Dental Special Effects Workshop

Hosted by Cory Hunt of Nightmare Playgrounds

Disclaimer: Please consult your dentist before wearing a dental special effect. We are instructing only in ways we create prosthetics. Wear and create at your own risk, we highly encourage the consultation of a dental professional before using these devices. Long term wear can alter the position of your teeth; these are not for dental purposes but for infrequent and short term use.

GOALS OF THIS CLASS:

1) Learn an easy and efficient method to produce a dental prosthetic.

2) Get haunters familiar with the process and give them a safe means to adapt this process to their needs

3) Become familiar with the materials, sculpting techniques, and types of prosthetic dental appliances

4) Gain understanding of the types of special effects dental appliances (their benefits and limitations)

5) Have fun and get a set of teeth to nibble your prey with.

Things to understand about this process:

- Acrylic in quantities larger than half a garden pea can get hot enough to permanently damage the nerves in your real teeth and gums. Sculpting fangs directly on your teeth or someone else's can result is permanent damage. Also sculpting directly on the teeth may result in an emergency procedure where a dentist has to cut the acrylic from around your dead teeth. Not fun.
- Monomer can melt plastics and has powerful fumes. Do not work with it unless in a properly ventilated area on an appropriate work surface.
- The use of a Dremel rotary tool is not necessary. Hand filing and shaping works just as well but is slower. As with the use of any power tool, proper eye protection and safety precautions should be taken.
- Never force an appliance on your teeth. If it doesn't seat smoothly and comfortably find where the issue is and fix it. Sometimes it is as simple as shaving out a small portion where the acrylic is pushing against the teeth.
- The process we are showing you is one of many that are out there. Some are more expensive and some are less. Never sacrifice safety for expense.
- These appliances can also be combined with silicone and latex facial appliances to make ripped away lips, hair lip/cleft pallet effects, or extended teeth that hide the real lips. Experiment, learn from professional SFX artists, and play with new materials. Again, safety first.
- These appliances can be very strong. They can be made so that food and drink do not affect them. The risk of choking does exist if they malfunction. We don't recommend using them for biting anything. For example: food, people, small furry animals...etc.
- Biting people is not sanitary. Beyond that, exchanging of bodily fluids poses a great risk for transmission of deadly and horrific diseases. Don't be dead.
- Please always wear gloves when working with your teeth. Maintain good hygiene and sanitary conditions. Disinfect your teeth before working with any tools and materials. Always disinfect your tools after you are done with them and before someone else uses them. It is also a good idea to disinfect your tools before you use them in case the other person forgot.

TERMS YOU SHOULD KNOW:

Impression- The negative space formed by surrounding the object in a casting material. It can also be called a mold.

Positive- Also called the cast or model. This is the piece that was formed by filling the negative space of the impression/mold.

Alcote Separator- Also called liquid tinfoil. This is a liquid barrier that dries and creates a barrier between the positive and the material being sculpted on it. Typically used to seal porous positives this also works to create a film that eases release for nonporous ones. In our case it helps keep the monomer (see below) from reacting with the plastic positive.

Acrylic Dental Powder- This powder is mixed with monomer. It goes through several stages of reaction during polymerization. I call them: 1) Liquid 2) Paste 3) Dough 4) Solid.

Note: Polymerization is just a fancy way of saying the combination of like or unlike materials to form a more complex product, typically through a chemical reaction.

Monomer- Also known as Methyl Methacrylate Monomer. This is the liquid additive that causes the Acrylic Powder to go through the previously mentioned stages to become a hard substance. It has extremely fast evaporation and cannot be stored in plastic; it will eat it. Highly potent fumes, proper ventilation is required when using it.

VPS Putty- This is a fast reacting binary putty that makes an impression with little shrinkage over time. For our purposes in making fangs the shrinkage is almost unnoticeable from 6 months to a year.

Polymer Clay- A plastic based sculpting clay that can be permanently hardened by baking it in an oven.

Friendly Plastic™ -A plastic that has a low melting temperature. It comes in bead form or in strips of varying color and metallics. The beads are an off white color. For purposes of what we are doing, bead form is the most economical and allows painting and staining.

Alginate- Powder that water is added to create a viscous material. It is ideal for making molds of items where moderate to high levels of detail need to be reproduced. Actually made from algae.

Binary Plastic- A two part compound, base and catalyst, that react when mixed together to form a plastic. This is also a polymerization process.

Cutback- A term used to describe a recess in the piece being molded or sculpted on that will get stuck inside of a narrow space preventing the release of the mold or the substance sculpted over the cutback. Imagine a ball hitch on a truck. The trailer's concave hemisphere that surrounds the tow hitch on the vehicle surrounds the ball. At the base of the ball hitch is the narrow neck that the trailer's female hitch surrounds and locks down on. The recesses of the neck on the ball hitch would be an example of a cutback.

Basic process: Step by Step

Impression:

1. Brush teeth, sterilize mouth

2. Mix impression material thoroughly

3. Place impression material in impression tray

4. Seat tray with material over teeth. The more impression material you have over the front of your teeth and gums the more area you have to sculpt on top of.

5. Wait until the impression material cures (if the material you are using has a cure time)

6. Close your mouth, blow with your lips closed to help break the seal the material has made around your teeth. Gently but firmly pull the tray off of your teeth.

7. Mind the drool.

8. Rinse out the negative cast (impression) of your teeth. Dry the negative carefully using cotton swabs or the twisted tip of a paper towel.

9. Examine the impression and make sure that there are no major deformities or bubbles.

Casting:

1. Place the impression on a surface or in a container to prevent casting material from pouring on unwanted surfaces

2. Mix the casting material

3. Pour the casting material into the impression in the back teeth portions (molars). This allows the material to flow into the front and side of the impression decreasing chances of bubbles forming.

4. Allow positive cast to cure fully.

5. Carefully remove the positive from the impression tray. Examine it for deformities that would interfere with building the teeth on it.

6. If you prefer, make a base for the cast of your teeth for ease of work (creates a stable area to hold and strengthens the positive cast).

Design your teeth:

1. Consider the layout of your prosthetic teeth, the size of your appliance, and how much speech and normal mouth movement is desired. Also consider how realistic or believable you would want your prosthetic.

2. Sculpt your prosthetic teeth. Shape them so they fit with your design and will be laid out in the pattern you desire. I find it helps to have a small swatch of masking tape to hold them in line on the table so they don't get knocked about.

3. If you are doing individual prosthetic teeth set into gums: bore small hollow spots on the back side of the prosthetic teeth where they will be inserted into the pink (gum) acrylic. This will help them get locked into the gums.

4. If you are shaping a section of teeth shade acrylic into teeth (by carving them from a piece of dental shade acrylic molded over the positive cast) and shaping gums over them: make sure you have the prosthetic teeth shaped how you want. Alterations are best made before you have the pink acrylic setting up around the prosthetic teeth.

5. If doing step four, shave the teeth shade acrylic back slightly so you can sculpt the pink (gum) acrylic around the teeth. This will make a believable gum line and reduce the

depth of the appliance. Having an appliance that is thick inhibits speech and makes the lips protrude outward. If protruding lips are desired plan for that as well.

Making your appliance:

1. Use clay if necessary to fill in problem spots, cutbacks or add space around the teeth of the positive cast so the acrylic doesn't lock onto the positive cast.

2. Make sure you don't sculpt your prosthetic teeth and gums into cutbacks on the positive cast. You may have to destroy your positive cast to remove the prosthetic appliance if you do.

3. If talking is important: keep the acrylic relatively thin and in a shape and direction parallel to the teeth. Again, the thicker your appliance the more pronounced your lips will be.

4. If inserting your prosthetic teeth into a gum line individually: have them laid out how you want them. Have them set up by your positive. Then place the pink acrylic on to the positive and insert the teeth into the gums. Pushing the teeth down into the acrylic forms the raised ridge that looks like where real teeth are inserted in to the gums (the scalloped ridgeline).

5. Examine the prosthetic teeth and gums. Fill in empty spots if necessary with the shade of acrylic appropriate. It is easy to add acrylic to the acrylic on the positive cast. A better bond is formed between already hardened acrylic and the new acrylic setting up if you put some monomer on the acrylic that is already cured AND the new acrylic you are adding to the appliance.

6. Shape the appliance how you want it. Buff the appliance with a nail file or buffing wheel/sanding wheel or bit of a Dremel. Take your time; make sure it is how you want it.

7. Test fit the appliance; do NOT force the appliance. Fix it if needed.

8. Stain the teeth and gums for realism or gruesomeness.

9. Coat with clear.

10. Let cure. Again check for fit.

11. Scare the pee out of people.

Nightmare Playgrounds

Fang Design

Name:

FANG CAPS:

SINGLES

TRIPLES

DOUBLES

style:

SINGLE POINT

DOUBLE POINT

STYLE:

CANINE (TRADITIONAL)

LOST BOYS (LATERAL INCISOR)

NOSFERATU (CENTRAL INCISOR)

GUMLINE PROSTHETIC:

ZOMBIE BUNNY

SHARPS JAGGED

CAT SHARK

TUSKS MINIONS

LAYOUT

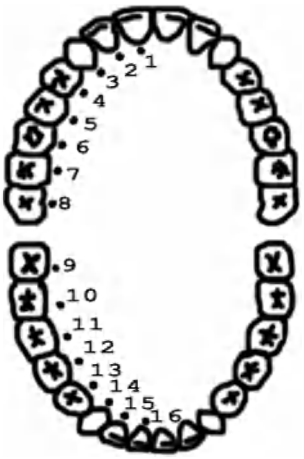
Adult Teeth

Upper Teeth

1.Central Incisor
2.Lateral Incisor
3.Canine (cuspid)
4.First Premolar (first bicuspid)
5.Second Premolar (second bicuspid)
6.First Molar
7.Second Molar
8.Third Molar (wisdom tooth)

Lower Teeth

9.Third Molar (wisdom tooth)
10.Second Molar
11.First Molar
12.Second Premolar (second bicuspid)
13.First Premolar (first bicuspid)
14.Canine (cuspid)
15.Lateral Incisor
16.Central Incisor



SKETCH OF FANGS

I got asked a lot of "Where do you get your supplies?" questions. So, here is a listing of where I get my stuff and things.

iSmile Dental Products:

http://www.ismiledp.com/

I buy my impression trays and VPS impression putty from them. For some inexplicable reason some of the large dental supply companies have started citing Homeland Security as a reason to not supply non dentist or large order customers with their product.

The guy at iSmile has GREAT customer service, can talk with you about stuff and helped me a lot when I was searching for my own supplier. Plus you get a small bag of Jelly Belly jelly beans with each order. So, what I get from him:

- Impression Trays (I usually go for Medium, and no one I saw at the make and take needed anything different)
- Alginate (when I use it, it is cheaper than most fx supply places…and you get jelly beans)
- VPS Putty (600 ml total weight tubs) Average set. (pricey compared to alginate)

  (Fast set makes me nervous if I get a customer who needs to be coaxed into putting that big tray in their mouth.)
- Silicone mixing bowls that I use for mixing alginate when I use it.

  (However, if you can find silicone mixing bowls sets from Target and places like that for cooking you can save some money)

You can buy a mixing spatula here if you want…they make mixing a little easier but a small cooking spatula would work, too. I used tongue depressors for years with no problems.

TAP Plastics:

- Casting Resin: Fast cure Polyurethane (the plastic we used to make the models and bases)

For your positive casts and bases: I haven't bought ultracal 30 in years, so I have no idea where to get it, and I get dental stone from Dax when I use it. I know places sell it, I just like the two part urethane better. It is not cheaper, though.

KEREKES:

http://www.bakedeco.com
This is where we found silicone Flan sheets to use as molds for your bases.

Dental bases at SFX online places run about 8 bucks a set (set of two, one upper, one lower). The sheet that has six depressions in it runs about 15 bucks…and you get three sets. Way cheaper.

Harbor Freight:

- Metal sculpting tools (spatulas, sculpting blades, and such)
- Cheap Non Latex gloves (and sometimes they come in sexy black, so you can look awesome when you are doing fangs OR you can cut off some of the fingers, leaving other fingers intact on for a neat Cenobite look)
- Cheap rotary tool bits and sanders (I tend to use Dremel brand but I sometimes have trouble finding the narrow sanders that are really nice for small work)

Sally's Beauty Supply (I have their membership card because it saves me money, membership is like 5 bucks)

- Dappen dishes (glass dishes we mixed acrylic in)

Acrylic and Monomer
Also Fang kits

I usually buy a medium shade tooth acrylic. They also have clear acrylic but be sure to get the violet monomer for it because it will have a yellowish cast to it with regular monomer.

FX Warehouse
http://www.fxwarehouse.info/

Monster Makers
www.monstermakers.com

Shop around, sometimes you can find better deals.

Alcote Separator:

FX Warehouse
http://www.fxwarehouse.info/

Monster Makers

www.monstermakers.com

Shop around, sometimes you can find better deals.

Petroleum Jelly:

Really, you can't find this?

Artificial Teeth: plastic human teeth

Most effects supply houses have these priced REALLY high for sets. I found some sets that get sold from China on Ebay for pretty cheap. I haven't bought them yet…and am weighing the whole "lead and bad chemicals in so many of their products" issue.

These teeth make really good sets for zombies. I tend to wack the back off with a Dremel so they are a lower profile. I have some sets (like 3) left from a Monster Makers kit I got years ago.

Acrylic Stains and Clear Coats:

Monster Makers

www.monstermakers.com

Shop around, sometimes you can find better deals.

Note: These are not the tooth enamel stains that you use for makeup effects, those wear and brush off. I have no idea if they will stain or be permanent on acrylic teeth. Try and make sure that you are getting an acrylic stain or clear coat.

And Finally…..Minions:

I prefer free range minions who have an ORGANIC diet. I find that Minions, who have been mass produced and churned out from corporate Minion Farms (or worse, Minion Mills) to have a dulled sense of creativity, often have mange, and need excessive amounts of direction for menial tasks.

If you can get in touch with some of your minion adoption agencies there are hundreds who are looking for a good home. I know Drama departments and High schools are overwhelmed with the amounts of minions they are trying to find good homes for.

And, remember, "Spare the rod, spoil the minion."

And Poof! You have the supplies you need to make fangs! (My daughter suggested this ending.)