

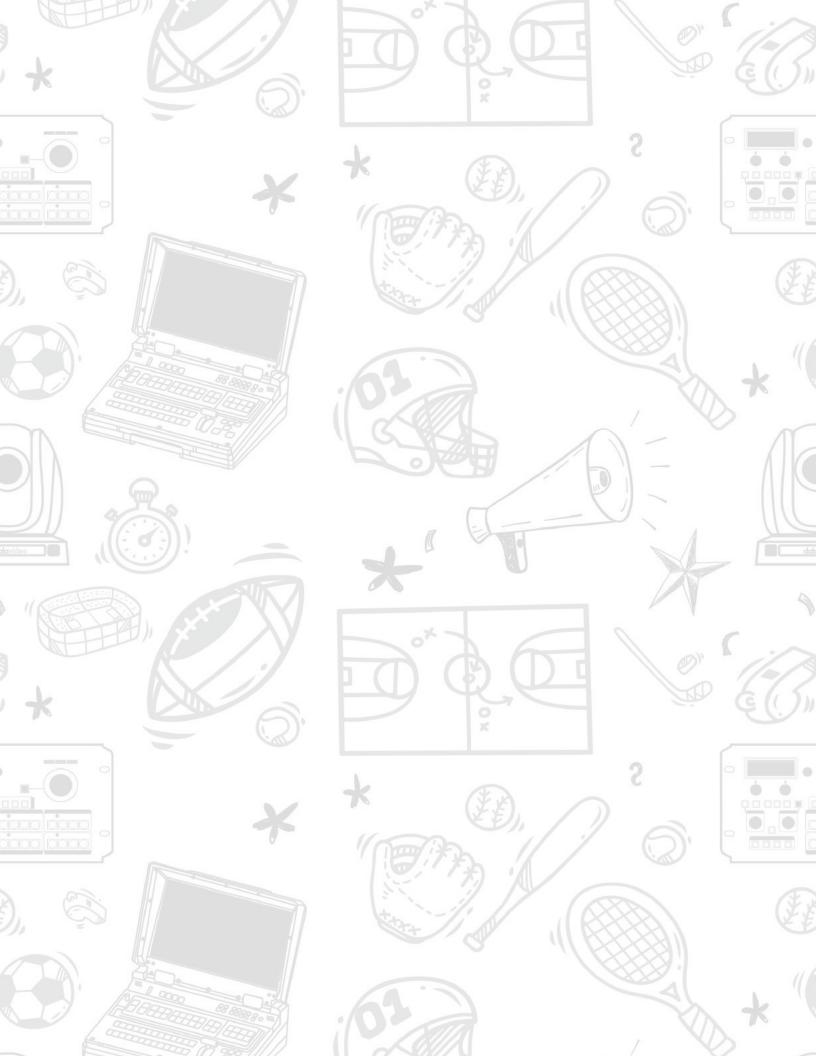
# **Introduction**

These are the production activities that will give students a hands-on experience on how to use the video equipment as well as practice their mobile production skills. These skills include technical skills as well as on air and on camera talent skills. Each activity corresponds with the chapters and sub chapters in the Mobile Production Teacher's Guide. After learning each chapter, students must complete an activity for that chapter to test what they have learned.

In the following activities, students will be divided into groups. Each group will be responsible for a different stage of the production. They will rotate between the following responsibilities:

- 1. Producer Team: (Script Writing, On Camera Talent, and On Air Talent)
- **2. Studio Production Team:** (Switcher & Camera Operation, Graphics)
- **3. Media/Field Production Team:** (Creating b-roll clips and Live Stream Operation)

Pick a team leader for each group. The team leader for each group will be responsible for keeping team members organized, assigning responsibilities, and sharing knowledge between teams. Students are required to rotate roles from week to week to ensure that everyone gets a chance to use each piece of the equipment and develops leadership skills. It is important for every student to get a chance to use their writing skills, verbal communication skills, and technical skills. The goal of these activities is to make sure every student is a well-rounded individual who possesses the skills aligning with the ISTE Standards for Students.



### SETTING UP THE EQUIPMENT

#### **Objective:**

To introduce the video production equipment to students and develop their skills in setting up and connecting all the equipment for a shoot. In this activity, all the students will be in the Production Team, since there is no need for script writing, on air talent, nor creating media clips yet. However, we will still break the team up into three groups.

