Theatre: HS Technical Theatre

Sample High School Theatre Learning Plan

Big Idea/ Topic

KSU Masterclass: Lighting Design

Connecting Theme/Enduring Understanding:

ENDURING UNDERSTANDING: Connecting visual arts, construction, and engineering to theatrical performance.
TECHNICAL FOCUS: Understanding the role, function, and process of the Lighting designer. Usingtheatrical conventions to create a lighting design.

Essential Questions:

What is the role of the scenic designer?
What is the process of scenic design?
What is the design concept?
Why do scenic designers use a ground plan?
What makes some stages more effective than others for certain stories?

Standard Alignment

CREATING

TAHSTT.CR.1 Create technical elements of theatre (e.g. sets, props, costumes, makeup, lighting,sound).

a. Explore and utilize the elements of design and principles of composition for a theatrical context.
b. Create basic to advanced technical elements by choosing appropriate materials, tools, and techniques.
c. Analyze and/or develop choices in technical elements (e.g. sets, lights, costumes, sound) of informal and formal productions and theatrical texts as a part of the design process, considering mood, tone, andsymbolism.
d. Create industry-standard paperwork (e.g. budgets, cut lists, materials, cue sheets, lighting and costumeplots, schedules, calendars) as it relates to completing design renderings and/or models.
e. Conceptualize and/or generate design elements for a dramatic work (e.g. scene, one-act, full-length,musical).

PRODUCING

TAHSTT.PR.1 Produce technical elements in theatre.

b. Identify and interpret design and construction documentation, materials, techniques, and procedures forproduction.
c. Differentiate between stock and non-standard material, scenic, or technical elements related toproduction.
d. Conduct initial research about design to inform further development of the production concept.
e. Explore and/or produce an appropriate series of design documentation for a theatrical production (e.g.thumbnail sketches, swatches, first renderings, mixed media presentation).

Instructional Design

***This lesson has a flexible timeline but can be accomplished in 2-3 days.**
This lesson is intended to reach students in a virtual setting, whether plugged or unplugged.
See the bottom of the lesson for a list of unplugged supplies.

Part 1:
Student Journal Prompt
Have the students observe and describe the light they see around them. This can be done in the classroom or outdoors. Students should take 5-10 minutes to document what they observe and describe it in as much detail as possible. Students should include not only a description of the light but how it makes them feel.

Share and discuss the observations. What was noticed? What terminology was used? What was ignored? (This can be done in a synchronous session live or online or can be posted asynchronously in a digital platform)

Part 2:
Teacher-Led Instruction:

In a live or recorded session present the information from the example lesson video, and the PowerPoint, on a synchronous digital platform such as Google Meet (https://apps.google.com/meet/how-it-works/), or create an asynchronous video of your own.

Example Video:
Kennesaw Basics of Lighting Design Lecture

After presenting the information about the basics of lighting design, reevaluate the observation of light exercise from part 1. Discuss the light in the room, or outdoors, or in several spaces as a class. Work to use terms and ideas found in the video presentation.

Unplugged Variation: Have the student read/watch the information about
Lighting Design on their own. Reevaluate the description of light from part one and record thoughts in the student journal using terms and ideas from the presentation.

Part 3:

Overview: In this lesson, students will have access to Matt Kizer's Online Lighting Lab and will be able tobegin thinking about lighting as a means of creating a mood within a play.

*This lesson is good for students who have little to no prior knowledge of lighting and electrical components ofdesign but need a basic understanding of how lighting is capable of enhancing

Reference Material:

Matt Kizer's Online Lighting Lab

Script Analysis For Lighting Design Handout

Lesson Steps:

1. Students should have access to a simple script (10 Minute Plays work well for this

assignment). Theyshould read the play and identify two key emotional moments within the script.

2. Students should complete the Script Analysis For Lighting Design Handout based on the script theyread.
3. Through either a discussion thread or email, students should identify a moment in the play they wouldlike to illustrate using the digital lighting lab. It's helpful for them to have a specific moment in mind before they start the assignment.
4. Direct students to the link: http://scenicandlighting.com/academic/light-labs-and-more/ where they can choose either the Color Lab or Light Lab for Dance option. After the experiment with the features of thewebpage, they can determine what specific choices they would like to make for their chosen "moment."Once they are happy with their design choices, they should take a screenshot of the finished look.
    a. Mac Users Screen Shot Keyboard Shortcut: Command+Shift+4
    b. PC Windows 10 Users: Alt+PrntScrn
    c. PC Non-Windows 10 Users: Win+Shift+S for Snipping Tool.

5. Students can present their screenshots either in GoogleSlide or PowerPoint to share their work. Students canwrite out a description of their selected moment in the script along with an explanation of their design concept.

Follow-Up:

-This lesson is intended to be an introduction to concepts of color and shape in lighting design. Students do notneed access to a light board or a background in programming cues or working with electrics, but that information should be introduced as well if the students can access that equipment safely.

Unplugged Variation: (This project can be used by students with computer access for additional enrichment)

Observe and reflect on a series setting with natural lighting. Observe different times of day, indoors and outdoors. Photograph the setting as best you can if possible. Document not only how the area is lit but how it makes one feel and why. Try to determine what could be used to recreate that lighting on stage or in another location. Recreate the natural light artificially with flashlights, practicals, or other light sources. Document theprocess and take a picture of the recreated lighting.

Evidence of Student Success

Diagnostic: Discussion of the observation of naturally occurring light in a given location, and journals
Formative: Teacher observation, discussion, and discussion of light using terms and ideas from the video.
Summative: Lighting Design Rubric

Distance Learning Supports

Ideas for Differentiation:
Below are changes to the lesson to help achieve that goal for students who need additional support. or increased rigor. Note: Be careful using these lessons for all students.

- Consider allowing students to record their thoughts in a variety of ways: using the talk to text/dictate feature, making an audio recording of their responses, drawing pictures, circling and/or labeling on their diagram or PowerPoint printouts, etc.
- Students needing additional support can simply create a lighting design without using a script for a starting point.
- For low-tech and unplugged adaptation students can work one-on-one with teachers on the phone during the planning stages of the project.
- Students working at an accelerated pace can complete the unplugged assignment as well as the lighting lab assignment.

Unplugged Supplies: Lesson checklist, Journal, printed PowerPoint slides, and/or copy of lecture notes, assignment handout, copy of assignment rubric.

Engaging Families

Materials included to support unplugged learners: Lesson checklist, Journal, printed PowerPoint slides, copy of lecture notes, assignment handout, copy of assignment rubric

Optional materials to support learning:

https://www.youtube.com/watch?v=spG3J4ODJSQ
https://www.youtube.com/watch?v=k4FinZS274I
https://www.youtube.com/watch?v=uY4oNW6s_y0
https://www.youtube.com/watch?v=DEpdsfz52b0
https://www.youtube.com/watch?v=z3jM_rbILhs

Matt Kizer's Online Lighting Lab

http://scenicandlighting.com/aca

demic/light-labs-and-more/

Lesson Checklist

Part 1:

- 1. Observe and document lighting in a natural setting.
- 2. Describe how you feel about the light.
- 2. Record reflections about the activity in your journal.

