns of each team member that they have identified on their Putting on a Play Workflow student capture sheet.
  - Provide students time to develop and practice their skits. If time allows, give students the option of using props or costumes.
- 2 After they have created and practiced their skits, groups will perform them for their classmates, who will rate the skit's effectiveness using the Skit Effectiveness Rubric.
- 3 If time allows, groups can make changes and improvements to their skits based on their peers' feedback.
- 4 As an extension, students can film the skits and incorporate the videos and some of their notes into a Flipgrid video presentation to share their message online.
  - The Flipgrid would leave instructions for user input, comments, and signup for the various activities.
  - As a conclusion activity, students will share their Flipgrids, complete the skit effectiveness rubric, and add images or thoughts that will improve the model.





Students will gain insight into how drama can connect with and change a community for the better: a universal idea that encompasses cultures, races, ethnicity, and geography. They will gain an in-depth understanding of related careers and how companies seek to inspire community activism and affect local change.

# Select one of the strategies listed below to help students answer these questions:

- · How do this problem and solution connect to me?
- How do this problem and solution connect to real-world careers?
- How do this problem and solution connect to our world?
  - 1 Write the three questions on the computer or flip chart slides and invite students to share out responses.
  - **Display** chart paper around the room, each with one question written on it. Ask students to write down their ideas on each sheet.
  - Assign one of the questions to three different student groups to brainstorm or research, and then share out responses.
  - Invite students to write down responses to each question on a sticky note, and collect them to create an affinity diagram of ideas.

## How does this connect to students?

Students will gain insight into how drama can connect with and change a community for the better: a universal idea that encompasses culture, race, ethnicity, and geography. They will get an in-depth understanding of the careers available in theatre and the arts, business, and activism.

## How does this connect to careers?

**Business Managers** plan, direct, and coordinate the administrative and business functions of an organization. They oversee the staff; consult with top executives on strategic planning; and oversee the financial aspects of the business.

**Writers develop** content for various types of media, including advertisements; books; magazines; movie, play, and television scripts; and blogs.

**Producers** and **Directors** create motion pictures, television shows, live theatre, commercials, and other performing arts productions. They interpret a writer's script to entertain or inform an audience.

**Actors** express ideas and portray characters in theatre, film, television, and other performing arts media. They interpret a writer's script to entertain or inform an audience.

**Public Relations Specialists** create and maintain a favorable public image for the organization they represent. They craft media releases and develop social media programs to shape public perception of their organization and to increase awareness of its work and goals.

# How does this connect to our world?

Community partnerships can be effective tools at inspiring lasting change. Companies such as Tata Consultancy Services sponsor initiatives like improving the lives of fisherman and combating climate change. When companies like TCS put time and resources into addressing these issues, they can add to the work done by local governments.

By understanding and supporting the arts, students can play a role in addressing important social issues, sustaining quality of life and documenting important moments in time. .

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### **Curriculum Connections**

**SUSTAINABLE DEVELOPMENT GOALS** 



#### GOAL 13: CLIMATE ACTION

Take Urgent Action to combat climate change and its impacts.

Climate change is the biggest threat to our development and well-being, impacting all life on the planet. The poorest and most vulnerable populations face the undue burden of adapting to climate change while dealing with economic impacts. Due to the global nature of this problem, we need global cooperation to find solutions, adapt to its effects and develop low-carbon pathways to a cleaner future. We need to align our attitudes, behaviours, and activities with sustainable principles in order to change our climate course.

#### Targets:

Ensure people, particularly vulnerable populations, are well prepared for hazards related to climate change and natural disasters.

Address issues of climate change through government action and resource allocation.

Improve education, awareness, and capacity of climate change action, impact reduction, and early warning systems.

To learn more about Goal 13 in Canada, visit the United Nations Sustainable Development Goals website.