### **GROUP A: Camera Team**

In this activity, students in Group A will be responsible for:

- Setting up the PTC-140T cameras on the tripods.
- Using the camera controller section on the HS-1600T MARK II, set the white balance on the cameras as well as setting the output resolution
- Using the joystick and zoom knob on the HS-1600T MARK II, practice panning, tilting, and zooming in and out of the cameras.
- Using the camera preset buttons, practice saving camera presets for each camera.

### **GROUP B: Switcher Team**

In this activity, students in Group B will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Practice switching from one input to the next, so you get the hang of live switching during the production.
- Going through the switcher menu and figuring out each menu setting and what it does.

### **GROUP C: Graphics Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.

#### Now it's time to rehearse!

The team leader for Group A will be the Camera Operator. Using the HS-1600T MARK II, the Camera Operator will set up the shots and save them as presets. Set up to four presets per camera. Make sure you set up the extreme full shot, full shot, and a couple of medium shots to ensure you cover the entire stage or subject you are shooting.

The team leader for Group B will be the Director, who calls out which input to cut to. A member of the group should be a Switcher Operator, who works together with the Camera Operator before The Camera Operator will set up the shots and when they are ready, they will tell the Switcher Operator, they can switch to that shot.

The team leader for Group C will be playing the PowerPoint presentation that has all the graphics to be overlay on top of camera inputs on the HS-1600T MARK II. The rest of the members of the group should observe how the Director, Camera Operator, and the Switcher Operator are working together to switch the live show.

Students should do this rehearsal multiple times, so each member of the groups gets a turn to be the Director, Camera Operator, Switcher Operator, and Graphics Creator.

At the end of this activity, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

After the class discussion, ask each group to nominate a new team leader, or assign a new team leader for each group.

## SETTING UP THE AUDIO AND DOING SOUND CHECK

### **Objective:**

To introduce the audio side of the production to students and have them understand the sound difference between different types of microphones as well as checking audio levels. This is a continuation of Activity #1. Students will be broken up into the same groups, but this time, you will connect microphones, headphones, and test audio.

### **GROUP A: Audio Team**

In this activity, students in Group A will be responsible for:

- Connecting the microphones to the audio mixer and the HS-1600T MARK II.
- Testing the microphone levels using the faders on the audio mixer.
- Checking to make sure the HS-1600T MARK II is outputting audio.
- Select two students to be on camera and on air talent who can be connected to microphones to test audio.

### **GROUP B: Camera Team**

In this activity, students in Group B will be responsible for:

- Using the camera controller section on the HS-1600T MARK II, set the white balance on the cameras as well as setting the output resolution
- Using the joystick and zoom knob on the HS-1600T MARK II, practice panning, tilting, and zooming in and out of the cameras.
- Using the camera preset buttons, practice saving camera presets for each camera.

### **GROUP C: Switcher Team**

In this activity, students in Group C will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Practice switching from one input to the next to get the hang of live switching during the production.
- Going through the switcher menu and figuring out each menu setting and its purpose.

### **FINAL SET UP**

When everyone is finished with their setups, Group B and C should join Group A to observe how to operate the audio mixer and test audio level. Students should connect different types of microphones to test how each sounds differently from the others. Students should also test how the headphones work with the Mackie Mix 8 audio mixer when doing audio commentary over the PGM audio from the game.

### LIGHTS, CAMERA, ACTION!

Now it's time to rehearse!

The team leader for Group A will operate the audio mixer and making sure the audio sounds good before the production begins. Two of the members will be acting as talent: one for an on interview and the other for on air commentary.

The team leader for Group B should be a Camera Operator. Using the HS-1600T MARK II, the Camera Operator will set up the shots and save them as presets. One camera should be a wide shot, and the other camera should be setup for close up shots. Two members of the group should stand in front of the cameras as talent for this rehearsal, so the Camera Operator can set up the shots properly.

Assign someone to be the Director, who calls out which input to cut to The Switcher Operator works together with the Camera Operator during the production The Camera Operator will set up the shots and when they are ready, they will tell The Switcher Operator, they can switch to that shot.

At the end of this activity, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

After the class discussion, ask each group to nominate a new team leader, or assign a new team leader for each group.

### PLANNING AND SETTING UP FOR THE EVENT

### **Objective:**

To begin planning for the first mobile production event on campus. Students will survey the location of the event and plan for where to mount cameras and set up their production equipment. Students should take notes during the location walkthrough, so they can better plan for the day they set up their equipment.

### **GROUP A: Camera Team**

In this activity, students in Group A will be responsible for:

- Figuring out where to place the cameras at the venue location.
- Figuring out where to run the cables and how long they should be.
- Setting up the PTC-140T cameras on the tripods.
- Using the camera controller section on the HS-1600T MARK II, set the white balance on the cameras as well as setting the output resolution
- Using the joystick and zoom knob on the HS-1600T MARK II, practice panning, tilting, and zooming in and out of the cameras.
- Using the camera preset buttons, practice saving camera presets for each camera.

### **GROUP B: Switcher Team**

In this activity, students in Group B will be responsible for:

- Figuring out where the FOH (front of house) location is.
- Acquiring a Run of Show document from the event planner so the switcher operator can plan out the pace of the show.
- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Practice switching from one input to the, following the Run of Show document.

### **GROUP C: Graphics Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to what is stated on the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.

### Now it's time to rehearse!

The team leader for Group A will be the Camera Operator. Using the HS-1600T MARK II, the Camera Operator will set up the shots and save them as presets. Set up to four presets per camera. Make sure you set up the extreme shot, and a couple of medium shots to ensure you cover the entire stage or subject you are shooting.

The team leader for Group B will be the Director, who calls out which input to cut to. A member of the group should be a Switcher Operator, who works together with the Camera Operator before The Camera Operator will set up the shots and when they are ready, they will tell the Switcher Operator they can switch to that shot.

The team leader for Group C will be play the PowerPoint presentation that has all the graphics to be overlay on top of camera inputs on the HS-1600T MARK II. The rest of the members of the group should be observing how the Director, Camera Operator, and the Switcher Operator are working together to switch the live show.

Students should do this rehearsal multiple times, so that each member of the groups gets a turn to be the Director, Camera Operator, Switcher Operator, and Graphics Creator.

At the end of this activity, have each team leader speak before the class and ask them each the following questions:

- Which part of the production was the most fun for your team?
- Which part of the production was the most difficult for your team?
- What would you do differently to improve your production value?
- After the class discussion, ask each group to nominate a new team leader, or assign a new team leader for each group.

### **RECORDING AND STREAMING YOUR PRODUCTION**

For this exercise, we will set up the encoder and recorder in the HS-1600T MARK II to stream and record your event. This is a continuation of Activity #3. Once you have everything set up and have finished rehearsals for the event, the next part is to practice recording and streaming the production.

The goal is to learn how to set up and operate the NVS-31, which is the encoder/recorder inside the HS-1600T MARK II, and stream to YouTube.

We will be breaking up into new teams as follow:

- 1. Producer Team: (Script Writing, On Camera Talent, and On Air Talent)
- 2. Production Team: (Switcher & Camera Operation, Graphics)
- 3. Media Production Team: (Creating b-roll clips and Live Stream Operation)

### **Objective:**

To teach students how to record and stream to YouTube live on the NVS-31, the encoder/recorder inside the HS-1600T MARK II.

### **Group A: Producer Team**

In this activity, students in Group A will be responsible for:

- Acting as on-screen talent for the practice production.
- Helping test audio and sound levels by doing microphone checks.

### Group B: Producer Team

In this activity, students in Group B will be responsible for:

- Setting up the PTC-140T cameras on the tripods.
- Using the camera controller section on the HS-1600T MARK II, set the white balance on the cameras as well as setting the output resolution
- Using the joystick and zoom knob on the HS-1600T MARK II, practice panning, tilting, and zooming in and out of the cameras.
- Using the camera preset buttons, practice saving camera presets for each camera.
- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Practice switching from one input to the next, following the Run of Show document.

### **GROUP C: Media Production Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.
- Configuring the NVS-31 and recording as well as streaming the production.
- Working with GROUP B to record and stream the production.
- Monitoring the stream quality on YouTube.

At the end of this exercise, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the Production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

Make sure to rotate groups for the next activity to ensure everyone gets a chance to take on a different role in the team.

Ask each group to nominate a team leader, and if they cannot decide, assign a new team leader for each group.

### **STAGE PRODUCTION**

Now that you've practiced your mobile production multiple times, you are ready to begin producing and streaming events on campus. This activity will focus on producing and streaming a stage production as a concert or play.

### **Objective:**

To produce and stream a stage production at school.

#### **GROUP A: Producer Team**

In this activity, students in Group A will be responsible for:

- Researching about the event.
- Casting an interviewer to ask questions to the cast members or musicians who will be performing.
- Writing questions for the interviews.

### **GROUP B: Producer Team**

In this activity, students in Group B will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Switching from one input to the next, following the Run of Show document.

### **GROUP C: Media Production Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.
- Configuring the NVS-31 and recording as well as streaming the production.
- Working with GROUP B to record and stream the production.
- Monitoring the stream quality on YouTube.

At the end of this exercise, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the Production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

Make sure to rotate groups for the next activity to ensure everyone gets a chance to take on a different role in the team.

Ask each group to nominate a team leader, and if they cannot decide, assign a new team leader for each group.

### ASSEMBLY

#### **Objective:**

To produce and stream a school assembly.

### **GROUP A: Producer Team**

In this activity, students in Group A will be responsible for:

- Researching about the event.
- Casting an interviewer to ask questions to the faculty members and students who are organizing the assembly.
- Writing questions for the interviews.

### **GROUP B: Production Team**

In this activity, students in Group B will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Switching from one input to the next, following the Run of Show document.

### **GROUP C: Media Production Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to what is stated on the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.
- Configuring the NVS-31 and recording as well as streaming the production.
- Working with GROUP B to record and stream the production.
- Monitoring the stream quality on YouTube.

At the end of this exercise, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the Production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

Make sure to rotate groups for the next activity to ensure everyone gets a chance to take on a different role in the team.

Ask each group to nominate a team leader, and if they cannot decide, assign a new team leader for each group.

### AWARD CEREMONY OR GRADUATION

Page 1

#### **Objective:**

To produce and stream an award ceremony or graduation.

### **GROUP A: Producer Team**

In this activity, students in Group A will be responsible for:

- Researching about the event.
- Casting an interviewer to ask questions to the students who are receiving the awards or valedictorian and salutatorian.
- Writing questions for the interviews.

### **GROUP B: Production Team**

In this activity, students in Group B will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Switching from one input to next, following the Run of Show document.

### **GROUP C: Media Production Team**

In this exercise, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to what is stated on the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.
- Configuring the NVS-31 and recording as well as streaming the production.
- Working with GROUP B to record and stream the production.
- Monitoring the stream quality on YouTube.

At the end of this exercise, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the Production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

Make sure to rotate groups for the next activity to ensure everyone gets a chance to take on a different role in the team.

Ask each group to nominate a team leader, and if they cannot decide, assign a new team leader for each group.

### **SPORTS PRODUCTION**

**Objective:** To produce and stream a sports game.

#### **GROUP A: Producer Team**

In this activity, students in Group A will be responsible for:

- Researching about the game.
- Casting an interviewer to ask questions to the coach and the athletes from the team.
- Casting an on-air talent to do play-by-play commentary.
- Writing questions for the interviews.
- Writing notes for the commentary during the game.

### **Group B: Production Team**

In this activity, students in Group B will be responsible for:

- Connecting the cameras and laptop to the HS-1600T MARK II switcher. Use the CAT6 cables to connect the cameras to the switcher and an HDMI cable to connect a laptop to the switcher.
- Switching from one input to the next, by following the Run of Show document.

### **GROUP C: Media Production Team**

In this activity, students in Group C will be responsible for:

- Creating lower third graphics for text overlay according to what is stated on the Run of Show document.
- Setting up the lumakey in the HS-1600T MARK II to overlay the graphics from a PowerPoint presentation.
- Configuring the NVS-31 and recording as well as streaming the production.
- Working with GROUP B to record and stream the production.
- Monitoring the stream quality on YouTube.

At the end of this exercise, have each team leader speak before the class and ask them each the following questions:

- 1. Which part of the production was the most fun for your team?
- 2. Which part of the Production was the most difficult for your team?
- 3. What would you do differently to improve your production value?

Make sure to rotate groups for the next activity to ensure everyone gets a chance to take on a different role in the team.

Ask each group to nominate a team leader, and if they cannot decide, assign a new team leader for each group.

