**Technical Theatre + Design** by Summer Lewis & Carolyn Pedersen

**Objective**: Students will demonstrate an understanding of the elements of technical theatre design by completing projects in each element, creating a group skit demonstrating technical elements, and a final written test.

**Class Level:** Intermediate

**Main Concepts:** Costume, set, light, sound

**1994 National Standards:**

CONTENT STANDARD 1: Script writing by improvising, writing, and refining scripts based on personal experience and heritage, imagination, literature, and history.

CONTENT STANDARD 2: Acting by developing, communicating, and sustaining characters in improvisations and informal or formal productions.

CONTENT STANDARD 3: Designing and producing by conceptualizing and realizing artistic interpretations for informal or formal productions.

**Lesson Plans**

Lesson 1: Technical Theatre Terms, Tour, and Parts

Students will demonstrate an understanding of technical theatre terms and parts by participating in a theatre tour, completing a graphic organizer, and writing what they want to learn more about in technical theatre.

Lesson 2: Costume Design

Students will demonstrate anunderstanding of costume design theories and practices by completing two character designs, including a paragraph justifying their color and style choices.

Lesson 3: Set Design

Students will demonstrate an understanding of set pieces and design by creating a model set for a play script of their choice.

Lesson 4: Lights and Sounds

Students will demonstrate an understanding of how to use light to create a mood by completing exercises in creating a light plot and mimicking the lighting of a photograph and how to analyze scripts for sound by creating a sound cue list for Glass Menagerie.

Lesson 5: Most Fun Review Ever-Production Teams

Students will demonstrate an understanding of technical design topics covered in class by designing one technical element for their production and filling out a role sheet.

Lesson 6: Show What You Know - Test Day

Students will demonstrate understanding of technical design in theatre by performing the skits of the children’s books and taking a written technical theatre test.

**Lesson 1. Technical Theatre Terms, Tour, and Parts**

**Objective**

Students will demonstrate an understanding of technical theatre terms and parts by participating in a theatre tour, completing a graphic organizer, and writing what they want to learn more about in technical theatre.

**Materials Needed**

4 sets of colored note cards (each set numbered 1-10), 4 rolls of tape, floor plan graphic organizer (production team on back), Cathartic Space DVD, production team overhead, floor plan overhead

**Related Documents**

* Technical Terms List (4)
* Floor Plan
* Production Team

**Lesson Directions**

**Anticipatory Set/Hook**

Have students take out a sheet of paper and fold it into thirds and write down everything they know about technical theatre.  Give prompts if necessary, what goes into putting a show on besides acting, etc.

**Instruction**

**Step 1:  *Discussion****.*  With a partner share what you know, maybe they remembered something you didn’t. Ask/Instruct students about what they wrote down, many of which will be on the different parts of technical theatre (set, sound, lights, props, costume, make-up).  Most of these involve knowing some terminology specific to the stage.  Pass out floor plan note sheet.

**Step 2:  *Instruction***.  Put up the overhead of the floor plan.  Instruct students that before we go look at the theatre, we are going to learn a few terms.  Go through the graphic organizer, asking for people to identify what they already know, and then filling in the blanks.

**Step 3:  *Instruction***.  Now divide the class into 4 groups.  Instruct them on the following joint productive activity.  We will be going into the auditorium to label some of the things we have just learned the names for.  Each group will be given a list of ten terms along with 10 notecards, labeled 1-10.  You task is to attach the correct number label to the actual item on stage.  Some of the things you might not be able to reach because they are high up in the air.  That’s okay, just attach it to the floor beneath the object.  Work together as a group to complete this activity.  The goal is to put up all your labels correctly first.  However, only one person from your group may be on the stage at a time.  So we recommend deciding as a group beforehand where the numbered notecard should be placed and then sending up a runner.  Everyone will start off the stage, just standing in front of the pit.  Don’t try to cheat off the other teams, because their terms may be different.

**Step 4:  *Check for Understanding****.*Have students repeat back the instructions in their own words.  When it is clear that everyone understands, proceed into the auditorium.

**Step 5:  *Group Practice****.*  Do the activity.  When they have finished, congratulate the winner and then have everyone choose a note card to stand by.  There may be more than one person at a spot.

**Step 6:  *Check for Understanding****.*  Go around and quickly point to each notecard group and have them yell out and point to the item that they labeled.  Now go back to the classroom.

**Step 7:  *Instruction***.  Now that we are more familiar with the stage, lets become more familiar with the different people that it takes to make a show run from the technical aspect. Put up the production team overhead.  Have students flip over their floor plan note sheet to the production team side.  Instruct them to put a short description of each job as you talk about it.  Start at the top and ask students to identify the jobs that they know, and if they don’t then you can provide a definition.

**Step 8:  *Check for Understanding****.*  Point out that there are far more opportunities for employment in technical theatre than in acting.  Quickly go through each job, asking a different student define it.  If there is time, ask students which job they would like to have and why.

**Step 9:  *Instruction****.*  Now we will be watching a short video on the creation of an original play written by a student, acted by students, designed and constructed by students. While they watch this film, have them write in the second section of their paper (the KWL one), things about technical theatre they would like to learn more about.  As they watch it, what intrigues them, what would they like to do.  As a little intro, this play is called *Angels Unaware; A Joan of Arc Story.*It’s about Joan of Arc, who was a Catholic teenager in medieval France, who claimed to be visited by angels that lead her to fight for France and re-establish the Dauphin, or prince.  She was burned at the stake as a heretic even though she helped to save France.  Watch the chapters pertaining to technical theatre.  Feel free to point out interesting things they do in the design.

**Step 10:*Discussion and Closure****.*  After the film is over, give students a little time to finish writing down what they would like to learn.  Then discusses the things that they saw that were interesting, what aspects of technical theatre were new to them or surprising.  Next time we will start into the first part of technical theatre, set design and construction.  Have them turn in their KWL paper, but keep the other ones for notes to study for the test at the end of the technical theatre unit.

**Assessment**

Students will be assessed on their participation in the JPA and their KWL paper.  The KWL will be turned back at the end of the unit for them to fill in the final part as a self-assessment.

**Lesson 2. Costume Design**

**Objective**

Students will demonstrate an understanding of costume design theories and practices by completing two character designs, including a paragraph justifying their color and style choices.

**Materials Needed**

A variety of male and female costumes, accessories, and shoes, fabric (or construction paper) of different colors, 4 white board markers

**Related Documents**

* Body Outline Handout

**Lesson Directions**

**Anticipatory Set/Hook**

Prepare by dividing the white board into 4-5 columns (depending on the number of fabric samples you have).  Number each column. Instruct students that you will be holding up different colors of fabric, and that you have 4 whiteboard markers.  When you hold up the fabric, any four students may come grab a marker and write a word or short phrase that they feel describes that color, the emotions it embodies, etc.  Only 4 students may write something, and each student may only come up once.  They need to write their responses in the coordinating column.  Ask them to describe the instructions in their own words.  Conduct the activity.

**Instruction**

**Step 1:  *Discussion***.  Discuss the responses for each column.  Ask students to justify what they have written.  Ask if any students disagree and to justify their opinion.  Discuss how color can effect our impression of a character. Costume designers have the responsibility to communicate information about the character and the play in general through the clothing of the actors.

**Step 2:  *Transition***.  Ask for a student to act as scribe (or do a graffiti wall).  Ask students to list what other responsibilities that they feel a costume designer might have.  (design costumes, measure cast member, read the script, interpret the script for design, pull costumes, buy fabric/costumes, research the period.  *Generally speaking, they do not build costumes*)

**Step 3:  *Discussion****.*  Quickly, review this list, and add to it where needed, if students missed anything.  Let’s talk first about pulling costumes.  When putting together a characters costumes, what kinds of things would you need, what articles of clothing (shoes, accessories, hats?, clothes).

**Step 4:  *Group Practice***.  Instruct students that they will be assembling a costume from pieces that you will be providing.  Have them get into groups of 4.  Instruct them that after you uncover the table they will have 5-10 (you decide) minutes to put together ONE (1) costume.  They may choose one member to be the model.  They must be able to tell us who the character is and why they chose those pieces.  Ask them to repeat back instructions in their own words.  Uncover the costumes and give them time to assemble their character.

**Step 5:  *Discussion****.*  At the end of the allotted time, have the models come to the front of the class.  You may choose to have the models or their group introduce them, or have the class guess what they are.  Discuss the choices made for each group costume and if they worked and why.