Source:

Sustainable Foundations: A Guide to Teaching the SDG's by the Manitoba Council for International Cooperation







### **Global Competencies**

CMEC (Council of Ministers of Education, Canada) Pan-Canadian Global Competencies Descriptions

Global Competency	Definition	Student Descriptors
of the cognand reason and intrap necessary and ethica increasing of skill are situations, perspective construct I and content with, other	Collaboration involves the interplay of the cognitive (including thinking and reasoning), interpersonal, and intrapersonal competencies necessary to participate effectively and ethically in teams. Everincreasing versatility and depth of skill are applied across diverse	Students participate in teams by establishing positive and respectful relationships, developing trust and acting co-operatively and with integrity.  Students learn from and contribute to
		the learning of others by co-constructing knowledge, meaning, and content.
	situations, roles, groups, and perspectives in order to co-construct knowledge, meaning, and content, and learn from, and with, others in physical and virtual	Students assume various roles on the team, respect a diversity of perspectives, and address disagreements and manage conflict in a sensitive and constructive manner.
	environments. '	Students network with a variety of communities/ groups and use an array of technology appropriately to work with others.
Communication	Communication involves receiving and expressing meaning (e.g., reading and writing, viewing and creating, listening and speaking) in different contexts and with different audiences and purposes. Effective communication increasingly involves understanding both local and global perspectives, societal and cultural contexts, and adapting and changing using a variety of media appropriately, responsibly, safely, and with regard to one's digital footprint.	Students communicate effectively in different contexts in oral and written form in French and/ or English through a variety of media.
		Students communicate using the appropriate digital tools and create a positive digital footprint.
		Students ask effective questions to acquire knowledge, listen to understand all points of view, voice their own opinions, and advocate for ideas.
		Students gain knowledge about a variety of languages and understand the cultural importance of language.



### **Global Competencies cont.**

Global Competency	Definition	Student Descriptors
Global Citizenship and Sustainability	Global citizenship and sustainability involves reflecting on diverse worldviews and perspectives and understanding and addressing ecological, social, and economic issues that are crucial to living in a contemporary, connected, interdependent, and sustainable world. It also includes the acquisition of knowledge, motivation, dispositions, and skills required for an ethos of engaged citizenship, with an appreciation for the diversity of people, perspectives, and the ability to envision and work toward a better and more sustainable future for all.	Students understand the ecological, economic, and social forces, their interconnectedness, and how they affect individuals, societies, and countries.  Students take actions and responsible decisions that support quality of life for all, now and in the future.  Students recognize discrimination and promote principles of equity, human rights, and democratic participation.  Students understand Indigenous traditions and knowledge and its place in Canada, learn from and with diverse people, develop cross-cultural understanding, and understand the forces that affect individuals, societies, and nations.  Students engage in local, national, and global initiatives to make a positive difference.  Students contribute to society and to the culture of local, national, global, and virtual
		communities in a responsible, inclusive, accountable, sustainable, and ethical manner.
		culture of local, national, global, and virtual communities in a responsible, inclusive,
	Students as citizens participate in networks in a safe and socially responsible manner.	





### **Global Competencies cont.**

Global Competency	Definition	Student Descriptors
Critical Thinking and Problem Solving	Critical thinking and problem solving involve addressing complex issues and problems by acquiring, processing, analysing and interpreting information to make informed judgments and decisions. The capacity to engage in cognitive processes to understand and resolve problems includes the willingness to achieve one's potential as a constructive and reflective citizen. Learning is deepened when situated in meaningful, real- world, authentic experiences.	Students will solve meaningful, real-life, complex problems by taking concrete steps to address issues and design and manage projects.  Students will engage in an inquiry process to solve problems as well as acquire, process, interpret, synthesize, and critically analyse information to make informed decisions (i.e., critical and digital literacy).  Students will see patterns, make connections, and transfer what they have learned from one situation to another, including in real world applications.  Students will construct, relate, and apply knowledge to all domains of life such as school, home, work, friends, and community.  Students will analyze the functions and interconnections of social, economic, and ecological systems.
Innovation, Creativity and Entrepreneurship	Innovation, creativity, and entrepreneurship involve the ability to turn ideas into action to meet the needs of a community. The capacity to enhance concepts, ideas, or products to contribute new-to- the-world solutions to complex economic, social, and environmental problems involves leadership, taking risks, independent/unconventional thinking and experimenting with new strategies, techniques, or perspectives, through inquiry research. Entrepreneurial mindsets and skills involve a focus on building and scaling an idea sustainably.	Students formulate and express insightful questions and opinions to generate novel ideas.  Students contribute solutions to complex economic, social, and environmental problems or to meet a need in a community in a number of ways including; enhancing concepts, ideas, or products through a creative process, taking risks in their thinking and creating, discovering through inquiry research, and by hypothesizing and experimenting with new strategies or techniques.  Students demonstrate leadership, initiative, imagination, creativity, spontaneity, and ingenuity in a range of creative processes and motivate others with an ethical entrepreneurial spirit.





