CRITIQUE THE 5E LESSON

Here you are using the **Authentic Lesson Reflection Tool** to help identify component(s) of Authenticity in the sets of lesson snapshots.

1. Click the name of your content area below to preview a 5E lesson.
2. Highlight the portion of the snapshot using the color corresponding to the component of Authenticity:
   * Red: Student-Centered Learning
   * Yellow: Construction of Knowledge
   * Green: Inquiry-Based Learning
   * Blue: Real-World Connections
   * Purple: *Anything that is counter to what is on the reflection tool*

**Content Areas:**

* [Electives](#bookmark=id.3onwjfaqg9bu)
* [English-Language Arts](#bookmark=id.n6ggxzef7h38)
* [Mathematics](#bookmark=id.jy5kpswey37o)
* [Science](#bookmark=id.s4gvre7mu72z)
* [Social Studies](#bookmark=id.f3a9zkcvupf3)

# Electives: Theater

## Standard: II.DT.CR.1.1 – Conceptualize a unified piece of theater by exploring performance and technical choices to develop a drama/theater work that is believable, authentic, and relevant.

**Engage:** Begin the lesson by discussing with students the importance of performance and technical choices in creating a believable, authentic, and relevant theater work. Show examples of different theater productions where performance and technical choices played a significant role in the overall impact. Ask students to brainstorm ideas on what makes a work believable and relevant.

**Explore:** Divide students into small groups and provide them with scenarios or scripts for a short scene. In their groups, students will discuss and decide on performance choices such as characterization, staging, and blocking. Each group will also brainstorm and plan technical choices including lighting, sound, and props that will enhance the believability and relevance of their scene.

**Explain:** Facilitate a discussion where each group presents their performance and technical choices to the class. Encourage students to explain the rationale behind their decisions and how they contribute to the overall unified theater piece. Highlight the importance of collaboration between performers and technicians in creating a cohesive production.

**Extend:** Introduce the concept of a staged reading to students, explaining its purpose in the theater world. Assign each group to perform a staged reading of their scene, focusing on conveying the dialogue and emotions effectively. Encourage students to provide feedback to their peers on ways to improve their staged readings.

**Evaluate:** Have each group reflect on the process of developing their unified theater piece. Ask students to discuss what they learned about the impact of performance and technical choices on the believability, authenticity, and relevance of a theater work. Assess students based on their contributions to the group discussion, creativity in making choices, and their reflection on the activity.

# English-Language Arts

## Standards: 12.1.S.2 — Students will follow agreed-upon rules as they engage in collaborative discussions about what they are reading and writing, expressing their own ideas clearly, building on the ideas of others, and respectfully disagreeing when necessary in pairs, diverse groups, and whole-class settings. 12.3.R.6 — Students will analyze how informational text structures support the author’s purpose.

**Engage:** Begin the lesson by asking students what they know about the story of Pinocchio. Prompt them with questions like "Who is Pinocchio?" and "What is his character like?" Encourage students to share their thoughts and opinions.

**Explore:** Provide students with an excerpt from the story of Pinocchio for silent reading. Ask them to pay attention to how the character of Pinocchio develops throughout the story. After silent reading, have students discuss in small groups the changes they noticed in Pinocchio's character and the reasons behind those changes.

**Explain:** Facilitate a full class discussion on the character development of Pinocchio. Use guided questions such as: *How does Pinocchio's behavior change throughout the story? What events influence Pinocchio's decisions? Why is honesty important in the story of Pinocchio?*

**Extend:** Distribute worksheets to students that contain scenarios where Pinocchio tells a lie. Have students analyze each scenario and discuss in small groups the consequences of Pinocchio's lies. Encourage critical thinking and empathy towards the characters in the story.

**Evaluate:** To conclude the lesson, have students participate in a "popcorn answers" session where they confess a personal lie they have told in the past. This activity aims to promote reflection on honesty and the importance of truthfulness in everyday life.

# Mathematics: Algebra 2

## Standard: A2.F.1.5 – Analyze the graph of a polynomial function by identifying the domain, range, intercepts, zeros, relative maxima, relative minima, and intervals of increase and decrease.

**Engage:** To start the lesson, present students with a real-world scenario that involves a polynomial function. Show a graph of a polynomial function without any labels and ask students to discuss what they observe. Prompt them to make predictions about the behavior of the function based on the graph.

**Explore:** Divide the students into small groups and provide each group with a set of polynomial function graphs. Ask them to analyze the graphs by identifying the domain, range, intercepts, zeros, relative maxima, relative minima, and intervals of increase and decrease. Encourage them to discuss their findings with each other and collaborate on identifying key features.

**Explain:** As a class, have students share their observations and conclusions from the group activity. Guide the discussion towards defining each of the identified features such as domain, range, intercepts, and extrema. Clarify any misconceptions and ensure that all students understand the significance of each feature in analyzing polynomial functions.

**Extend:** For a hands-on activity, provide students with graph paper and equations of various polynomial functions. Ask them to plot the graphs of these functions and identify the key features discussed earlier. Encourage students to compare and contrast the graphs to deepen their understanding of how different coefficients and degrees affect the graph of a polynomial function.

**Evaluate:** To assess students' understanding, present them with a new polynomial function graph and have them analyze it independently. Ask them to create a detailed report outlining the domain, range, intercepts, zeros, relative maxima, relative minima, and intervals of increase and decrease for the given graph. Review their reports to gauge their grasp of analyzing polynomial functions.

# Science: Environmental Science

## Standard: EN.LS2.7 – Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

**Engage:** Start with a hands-on activity where students simulate the effects of habitat destruction by creating a mini ecosystem in a terrarium or aquarium and then gradually removing key components to observe the impact on biodiversity.

**Explore:** Conduct a field trip to a local park or nature reserve where students can observe firsthand the biodiversity in different ecosystems and identify signs of human impact such as pollution, invasive species, or habitat fragmentation.

**Explain:** Set up a biodiversity sampling activity where students collect and analyze data on the variety of species present in a designated area, discussing how human activities can influence species diversity and abundance.

**Extend:** Organize a conservation project on school grounds where students can plant native species, create habitat structures, or install bird feeders to attract and support local wildlife, demonstrating practical ways to enhance biodiversity.

**Evaluate:** Implement a biodiversity assessment activity where students conduct a survey of the flora and fauna in a specific area before and after implementing a conservation intervention, allowing them to measure the effectiveness of their actions on biodiversity.

# Social Studies: U.S. History

## Standard: USH.5.2 – Analyze the series of events affecting the outcome of World War II including major battles, military turning points, and key strategic decisions in both the European and Pacific Theaters of operation including Pearl Harbor, the D-Day Invasion, development and use of the atomic bomb, the island-hopping strategy, the Allied conferences at Yalta and Potsdam, and the contributions of Generals MacArthur and Eisenhower.

**Engage:** Begin the lesson by showing a brief video clip highlighting the events of D-Day. Lead a class discussion on the importance of D-Day in World War II. Ask students to share any prior knowledge they have about D-Day and its impact on the war.

**Explore:** Provide students with reading materials, articles, and primary sources related to D-Day. In groups, have students create Cornell notes summarizing key information about D-Day. Encourage students to ask questions and discuss their findings with their peers.

**Explain:** Conduct a detailed lecture on the planning, execution, and outcomes of D-Day. Discuss the strategic significance of the invasion and its impact on the course of the war. Address any misconceptions or confusion students may have about D-Day.

**Extend:** Assign each student a specific aspect of D-Day to research further. Have students create informative posters that showcase their research findings. Encourage creativity and attention to detail in the poster presentations.

**Evaluate:** Organize a poster presentation session where students present their findings to the class. Evaluate students based on the content of their posters, the clarity of their presentation, and their understanding of D-Day. Facilitate a class discussion on the key takeaways from the research projects.