**Step 6:  *Transition/Instruction***.  Discuss how some of the choices they made communicated very specific things about the characters they choose.  In the process of costumes design, designers pull much of their information from the actual script and from the director’s concept, but the script is their major source of information.  All of them have read scripts before, ask them to list what kinds of information they find in a script that would affect costumes worn in the show (i.e. time period, gender, age, time of day, weather, season, location, activity, span of time, emotional status of the character, socioeconomic status, sometimes there are specific instructions (in Chekov’s *The Seagull* you know that Masha always wears black because another character asks her “Why do you always wear black.”)).

**Step 7:  *Transition/Individual Practice***.  Let’s review the information we have.  We know what a costume designer is responsible for doing, where they get information and what kind of information for designing the costumes, and how colors can communicate information about the character.  The style of clothing worn also communicates a great deal about a character.  Have students pull out a piece of paper.  On the TV you will be showing them pictures of different styles of clothing.  For each image, they need to describe in a few words what they are wearing and then write at least three sentences describing what this style tells about them (Are they social?  What do they value?  What time period do they live in?  What are their major emotions?  Where do they live?  What activities do they participate in?  Look to the ideas listed above in step 6).  As a class, go through the images, and have three students share some of their comments.  Ask them to justify what they wrote from what they saw.

**Step 8:  *Individual Practice****.*Again, let’s review what we know about responsibilities, information, colors, and styles.  Using these tools, students will complete the following assignment.  You will pass out the Body Outline Worksheet.  On one side is a female and a male on the other.  They will need to select a play, book, or movie that they are familiar with, and then select one male and one female character from the same play/book/movie.  They will need to complete a color rendering of costumes they would design or were designed for these characters.  On the side, they need to write a paragraph justifying what they chose color and style wise and what it communicates.  This will be due at the beginning of next class period.  You may choose to give them the remainder of class to work on the project.

**Closure**:  Ask students to each pick up a few items of the costumes and follow you into the costume shop.  They will neatly put away everything, clothes on hangers, shoes in boxes, etc.  Direct them where necessary.  Upon returning to the classroom take a few minutes to discuss the real world implications of what you have discussed.  How does what they wear communicate about them.  When they go to a job interview, what kind of “costume” should they put on, etc.  Remind them to bring their completed color designs with one paragraph justification for each design.  Collect their writings on the images.

**Assessment**

Students will be assessed on their participation, the image writings, and their costume design and justification.

**Author's Notes**

**Preparation**:  put the costumes on a table in a central location and cover with a piece of fabric.  Don’t allow students to touch it or uncover it.

**Lesson 3. Set Design**

**Objective**

Students will demonstrate an understanding of set pieces and design by creating a model set for a play script of their choice.

**Materials Needed**

Rulers, scissors, manila folders, tape, glue, colored pencils/markers, scratch paper, copies of several set descriptions from various plays.

**Lesson Directions**

**Anticipatory Set/Hook**

Ask for a student volunteer and invite them to the front of the class.  Give everyone else a scratch piece of paper.  Instruct the volunteer to describe the living room in their house and as they describe it have the other students to either list objects or images, or draw what she is describing.  They do not need to ask questions to clarify, but can fill in the blanks however they want.  This doesn’t need to be a faithful replica of the volunteer’s living room, but your interpretation of it.  Proceed with the activity.

**Instruction**

**Step 1:  *Transition***.  Ask if any students added things to complete their room that wasn’t described by the volunteer.  As students look at their drawing, inform them that they have just created a set design.  Now let’s consider some other logistics of creating a set design.

**Step 2:  *Instruction****.*  As they look at their “set design,” consider how feasible it is for the stage.  On the board, create a list of things that are important to consider when designing a set. (room for movement, how it fills the space, cost of building, lines that are created, feeling/mood of the environment).

**Step 3:  *Discussion****.*Now that we understand what practical things we have to take into consideration, let’s discuss how we create an environment that supports the mood of the play.  On the board, list different genres or types of plays (romances, comedies, fairy tales, mysteries, crime, tragedy, etc.)  Just as with costume design, colors can greatly impact the feeling the set creates.  Go through the list and have students name one or two colors that they would associate with the set of that type of play (romance-pink, mystery-gray, royal historical-purple/red, comedy-yellow, orange, etc).  We also can gather a lot of information about the play before any action happens when we look at the set, just from the set style, props, furniture, etc.

