



IGNITE MY FUTURE

SUBJECTS

English Language Arts
Science

COMPUTATIONAL THINKING PRACTICE

Collaborating Around
Computing

COMPUTATIONAL THINKING STRATEGIES

Decomposition
Abstraction

MATERIALS

Copies of the play
"A Raisin in the Sun"

Copies of the play
"West Side Story"

Sticky notes

Computers with access to
the Internet (optional)

[Theatre Roles](#)
student capture sheet

[Play Analysis](#)
student capture sheet

[Putting on a Play Workflow](#)
student handout

[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 theater 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 read excerpts 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 to substitute "West Side Story" and "A Raisin in the Sun" with any other play script that addresses some form of injustice.

Students will be able to:

- **Evaluate** roles within a community theater,
- **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, such as “Raisin in the Sun” and “West Side Story” that have addressed social justice issues like race and poverty to understand how theater can provide a powerful platform for community change. Then, they will research career profiles of the different roles they are to simulate: theater 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: increased pollution in a nearby river. 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 well you do!

2 Divide students into groups of 4.

3 Distribute the [Theater Roles](#) student capture sheet and encourage students to explore the career profiles of the roles they will simulate: theater producer, director, actor, and marketer.

4 Provide each student group with copies of one of the following career profiles from the Bureau of Labor Statistics Occupational Outlook Handbook (you may choose to print out the profiles ahead of time or direct students to the BLS website):

- [Producers and Directors](#)
- [Actors](#)
- [Public Relations Specialists/Marketers](#)

5 Students will record the primary responsibilities of each career on the [Theater Roles](#) student capture sheet.

6 Distribute the following passages from famous 20th century plays “West Side Story” and “A Raisin in the Sun.” Instruct students to assign parts to group members and read the passages aloud:

- Act One, Scene One from “West Side Story”
- Act One, Scene One from “A Raisin in the Sun”

7 Instruct groups to record the issues and their evaluations of each example on their [Play 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?

 Find more easy-to-implement resources to integrate computational thinking practices into your classroom by visiting ignitemyfutureinschool.org



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.

- 1 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?
- 2 Provide** each student with [a copy of this article about the water crisis in Flint, Michigan](#) (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.
- 3 Quickly review** student responses with the class, making sure to combine redundant and similar answers into groups.
- 4 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.
- 5 Direct** students to their [Theater Roles](#) 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.
- 6 Distribute** the [Putting on a Play Workflow](#) 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 theater 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 Padlet presentation to share their message online.
 - The Padlet would leave instructions for user input, comments, and signup for the various activities.
 - As a conclusion activity, students will share their Padlets, 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 PPT or flip chart slides and invite students to share out responses.
- 2 Display** chart paper around the room, each with one question written on it. Ask students to write down their ideas on each sheet.
- 3 Assign** one of the questions to three different student groups to brainstorm or research, and then share out responses.
- 4 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 theater 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 theater, 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 theater, 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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National Standards

K-12 COMPUTER SCIENCE FRAMEWORK

Practice 2. Collaborating Around Computing

Collaborative computing is the process of performing a computational task by working in pairs and on teams. Because it involves asking for the contributions and feedback of others, effective collaboration can lead to better outcomes than working independently. Collaboration requires individuals to navigate and incorporate diverse perspectives, conflicting ideas, disparate skills, and distinct personalities. Students should use collaborative tools to effectively work together and to create complex artifacts.

NEXT GENERATION SCIENCE STANDARDS

Earth and Human Activity

ESS3.C: Human Impacts on Earth Systems

- Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things.
- Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise.

COMMON CORE STATE STANDARDS

Knowledge of Language:

CCSS.ELA-LITERACY.L.8.3

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

Comprehension and Collaboration:

CCSS.ELA-LITERACY.L.8.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

Presentation of Knowledge and Ideas:

CCSS.ELA-LITERACY.SL.8.6

Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate.

Play Analysis

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

- What is the main issue or issues that the play discusses?
- How effective is the play in combatting this issue?
- Do you think that this play speaks to all regardless of culture?
- Do you think that this play 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?	

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Theatre Roles

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:

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?	

Comments and Suggestions: