

## Competencies

- The four stages of production
- The necessity of pre-production planning
- The necessary operations during setup and rehearsal
- The production options available and their pros and cons
- The budgeting process
- The necessary paper work required in a production
- Responsibilities of specific personnel before, during and after the production

## Production Process

Although the actual production of a show usually takes place in the studio, this is only a small part of the overall production process. Long before anyone enters the studio, the program must be carefully planned and many detailed preparations completed. This involves work in a number of different steps that can be divided into four separate stages:

- Pre-production planning
- Setup and rehearsal
- Production
- Postproduction

Not every production will require work in each stage, nor is the same emphasis always given to each. For example, a live, daily news program will probably require little setup and rehearsal and no postproduction, while a music special that is video taped in segments and assembled later, would operate in all four segments.

## Pre-production Planning

Pre-production planning is essential for a successful show. It is the most important phase of the production process because it is the foundation upon which the other phases rest.

The pre-production planning for a program may begin days, or even months before the actual production date. The more complicated and involved the production, the more pre-production time is necessary. During this stage, the producer and director work with the writer to complete the script and develop the overall approach.

## Setup and Rehearsal

Just prior to actual production, the studio and control room must be prepared for the program. The amount of time allotted for setup will be determined during pre-production and usually depends on the complexity of the production and size of the budget. The various crews should work simultaneously, whenever possible. The stage does not have to be completely set before the lighting and audio personnel can do their work.

While the studio floor is being set for the production, a similar operation is occurring in the control room. The video engineer must white and black balance the cameras, and be sure they are in phase so the cameras will create an identical image. The monitors should be aligned using color bars and all the switcher functions should be checked. The intercom system should be checked also, remembering that the ambient sound level will probably change in the studio when the program is begun, especially if it is a musical production. Videotapes should be labeled and loaded into the VTR's. On the audio side, the control console should be checked for correct levels on each input. Audio patches to each recorder must be made, and just before the production begins, a 1000 Hz tone along with color bars is recorded on each videotape.

Once the studio and control room are set, the rehearsal begins. It is during the rehearsal that all the elements should finally come together. While the director works on perfecting performances and camera shots, other members of the production team must also watch for problems in their respective areas. Audio might reposition a microphone, while lighting might need to move or adjust a lighting instrument. The key determinant is how the production looks on the TV screen, so a floor monitor is essential during rehearsals.

## Production

Before the days of videotape, all programming was done live. The show started at a specific time there was no time to stop and re-do a segment. Videotape allows the director far more flexibility. The director has several production options.

### Live vs. Video Tape

Going live is a unique combination of the very best and the very worst that television production has to offer. Because there is no postproduction and videotape recording, editing expenses are deleted. If you have an option of producing live or on tape, consider the trade-offs involved. What is gained in immediacy and impact is lost in the amount of control you can realistically expect to have over a live production.

### Live

For a program that is broadcast live, production is the final phase. Most news, sports coverage, and other “immediate” programming are produced live. On the plus side is the immediacy that is available only on live television.

## Videotape

Videotape is by far the most commonly used production mode and offers the producer different recording approaches:

- Live on tape
- Recording segments
- Single camera/VTR
- Multiple camera/multiple VTR

The recording approach you use should be based on the show's production requirements, the facilities available, and the time and money available.

Some times a program may be produced “live on tape.” While this may seem to be contradiction of terms, it means that the program is produced in real time, and recorded for future broadcast. Only in case of a serious blunder, is the tape stopped and edited.

The recent development of sophisticated non-linear editing technology permits the use of videotape to capture the production and then edit it on computers. Complex productions can be produced in short segments, which are later edited together. Taping in segments allows for a high degree of creative control. Some productions are taped with only one camera and use motion picture production techniques.

## Postproduction

Programs that are produced on videotape for later editing require a postproduction phase. At this time, the director supervises the editing either tape-based or non-linear. Postproduction can be a simple matter of assembling a few completed segments or a highly complicated procedure combining hundreds of individual shots. One of the major advantages of postproduction is the creative control it offers the director in the selection of both shots and performances. In many instructional or industrial productions, postproduction provides for the addition of visual elements, such as graphics or taped segments. Remixed and additional audio can be added during postproduction or the existing soundtrack can be modified.

## Production Mode

### Studio vs. Location

Often the show determines whether it is produced in the studio or on location. Studio work offers you the maximum control over most production variables. Some shows, however, benefit from outside production, especially those that require sets, props, or locations that cannot be easily duplicated in the studio.

## Budgets

A budget is a detailed estimate of the costs involved in producing a program. A program budget, like a household budget, is only as useful as the time and care you spend to develop it and how strictly you follow it.

Television budgets are patterned after motion picture budgets. Most program budgets are divided into two sections:

- Above-the-line costs (Creative personnel)
- Below-the-line costs (Production expenses, technical personnel and facilities)

A program with expensive performers can become “top heavy” while a show with lavish sets and costumes can become “bottom heavy.”

You will need to research your costs carefully to find out exactly what your expenses will be. All production studios print a rate card, which lists facilities and their costs on a per-hour and per-day basis. Equipment and materials suppliers will also quote you costs on such items as videotape, construction materials and production equipment. If you are shooting on location, costs for meals, transportation and lodging must also be computed.

The two basic determinants of a budget are accurately listing everything you will need, and how long you will need it. You must accurately estimate the time that you will spend in the four phases of production before you can figure your costs. Once you have figured all your costs, add another 10 or 15 per cent for “contingencies.” This pad will come in handy for emergencies or cost overruns.

A budget plays a very important role in determining the final program. Although the budget may appear like only a series of numbers on a sheet of paper, in reality the budget determines exactly what you can or cannot do from a creative standpoint. There is only one hard and fast rule about budgets--they are never large enough. In certain circumstances, formal budgets are not required, but you should always think in terms of the essentials of budgets; time and money. As you become familiar with building budgets, they will become easier to prepare.

## Paper work

The program producer must coordinate the many complex elements that go into a program. There is no way to keep it in your head, so you must begin to work out the production scheduling and organization on paper. The production book is the program “bible.” It is usually a loose-leaf binder containing all the paper work for the production.

## Master Production Schedule

This schedule is a spreadsheet designed to give you an overview of the entire production. The master schedule includes every production operation that must be completed: what is to be done, who is to do it, and when its completion is expected to be completed.

A PERT chart is sometimes used and a critical path method is utilized. A plot of the critical path shows what operations must be completed before other tasks can be started, and what operations can be done at the same time. Using the critical path method, the start-to-finish time of a production can be shortened.

A shoot schedule lists the program's rundown of activities in the sequence they are done. This is easy for live or live-on-tape production, but it becomes more difficult if it is taped out of sequence.

## Facilities Sheet

The "FAX" sheet lists all the equipment necessary for the production, and when in the production process it is to be used.

## Call Sheet

This form is usually reserved for performers, but sometimes the crew is listed. It acts a notice of work times.

## Personnel

As with any industry, titles and job descriptions have developed as the industry becomes more complex. The performing arts field has modified titles and job descriptions from the motion picture, radio, TV, and the stage.

### Producer

The producer is responsible for finding and developing the production. He develops the budget and tracks the money flow. He usually hires the writers, talent, and most importantly, the director.

### Director

The director is responsible for the entire production including all technical and creative aspects. The director has the responsibility for the production and the authority to make all decisions. The director's decision-making skills and people skills are very important. He must have a thorough knowledge of the technical aspects of the production. He is in charge during all phases of the production process and during the actual production, he call the shots.

## Assistant Director

The primary job of the assistant director is the timing of the production. During the rehearsal, each segment will be clocked. These individual times added together to calculate the total time of the show. If the total time is longer or shorter than the allotted time, lengths specific segments must be adjusted. During the production, the segments are also timed and compared to the rehearsal times. The remaining segments are then adjusted to complete the show at the proper time.

The assistant director also assists the director in working with the talent and crew. During the show, the assistant director will give advance cues to the crew as to what they will be doing next. Finally, the assistant director should be ready to take over at any time. The AD is the standby director.

After the show is over, the assistant director is responsible for clearing the control room of materials used for the show.

## Floor Director/Manager

The floor director has two major areas of responsibility. The floor director must work with the talent and also must be in charge of all of the activities in the studio.

The floor director must be able to work with many types of people--from the professional to the first-timer. Care must be taken to make the talent as comfortable as possible and understand what is expected of them.

The floor director is also responsible for everything that is happening in the studio. They are the eyes and ears of the director in the studio. The floor manager is the coordinator of the varied activities that are going on. During a production, they must remain alert to what is happening all around them.

After the production, the floor director supervises the striking (removal) of the set and communicates with the talent.

## Floor Assistant

Under the supervision of the floor manager, the floor assistant is responsible for changing sets, hanging and aiming lighting instruments, and assisting the audio engineer. During the production, the floor assistant helps the cameraperson by keeping the camera cable free of the dolly wheels. After the production, the floor assistant helps with the strike.

## Camera Person

The cameraperson is responsible providing the shots requested by the director. Anticipation of what will be coming next in the production is very important. They must be aware of what is going on around the studio and should not fix their stare at the viewfinder. Before the production, the camerapersons may assist the floor manager in preparing for the production. After the show, they will also assist in striking the set.

## Lighting Director

The lighting director is responsible for supervising the hanging and aiming the various lighting instruments needed for the production. They may also be called upon to design the lighting. During the production, the lighting director is responsible for making any adjustments to the instruments and controlling the intensity. However, after the production other crewmembers normally remove the lighting instruments.

## Audio Engineer

The audio engineer is responsible for selection and placement and connecting of microphones. During the rehearsal, audio levels will be set and balanced. During the production, the audio engineer will maintain proper levels and mix the various audio sources.

## Video Tape Recording Engineer

Before the production begins, the recording engineer is responsible for acquiring and labeling the tapes to be recorded and played. Color bars, slates and audio tone are recorded prior to the start of the show. Audio and video signals must also be patched. During the production, the recording engineer cues and rolls tapes as requested by the director.

## Technical Engineer

The engineer is responsible for operating and adjusting the technical equipment. During the rehearsal, all equipment should be inspected to see that it is operating correctly. Before the production, the cameras should be black and white balanced. The system should also be phased so that each piece of equipment is providing the correct color. During the production, the engineer will view the waveform monitor and adjust the iris for the proper video levels.

## Technical Director

During the production, the technical director operates the production switcher. The “TD” follows the commands of the director as to which input to select and what transition to use.

## Graphics Operator

The graphics operator is responsible for creating the messages on the character generator and graphics computers. Information from the assistant director is entered before the production. Following the directors’ commands, various messages and sequences are played back to be keyed over the video by the technical director.