**Step 4:  *Check for understanding***.  Describe a few sets for students and have them guess what the set is.

White, clean, one bed with white sheets, a tv suspended in a corner, tiled floor, a beeping machine, a bag suspended on a pole, a cheap art print over the bed, a window (Hospital)

A pink rug, bed with fluffy purple pillows, a multitude of stuffed animals, a dollhouse in the corner, a flower printed bedspread, ruffled curtains, hand drawn art on the wall, a poster of Hannah Montana (Little Girl’s Bedroom)

Clean, carpeted, benches in even rows, a pipe organ, stained glass windows, a pulpit (Church)

Ask students what clues gave away the location.  There are specific things we can include that make the location clear.  These sorts of things are important to help communicate with our audience and let them know what kind of play they are watching, and can help influence the feeling of the play

**Step 5:  *Instruction.***  Explain to students that they will now have the opportunity to work with a partner in creating a model set from one of the set descriptions you will provide. First they need to understand that these need to be created to scale.  Ask if anyone can explain what that means.  (it is proportionally accurate, aka ¼ inch equals 1 foot.)  Quarter inch scale will work really well for this project.  On the board, sketch out your school’s stage and give them rough dimensions of where the set they are designing would be located (aka 24’ by 40’ because they are easily divided by 4).  Most real sets are constructed from three specific kinds of set pieces— stairs, platforms, and flats.  Ask if there are any questions about what stairs are (don’t worry about doing stairs to scale, just accordion fold the paper, and you’ll be fine).  Ask if anyone knows what a platform is (a raised floor).  These are used to create more levels on stage.  Ask students to give some examples on how they might use a platform in a set.  Ask if anyone knows what a flat is (a fake wall, essentially).  It can have doors or windows in it.  If you include doors or windows in your set design you need to include another important aspect of set design, masking. Masking simply means that you put some additional flats behind the window or door so that they audience can’t see through to opening and into the backstage area.  Masking “masks” the backstage and keeps the illusion of the set.  Set pieces can be painted to mimic any kind of building material, so don’t limit yourself.

**Step 6:  *Group Practice***.  First you will briefly go through the set descriptions and students interested in that set can be paired together (or whichever way you deem best to team students together).  Explain that students will use the manila folders on which to mount their set design.  They will need to go through their set description and highlight specific things they need to include in their set.  This set description needs to be attached to the back of their set design with their names on it when they turn it in.  They will need to create the flats, platforms, and furniture from other pieces of manila folder and use colored pencils/markers to help communicate the mood and setting of the play.  Get to work!

**Closure**:  Allow students to work on their project until 7 minutes before the bell rings.  Have them clean up.  Allow them to take projects home if they are unfinished, and they may turn them in at the beginning of class next time.  Take the last few minutes to discuss what was interesting about set design to them.  What does this room communicate by its cools, furniture, props, etc?  What does their own bedroom communicate about themselves?  Remind them to turn in their design today or the following class period.

**Assessment**

Students will be assessed on in class participation and their completed model set.

**Lesson 4. Lights and Sounds**

**Objective**

Students will demonstrate an understanding of how to use light to create a mood by completing exercises in creating a light plot and mimicking the lighting of a photograph and how to analyze scripts for sound by creating a sound cue list for *Glass Menagerie*.

**Materials Needed**

Flashlights, black and white photographs, Glass Menagerie overheads, graph paper, gels, colored pencil, gobos

**Related Documents**

* Station 1: Sound Design
* Station 2: Lighting for Living
* Station 3: Key/Fill/Top Light
* Photographs

**Lesson Directions**

**Anticipatory Set/Hook**

Bring out students manila folder set models from the previous lesson. Have each team briefly describe what they designed and why they chose it. Ask a few students to answer what they enjoyed about set design, what was difficult, and why it is important.  Then ask what element of technical theatre might be necessary in order for us to be able to see the lovely set.