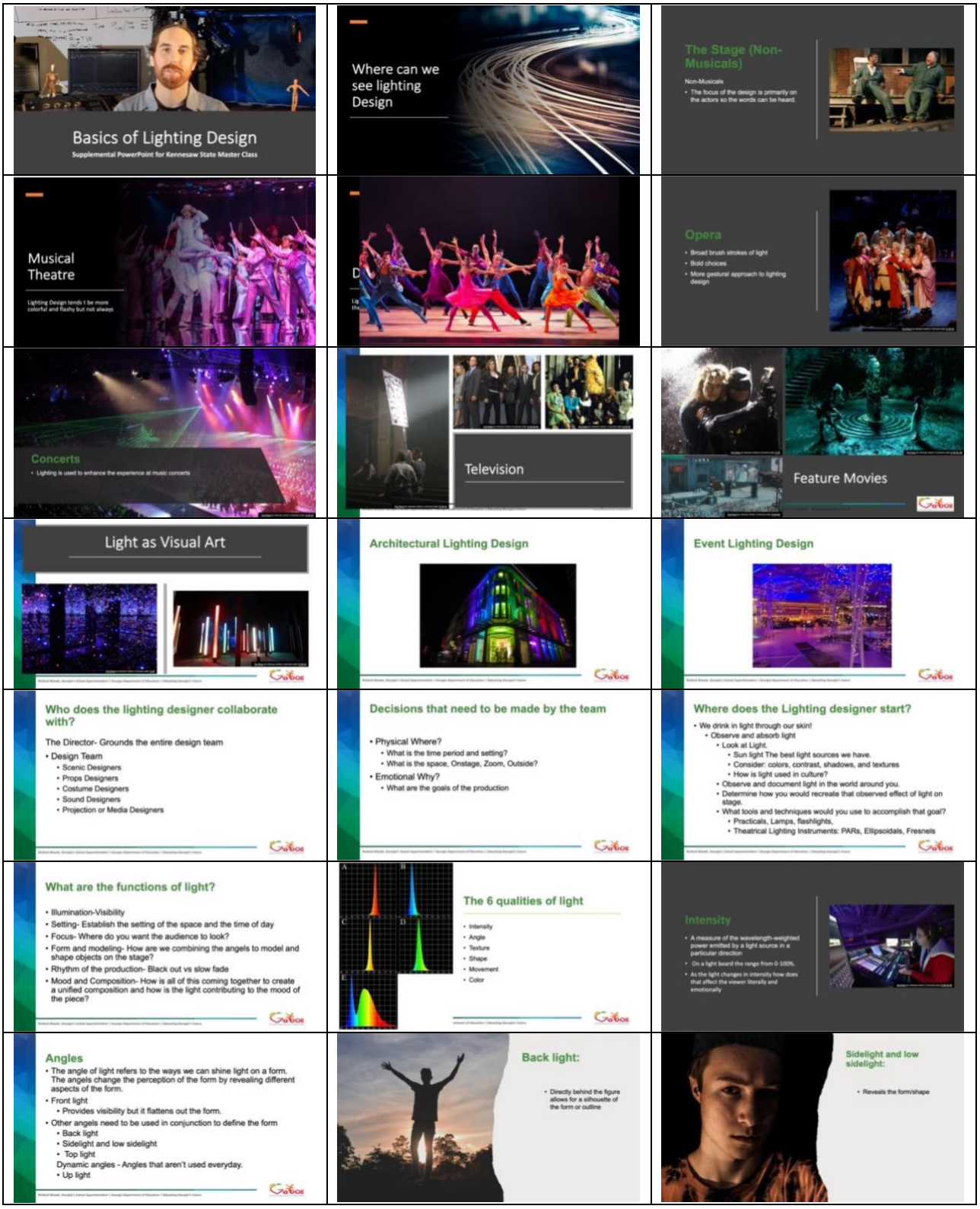
Part 2:

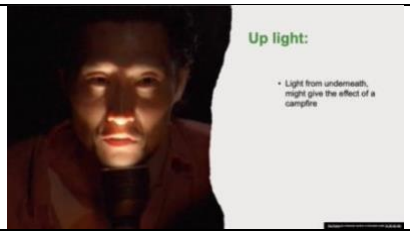
- 3. Read, watch, or listen to the information about lighting design.
- 4. Revisit the described lighting from part one. Discuss and describe the light using terms and ideas from the master class video.

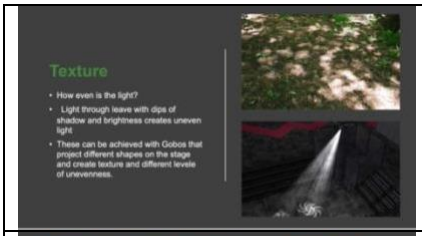
Part 3:

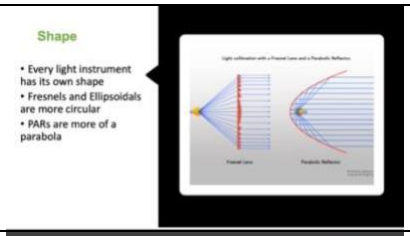
- 5. Select a scene or lighting idea from a script or observations of real life.
- 6. Use the lighting design handout to further plan your design.
- 7. Go to http://scenicandlighting.com/academic/light-labs-and-more/ where they can choose either theColor Lab or Light Lab for Dance option.
- 8. Experiment with options for lighting design until you have achieved your goal based on the design plan.
- 9. Take a screenshot of your design
- 10. Use GoogleSlide or PowerPoint to share your work.
- 11. Write out a description of your selected moment in the script along with an explanation of yourdesign concept.

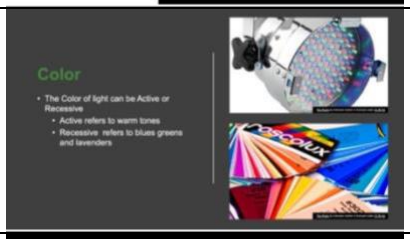
Example PowerPoint Slides:











Lecture Notes:

Basics of Lighting Design
Supplemental PowerPoint for Kennesaw State Master Class
Where can we see lighting Design

- The Stage (Non-Musicals)
- Non-Musicals
    - The focus of the design is primarily on the actors so the words can be heard.
- Musical Theatre
    - Lighting Design tends t be more colorful and flashy but not always
- Dance
    - The lighting focuses on the forms and the body of the dancer.
- Opera
    - Broad brushstrokes of light
    - Bold choices
    - More gestural approach to lighting design
- Concerts
    - Lighting is used to enhance the experience at music concerts
- Television
- Feature Movies
- Light as Visual Art
- Architectural Lighting Design
- Event Lighting Design

Who does the lighting designer collaborate with?

The Director- Grounds the entire design team
Design Team

- Scenic Designers
- Props Designers
- Costume Designers
- Sound Designers
- Projection or Media Designers

Decisions that need to be made by the team
Physical Where?

- What is the time period and setting?
- What is the space, Onstage, Zoom, Outside?

Emotional Why?

- What are the goals of the production

Where does the Lighting designer start?

- **We drink in light through our skin!**
- Observe and absorb light
- Look at Light.
- Sunlight The best light sources we have.
- Consider: colors, contrast, shadows, and textures
- How is light used in culture?
- Observe and document light in the world around you.
- Determine how you would recreate that observed effect of light on stage.
- What tools and techniques would you use to accomplish that goal?
- Practicals, Lamps, flashlights,
- Theatrical Lighting Instruments: PARs, Ellipsoidals, Fresnels

What are the functions of light?

- Illumination-Visibility
- Setting- Establish the setting of the space and the time of day
- Focus- Where do you want the audience to look?
- Form and modeling- How are we combining the angels to model and shape objects on the stage?
- The rhythm of the production- Blackout vs slow fade
- Mood and Composition- How is all of this coming together to create the unified composition and how is the light contributing to the mood of the piece?

The 6 qualities of light

- Intensity
- Angle
- Texture
- Shape
- Movement
- Color

Intensity

- A measure of the wavelength-weighted power emitted by a light source in a particular direction
- On a light board the range from 0-100%.
- As the light changes in intensity, how does that affect the viewer literally and emotionally

Angles

The angle of light refers to the ways we can shine a light on a form. The angels change the perception of the form by revealing different aspects of the form.

- **Front light**

    - Provides visibility but it flattens out the form.
    - **Other angels need to be used in conjunction to define the forBacklight**ght
    - Sidelight and low sidelight
    - Top light
    - Dynamic angles - Angles that aren't used every day.
    - Uplight
- **Backlight:**
    - Directly behind the figure allows for a silhouette of the form or outline
- **Sidelight and low sidelight:**
    - Reveals the form/shape
- **Top Light**
    - This is like the light from the sun, down on the figure from above.
- **Uplight:**
    - Light from underneath might give the effect of a campfire

Texture

- How even is the light?
- Light through leave with dips of shadow and brightness creates uneven light
- These can be achieved with Gobos that project different shapes on the stage and create texture and different levels of unevenness.

Shape

- Light can be shaped internally with shutters
- This allows the designer to change the shape of the light by adjusting the blades

Movement of light

- Moving lights that cause the beams to move around on stage
- Spotlights and the placement of the spot changes where the audience looks and moves the focus of the audience around the stage.

Color

- The Color of light can be Active or Recessive
- Active refers to warm tones
- Recessive refers to blues greens and lavenders

Careers in Theatrical Lighting Beyond Design

- Master Electrician
- Production Elec
- Lighting supervisors
- Sales
- Rentals
- Associate and assistant Designers
- Lighting Programmers
- Additional Lighting Jobs in Film and Beyond
- Gaffer
- Production designer
- DP
- Architectural art installation design
- Environment or experience design

Well Known Lighting Designers

- Stanley McCandless
- Jean Rosenthal
- Tharon Musser
- Allen Lee Hughes
- Jennifer Tipton

- Pat Collins
- Paule Constable
- Mark Stanley
- Kevin Adams
- Don Holder
- Richard Pilbrow
- Ken Billington
- Kathy Perkins
- Peggy Eisenhauer
- Ken Posner
- Rober Wierzel
- Jen Schriever
- Lucy Carter
- Natasha Katz
- Jane Cox
- Chris Akerlind
- Lap Chi Chu
- Howell Binkley
- Jules Fisher

Lighting Design 101History of Lighting

- The first form of theatrical lighting was the Sun.
- Greek and Elizabethan theatres were outdoors
- Changes in time or light were indicated by the dialogue
    - *"But look, the morn in russet mantle clad Walks o'er the dew of yon high eastward hill." –Hamlet Act I, Scene i*
- 17th and 18th century: indoor theatres with candles and oil lamps
- 19th Century: Gas Lighting
- Drury Lane is the first theatre to fully employ Gas Lighting
- http://www.overthefootlights.co.uk/1817-18.pdf
- 20th century: Electric lighting

Objectives of Lighting Design

- Visibility
- Establish a time and place
- Create mood
- Reinforce style
- Focus and composition
- The rhythm of visual movement
- **Functions of Lighting Design**

1. VISIBILITY- Can the audience see the important action on stage? Is the action we don't want to see notlit?
2. MOOD- What is the overall look/feel/atmosphere of the scene? How do I communicate that with light?
3. REINFORCEMENT- What information in the text do I want the audience to understand more fullythrough light?
4. PUNCTUATION- How do I want scenes to end/transition?
5. SCULPTURAL AESTHETIC- what do I want to evoke in the audience? How do I create depth/detail inlighting?

Qualities of Stage Light

- Intensity
    - controlled by dimmers
- Color
    - provided by gels
- Direction
    - key, fill, back and downlights
- Form
    - controlled by shutters and

gobosInstruments and Controls

- Floods, scoops, strips, and border lights
    - for a soft “wash”
- Fresnel
    - a soft-edged spotlight for area lighting
- Ellipsoidal reflector spotlight
    - the “workhorse” for a concentrated beam
- Robotic or “wiggle” lights
    - for example, the Vari-Lite
    -

LIGHTING TERMS TO KNOW

1. Dimmer- How electricity enters the building and how it flows through the wires. “Neighborhood”
2. Circuit- The physical plug for the light. “House”
3. Channel- The name of the circuit on the board. “Address”
4. Instrument- The name of the light (Ellipsoidal, PARCan, LED, Mover, etc)
5. Lamp- the thing that creates light.
6. LED- Light Emitting Diode (lights that vibrate and can change color at low wattage)
7. Incandescent- Lamps that vibrate a coiled filament to emit light. Higher wattage.

Other Terms

- Lightboard
- Cues
- Light plot
- Hang and focus

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Script Analysis Handout:

Lesson: Online Lighting Lab & Intro to Lighting Design
Grade Level: 9th-12th Grade

SCRIPT ANALYSIS FOR LIGHTING DESIGN

Using your assigned script, answer the following questions about the setting, location, and overall mood of the play.

