

# The STEAM Plays: Using the Arts to Talk about STEM

Book by Rob Roznowski

Music and Lyrics by Seth Burk

## Characters

Stage Manager (*Evil Genius and Abbey*)

Marie (*Super Fan #2, Alana, Engineer #3, Engineer, Photographer, Betty, Taylor Swift, Customer*)

Trey (*Brad, Engineer #2, Billy, Mom, Pythagoras, Dad*)

Skye (*Scientist, Ballerina, Sally, Creative Writer, Star, AI, Accountant, Stage Manager for Beige*)

Elliot (*Scientist Dad, Actor, Super Fan #1, Magician, Technologist, Engineer, Studio Artist, Designer, Clerk*)

All roles are open to any gender, race, or ethnicity.

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## ORIGINAL CREATIVE TEAM

Rob Roznowski, Director

Katie Clemons, Choreographer, Musical Director, Tour Manager

Thalia Lara, Scenographer & Technical Director

Henry J, Fight Director

Reese Verlinde, Assistant Director

Ava Ballagh, Assistant Choreographer

## ORIGINAL CAST MEMBERS (casts A & 1)

Natalie Palencik & Olivia Hagar, Marie

Karam Mawazini & Marcus Pennington, Trey

Bella Seigo & Zoe Dorst, Skye

Preston Lyford & Cassidy Williams, Elliot

Alex Speveck, Stage Manager

“ / ” means that lines overlap

**P#s** indicate projection cues

**A#s** indicate audio cues

## OPENING

*P1 - The logo for the STEAM Plays appears on the screen.*

### **STAGE MANAGER**

Hi Everyone. Welcome to The STEAM Plays Using the Arts to Talk About STEM. Kind of a long title. But I wanted to prepare you for what you are about to see. It is a collection of short plays and songs about STEAM education. Do you know what STEM or STEAM stands for? (*Facilitate conversation.*). I am the Stage Manager for this show. I am in charge of making the show run smoothly and efficiently. And that means I use STEAM to do my job. Science to follow health and safety measures. Technology like the computer, projector, and speaker here that are all hooked up and engineered to work together to make the show smooth. I use Math to keep the show running on time. And finally, the Arts. This show uses most of the arts– writing, music, dance, acting, media, and more. Right now, I am gonna use my math and technology (my clock on my phone) to get the actors to places to start the show! Actors places!

### **ACTORS**

Thank you, places.

*The actors run to places, and the Stage Manager goes to the podium to call the show.*

### **STAGE MANAGER**

Seems like we're ready to start! Music and projections go.

*P2 - What Will YOU Make? Media*

*A1 - What Will YOU Make? accompaniment*

## **WHAT WILL YOU MAKE**

### **ACTORS**

WHAT WILL YOU MAKE?

WHAT WILL YOU MAKE?

WE'RE MAKING DISCOVERIES

WITH TOOLS THAT WE'RE GIVEN

INVENTIONS AND PLANS

TO MAKE A DECISION,

MAKING A SHOW

USING ALL THAT WE KNOW

TOWARD *ONE BIG VISION!*

WE'RE LEARNING AND THINKING AND PUZZLING AND STRIVING  
 BUT ALL OF IT STARTS WITH A DREAM  
 SO WE'RE DREAMING AND GROWING AND PLANNING AND THRIVING  
 AND WE'RE PICKING UP STEAM  
 YEAH, WE'RE PICKING UP STEAM  
 YEAH, WE'RE PICKING UP, PICKING UP, PICKING UP, PICKING UP  
 STEAM STEAM STEAM STEAM STEAM!

SO PICK YOUR DREAM AND FOLLOW THROUGH  
 IF YOU DREAM OF BUILDING BUILDINGS OR A 9-STORY CAKE  
 CUZ WHAT YOU DREAM IS WHAT YOU'LL DO  
 TODAY WE'LL FIND OUT WHAT IT WILL TAKE  
 SO YOU AND ME, LET'S DREAM SOMETHING NEW  
 AND FIND OUT TOGETHER  
 WHAT WILL YOU MAKE?  
 WHAT WILL YOU MAKE?

**STAGE MANAGER**

Places for "The Science Plays." Projections, go.

**P3** (*Projections screen shows "The SCIENCE Plays"*)

**SCIENCE**

**MARIE**

Hi, I'm Marie! I'll be taking you through the Science section.

**STAGE MANAGER**

And I'll be here making sure we stay on time.

**BOTH**

Math!

**MARIE**

Awesome! You know, I've always been interested in science. Like forever. Ever since I was a little kid.

*Dad, the Scientist, enters. Marie tugs at her father's lab coat.*

**MARIE**

Daddy?

**SCIENTIST DAD**

Yes, Marie?

**MARIE**

Why?

**SCIENTIST DAD**

Why what?

**MARIE**

Why? Everything? Why do birds fly? Why does it snow? Why is the sky blue? There are just so many questions I have to keep asking...Why?

**SCIENTIST DAD**

Well, Marie. You certainly are curious.

**MARIE**

And another question, please?

**SCIENTIST DAD**

Sure thing, Marie.

**MARIE**

How come there are so few women scientists in your lab? I hardly ever see a woman scientist! Why is that?

**SCIENTIST DAD**

There are lots of female scientists. Well, lots more than in the past. And they're all asking, "Why?" Did you ever hear of the most famous female scientist, Marie Curie? You're named for her!

**MARIE**

Marie Curie?

**SCIENTIST DAD**

Oh yes, two Nobel prizes, one of the first female professors in the world, saving millions of lives through her discoveries. All because she asked, "Why?"

**MARIE**

I'm going to call her Marie Curie- OUS!

*They share a laugh.*

**STAGE MANAGER**

Sound and projections go.

**P4 - Why? Video**  
**A2 - Why? Science! Accompaniment**

**WHY? (SCIENCE!)**

**MARIE**

WHY?

WHY?

WHY, WHY,

WHY WHY WHY WHY WHY?

**SCIENTIST DAD**

ASKING QUESTIONS

**MARIE**

WHY?

**SCIENTIST DAD**

GETTING ANSWERS

**MARIE**

WHY?

WHICH, IN TURN, LEADS TO OTHER QUESTIONS

SCIENCE IS ASKING

**MARIE**

WHYYYYYYYYY

**SCIENTIST DAD**

DO THE TREES TURN YELLOW IN THE FALL?

**MARIE**

WHYYYYYY

**SCIENTIST DAD**

DO THEY EVEN CHANGE THEIR SHADE AT ALL?

**MARIE**

WHYYYYYYYY, WHY WHY WHY WHY WHY  
DO THEY GROW SO MUCH TALLER THAN ME?  
AND WHY AM I SMALL?

**SCIENTIST DAD**

ALL THIS AND MORE TO BE FOUND ASKING WHY

**BOTH**

WHY WHY WHY WHY WHY  
WHYYYYYYYYYYY  
WITH SCIENCE!

**STAGE MANAGER**

Places for "Mixing it Up with Marie." Sound and projections, go.

**P5** - *Mixing It Up with Marie Show Graphic*

**A3** - *Audio Track: Mixing it Up with Marie*

*A theme song plays for "Mixing it Up with Marie" and the Show Graphic appears on the screen.  
Throughout this segment, Marie is excited all the time and always out of breath!*

**MARIE**

Hi, I'm Marie, and I like baking. Like a lot. I love it. (*Singing a bit*) Baking is my favorite thing. Yes, baking! Who likes baking? Whoever did not raise their hand is missing out on one of the most giganticest, amazing, and coolest things ever. Here is my co-host, Brad.

**BRAD**

I never baked before, Mariie. Is it hard?

**MARIE**

Nope. it is totally fun! Today I am going to make bread. Bread. Bread is good on sandwiches, and toast, and bagels.

**BRAD**

My Mom, doesn't eat bread. Cuz she's gluten-free.

**MARIE**

You can make gluten-free bread too!!!! Here is all we need for our bread. Flour, yeast, salt, and water. So in one bowl, we put a whole bunch of flour.

*(Marie pours a bag of flour into the bowl. It goes everywhere.)*

**BRAD**

Whoohah, Whoah, Marie. Why are you doing it this way? Don't you have a recipe for this bread you're making?

**MARIE**

I never use recipes. I just make it up as I go. Here are some pictures of things I created. Here is a cake I made with no recipe.

**STAGE MANAGER**

Projections, go.

*P5.1 - A picture of a horrible cake appears over the show graphic*

**MARIE**

Here is a picture of a croissant I made with no recipe.

**STAGE MANAGER**

Projections, go.

*P5.2 - A picture of a horrible-looking croissant appears over the show graphic*

**MARIE**

Muy deliciosa! And here are my sticky buns I made with no recipe.

**STAGE MANAGER**

Projections, go.

*P5.3 - A picture of the saddest sticky bun appears over the show graphic*

**MARIE**

Love my sticky buns!

**BRAD**

Marie, this all looks.... Um.... well great. I guess. But...

**MARIE**

What?

**BRAD**

You should use a recipe.

**MARIE**

But why???? A recipe stifles my creativity!

**BRAD**

So, you can't call anything a sticky bun.

**MARIE**

I love cooking and saying sticky buns.

**BRAD**

So there's a science to baking. When I watch Master Chef Junior, I always see the kids measure and weigh everything to be very specific about the ingredients because otherwise. It's just well...

**MARIE**

A mess? My mom says the kitchen is a disaster area after I cook.

**STAGE MANAGER**

Well, I am gonna have to sweep up this flour. So, I sorta get what they're saying.

**MARIE**

Let me see if I understand why. instead of just throwing everything together, I should use the measurements and follow the recipe?

**BRAD**

Yes, exactly baking is a science.

**MARIE**

*(Marie thinks for a second.)* I guess my sticky buns looked kinda sick and not in a good way. OK. I'll stick my buns to the sticky bun recipe. *(Singing again)* Because I love baking!

**STAGE MANAGER**

OK. Love it. Let's just get you to a place where your messes can be a little more contained.

**MARIE**

Bye, everyone! Thanks for watching "Mixing it Up With Marie!"

**STAGE MANAGER**

Sound go.

**A3.1 - The Mixing It Up With Marie theme music plays again.**



**P5.4** - *The crummy baked good pictures disappear so only the show graphic is seen during the theme song.*

**STAGE MANAGER**

Places for "Evil Genius, Part One." Sound and projections, go.

*The Stage Manager is still sweeping and goes to the computer for the cue*

**A4** - *The "Evil Genius" theme is heard.*

**P6** - *The Evil Genius Graphic appears.*

*No one is there.*

**STAGE MANAGER**

Evil Genius, to places.

**MARIE**

Oh, didn't you hear about Hank? *(To audience.)* Hank usually plays the evil genius. *(To the Stage Manager)* Hank got Pink Eye at church.

**STAGE MANAGER**

Makes sense. But who is going to play the Evil Genius? That character is in and out of the whole play!

**MARIE**

It has to be you because we are playing so many other roles.

**STAGE MANAGER**

OK, fine. But I'll still have to call the cues.

**MARIE**

You got this. You're the stage manager!

**STAGE MANAGER**

Places for "Evil Genius, Part One."

*The Stage Manager dons a wig & goggles as the Evil Genius.*

**A4.1** - *Evil Genius Theme plays again.*

**EVIL GENIUS**

Hello, I am an Evil Genius. You may "boo" me now!

*Trey holds up a title card that says "Boo!" He does this whenever a "boo" is called for.*

**EVIL GENIUS**

I specialize in body swaps like Freaky Friday and other films where two people change bodies for mysterious reasons. Well, part of my evil plan is to stop the arts from being put into STEM education.

**MARIE**

Why? Why would you do that?

**EVIL GENIUS**

The arts are lesser. There's STEM and then the Arts... blech. The arts don't belong there! Mwahhhhhhhh. You may "boo? me if you like.

*Hopefully, the audience boos. Marie boos.*

**EVIL GENIUS**

My plan as of now is to switch the body of a laboratory scientist and an actor. Imagine how much that artist will disrupt science and vice versa!! MWahhhhh. Let's bring them in.

*A Scientist (Skye in Lab Coat) and Actor (Eliott maybe with a script) enter and strike poses.*

**EVIL GENIUS**

Presto chango. You will now switch bodies.

**STAGE MANAGER**

Body Swap Music, go.

*A5 - Weird Body Swap audio track*

*P6.1 – Purple lightning flashes across the screen*

*Music and animation as the body swap occurs by doing some weird body swap movement. During the switch, the Actor (Eliott) puts on the Scientist's lab coat from Skye and hands off the script to the Scientist (Skye).*

**SCIENTIST**

Wait a minute, I am an actor now?

**ACTOR**

And I am a scientist? This feels different.

**EVIL GENIUS**

My evil plan is working!!!!

**SCIENTIST**

I don't even know what you do. What do you do?

**ACTOR**

We are given a script and then we research it and then practice and then share it with the audience.

**SCIENTIST**

OK, we do that too. We take an issue and then research it. An experiment and then share the data.

**ACTOR**

Wait, seems we're not so different.

**SCIENTIST**

Yeah, never realized how similar our jobs are.

**MARIE**

Sorry, seems like your plan didn't work.

**EVIL GENIUS**

No, your jobs could not be further apart. You will have so much trouble in your new bodies! I will have successfully stopped the Arts from being part of a STEM education!!!! You may boo.

**SCIENTIST**

Nope, seems like we have a lot in common. I mean I'll have to learn lines, but I memorize lots of stuff as a scientist already. I'm an actor now!

**ACTOR**

And I have to learn the periodic table and formulas, but I've played a doctor on TV, so, guess I'm a scientist now.

**ACTOR AND SCIENTIST**

We got this.

*They high-five and leave.*

**EVIL GENIUS**

Drat! My plans have been foiled!!!

**MARIE**

You seem a bit stressed. Maybe just watch some cute cat videos on YouTube?

**EVIL GENIUS**

How dare you! I am a dog person!!!! *(To audience.)* Fear not, I shall return. And will exit while you boo me!

*The Stage Manager yanks the wig off and returns to the podium to continue with the show.*

**STAGE MANAGER**

Places for Anatomy of a Dance. Projections and sound, go.

*P7 – Anatomy of a Dance Graphic*  
*A6 – Anatomy of a Dance Accompaniment*

**ANATOMY OF A DANCE**

**MARIE**

Hoooooo-wee! This beat makes me wanna

DANCE DANCE DANCE

GLIDE AND SWAY

ONE OF THESE, ONE OF THOSE

GET OUT OF MY WAY! I GOTTA

SPIN SPIN SPIN AND A

BOUNCE ALL DAY

THEN A WIGGLE WIGGLE WIGGLE WIGGLE WIGGLE WIGGLE WIGGLE...

**HEY!**

*A Ballerina (Skye in a Tutu) enters.*

**BALLERINA**

Looks like you love to dance. Me too.

**MARIE**

Yeah, but looks like you got training. You know what you're doing with your body. I just MOOOVE to the music.

**BALLERINA**

That's cool. The training is just knowing what to do with your body. It's anatomy, really. Join in if you want.

STRETCH THAT LEG AND POINT THOSE TOES

RELAX YOUR ARMS, LET THE MUSIC FLOW

FOCUS ON YOUR CORE AS YOU DO YOUR SPIN

YOU LOOK LIKE YOU GOT IT!

**MARIE**

LET'S DO IT AGAIN!

**BALLERINA**

BALANCE YOUR WEIGHT AS YOU BEND YOUR KNEES

**BOTH**

NOW WE CAN LEAP AS HIGH AS WE PLEASE!

**BALLERINA**

WITH A KICK BALL CHANGE INTO PAS DE BOURREE  
PIVOT TURN INTO CHASSE, CHASSE...

**MARIE**

Hey! That looked so good! You lost me at the end there, but the first part felt really confident focusing on all the body parts! My way felt a little more fun, though.

**BALLERINA**

You can do a bit of both, let's try!

**MARIE**

DANCE DANCE DANCE

**BALLERINA**

WITH POINTED TOES  
RELAX YOUR ARMS

**MARIE**

AND DO ONE OF THOSE!

**BALLERINA**

FOCUS ON YOUR HIPS AS YOU

**BOTH**

SPIN SPIN SPIN

WIGGLE WIGGLE WIGGLE THEN WE DO IT AGAIN!

**BALLERINA**

BEND YOUR KNEES, KEEP YOUR

**MARIE**

THEN I CAN BOUNCE BOUNCE BOUNCE!

**BALLERINA**

AND I CAN PRANCE PRANCE PRANCE!

**MARIE**  
GLIDE THIS WAY

**BALLERINA**  
THAT'S A PAS DE BOUREE

**BOTH**  
HEY!  
THAT'S THE ANATOMY OF DANCE!

**MARIE**  
So, you have to understand your body to dance?

**BALLERINA**  
It's science. Anatomy, really.

**MARIE**  
Thanks, Ballerina! Well, that ends the Science section.

**STAGE MANAGER**  
Right on time! Thanks, Math! What'd you learn, Marie?

**MARIE**  
Science is about asking, "Why?". It's also about being exact like the recipe but it's also about using your imagination and being creative...like an artist.

**STAGE MANAGER**  
Nice job. Places for "The Technology Plays." Projections go.

**P8 – Technology Title Graphic**

Technology

**STAGE MANAGER**  
*(looking at watch)*  
Oops, gotta get my steps in. Places for "Trey the Technologist."

*As the Stage Manager walks in place to gain Fitbit steps, Trey, a California surfer type, enters*

**TREY**  
*(To the Stage Manager)* Thanks, Dude. Look at you using technology to stay healthy! NICE.

**STAGE MANAGER**

Sound and projection go.

*P9 – DJ Techie Trey Animated Graphic*  
*A7 – TECH! Accompaniment*

**TREY**

*(To the audience.)* Yo, yo, yo, can I hear you say TECHNOLOGY? I can't hear you? Here we go now, repeat after me!

*Trey starts a chant with the kids, a call and response, offering the mic to the audience to repeat.*

TECH!

**AUDIENCE**

TECH!

**TREY**

TECH!

**AUDIENCE**

TECH!

**TREY**

TECH!

**AUDIENCE**

TECH!

**TREY**

Nice! Now follow along...

WE RUN WATER TO YOUR SINK

*(Gestures mic to the audience to call out)*

**AUDIENCE**

TECH!

**TREY**

SEND A TEXT FASTER THAN YOU CAN BLINK

*(To the audience again)*

**AUDIENCE**

TECH!

**TREY**

WE TOOK A ROCK AND MADE IT THINK  
 COMPUUUUUUTERS

YOU CAN THANK US FOR COMPUUUUUUTERS

IF YOU WANT TO WRITE OR BAKE  
CARVE A SCULPTURE OR A RAKE  
ANYTHING YOU WANT TO MAKE

TECH WILL MAKE IT EASIER TO DO  
IT'S ALWAYS HERE FOR YOU  
...WHEN ITS WORKING... MOST OF THE TIME...

Everybody now!

GO TECH

**TREY**

That was awesome little dudes! See you soon. When I ride the next big wave... Of technology!  
Later skaters!

**STAGE MANAGER**

No, Trey, you are taking us through the technology section.

**TREY**

Whoah. Heavy, dude. Lots of responsibilities. But I'm in.

**STAGE MANAGER**

Trey, what do you think technology is?

**TREY**

I just did a whole audience chant thing about it. But anyways, I think it is something that makes your life better. In cavepeople's time, like, stone tools. Now it's my phone, bro. And in the future, we'll use technology to fight climate change. I wonder if we can use tech to make higher waves for me to surf. I mean, that would make my life better.

**STAGE MANAGER**

Bet technology could do that, Trey.

**TREY**

AWESOME!

**STAGE MANAGER**

Places for "Marvel Meltdown." Projections, go.

**P10** – *Graphic of Movie Theatre Marquee*

*Two Superfans (Elliott & Marie) wearing capes (masks in hand or on heads) run to centerstage.*

**TREY**

That generic Marvel movie was so cool!!!!!!



**SUPERFAN 1**

Like mind-blowing!

**SUPERFAN 2**

SOOOOO AMAZING!

**SUPERFAN 1**

The Special effects were so cool!

**SUPERFAN 2**

I saw it in 3-D. So amazing. Like you could reach out and touch it!

**SUPERFAN 1**

Those special effects artists must have the coolest job in the world.

**SUPERFAN 2**

What's so cool about it? It's just a bunch of computer programmers. Putting in code. 0,1,0,1,1,1,1,0. Ooh, look, I made a planet.

**SUPERFAN 1**

For people to create those amazing worlds, they HAVE to be artists. That was a whole new planet they created we've never seen. And we believed it.

**SUPERFAN 2**

Yes, because they're that good at computers. It's CGI.

**SUPERFAN 1**

Exactly, computer-generated imagery. They created the/ imagery.

**SUPERFAN 2**

Coding.

**TREY**

Whoah, dudes. Relax. It's just a movie. An exceptionally cool one but still just a movie.

**SUPERFAN 1**

I guess we are going to have to battle this out.

**SUPERFAN 2**

For my family's honor.

**TREY**

Whoah, fighting over a Marvel movie? That's weird. But Cool.

**STAGE MANAGER**

Sound and Projections. Go. Slow Motion. Go.

**P11** – Comic Book Pow-Style Animations

**A8** – Hero Battle Music Audio Cue

*The screen takes on an ominous and otherworldly look. Sounds play like music for battles. The Superfans don their masks & fight in slow motion. It is ridiculously over the top. It is a draw.*

**STAGE MANAGER**

Sound. Stop. Slow Motion. Stop.

*They talk as if they were Marvel heroes.*

**SUPERFAN 1**

We were well-matched, my great adversary.

**SUPERFAN 2**

Even Steven, my friend. Our battle for superiority left us in a draw.

**SUPERFAN 1**

I think we must see this Marvel work as truly a blend of art and technology.

**SUPERFAN 2**

I bow to that decision. Until we meet again.

*They “fly” offstage.*

**TREY**

What did I just see? It was weird... but cool.

**STAGE MANAGER**

Places for “Magic to Do.” Projections go.

**P12** – Magic Act “Curtain”

*A sparkly vested Magician (Elliott) enters.*

*The Magician does not speak but instead makes his own music as he works.*

**TREY**

Whoa, a Magician in the Technology section? What is that about?

*The Magician prepares for the trick with lots of showy body language and self-made music.*

**TREY (CONTINUED)**

Wait, Technology is about solving a problem. I guess magic could solve a problem. Like if you REALLY needed a rabbit or something.

*The Magician performs the trick with much fanfare. The trick goes something like this: the magician has a deck of all three of clubs with one King of diamonds on the top. He gets Trey to*

*choose a card and show it to the audience. It would most likely be a three of clubs. But the Magician shows the card to the audience all proud!*

**MAGICIAN**

Ta da!

*But it is the King of Diamonds. The Magician gestures to the audience like, "I did it, right?"*

**TREY**

I don't know how to break this to you dude, but that wasn't the right card. That's ok, though. You still have that sparkly vest!

*The STAGE MANAGER presses the projections button unseen by the audience.*

**P12.1 – Magic Trick Card Animation**

*The magician gestures for Trey to wait as he goes/gestures to the projection screen... and the projections show a card appearing and growing on the screen – backside showing.*

**STAGE MANAGER**

Wait, I didn't have a projection cue here!

*The Magician reaches behind the screen and pulls out a large three of clubs card – at the same time, the projections card flips around to reveal the three of clubs as well.*

**MAGICIAN**

Is this your card?

**TREY**

YES!

**MAGICIAN**

The art of magic and technology working together to solve a problem. Ah, thank you.

*The Magician bows profusely. Trey claps wildly.*

**TREY**

Weird, but cool, dude!

**STAGE MANAGER**

Places for "Evil Genius, Part Two." Sound and Projections go.

**P13 – Evil Genius Graphic Returns**

**A9 – Evil Genius Theme Audio Track**

*Evil theme and sound as the Stage Manager puts the wig on.*

**EVIL GENIUS**

It is me! Back again! To keep arts out of STEM education for evil purposes!!!!!! Mwahhhh. (If they boo) I didn't say you could boo me! Now, you may boo.

*(Trey holds up the BOO card)*

**TREY**

Dude, I'm not feeling your energy. *(Referring to the audience.)* And they aren't feeling you either.

**EVIL GENIUS**

Evil Geniuses aren't here to be felt.

**TREY**

Weird, but cool.

**EVIL GENIUS**

I know last time didn't go as planned but this time I am switching the bodies of a Technologist and a Creative Writer. There is no way they will ever be able to replace each other, and STEAM education will be ruined forever. That's a boo there.

*(Trey holds up the BOO card)*

*Enter Creative Writer (Skye with a Notebook and Pen) and Technologist (Eliott).*

**EVIL GENIUS**

You will now switch bodies! And I will become the Stage Manager for a second. *(Wig off.)*  
Sound go. *(Wig on.)* Back to Evil.

**P13.1** – Purple lightning flashes across the screen

**A10** – Weird Body Swap Audio Track

*Music plays as they do some wild body-switching movements – hand off props to each other.*

**TREY**

WEIRD. But. COOL.

**EVIL GENIUS**

Mwaah. I have disrupted STEM from ever being STEAM!

**CREATIVE WRITER (NOW TECHNOLOGIST)**

So what do you do exactly now that I am in this new body?

**TECHNOLOGIST (NOW CREATIVE WRITER)**

Well, as a technologist, I try to find answers to make things better.

**CREATIVE WRITER (NOW TECHNOLOGIST)**

As a creative writer, I do the same thing. I write a story that I think can teach people something to make their lives better.

**EVIL GENIUS**

I see where this is going—

**BOTH TECHNOLOGIST AND WRITER**

Communication. Collaboration. Imagination. *(Pause.)* And Creativity. *(Another pause.)* Jinx. Buy me a Coke! *(Another pause.)* Buy me a diet Coke. Now we're just saying things together.

**CREATIVE WRITER**

We got this. I love being in my new body!

**TECHNOLOGIST**

Me too. This is going to be fun!

*They leave.*

**EVIL GENIUS**

Wait! Drats!!!! Foiled again!!!!

**TREY**

Dude, try yoga.

**EVIL GENIUS**

But I'll be back with another evil plan. Please boo on my exit!

*Trey holds up the BOO card.  
The Stage Manager whips the wig off.*

**STAGE MANAGER**

Places for "There's an APP for That" Projections go.

**P14** – *Animated rainy day that turns digital  
Three actors run onstage (Marie as Alana & Skye as Sally).  
It is a grey and rainy day. Trey is one of the kids.*

**TREY**

We can't go outside. It's raining pretty bad.

**ALANA**

I know. I hate when it rains.

**TREY**

I could be surfing, dude! Sally, what would you be doing?

**SALLY**

I could be selling seashells by the seashore.

**TREY**

Weird but cool. What should we do?

**SALLY**

We could play video games?

**ALANA**

I have stuff to play with on my iPad.

**TREY**

I'll check for stuff to do on my phone. Wait a minute. I'm in the technology section of The STEAM Plays. And we're all using technology to entertain ourselves on a rainy day. Is that the hidden message of this scene?

**STAGE MANAGER**

Wow. Yes, that's right. Trey, you are smarter than I thought.

**TREY**

*(Proudly)* Thanks, dude. I appreciate that.

**STAGE MANAGER**

Trey, really nice work on the technology section.

**TREY**

I'm feeling it. Like technology is everywhere. Little dudes, I learned technology is creative and solves problems. It's complicated. If I had to describe technology in three words, I would say... Weird. But. And the last word..... I'm drawing a blank here. Got any suggestions, little dudes?

*Hopefully, they shout, "cool"*

**TREY**

I think I heard "cool" out there. Not sold on it, but we'll use it as a placeholder.

**STAGE MANAGER**

Whatever you say, Trey. Places for the "The Engineering Plays.". Projections go.

**P15** - *A projection appears that reads "The Engineering Plays"*

## ENGINEERING

**SKYE**

Hi, my name is Skye, and I'm gonna take you through the Engineering Plays. Engineering is the most important part of STEAM education, so obviously, this is why they gave this section to me.

**STAGE MANAGER**

I think we all think that every part of STEAM education is equally important.

**SKYE**

Let's agree to disagree. Engineering and me, most important. I think you can start the music now.

**STAGE MANAGER**

Thanks. I do the cues. Projections and sound go.

*P16 – Blueprints to Future Cities Animation*

*A11 – Make it Better (Engineering) Accompaniment*

**SKYE**

LET'S FIND OUT WHAT CAN BE  
CITIES, SYSTEMS, CIRCUITRY  
WHAT FUTURE DO YOU SEE?  
LET'S FIND OUT WHAT COULD BE!

WE MAKE THE BLUEPRINTS OF TOMORROW  
WHERE ALL YOUR PROBLEMS ARE OK, WAIT AND SEE  
LET'S FIND OUT WHAT COULD BE!

*The actors act this out as Skye narrates.*

**SKYE**

Picture it, Ancient Mesopotamia. Two Mesopotamians speak Mesopotamian to each other. They are frustrated about how to get their grains to market. They've been carrying it on a board. And then inspiration. To get from here to there– the wheel was invented! Good design, no?

**SKYE**

LET'S FIND OUT WHAT COULD BE  
WHEELS ARE TURNING ENDLESSLY  
WHAT'S NEXT FOR YOU AND ME?  
LET'S FIND OUT WHAT COULD BE!

**SKYE**

Picture it 1869 in Utah as the Golden Spike for the Transcontinental Railroad is hammered into the ground. They engineered how to get from here to there. By train. Creative, no?

LET'S FIND OUT WHAT CAN BE  
RUNNING TRAINS FROM SEA TO SEA  
WHAT COULD IT MEAN FOR YOU AND ME?  
LET'S FIND OUT WHAT COULD BE!

**ENGINEER 1**

HOW CAN I GET TO A DESTINATION WHERE THERE'S NO TRAIN AND IT'S SO FAR?

**SKYE**

LET'S TAKE THE HORSE AND BUGGY,  
ADD AN ENGINE, NOW YOU'VE GOT A CAR!

**ENGINEER 2**

CARS ARE GREAT, BUT ONLY WHEN THE ROADS ARE GOING MY WAY

**SKYE**

HERE'S A NEW SYSTEM OF ROADS ACROSS THE COUNTRY,  
WELCOME TO THE HIGHWAY

**ENGINEER 3**

BOATS ARE SLOW, BUT I CAN'T GO TO EUROPE ON A CAR OR TRAIN!

**SKYE**

TRAINS AND CARS ARE OUT, YOU'RE RIGHT, BUT HERE YOU GO! I MADE A PLANE

*(Spoken)* Innovative, no?

**ALL**

DESIGN! CREATE! AND INNOVATE! YEAH!

OH, THAT'S OUR CREED

SO, WHEN IN NEED

DON'T CLENCH IN FEAR!

WE DESIGN! CREATE! AND INNOVATE! OH,

YOU'RE NOT ALONE, PICK UP THE PHONE

AND CALL YOUR FRIENDLY ENGINEER!

LET'S FIND OUT WHAT CAN BE

CITIES, SYSTEMS, CIRCUITRY

WHAT FUTURE DO YOU SEE?

LET'S FIND OUT WHAT COULD BE!

WE MAKE THE BLUEPRINTS OF TOMORROW

WHERE ALL YOUR PROBLEMS ARE OK, WAIT AND SEE



## LET'S FIND OUT WHAT COULD BE!

**SKYE**

Don't you love me!? Don't I have a great voice? Thank you. And let's give it up for engineering too! So many cool things over the years. "Lifetime Achievement Award" for Engineering!

**STAGE MANAGER**

Thanks. Places for "Who Are You Wearing?" Projections and sound, Go.

**P17 & P17.1** – Red Carpet Animation of Camera Flashes Fades into the Fashion Design Graphic of the Gown that Skye is wearing.

**A12** – Sound Effect of Camera Shutters and Flash Bulbs  
We are on an imaginary (or rolled-out prop) red carpet.

Photographer (played by Marie) with a large camera with a flash is mock-taking pictures of the many imaginary stars on the red carpet.

STAR (Skye), who has pulled on a glamorous gown, struts the "red carpet".

**PHOTOGRAPHER**

(To STAR.) Over here. Over here.

*The Star turns to the photographer.*

Who are you wearing? That dress is amazing!

**STAR**

(To audience.) It's me Skye playing a Movie Star. Typecast, right? (To photographer) I don't know who I'm wearing. Every designer wanted me to wear their clothes! My stylist picked it out for me. It's pretty, right?

**PHOTOGRAPHER**

It's a feat of engineering.

**STAR**

Engineering? it's a dress. Watch how cute I am doing this. (She strikes a pose.)

*The action freezes as an actor (Eliot) comes out (or stands on their acting block) with a tape measure around their neck wearing glasses in the style of Edith Head. This is the designer.*

**DESIGNER**

Actors, they don't know anything. I designed this dress. Using every letter from the STEAM alphabet soup. Listen, Science and technology were used on my tablet when I sketched this outfit. Then comes the engineering and math part. I had to make a pattern using measurements – math– to create the separate pieces that I sewed together using a machine, that is technology! So, this actor may not know it, but you do now. All the folds, the pleats, the curves. That's engineering. You are wearing a product of a STEAM education. Back to the Red Carpet. And the actors who couldn't care less.

**PHOTOGRAPHER**

You look incredible! The fans love it! This dress is going viral!

**STAR**

Hooray. I am so amazing! I love me! Look how pretty I look when I twirl!!!!!!!!!!!!

*(She twirls offstage)*

**STAGE MANAGER**

Places for "Evil Genius Part 3." Sound and projection go.

**P18** – *Evil Genius Graphic Reappears*

**A13** – *Evil Genius Theme Audio Track Play Again*

*Stage Manager puts the wig on.*

**EVIL GENIUS**

OK, let's try this one more time. Quick boo from you all. *(Trey holds up BOO card)* Let's get this settled quickly. Body switching a Studio Artist and an Engineer. Impossible there will be any crossover.

**SKYE**

We just did a whole scene about design and engineering are really similar. And the song before we sang, Design, Create, Innovate. Evil Genius, I feel like you aren't really listening and responding which is what I do so well.

**EVIL GENIUS**

Phooey. Hogwash, and Balderdash. With this body switch, the idea of STEAM Education will be destroyed forever! The arts will be gone from STEM. Let's get these people in here.

**STUDIO ARTIST**

Yeah, we talked about this backstage. We found a lot of common ground.

**EVIL GENIUS**

No! Impossible!

**ENGINEER**

Creativity, attention to detail, design principles, visualization, technical skills, and lots more.

**STUDIO ARTIST**

We're actually excited to switch bodies.

**EVIL GENIUS**

Never mind. GET OUT! If it's fun, then it can't be part of my evil plan.

*They leave.*

**SKYE**

It seems like you're really hung up on this. Maybe some therapy could help? I could play a therapist. I'd be so good! I would pretend to listen so hard!

**EVIL GENIUS**

To that, I say (*blows a raspberry.*) I will be back one last time to lay my plan of action for evil purposes. Boo me off, please.

*The Stage Manager takes the wig off.*

**SKYE**

I know you just learned this role but good job. 7 out of 5 stars.

**STAGE MANAGER**

Places for "The Little Engineers Who Could" Projections, go.

**P19 – Neighborhood Graphic**

**SKYE**

I don't like this scene. I'm not the focus of it. Quick question, don't you think I should play Betty in this scene? She is the romantic lead.

**STAGE MANAGER**

Let's do it as rehearsed.

*During this and while Skye is getting volunteers, Billy (Trey) & Betty (Marie) are donning their old-timey accessories (Billy has a Newsboy Cap & Betty has a Big Bow).*

**SKYE**

Fine. (*to audience*) Now, you are going to have to imagine that these two kids are separated by a fence. Wait, could we get two volunteers to play the fence?

*Skye selects two students from the audience and poses them onstage as the fence.*

**BILLY**

Hi, my name's Billy and I just moved in next door. I can't see you because of this fence.

**BETTY**

Hi Billy, I'm Betty and I have lived here my whole life. Seven years.

**BILLY**

Cool. Wanna play?

**BETTY**

I do, but there's this fence here.

**BILLY**

Right. Dumb fence.

**BETTY**

Fences aren't fun!

**BILLY**

Here's a loose board. Let's just loosen it some more without pulling it off. You can squeeze through and come over and play.

**BETTY**

Cool, let's try.

*They "pry" the board/student open and Betty sneaks through!*

**SKYE**

So that was the first time Betty and Billy engineered a way to be friends. We're gonna jump forward 1 year. Now I am playing Betty's Dad. Cue Dad's voice "Betty, dinner!"

**STAGE MANAGER**

Hey, I do the cues.

**SKYE**

Shhh.. I'm running things now.

**BETTY**

I wish we could talk every night.

**BILLY**

Me too. I saw this movie where they had a string and two cups. They stretched it over the fence so they could talk! We could talk!

**SKYE**

Now this scene was back sixty years ago, so there were no smartphones invented. So, Billy and Betty engineered a way to talk each night. Props, go.

**STAGE MANAGER**

Here you go.

*The Stage Manager gives the actors string connected to two Solo cups that the actors talk into and listen to.*

**BILLY**

Can you hear me?

**BETTY**

I can!

**SKYE**

And so they chatted many nights away. Let's jump ahead six more years. Billy and Betty are dating but they still talk on their string phones.

**BILLY**

Betty, I sure like you. Do you think I could give you a kiss?

**BETTY**

Thanks for asking. Sure thing. But we're separated by this fence. What if I pushed this box toward the fence, and you find something to stand up on your side? And then we can meet over the fence for our first kiss.

*They push their crates/actor blocks to either side of the "fence".  
They climb up on the boxes and are about to kiss.*

**SKYE**

We're going to skip that part! But yet again, Billy and Betty engineered a way to get together. We'll skip forward 4 more years. It's their wedding day.

**BETTY**

Guess what? My mom said it doesn't feel right having this fence keeping apart our two families.

**BILLY**

Awesome. Does that mean...?

**BETTY**

Yes, Mom said we should take the fence down now.

**BILLY**

If we take the fence down, we could use these old boards here and build our dream home!

**BETTY**

I love that idea. Help me lift these boards and we'll start pounding nails into them to make our new home!

*They grab giant inflatable hammers and head toward the "fence".*

**SKYE**

I'm gonna stop here. Gotta save those boards. You all can go back to the audience. Let's give them a hand. So, Billy and Betty engineered a way through the fence. Anytime you're making something to connect some ideas, you are engineering something.

**STAGE MANAGER**

We're about out of time for the Engineering Plays.

**SKYE**

That's cool because I think they got it. Engineering is about making ways to connect better. The wheel, the train, the fence. It's all about ways to connect. You know what else?

**STAGE MANAGER**

What?

**SKYE**

I kinda liked running that scene. I engineered the way it worked. I may have had enough time in the limelight. Maybe I should be a Stage Manager.

**STAGE MANAGER**

Let me think about it. Places for the "The Math Plays." Projections, go.

*P20 – Math Plays Graphic*

**MATH****STAGE MANAGER**

Elliot. This is your section.

**ELLIOT**

Oh, man, this is the worst. I hate Math. I am gonna be a lousy tour guide for them.

**STAGE MANAGER**

Sorry, but it's your turn. Places for the play "PHONE-Y MATH." Projections, go.

*P21 – Math & Numerals Animation*

*ELLIOT runs onstage with his phone*

*Trey dons a pair of vintage cat-eye glasses or any other fun accessories to be MOM.*

**ELLIOT**

But, Mom, I don't want to study for math. I'll never use it when I grow up!

**MOM**

You most certainly will. I use math all the time. Like when I tip at a restaurant.

**ELLIOT**

Mom, you use your phone to figure out how much to tip.

**MOM**

Well, that's still math.

**ELLIOT**

Any math I need, I can do it with my phone.

**MOM**

Well, at least that's better than all the time you waste on your TikTok videos on your phone.

**ELLIOT**

I don't know how they do it, but TikTok knows what I like.

**MOM**

Well, no math studying; no TikTok today.

**ELLIOT**

Aw, Mom! I need my TikkieTokkie!

**MOM**

You heard me. No watching that if you're not studying.

*Mom leaves.*

**ELLIOT**

Stupid Math. I'll never need it! I want to watch TikTok.

**MOM**

*(Offstage)* No!

**STAGE MANAGER**

Cue mysterious music. Go.

**A14** – *AI Gorithm Theme Audio Track*

**P22** – *Math Numerals Animation faders into a Gritty City Mathscape Graphic*

*AL (Skye) enters, a mysterious villain-type, wearing a fedora or some other AI Capone inspired accessory.*

**AL**

It is!! AI. AI Gorithm. I am the mysterious person that knows what videos you will love. And keeps you watching them for hours when you should be studying math!

**ELLIOT**

How do you know what I'll like?

**AL**

I was kind of hoping you might be scared into studying math and giving up TikTok.

**ELLIOT**

Nope. Not scared, just wondered how TikTok knows what I like.

**AL**

It's really quite simple. It's math that adds up and counts what you like and then just keeps picking the videos you'll love. See that dance video? Stay on it for a few seconds, and we'll keep sending you more fun dance videos.

**ELLIOT**

I got those moves down.

*Elliott dances a bit*

**AL**

Go, you! But how they choose the videos, it's math, really.

**ELLIOT**

Ew, so, math is connected to my favorite thing in the world? TikTok!

**AL**

Yes, but you're not getting the point. TikTok is a time suck and wastes hours you could be studying.

**ELLIOT**

You're saying that math taught me this!?

**STAGE MANAGER**

Sound and projections, go.

*P23 – TikTok Dance Clip with its own audio*

*The latest dance music trend on TikTok plays and ELLIOT dances.*

*Al may join in.*

*When the clip ends, the video fades back into the gritty city mathscape from before.*

**AL**

Math, yes, it's an algorithm. And it's bad for you!

**ELLIOT**

OK, now I think I love math.

**AL**

I think the point of this scene is that the algorithm used on TikTok is bad and sucks you in. And that you should study math instead.

**ELLIOT**

I'm gonna study math and make algorithms that make everyone as happy as TikTok makes me. YAY, MATH!

*Elliot runs off. Mom enters.*

**MOM**

Well, at least you got him to study math. So thanks for that, Bert. Can I Venmo you for doing this?

**AL**

Yeah, I'm not tech-savvy. Good old-fashioned cash will do.

**MOM**

Ok, but I'd like to add a tip for all your hard work. Oh, dear, I'm gonna need my phone to figure that out.

*They leave.*



**STAGE MANAGER**

Nice dance, Elliot. Seems like you are liking Math better.

**ELLIOT**

Nope still hate it. But it's everywhere. In this next scene, I am going to play a pretentious artist who also hates math.

**STAGE MANAGER**

Ok, but try to keep an open mind about math! Places for "It Pays the Bills." Projections go.

**P24 – Abstract Art**

*The Accountant (Skye) and The Artiste (Eliott) take the stage.*

*The Artiste is wearing a Beret (has a painter's palette and brush) and speaks with an annoying French accent in this scene.*

**ARTISTE**

I am an artiste; I do not worry about math! I am brilliant!

**ACCOUNTANT**

I am your business manager and accountant. it would really help me out if you keep track of your expenses at the very least.

**ARTISTE**

I do not deal in anything mathematical. I create! I live! I express myself! You are my accountant.

**ACCOUNTANT**

Fine, fine. You're the talent. Just out of curiosity, how far along are you on your new painting?

**ARTISTE**

It is about two-thirds done. But I cannot be rushed, I am an Artiste.

**ACCOUNTANT**

Artiste, I know I heard you before. And how do you make this lovely color of teal for the painting?

**ARTISTE**

To make teal, you use the perfect equal blend of 50% blue and 50% green. I am brilliant!

**ACCOUNTANT**

One last question, how much is the new brush you wanted?

**ARTISTE**

I demand TWO new brushes at fifty dollars a piece for \$100. I demand them for my work. I must have them! The world demands them!

**ACCOUNTANT**

Ok, Mervin, you forget I knew you when we grew up together in Cheboygan, Michigan. (*He shows him where they lived on his hand– it's a Michigan thing.*) So lose the accent, and you can so do the math. You just told me the percentage, a formula, and prices times two. So forget the tortured artiste and start keeping your receipts.

**ARTIST**

*(No longer French)* Fine.

**ACCOUNTANT**

*(As they walk out.)* Seriously Mervin. We took math together. You got a higher grade than me.

**ARTISTE**

*(French is back)* You see, even in math! I am brilliant!!!!!!

*They are gone.*

**STAGE MANAGER**

OK, so what did you learn about math?

**ELLIOT**

Try as you can, you can't avoid it. (To audience.) Who here doesn't like math? Let me count the hands raised. Wait a minute, I am using math to figure out who doesn't like math! Man, math is everywhere!

**STAGE MANAGER**

Sound and projections go.

**P25 – Math! Graphic**  
**A15 – Math! Accompaniment**

**MATH!**

**ELLIOT**

1, 2, 3, 4,

MATH IS THE FOUNDATION  
OF ALL THINGS YOU'VE SEEN TODAY

IF YOU WANT TO BUILD OR SING  
YOUR BURGER GRILLED, A SWORD TO SWING  
THE PITCH AT WHICH A BELL WILL RING  
ALL OF THIS, YES, EVERYTHING  
IS MATH

HOW OLD ARE YOU? MATH

ONE SLICE OR TWO? MATH  
 THE SHAPE OF THIS BALL? MATH  
 HEY YOU! YOU LOOK TALL! HOW TALL ARE YOU?

*(beat for an answer)*

MATH!

TO UNDERSTAND  
 TO KNOW THE TRUTH  
 AND KEEP ALL OF IT STRAIGHT  
 TO HARNESS ALL THE BUILDING BLOCKS  
 THAT YOU NEED TO CREATE

ALL OF THIS AND MORE, IT'S TRUE, IS - WAIT  
 FOR IT...

*(Counts beats of rest on fingers)*

ONE, TWO, THREE, FOUR, FIVE, SIX, SEVEN, EIGHT

MATH

**STAGE MANAGER**

Places for "FINAL EVIL GENIUS" Projections. Sound go.

**P26** – *Evil Genius Graphic*

**A16** – *Evil Genius Audio Theme*

*The Stage Manager puts the wig on. The theme plays.*

**EVIL GENIUS**

OK, I'm back, kids, and I want you to know this last one is infallible. The Arts have no place in MATH!

**ELLIOT**

Don't mean to bring you down, but I just sang a song about how Math is everywhere. Just so you know.

**EVIL GENIUS**

Just so you know, I had to get two people so vastly different that there would be no way that they would survive in another person's body. I submit to you the famous ancient Greek mathematician Pythagoras. Father of the Pythagorean Theorem.

*Pythagoras (Trey), wearing a Toga, and Taylor Swift (Marie), wearing a sequin Jacket, enter.*

**PYTHAGORAS**

In a right triangle, the square of the hypotenuse equals the sum of the squares of the other two sides.

**EVIL GENIUS**

Wow, so boring.

**ELLIOT**

Kind of agree. Went right over my head.

**EVIL GENIUS**

And to switch bodies, I brought megastar Taylor Swift.

**TAYLOR SWIFT**

I date boys, and then after we break up, I write songs about them.

**EVIL GENIUS**

Two people so wildly different that when I switch their bodies, there will be no connection between music and math. I'll be good with you all booing me now.

**TAYLOR SWIFT**

Sorry Evil Genius person, but I use math all of the time in my music, the chords, the tempo, the measures, the key. All of that is based on math.

**PYTHAGORAS**

Oh, yes, agreed. Numbers are in everything. I associated numbers with virtues, colors, music, and many other qualities.

**TAYLOR SWIFT**

Hey, Greek Math Guy, I'm in a creative slump, would you like to go on a date? And then later, we break up and I write a hit song about it and you get no royalties from it?

**PYTHAGORAS**

Sure. You're not into this Evil Genius, right? Wouldn't want a love triangle!

**TAYLOR SWIFT**

Perfect name for a song!

**ELLIOT**

Quick question for the Evil Genius. Why are you trying to prove that arts don't belong in STEM education?

**EVIL GENIUS**

I went to a school where the arts weren't valued. Sports and STEM got all the funding and the interest. And my mommy... (*Sniffles*) My mommy said I couldn't study the arts in college.

**TAYLOR SWIFT**

Well, you tell your Mom, my ERAs tour made over a billion dollars.

**PYTHAGORAS**

Well then, for sure **you're** picking up the check.

*They exit.*

**EVIL GENIUS**

In trying to prove that the arts don't belong in STEM education, I have failed miserably. They're all interconnected. You can't have STEM without the vision and creativity to make it. Maybe I'm not such a genius after all. But still evil, though! For one last time, can you boo me off the stage?

*Stage Manager takes the wig off. ELLIOT remains.*

**ELLIOT**

Wow, that guy could use a hug.

**STAGE MANAGER**

So, what do you think about Math now?

**ELLIOT**

I know that Taylor Swift tickets are expensive.

**STAGE MANAGER**

That involves math.

**ELLIOT**

You're right. It's everywhere. Better learn to love it.

**STAGE MANAGER**

That's a great way to look at it, Elliot. Places for "The Arts Section." Projections go.

*P27 – The Arts Plays Graphic*

**ALL**

Thank you, places!

**ARTS****STAGE MANAGER**

Can I get everybody out here before we begin? We're going to end with Arts. You may be a scientist or an engineer but if you don't have imagination and creativity, you're just left with ideas. I've been playing this Evil person trying to get rid of the arts all day, can I be in the arts play? I really like this play. Skye, do you want to stage manage for me?

**SKYE**

My big break!! I love being in charge! GET TO PLACES!!!!

*Stage Manager, hands over headset to SKYE, removes black jacket to reveal beige top.*

**STAGE MANAGER**

Sure. Remember to–

*Stage Manager is now ABBEY and Skye is Stage Manager.*

**SKYE AS STAGE MANAGER**

Quiet, you! I'm in charge now! I love power!!!! Places for our final play, "Beige." Sound and projections go.

**P28** – Beige Room

**A17** – Wake up Alarm

*We see a sketch of a beige room and hear a non-musical phone alarm go off. ABBEY wakes up out of bed. ABBEY looks at her phone. She presses a button.*

**ABBEY**

Wait. This is weird. No music.

**SKYE AS STAGE MANAGER**

Sound, Go.

**A18.00** – Eerie Void Sound

*She seems a bit confused. She looks at herself in the mirror.*

**ABBEY**

Why are my clothes so....

**STAGE MANAGER**

Sound, Go.

**A18.01** – Eerie Void Sound again

*She looks confused again.*

**ABBEY**

That's weird.

*She looks around her room.*

**ABBEY**

Where are all my...?

**STAGE MANAGER**

Sound, Go.

**A18.02** – Eerie Void Sound again

*She looks confused again.*

**ABBEY**

What is happening?

*Dad (Trey) also wearing a beige top enters. Abbey walks to her Dad. Things speed up here.*

Dad. Something's up with my phone. It's not playing music. And my pajamas have no design on them. They're just beige. Your clothes too. All my posters are down off the wall. Hey, where are my paintings from school? They're not on the fridge.

**STAGE MANAGER**

Sound, Go.

**A18.03** – *Eerie Void Sound again*  
*Both are confused now.*

**DAD**

This is strange. What do you think is going on?

**ABBEY**

I don't know, Dad, but it feels like we're in a science fiction movie.

**DAD**

There has to be an explanation.

**ABBEY**

Dad, that's what people say in science fiction movies!

**STAGE MANAGER**

Sound, Go.

**A18.04** – *Eerie Void Sound again*  
*Both are confused now.*

**ABBEY**

*(To Audience)* I'm gonna stop for just a second. *(To Skye as Stage Manager)* I think you can just press the sound if you're just repeating the cues.

**STAGE MANAGER**

Got it. I'm doing so good, though, right? I love me as stage manager!

**DAD**

Turn on the television.

**A19.0** – *Static Audio Effect*

**ABBEY**

It's just static!

**DAD**

The radio!

**A19.1** – *Static Audio Effect*

**ABBEY**

Dad, it's static too.

**DAD**

Probably just a storm last night. Let's just take our minds off this. What do you want to do today?

**ABBEY**

OK. I guess. We could go to a movie or to the museum?

**DAD**

Let's go see that new movie.

**ABBEY**

I'll check the times.

*She checks her phone.*

Dad, it's weird. There are no movies playing.

**A18.05** – *Eerie Void Sound again*

And all the museums are closed today.

**A18.06** – *Eerie Void Sound again*

**DAD**

OK. What is going on? Maybe there's a parade or a game or something in town, right?

**ABBEY**

Dad, something is off!

**DAD**

OK, we just stay calm.

**ABBEY**

I'm trying to, but what is happening? What should we do?

**DAD**

Let's just get out of the house. Let's go shopping. Be around other people.

**STAGE MANAGER**

Projections, go.

**P29** – *Sketch of a Beige Mall*

*They are at the mall; they see a store clerk (Eliott in Beige).*

**DAD**

Something feels different about this store today.

**ABBEY**

Well, first, there's no music playing.

**A18.07** – *Eerie Void Sound again.*

**DAD**

And all the decorations are gone.



**A18.08 – Eerie Void Sound again****CLERK**

*(Eerily calm.)* Can I help you with anything? Oh look, your clothes are beige like mine.

**ABBEY**

Hey, why is EVERYTHING in here, beige?

**A18.09 – Eerie Void Sound again****CLERK**

*(Eerily calm.)* It's the strangest thing. We came in today, and everything was void of color. No designs. Neutral. Drab. Beige.

**ABBEY**

No designs?

**CLERK**

Well, see the clothing section—. All beige. The furniture. Bedding. Toys. All of it beige. And we have no idea why.

*Clerk smiles creepily.*

**A18.10 – Eerie Void Sound again**

Everyone here is just trying to keep as calm as possible.

*A Customer (Marie), also in beige, runs across the stage screaming at the top of their lungs!*

**CUSTOMER**

WHAT IS HAPPENING?!!!!?!?!?!?!?

**DAD**

Come on, Abbey, let's get out of here.

**CLERK**

Have a nice day. *(Beat.)* If you can.

**A18.11 – Eerie Void Sound again****DAD**

That store was freaky.

**ABBEY**

Dad, what is going on out here? It's all different out here.

**DAD**

What do you mean?

**ABBEY**  
The fountain's gone.  
*A18.12 – Eerie Void Sound again*

**DAD**  
The statue is gone.  
*A18.13 – Eerie Void Sound again*

**DAD**  
The dance school is closed.  
*A18.14 – Eerie Void Sound again*

**ABBEY**  
The library is closed.  
*A18.15 – Eerie Void Sound again*

**DAD**  
What's wrong with everyone?

**ABBEY**  
Look, everyone is dressed drab. Everyone looks the same.  
*Elliot and Marie walk by like mindless zombies.*

**ABBEY**  
Just stay calm, Dad.

**DAD**  
Shhhh.  
*The zombies leave.*

**ABBEY**  
That was close.

**DAD**  
Anything that makes life worth living is gone. Vanished.

**ABBEY**  
Let's piece it together. Music, my posters, movies, museums, media, dance, books, sculpture – all of it, gone.

**DAD**  
They're all the arts!

**ABBEY**  
And everyone walking around without creative expression. We're all the same.

**DAD**

Art has disappeared from the world.

**ABBEY**

Not on my watch! We can't let that happen! Everybody! Everybody!

*Elliot and Marie run on, no longer zombies.*

Listen, we figured out what it is. The arts have vanished. That's why everything is so beige and drab.

**MARIE (GETTING IT!)**

Of course. And boring.

**ELLIOT**

And the same.

**DAD**

And without any joy.

**ABBEY**

Let's think. How do we get art back into the world? How can we make art ourselves?

**MARIE**

Be creative.

**ELLIOT**

Paint. Draw.

**DAD**

Dance.

**MARIE**

Sing.

**ABBEY**

Sculpt, write, film, act. That's right! Do it. Do it. Do it!

**STAGE MANAGER**

Sound and projections, go.

**P30** – *Color Explosion in the Mall Sketch*

**A20** – *Cacophony Audio Effect*

*A wild cacophony of music as the actors each take on a different form of self-expression.*

*And color comes back to the screen.*

**ABBEY**

*(over the music)* It's working. It's working! Color is coming back to the world! People are smiling again. People are expressing themselves again. People are letting themselves be creative.

**DAD**

We did it!

**MARIE AND ELLIOT**

Yay!

**DAD**

But how? How did it happen?

**ABBEY**

I think it may be our fault. I know I haven't done anything creative in a very long time. I was so busy worrying about other stuff that I lost my creativity.

**DAD**

I don't know the last time I just listened to some music.

**MARIE**

I was a dancer but since the pandemic closed so much of the arts down, I had to get a corporate job.

**ELLIOT**

I've been in such a funk that I really didn't do anything creative. And that's what usually cheered me up. What was I thinking?

**ABBEY**

I don't want to live in a world without art. We have to take time to stop and be creative. Hey, do you all want to head to the museum? It's open again!

**ALL**

Yes!!!

**ABBEY**

OK! On our way there, let's sing, dance, and act. Let's make the world less beige!

**DAD**

Hit it!

*They walk offstage singing, dancing, and acting like fools!*

**STAGE MANAGERS (SKYE AND ABBEY TOGETHER)**

Places for the final number. Sound and projections go.

**P31 – Finale Animation**

**A21 - What Will You Make (Reprise) Accompaniment**

**WHAT WILL YOU MAKE (REPRISE)**

**ALL**

SO PICK YOUR DREAM AND FOLLOW THROUGH  
IF YOU DREAM OF BUILDING BUILDINGS OR A 9-STORY CAKE  
CUZ WHAT YOU DREAM IS WHAT YOU'LL DO  
TODAY WE'LL FIND OUT WHAT IT WILL TAKE  
SO YOU AND ME, LET'S DREAM SOMETHING NEW  
AND FIND OUT TOGETHER  
WHAT WILL YOU  
MAKE?

*The song's end signals the end of the show.  
The Stage Manager hits the final projection cue and the STEAM PLAYS logo returns – or  
alternately the Finale animation can be programmed to fade into the final graphic.  
P1 – The STEAM Plays Logo*

*End of Show.*

## Notes from the Scenographer

The initial concept of this production was to ensure its portability, enabling us to tour it to local schools while also hosting it on the Michigan State Campus, utilizing the unique presentation space at the Facility for Rare Isotope Beams (FRIB). Given the diverse array of stages we would encounter, it was imperative to devise scenic elements that could establish a stage space even when none existed. All scenic components had to be compact enough to fit into our travel van alongside the actors and crew. Moreover, our presentation space at the FRIB imposed constraints, limiting us to eight feet of performance space from the back wall to the audience, while providing double screens for multimedia display.

In line with the play's thematic emphasis on integration, collaboration, and interdisciplinary interconnectedness—concepts inherent to theatre and crucial factors for why STEAM education works—Rob and I were eager to incorporate creative technology throughout the development, production, and presentation of our scenography as much as possible.

Central to the scenic design was the creation of individual iconography inspired by imagery pertinent to the fields of Science, Technology, Engineering, and Math (STEM). Each iconography was tied to the actor leading the respective section, supported by a cohesive color palette. Drawing inspiration from the evolution of comics as a storytelling medium, we embraced artistic styles from this genre, highlighting how creativity flourishes when technology is embraced fully. Many modern blockbusters trace their origins back to hand-drawn comic strips, showcasing the dynamic evolution of storytelling methods with advancing technology.

In the spirit of leveraging technology to enhance artistic expression, my media creators and I utilized AI as a collaborative tool to develop visual elements for both media and scenic iconography. Viewing AI interfaces as artistic collaborators, I continue to refine and expand the catalog of imagery available for the show. As part of our commitment to promoting arts integration within education, we are providing all reproducible materials for free on our website for use in your productions of The STEAM Plays. Feel free to use what we have provided or create your own. Also online, look for projects you can do in the classroom to engage students in creative exploration of scenography and other extensions on the themes in the play. We encourage others to contribute additional media for various scenes, fostering a culture of continuous creation and iteration. Let's continue to innovate together!

-Thalia Lara

Following are production guidelines and design elements as created for the original production.

## Scenic

Scenic elements for this show should be simple and flexible to allow for quick shifts between locations. In the first production, we set up our playing space with 4 “actor” stations and one stage manager station in addition to a rear projection screen (unless the space we were in had its own media capabilities). For the Stage manager station, we utilized the podiums at the touring locations or in the rare case that there was not one, our transportation crates could be stacked to fulfill this need.

The actor stations were built to be dismantled for transport and easily built by the actors at each location. Each station consisted of four parts, 2 hinged jack stands, 1 cross brace, and 1 hard covered flat “header”. Hinge pins were used to assemble the jack stands, and bolts to secure the header flat and cross brace. The headers had coat hooks to be used for costume accessories and props. All actors also had a crate to use as a seat or step (like an acting block) that doubled as packing space for props and costumes.

## Properties

The list of properties as called for in the script:

- 5 Cell Phones
- A Mixing Bowl
- Container of Flour
- Mixing Spoon
- Broom & Dustpan
- “BOO” Card (Melodrama style)
- Script
- Headphones
- Notebook & Pen
- Trick Deck of Cards & Large version of the trick Card
- Camera with a Flash
- Fabric Tape Measure
- String with Two Colo Cups
- 2 Giant Inflatable Hammers
- A Painters Palette and Paintbrush
- A Triangle with A Chiming Stick
- Construction Tape Measure
- 4 Balls

## Costumes

The 4 actors have a base costume that connects with the color story established scenically for the section that they lead but that style-wise connects to their personality. The costumes should be casual and simple so that they can be worn under the accessories that help the actors

quickly adopt their other roles. The following is an outline of the base costumes and accessories that we used for our production.

**Marie** – Green (Science, Energetic, Enthusiastic, Creative)

*Base Costume:*

Green pants and Black Blouse with Chunky Black Boots

*Character Change Accessories:*

Baking Show Host (Science Section) – Chef Hat

Superfan (Technology Section) – Green Cape and Mask

Engineer (Engineering Section) – Green Safety Vest

Betty (Engineering Section) – BIG Green Bow on a headband

Taylor Swift (Math Section) – Sequin Jacket

Mall Customer (Arts Section) – Beige Top

**Trey** – Orange (Technology, Surfer Dude, Casual, Chill)

*Base Costume:*

Hawaiian Shirt (techno print) & Board Shorts with Birkenstock-style sandals

*Character Change Accessories:*

Baking Show Assistant Brad (Science Section) – Apron

Engineer 2 (engineering Section) – Orange Safety Vest

Billy (Engineering Section) – Orange Plaid Newsboy Cap

Mom (Math Section) – Cat-Eye Glasses

Pythagoras (Math Section) – Toga

Abbey's Dad (Arts Section) – Beige Top

**Eliott** – Yellow (Math, Stylish, Trendy, Magician)

*Base Costume:*

Striped button up & Black Pants with Trendy Hip Shoes

*Character Change Accessories:*

Scientist Dad (Science Section) – Lab Coat

Superfan (Technology Section) – Yellow Cape & Mask

Magician (Technology Section) – Sparkly Vest

Engineer 1 (Engineering Section) – Yellow Safety Vest

Fashion Designer (Engineering Section) – Edith Head (Edna Mode) Style Glasses

Artiste (Math Section) – Yellow Beret

Mall Clerk (Arts Section) – Beige Pullover

**Skye** – Blue (Engineering, Sporty, Dancer, Confident)

*Base Costume:*

Sport shorts & Tank Top, Running Shoes & Big Bunchy Socks

*Character Change Accessories:*

Scientist (Science Section) - Lab Coat

Ballerina (Science Section) -Tutu

Star (Engineering Section) - Sparkly Gown



AI (Math Section ) – Fedora  
Arts - Beige Top

**Stage Manager** – Black & Purple

*Base Costume:* Black Pants, Beige Top, Black Zip-up (hides the beige shirt until the final scene), Black Shoes, Headset

*Evil Genius Accessories:* Crazy Purple Wig and “Steam Punk” inspired Goggles

**Media – Visuals**

The graphics, animations, and footage as noted in the script are as follows:

<b>pg</b>	<b>Visual Media</b>
2	<b>P1</b> <i>The logo for the STEAM Plays</i>
2	<b>P2</b> - <i>What Will YOU Make? Media</i>
4	<b>P3</b> <i>(Projections screen shows “The SCIENCE Plays”)</i>
5	<b>P4</b> - <i>Why? Video</i>
6	<b>P5</b> - <i>Mixing It Up with Marie Show Graphic</i>
7	<b>P5.1</b> - <i>A picture of a horrible cake appears over the show graphic</i>
7	<b>P5.2</b> - <i>A picture of a horrible-looking croissant appears over the show graphic</i>
7	<b>P5.3</b> - <i>A picture of the saddest sticky bun appears over the show graphic</i>
9	<b>P5.4</b> - <i>The crummy baked good pictures disappear so only the show graphic</i>
9	<b>P6</b> - <i>The Evil Genius Graphic appears.</i>
10	<b>P6.1</b> – <i>Purple lightning flashes across the screen</i>
12	<b>P7</b> – <i>Anatomy of a Dance Graphic</i>
14	<b>P8</b> – <i>Technology Title Graphic</i>
15	<b>P9</b> – <i>DJ Techie Trey Animated Graphic</i>
16	<b>P10</b> – <i>Graphic of Movie Theatre Marquee</i>
18	<b>P11</b> – <i>Comic Book Pow-Style Animations</i>
18	<b>P12</b> – <i>Magic Act “Curtain”</i>
19	<b>P12.1</b> – <i>Magic Trick Card Animation</i>
19	<b>P13</b> – <i>Evil Genius Graphic Returns</i>
20	<b>P13.1</b> – <i>Purple lightning flashes across the screen</i>
22	<b>P14</b> – <i>Animated rainy day that turns digital</i>
22	<b>P15</b> - <i>A projection appears that reads “The Engineering Plays”</i>
23	<b>P16</b> – <i>Blueprints to Future Cities Animation</i>
25	<b>P17</b> – <i>Red Carpet Animation of Camera Flashes</i>
25	<b>P17.1</b> - <i>Fade up the Fashion Design Graphic of the Gown that Skye is wearing</i>
27	<b>P18</b> – <i>Evil Genius Graphic Reappears</i>
27	<b>P19</b> – <i>Neighborhood Graphic</i>
30	<b>P20</b> – <i>Math Plays Graphic</i>
30	<b>P21</b> – <i>Math &amp; Numerals Animation</i>

- 31 **P22** – Math Numerals Animation faders into a Gritty City Mathscape Graphic
- 32 **P23** – TikTok Dance Clip with its own audio
- 33 **P24** – Abstract Art
- 34 **P25** – Math! Graphic
- 35 **P26** – Evil Genius Graphic
- 37 **P27** – The Arts Plays Graphic
- 38 **P28** – Beige Room
- 40 **P29** – Sketch of a Beige Mall
- 43 **P30** – Color Explosion in the Mall Sketch
- 44 **P31** – Finale Animation
- 45 **Return to P1** – The STEAM Plays Logo

## Media – Audio

The following table catalogs the audio cues as they appear in the script.

<b>Scene</b>	<b>Pg</b>	<b>What</b>
Opening	2	<b>A1</b> - What Will YOU Make? accompaniment
Science	5	<b>A2</b> - Why? Science! Accompaniment
Science	6	<b>A3</b> - Audio Track: Mixing it Up with Marie
Science	8	<b>A3.1</b> - Audio Track: Mixing it Up with Marie
Science	9	<b>A4</b> - The “Evil Genius” theme audio
Science	9	<b>A4.1</b> -The “Evil Genius” theme audio
Science	10	<b>A5</b> - Weird Body Swap audio track
Science	12	<b>A6</b> – Anatomy of a Dance Accompaniment
Tech	15	<b>A7</b> – TECH! Accompaniment
Tech	18	<b>A8</b> – Hero Battle Music Audio Cue
Tech	19	<b>A9</b> – Evil Genius Theme Audio Track
Tech	20	<b>A10</b> – Weird Body Swap Audio Track
Engineering	23	<b>A11</b> – Make it Better (Engineering) Accompaniment
Engineering	25	<b>A12</b> – Sound Effect of Camera Shutters and Flash Bulbs
Engineering	26	<b>A13</b> – Evil Genius Theme Audio Track Play Again
Math	31	<b>A14</b> – AI Gorithm Theme Audio Track
Math	34	<b>A15</b> – Math! Accompaniment
Math	35	<b>A16</b> – Evil Genius Audio Theme
Arts	38	<b>A17</b> – Wake up Alarm
Arts	38-42	<b>A18.00-A18.15</b> – Eerie Void Sound
Arts	39	<b>A19.0 &amp; 19.1</b> – Static Audio Effect
Arts	43	<b>A20</b> – Cacophony Audio Effect
Finale	44	<b>A21</b> - What Will You Make (Reprise) Accompaniment