### **Global Competencies cont.**

Global Competency	Definition	Student Descriptors
Learning to learn and to be self-directed and self-aware	Learning to learn and to be self-directed and self-aware, means: becoming aware and demonstrating agency in one's process of learning, including the development of dispositions that support motivation, perseverance, resilience, and self-regulation. Belief in one's ability to learn (growth mindset), combined with strategies for planning, monitoring and reflecting on one's past, present, and future goals, potential actions and strategies, and results. Self-reflection and thinking about thinking (metacognition) promote lifelong learning, adaptive capacity, well-being, and transfer of learning in an ever-changing world.	Students learn the process of learning (metacognition) (e.g., independence, goalsetting, motivation) and believe in their ability to learn and grow (growth mindset).  Students self-regulate in order to become lifelong learners and reflect on their thinking, experience, values, and critical feedback to enhance their learning. They also monitor the progress of their own learning.  Students develop their identity in the Canadian context (e.g., origin and diversity) and consider their connection to the environment. They cultivate emotional intelligence to understand themselves and others. They take the past into account to understand the present and approach the future.  Students develop personal, educational, and career goals and persevere to overcome challenges to reach goals. They adapt to change and show resilience to adversity.  Students manage various aspects of their life: physical, emotional (relationships, self-awareness), spiritual, and mental well-being.



### **Play/Film Analysis**

As you read or view excerpts from well-known plays and films, answer the following questions for each:

- What is the main issue or issues that the play/film discusses?
- How effective is the play/film in combating this issue?
- Do you think that this play/film speaks to all regardless of culture?
- Do you think that this play/film is a good example of using theatre to promote community change? Why or why not?

Name of Play	
Issue(s)	
Effectiveness	
Transcends Culture?	
Good Example? Why or Why Not?	
Name of Play	
Issue(s)	
Effectiveness	
Transcends Culture?	
Good Example? Why or Why Not?	
Name of Play	
Issue(s)	
Effectiveness	
Transcends Culture?	
Good Example? Why or Why Not?	



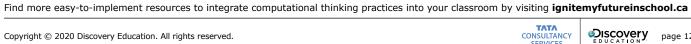


### **Theatre Roles**

As you research the roles in a community theatre, record your notes in the table

As you research the roles in a community theatre, record your notes in the table.
Role: Producer
Responsibilities:
Role: Director
Responsibilities:
Role: Actor
Responsibilities:
Role: Public Relations Specialist/Marketer
Responsibilities:







### **Putting on a Play Workflow**

**First,** record the tasks you must perform in your role in the order in which you must perform them. In the right column, indicate which other members of your team you will need to work with to accomplish the task.

#### **Individual Workflow**

Role:		
Step #	Description of Task	Who Else Is Involved?



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### **Putting on a Play Workflow Cont.**

**Next,** work with members of your group to combine your workflows into a series of steps everyone on the team can use to determine what they need to accomplish, in what order, and with whom they need to work.

#### **Group Workflow**

Role:		
Step #	Description of Task	Who Is Involved?





### **Skit Effectiveness Rubric**

Message: Increased Awareness of Pollution Dangers	
Does the skit make the message clear?	
Does the skit contain details about when and where to see the play?	
Does the skit make me want to see the play?	
Does the skit show, rather than tell, about the play?	
Does the skit include information that could inspire people to take action or learn more about the problem?	
Does the skit appeal to people of different ages, cultures, and backgrounds?	

 $Find more easy-to-implement \ resources \ to \ integrate \ computational \ thinking \ practices \ into \ your \ classroom \ by \ visiting \ \textbf{ignitemyfutureinschool.ca}$ 

Comments and Suggestions:

