Chapter 4: The Productions Process

The Production Process is the term used to describe the different steps involved in producing a final video or multimedia project. There are 3 major steps in the process: Pre-Production, Production, and Post-Production. Each step is crucial to the step it precedes. If the Pre-Production stage is overlooked or done poorly, both Production and Post-Production will be directly affected. Therefore, it is important to address all of the stages with care.

Pre-Production

Pre-Production is the planning stage of the production process. Planning a video can make or break your final production. The first step in planning a video is generating an idea. The idea must be attractive enough for the client to consider moving on to the next step of the process: the budget.

The cost of the production will depend on a few factors. If the video is intended for broadcast on a television station, you will want to use a broadcast videotape format to accommodate this fact. If it is intended for home viewing, you may find it more economical to use a good prosumer format. If the client wants extras such as 3-D animation, you must account for the large extra cost involved in this expensive addition.

Calculate the amount of time that the entire video will take and allow yourself a fair wage for the time you put into the video. Remember, broadcast formats may be overkill for a production that only requires a prosumer format. You may lose a client at this point if your budget does not fit into their own budget. But do not underestimate the budget for the video. You don't want to go back to the client later on asking for more money.

Once budget approval is done, the idea must be translated into a script or screenplay. After the screenplay is written, storyboards can be drawn to give a visual representation of what the video will look like. For a corporate video, the storyboards are used to give the client an idea of how the video will look. If the client does not like a certain part, this is their chance to change it before the video is shot and edited. It is important that the client clearly understands the storyboards to avoid re-shooting later.

Once approval has been given, the equipment must be booked and gathered, scheduling needs to be completed, crews and actors need to be hired, and locations for shooting need to be established in order to prepare for the actual “production” of the video.

DID YOU KNOW?

Hayden Christensen who starred in “Life As A House” and played Anikan Skywalker in “Star Wars” episodes 2 and 3, attended high school just north of Toronto at Unionville High School. He was a graduate of the Arts York Drama program there in 1999.
Pre-Production Tools

Storyboards and scripts are two of the most important tools used in Pre-Production. They are the visual representation of the video put onto paper. They also convey what is suppose to happen in a video. A good storyboard and script should be so clear that anyone could take them and complete the entire video exactly as it was intended. The following will outline how to correctly fill out each of these production tools so they can be used to their fullest advantage.

- **Production Title:** the name of your video production
- **Total Length:** how long the total video is that you are storyboarding
- **Video Information:** the pictures that are drawn to represent each shot
- **Created By:** the person that drew this page of the storyboard
- **Audio Information:** the sounds that are heard during each shot
Parts of a Storyboard

**Shot Number:**
This box contains the shot number in order of occurrence.

**Title:**
Every shot has a name so they can be referred to in an alternate way. Shot #1 tells you nothing but a title can give a brief description for improved understanding.

**Time:**
This is the length of the shot measured in the standard video time notation or timecode (hours, minutes, seconds, frames, or 00:00:00:00). The first number represents the start of the shot while the last number indicates the end of a shot. The next shot begins with the same timecode that the last shot ended.

**Transition:**
How the current shot is going to change into the next shot. Examples are cuts, dissolves, and wipes.

**Picture:**
This section contains the drawing of what the shot is suppose to look like.

**Special Instructions:**
This section contains any important information that is needed regarding a shot, like type, movements, etc.
The Video Script

The script used in a video production is somewhat different than screenplays. This script is part of a series of storyboards and is not intended to be used on its own. For each square or shot in a storyboard, there is an audio counterpart which describes what is heard during each shot. Therefore, the number of shots in a video storyboard should have an equal number of sections in the script. The script corresponds to the video start and end points of each segment and contains the audio type, and a description of the audio. This is where you would write in the dialogue between actors and actresses, any narration that may be occurring, what sound effects are to be added, or the type of music to be heard.

There are four types of audio that can occur in a production:

1. Dialogue
2. Narration
3. Music
4. Sound Effects

Dialogue is any spoken parts of the script that are captured while the camera is videotaping. This would include two people having a conversation in a room or a reporter describing the scene of news a story.

Narration is any spoken parts of the script that are recorded in the editing process, after the video has been completed or is in the process of being completed.

Music is any of the musical parts that are added into the video in the editing process. If you are creating a music video, then the lyrics from the song should be written into the description section.

Sound effects are also added in later on in the editing process and can be used to enhance the scene.

Be sure to understand each of these audio types and describe them as accurately as possible in your storyboard. The storyboard not only helps you in the production stage but will come in handy during post-production as well.

Parts of the Video Script for a Storyboard

Type of Audio:
Dialogue, Sound Effect, Music, or Narration

Audio Description:
Describe the audio that is being heard during the shot

Music: Upbeat

Narration: “by dropping her tape measure over the side”

SFX: Tape measure hitting ground
Screenplay Format

In the production industry, there are many different formats used for screenplays. Each one has its own distinct features that come with advantages and disadvantages. When creating a screenplay for use in school, it is important that the format be easy to use, have clear divisions, and have identifiable parts.

The first page of a screenplay is the title page. The title page contains just 2 pieces of information - the title of the movie and the author. Each is centred on the page with no other pictures or text on it.

The core pages of the screenplay is where all the descriptions of the scenes and dialogue are. There is a specific format that must be used when writing a screenplay. This format is outlined on the next two pages. It is a professional industry standard format. Make sure you understand each part of the screenplay and use them correctly.

### Production Notes

- Screenplay Format
- Title Page
- Characters Page
- Synopsis Page

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FADE IN:

EXT. ANNAPOLIS, MARYLAND HARBOUR – DAY

Sailboats, yachts drift to nowhere in particular.

Quaint shops, cafes, ice cream parlors overflow with CUSTOMERS. The Harbor Queen loads a line of TOURISTS.

A motorboat tips by. The backwash sprays onto the dock, adds to a large puddle. Something flashes silver deep within the puddle and then is gone.

EXT. NAVAL ACADEMY – DAY

Savannah-style duplexes—

A brass plaque announces the home of Captain John Ketch. The front door swings wide. JONAH, 5, exits with his mother, ANNA KETCH, 30, flaming red hair and joy in her eyes, in matching yellow slickers and rainboots.

Anna kneels to tie her son’s boots, and Jonah throws his arms around her. In one hand, he carries a small, metal box, the letters J-U-S-N-A-K engraved on top.

JONAH

Mommeee.

Anna returns an extra long hug, then tousles his hair.

ANNA

Tied tight as a frigate.

Jonah traces the reddish, anchor-shaped birthmark on the back of her hand with his finger.

ANNA

My destiny. The sea.

Anna glances at enlarging thunderheads, grins.

ANNA

Puddle-jumping weather ahead!

(to Jonah)

Raindrops fall. A few at first. Then more steadily.

Anna lifts her head toward the sky. The downpour soaks her face. Jonah irritates her. She laughs.

Screenplay courtesy of Arla Bowers

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Core Pages of the Screenplay

The core part of the screenplay contains many different parts that are outlined in the diagram to the right.

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The crew must also be hired. This includes every member from make-up and costumes, to lighting and camera operators. Once all of these components are set and the timelines are worked out, scheduling can begin.

### Scheduling

Planning out what is going to be shot in each location and when, is an important task. Time is money and the longer a crew spends at a location, the more money it is going to cost. By planning the shooting schedule to cover as much as possible in one location, the producer can save time and money that may be needed later on in the production. A good schedule will make everything run as smooth as possible with few unforeseen interruptions.

### Location Scouting

All of the locations that will be used during the production stage need to be located before the actual shooting can begin. This takes time and can be very frustrating if the right place can’t be found. Locations are important to the overall feel of the production. Permits to shoot in some areas may also be needed.

### Hiring

All of the actors and actresses for a production have to be auditioned which is another time consuming process. The director and producer usually work together to get the best cast possible that fits within their budget.
Production

The second stage in the production process is called Production. Production is when you actually videotape or collect raw footage for your video. This stage usually involves more people than any other part of the process. Not only do you have the entire production crew, but you also have your talent present. On large scale movie productions, there are also outside groups such as caterers on the set making it even more confusing.

Production is also the most expensive part of the process. A large number of people means that a high amount of money is being spent on wages. Other expenses include equipment rental, hydro, trailers, airfare, food, videotape (film), and other production costs. The longer the production stage goes on for, the higher the final bill.

An average movie made for theatre release costs $40 million while television shows are much cheaper. The first television show ever to break the $1 million threshold per episode was The Young Indiana Jones Chronicles. Over the course of 40 weeks, the cost of that television show equaled the average cost of a theatre movie with less potential of making a large profit.

Things To Remember During Production

There are a few hints that may make the videotaping of your production run a little smoother. Following these tips will make your production time much shorter.

Rehearsing

Before you start shooting a scene or segment, have the talent run through the part a few times. As the talent is rehearsing, the director should go over all of the different jobs and make sure they know exactly what they are doing. By the time the rehearsing is done, everyone will be ready to go and the shoot will take less time.

Set Up Your Shots

If you are shooting your scene or segment near a window, make sure that the camera is not pointing at the window itself. If it is and your lighting director has not set up any lights, the talent in front of the window will be completely dark.

Another key point is to white balance the camera in that light. If you do not white balance the camera, everything will have a blue tinge to it. This is because natural sunlight is blue, but you are shooting indoors. The camera adds blue to the picture when indoors. Always white balance the camera so that it knows what the color white looks like in each new lighting situation.

When you set up your shots, make sure that you have all of the angles covered. You may need extra footage later on to make a scene more interesting. Sometimes having an extra camera will catch things that one camera can't. If you have a number of angles to select your final shots from, the video will look much better and will be more interesting to watch. Don't be afraid to use multiple angles and cameras.
**Take Extra of Everything**

When you go out on a live shoot don't be cheap with the amount of things you bring with you. So many unexpected events can happen that you want to be prepared for anything. An entire shoot can be ruined because something as simple as a microphone will not work. To prevent this from happening, pack extra of everything. This includes extra microphones, cables, batteries, stands, and even another camera if you can.

You may think you are being too cautious but the first time something goes wrong you will be thankful. This is especially true for corporate work when they are paying you to videotape. It looks very unprofessional if you have to cancel a scheduled shoot because of faulty equipment!

**Schedule, Schedule, Schedule!**

A well planned production always has a well planned schedule. In advance of a shoot, all of the parties involved should be notified of dates, times, and what they need to bring with them. This is true even in a school setting. Make sure all of your classmates realize when a shoot is taking place so they can be fully prepared on that day.

Scheduling also gives you a visual representation of how long the video will take to produce. If you find that there is not enough time to videotape everything you may need to consolidate your shoots to make them more in depth and longer, or you may have to alter your storyboards and scripts.

Remember to leave enough time for the Post-Production stage of the process. Editing your video will take some time so plan out your video well! The more time you have left over for the final stage, the better your production will be.

**Post-Production**

Post-Production is the final stage of the production process. Post-production can sometimes last longer than both pre-production and production. It can take many days, even weeks just to watch the raw footage that has been collected depending on the length of the project.

There are three different aspects to this stage:

1. **Video and Audio Editing**
2. **Soundtrack Composition**
3. **Marketing & Advertising**
Video and Audio Editing

Edit Decision List

Editing can be a very long and tedious process if it is not planned out. That is why editors, directors, and producers use what is called an Edit Decision List or EDL. The EDL lists the timecode for every piece of raw footage that has been collected for a production. It can be very hard to decide which shot to use especially when you aren't sure exactly where each one is. The EDL will give you the exact location so that any shot can be located quickly. This will save many hours of searching for shots that you want to use but don't know where they are.

How To Use the Edit Decision List

The Edit Decision List has six main parts to it:

1. Time In
2. Time Out
3. Description
4. Length on Master
5. Order
6. Used

The Edit Decision List (EDL) is used to log all of the raw footage that has been collected during the production process. Each shot has its time listed as well as a brief description so it can be located easily during the editing process. The length on the final master tape is estimated as well as the order.

Once the shot is used, a check mark is placed in the last column to signify that it has been used. Shots not being used simply have dashes put in these boxes.

Computer Graphics

Computers have become a permanent part of both video and audio editing. They are used to control the editing decks for precise frame accurate editing, 3-D animation, and titling.

Animation is used in many television shows and movies such as Jurassic Park, King Kong, The Incredibles and Monsters Inc. The first movie to use computer generated animation was Tron. It featured sequences where motorcycles raced along a grid in a game-like fashion.

The Edit Decision List (EDL)

<table>
<thead>
<tr>
<th>Time In</th>
<th>Time Out</th>
<th>Description</th>
<th>Length on Master</th>
<th>Order</th>
<th>Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:01:05:00</td>
<td>00:01:11:12</td>
<td>Shot of sun setting over a lake</td>
<td>5 sec.</td>
<td>12</td>
<td>✓</td>
</tr>
<tr>
<td>00:01:11:12</td>
<td>00:01:18:22</td>
<td>Tree by the lake with the sun in the background</td>
<td>0</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
This has led to widespread use of computers in both television and film. The first fully computer animated film was released by Disney and Pixar in November of 1995 (the same company to use animation in Tron). Toy Story brought computer animation to the forefront of video and film.

The computer software that was used for the TV shows Sea Quest and Babylon 5 is also used in schools across the North America. Lightwave 3-D is capable of creating broadcast quality animations for video producers. It is recognized as one of the top animation programs available along with 3D Studio Max and Maya. These 3 programs are extremely powerful but are very complex to learn.

In a high school setting, simple computer generated titles can be created using programs such as Adobe Photoshop or Elements. Many editing programs have titlers built in like Adobe Premiere and Final Cut Pro. Live Type for Final Cut Pro is one of the more advanced programs that allows the user to add motion to their titles to make them more interesting to watch.

**Video Editing**

The most creative part of the production process is usually the videotaping. This is because of the different angles that can be used, camera movements, and shot composition. Editing the video can also be very creative.

There are many styles of editing that can be employed to make a video more interesting. It is up to the producer and director to decide how the final video will be edited. Are the cuts going to be fast-paced giving the video "action" or are the cuts going to be slower to give a more tranquil feeling?

The answer to these questions depends on a few key points. You need to know what type of production you are trying to produce (action, romance, drama, etc.), and who the target audience is (young children, teens, adults). The style of editing you select will depend on the answers to these two critical questions.

Once your editing style has been established, you can then decide on your editing method. Hopefully by this point all of your computer graphics and animations are completed and your EDL is filled out. These are important to have done so that editing will be efficient.

The Editing Method is the system that you are using to edit your final production on. There are two methods currently available:

1. Linear
2. Non-Linear
At this point, the shot can be trimmed to the required size and put anywhere on your master. Since the transfer is digital, there is no signal loss when making a hard drive master.

The advantage of this system is that you can edit one section together and then go back to work on an old section. In the end, all of the sections can be pieced together in whatever order you want. If you do not like the order, you can then change it quickly. The same applies to any other sequence. If you do not like a particular shot or if you left something out, it can be changed quickly.

With tape, it was impossible to add a new shot in-between two others because the rest of the tape would have to be re-edited from that point on in order to make the needed space. If you were working with a computer controlled system with an Edit List, this may take quite a bit of reprogramming as well as re-performing the edits from that point forward.

An off-line system with no computer involved would be even worse. You would have to put in your new shot and
Soundtrack Composition

The soundtrack of a video is just as important as the visual scenes. A good soundtrack has many different parts to it. In post-production, the most significant part is the music. The parts of a soundtrack are summarized in the Audio Production chapter.

Once the video has been completely edited, the music can then be composed for the production. Contrary to what most people think, the music is not written before the video is done, but rather afterwards. The music composer is usually hired during the pre-production stage. They begin working on the music as sections are edited. In a short corporate video, it may only take a few days for the entire musical score to be written. Large scale movies require months.

The composer sits in front of a television set, usually with a keyboard and some recording devices. As they watch the video, they get a sense of what mood is being portrayed. They then match the music to the video. This process continues for the entire video.

Once the music is written and approved by the producer and director, it is recorded. Again, small productions may require the composer to play all of the instruments on a keyboard and record the audio on DAT (Digital Audio Tape). However, movies tend to complete this process a little differently.

Audio Editing

Audio Editing is just as important as the video editing of a production. It is crucial that all of the audio is heard and at the appropriate levels. The most dominant audio is usually the talent speaking. You want to make sure that your audio levels are high enough for people to hear without having to crank the volume up to some ridiculous level.

On most editing VCR's, there are level meters for the audio. You want your levels to peak just barely into the red zone. On professional series recorders, the needle should peak just below the red zone. If you start to go higher, the audio will become too distorted. Another point to remember when editing audio is that there are a many different soundtracks available to use. Computer editing programs like Premiere give you up to 99 audio tracks to work from.

When you edit your audio remember a few key points. Do not cut off anything that is being said in the middle of a word. This sounds very awkward. Also, do not cut music off. Always use an audio mixer to properly fade the music out when editing with tape. On computer systems, simply use the fade tool. A sudden cut sounds very unprofessional so avoid doing this as much as possible. Always maintain good audio levels and clean sound so that your productions sound just as good as professional films.
One of the most famous movie composers is John Williams. He has composed soundtracks for such movies as the Star Wars Trilogy and the Indiana Jones Trilogy. Once he composes a soundtrack, the musical notation is written out and given to an orchestra. The orchestra then plays their parts while watching the movie on a film screen. The performance is played over and over until it is correct. The final recording is then taken to the recording studio for the final mix and synchronization (using timecode) of the music. When the final film is released in the theatres, the sound is unbelievably clear.

The musical soundtrack adds another dimension to your video project. Don’t forget about the importance of good quality audio. If you can, try to get a talented student at your school to compose a soundtrack for you. It will be different from all of the other projects and will give you a sense of what it takes to make a real video production.

Marketing and Advertising

Once the video has been completely finished, it is time for the mass marketing and advertising phase. What good is a video or movie if nobody knows about it? That is why people advertise.

Movies are marketed and advertised to various degrees. Almost every new movie produces television commercials to entice people to come out to their production. They also produce trailers which are the extended commercials we see at the start of every movie at the theatre. Most people refer to them as previews. Both of these methods are heavily used to attract audiences. Unfortunately, some television commercials and trailers reveal too much of the movie making it less enjoyable when you actually get to see it.

Another marketing scheme is to produce movie posters, banners, and standup displays. We see these as we enter a movie theatre. These advertisements are designed to capture our interest at a quick glance. A good poster or standup display can trigger a reaction within a person that may make them go to see the movie.
Videos need marketing as well. Music videos get played on music video channels because of marketing. Videos are advertised in magazines, newsletters, and newspapers all of the time. Once you have established who your market is, you then find a publication that is aimed at that group. Your small ad could generate a large number of sales.

As you can see, marketing and advertising plays a major role in the post-production process. If done properly, the movie or video will be a success not only in the theatres, but in the toy store as well. All the more money for the next production!

The creation of toys to support the marketing of a movie has also become very popular. We have seen some of the greatest movie characters turned into toys.

The best example of toy marketing would be the Star Wars toy collection. They had an action figure for everyone, even characters that only appeared on screen for a few brief seconds. But every child had to have every action figure from the movie. They even had carrying cases, lunch boxes, models of the spaceships, T-shirts, and colouring books. The marketing campaign was so successful that it was carried out for each of the three movies. Even today, three decades since the first movie was released, Star Wars action figures can still be purchased.