1. What is the title of your play? _____
2. What is the setting? _____
3. What time of year does the play take place (If this is not specified in the script, what season do you think it takes place in? Why?) _____

_____

4. Does the play take place indoors or outdoors? If it is indoors, would you be able to see the outside through windows or doors? _____

_____

5. Describe the tone of the play in 3 adjectives: _____
6. Describe the main character of the play using colors and emotions:

_____

7. What is the climax of the play (the highest point of action in the piece)? _____

_____

8. Is there a moment in the script where a change in light is specifically mentioned? What needs to happen at that moment? _____

_____

9. Are there moments in the script where you feel lighting would help clarify something for the audience (for example, isolating characters in different spotlights that are separated from each other geographically but talking on the phone)?

_____

_____

10. What is the overall emotion that you would like the audience to walk out of this play experiencing? _____

COURSE: Technical Theatre Design	UNIT: 4	LESSON: Lighting

Formative/Summative LIGHTING DESIGN ASSESSMENT RUBRIC

Criteria	Advanced/Level 4	Proficient/Level 3	Emerging/Level 2	Developing/Level 1
Visibility TAHSTT.CR.1 (a,c,d,e) TAHSTT.PR.1 (d,e) TAHSTT.RE.1 (a) TAHSTT.CN.1 (e)	The performers are visible and can be seen by the audience.	The design makes the performers mostly visible.	The performers are rarely visible. The play/event is sometimes hard to follow as a result.	The performers are not visible in the design to the point that the play is difficult to follow.
Location and Time TAHSTT.CR.1 (a,c,d,e) TAHSTT.PR.1 (d,e) TAHSTT.RE.1 (a) TAHSTT.CN.1 (e)	The location and time of day are clearly defined and enhance the audience's ability to contextualize the performance.	The location and time of day identifiable and clearly based on the theatrical text.	The location and time of day are clearly defined but are not recognizable or not clearly tied tot of the play or the design concept.	The location and time of days are not evident.
Design Concept **A clear understandable the vision of the design closely tied to and amplifying the text.** TAHSTT.CR.1 (a,c,d,e) TAHSTT.PR.1 (d,e) TAHSTT.RE.1 (a) TAHSTT.CN.1 (e)	The design concept is exceedingly clear in the execution of the design. The concept clearly enhances the theatrical text. The concept is clearly based on the text.	The concept is generally identifiable and often enhances the audience's experience the performance of the text.	The design concept is clear but does not clearly enhance the audience's experience of the theatrical text or works in opposition to the text.	The design concept is not evident.
The elements of design and composition convey the tone and style of the world of the play. TAHSTT.CR.1 (a,c,d,e) TAHSTT.PR.1 (d,e) TAHSTT.RE.1 (a) TAHSTT.CN.1 (e)	All elements of design work together to create a specific and clearly defined mood, tone, and style which enhances the theatrical text and aids performance.	The elements of design work together to create general moods, tones, and styles appropriate for the theatrical text.	The elements of occasionally work together to create general moods, tones, and styles that are generally appropriate for the theatrical text.	The elements of design do not work together to create general moods, tones, and styles that are appropriate for the theatrical text. The tone and style is either not evident or contrast the text in a manner not indicated by the design concept.
Practicality **Safety, functional use for actors, directors, and other designers** TAHSTT.CR.1 (a,c,d,e) TAHSTT.PR.1 (d,e) TAHSTT.RE.1 (a) TAHSTT.CN.1 (e)	The design is safe for actor use. The design is exceedingly helpful to the director in staging the play providing multiple levels and planes for staging. The scenic design specifically addresses taking other areas of technical design into consideration.	The design is safe for actor use. The design is helpful to the director in staging the play for the audience. The scenic design takes some of the other areas of technical design into consideration.	The design is safe for actor use. The design is somewhat helpful to the director in providing some levels and planes. The scenic design mostly takes other areas of technical design into consideration.	The design is not safe for actor use. The design does not provide the director with many options for staging. The scenic design hinders other areas of technical design.

_____/20