**Instruction**

**Step 1:  *Transition***.  The lights!  What can lights do for a show, besides make things visible?  They can create a mood, suggest time of day, time period, etc. by how they are used. The lighting designer makes these sorts of decisions.  Just like the costume designer, where does he obtain most of his research information?  The script.  He also relies heavily on the set designer to know where instruments can be usefully placed.  A sound designer also relies on the script for most of his information.  Today we will be exploring these two areas of technical theatre.  We will do it by dividing into three groups and working in centers. At certain times we will rotate centers so each group gets to do each activity. Before we get started, I will give instructions for each activity, and I expect that you will be able to work as a group without my direct supervision.

**Step 2:  *Instruction***.  Give students the following instructions.  Remind them that they will be available at each station.

Station 1:  Sound Design-I will be working with you at this station where we will explore how a sound designer reads a script for sound cues.  We will be using *The Glass Menagerie.*

Station 2:  Light for Living-Lighting designers need to know how lighting affects a space.  Here you will be creating an overhead drawing of your living room at home, indicating sources of light and what directions the light goes in the room and where it creates shadow.  You will also write one paragraph describing how you think the lighting in your living room creates a mood for that room.  Is it different from any other room in the house?

Station 3:  Key/Fill/Top Light-This is the standard procedure for lighting on stage.  In groups of three within your group, you will try to imitate the lighting of photographs by using flashlights on a group member.  After experimenting with white light, you will use gels (color) to create a specific mood for scene you create.  You will write one paragraph describing you key and fill lights, the colors you used, and the resulting mood of the scene.

At the end of the period, you will turn in one piece of paper that has all three assignments on it, plus the living room light plot.  Any questions?  Have students repeat back instructions in their own words.  Divide the students in to three groups by birthday.  (Group 1-Jan-Apr, Group 2-May-Aug, Group 3-Sept-Dec, or however works out best with the numbers of your students).  Assign each group a leader and instruct them to read the instructions at each station so that students remember what is expected of them.

**Step 3:  *Group Practice****.*Students will spend 20 minutes in each center.  Watch the clock and have them rotate at the right time. Use the attached instructions at each center.  If you want, the sound activity could be done without direct supervision and the teacher could run the Key/Fill activity.  (*We did it both ways in different classes and it worked well.  Determine which one your students would most like need supervision at)*

**Closure**:  After each group has done every center, gather the class back together and discuss what they learned about lighting and sound.

**Assessment**

Students will turn in their paper with all three assignments on it and living room light plot.

**Lesson 5. Most Fun Review Ever-Production Teams**

**Objective**

Students will demonstrate an understanding of technical design topics covered in class by designing one technical element for their production and filling out a role sheet.

**Materials Needed**

Large fabric samples/sheets, sound effects cds, 8 children’s books, a variety of props, butcher paper, markers, designer responsibility role sheets

**Related Documents**

* Technical Terms Review Sheet

**Lesson Directions**

**Anticipatory Set/Hook**

Go into the auditorium and have students line up in front of the first electric.  Ask them if they can name what this is (remember your drawings?).  Excellent, today you will learn how to hang a light on an electric.    This will only work if students follow your instructions explicitly.  First they will need to get into pairs in front of a light.  Any pair of students seen goofing off will be assigned book work and will receive no credit for the day.  Otherwise, we will have some fun with technical design.

**Instruction**

**Step 1:  *Instruction/Group Practice*.**  First have the students observe the instrument.  Note that it is called an instrument.  The “bulb” inside the instrument is called a lamp.  Just like any other profession has its own lingo, so does lighting.  Never ever touch a lamp (or bulb) with your fingers because the oils from them transfer to the glass and heat up and boil on the surface of the lamp!  Any idea what boiling oil and glass do to each other?  They melt, and sometimes explode.  In front of the lamp is the lens, the big hunk of glass. It helps to magnify the light emitted by the lamp.  So, to hang a light.  First, the C-clamp needs to go around the batten  (what is the batten again?).  Then secure it to the batten by using a wrench to lock it in place.  Then attach the safety cable around the batten as well.  Why might we have a safety cable?  Now, we can plug our instrument into a dimmer.  What is a dimmer?  Essentially, it a high voltage plug for things like lighting instruments that need a lot of energy.  Notice that they are numbered.  This is to allow the lighting crew to know what dimmer controls which light.  Go ahead and plug in your instrument.  After all of the students have successfully hung and plugged in their instrument, turn on the first electric to make sure they were all properly hung.  Pretty easy.  Yes.

**Step 2:  *Transition*.**  Today we thought it would be good to have a little practical experience in working with technical design.  Talk briefly about lighting designer responsibilities.  Unfortunately, our classroom is not equipped with lights we can mess with, so any questions before we go back into the classroom?

**Step 3:  *Instruction****.* While back in the classroom, have all students take a seat ready for important directions.  “Today you will each become a designer or director as part of a production team, and put together a skit based on one of these children’s books.  Let’s briefly go over what the responsibilities will be.”  Use the designer responsibilities sheets to explain what each job will be responsible for.  List on the board numbers 1 through however many would make even groups of 5 under the designer titles.  Allow students to choose which role they would like to be and list their name on the board.  After they have chosen, create the groups by putting all of the 1’s, 2’s, 3’s, and so on together.

**Step 4:  *Group Practice***.  Each design team will have a production meeting first in which they will choose how to create their story.  Remind all of the students that the first step in designing is to read the script…so they should all read the book, out loud would be easiest and preferred.  The director will cast each of the designers in needed acting roles. Students will have the remainder of the class period to rehearse, design, and prepare the technical elements of their performance.  Attached to each responsibility sheet is a review sheet that they can fill out to review for the test that will happen next class period.  They may use each other as resources, obviously.  Skits will be performed after the yhave taken their test the following class period.

**Step 5:  *Discussion/Closure.***  Discuss what is working and what is happening in their groups. What is surprising to them about designing?  Go through the review sheets, if there is time go through each item so that they feel a little more prepared for the test next class.

**Assessment**

Students will be assessed on their participation in the group’s planning and their specific role and responsibilities that they are working on as a designer.  They will turn in their design sheets at the end of the class period.

**Author's Notes**

**Preparation:**  Have a tech student bring down the first electric.  Remove enough lights for each pair of students to have their own light.

**Lesson 6. Show What You Know - Test Day**

**Objective**

Students will demonstrate understanding of technical design in theatre by performing the skits of the children’s books and taking a written technical theatre test.

**Materials Needed**

Large fabric samples/sheets, sound effects cds, 8 children’s books, a variety of props, butcher paper, markers, designer responsibility role sheets

**Related Documents**

* Technical Theatre Test

**Lesson Directions**

**Anticipatory Set/Hook**

Tell the students that you have just gotten a job as the designer for *Romeo and Juliet*, but unfortunately, because the theatre is on such a tight budget, you are the only one hired to do all of the technical elements for it!  You have the next 15 minutes to prepare your design for *Romeo and Juliet* or else you will blow up, so you’re coming to your students for help.

**Instruction**

**Step 1: *Discussion/Review*.**In order to make sure that you are covering all of the elements of technical theatre, have the students pull out their technical theatre terms review sheets along with the overhead stage map that we did a few class periods ago.  Ask about what you would use for lighting and have students use the terms on the sheet to tell you what you could do with gobos, gels, etc.  Ask what those terms mean, also.  This should serve as a brief review for the exam. Answer any questions that students have.

**Step 2: *Individual Practice.***Have students put all notes away and spread out around the room so that they can take the test.  Pass the test out to students and monitor them while it is taken.  Once they are finished with the test, have them turn it in and work on something quietly.  This is the only time they may listen to headphones in class!

**Step 3: *Transition.***After all students have completed the test, gather everyone back together and tell them that they will have the next bit of time to work on their productions in their design team and set up for their performances.  Establish a performing order on the board

**Step 4: *Group Practice.***Break up into groups and allow students time to work on setting up their productions.  Check in on each group and make sure that they are using all of the resources that they can.  When 30 minutes are remaining in the class period, start the performances.

**Closure:**After the performances are over, have a discussion about what about them worked well technically.  What designs stood out to you and why?  What else do you learn about technical theatre from being part of a production team?  Answer any final questions, because now you’re all done with the unit on technical theatre!

**Assessment**

Students will be assessed on their ability to work in a production team and carry out their designer responsibilities in the performance. More formal assessment is given through the written technical theatre test to see if students can retain some of the more concrete information that they were given.

**Author's Notes**

***Note:****You may choose to devote a class period to the skit performances separate from the testing day.  If so, we recommend doing skits between the production team day and the test day.*