

AirPlay

Educator Research & Study Guide



Educator & Research Guide

Welcome to the world of Seth Bloom and Christina Gelsone, the performers and creators of *Air Play*. Consider this guide your VIP backstage pass, with tidbits from rehearsal strategies and development, solutions to real-life problem solving, and artistic inspirations.

We have taught for years around the world, sometimes without language. Years before we created *Air Play*, we taught stilt-walking in Afghanistan, water-spitting in Canada, acrobatics in Egypt, and clowning in China. Every time, in every country, we have wanted our students to have fun, learn a real skill, and have some “big thoughts” along the way. This guide was made by us, the creators of *Air Play*, especially for you.

This *Air Play* study guide was designed for multiple uses:

For the teacher

- Each section is designed to be **flexible for pre-show or post-show use**. Most questions are written as post-show inquiries, but can be made into “look for” pre-show ideas. You may want to simply change verb tenses for some questions, or save questions from an activity for a post-show discussion.
- Many sections have a fast **introductory game** or activity (labeled “lickety-split”) as well as more in-depth exercises, so you have flexibility in your class schedule to engage within the time you have.
- The exercises are designed to be **read aloud**, if you choose to do so. This gives you the opportunity to have the students participate in large groups, or break into smaller groups for activities. For some exercises, you may even choose to have the student use the entire page for self-exploration, or as a take-home activity for parents to explore with the student.
- You will notice classroom **questions are in blue ink** for easy locating.

For the student

If, by chance, you should come upon this full document, then you have stepped into the private world of a *teaching artist*. You are welcome to do any of the activities alone, with friends, or with your parents. Have fun, learn, and keep asking questions.

For the curious

This is just a taste of the dedication, exploration, fun, and hard work of our *Air Play* world. We invite you to keep researching and exploring on your own: how does electricity work, what is Surrealist art, where are the hidden weather patterns in the room you are sitting in right now, why does Chile have so many volcanoes, and how can you look at the world sideways?

Air Play

Theater as a Visual Poem

Air Play has no words. It's part comedy, part sculpture, part circus, part theater. We think of it as a visual poem, a world that lets you make your own ideas inside of large "air sculptures" of flying fabric, umbrellas, and balloons. Though it looks simple, *Air Play* is a very detailed and takes a lot more work than what you just see on stage! Every theater has unique invisible wind currents, so *Air Play* has invented fan systems to control the sculptures. For now, check out some fun backstage facts:



- **Air Play was created by two clowns**, Seth Bloom and Christina Gelsone, **and one sculptor**, Daniel Wurtzel. You'll read more about them on the next page.
 - **Air Play's director**, West Hyler, has worked with *Cirque du Soleil*, *Jersey Boys*, and *Big Apple Circus*.
 - **Air Play's technical director**, Todd Little, managed a record-breaking hot air balloon that traveled half-way around the world! His balloon module is now in the National Air and Space Museum in Washington, D.C.
 - **Air Play's stage manager**, Flora Vassar, controls all of the lights, sounds, and fans simultaneously. She has over 250 cues, and is considered the third "performer" in the show.
 - Seth and Daniel went to the same university, Wesleyan. Lin-Manuel Miranda, the creator of *Hamilton*, was a fellow student at Wesleyan with Seth.
 - *Air Play* uses over 200 feet of fabric, longer than 4 school buses.
 - *Air Play* uses 67 balloons each show.
- While *Air Play* looks light, the entire show weighs 1,675 pounds.
 - *Air Play* has traveled around the world on a plane, a truck, a van, and a boat.
 - Climbing inside the giant balloons is the most dangerous part of the show. We bring a sharp object to pop them in case of an emergency. It also gets very hot inside the balloons.

The Creation of Air Play: Circus and Sculpture Meet

Seth Bloom and Christina Gelsone met at a circus in Afghanistan, became engaged while street performing in Scotland, and married in China. Since becoming clown partners in 2006, they have created 6 shows together, competed in international circus festivals, juggled on Letterman, were featured in the New York Times, and headlined at the Big Apple Circus. They live in New York City. See more at acrobuffos.com or airplayshow.com.



Before becoming clowns, Seth was a professional juggler, and Christina was a professional ballet dancer. Seth also graduated from three clown schools and has a Bachelor's Degree from Wesleyan and a Master's Degree in Theater from London. Christina went to one clown school and graduated from Princeton University. Yes, even clowns have to study hard.



Daniel Wurtzel is a sculptor who also lives in New York City. His early work was with huge and heavy pieces of stone, wood, bronze, and silicone. His most recent work has been with making invisible air streams visible and transforming humble materials into beautiful art with air. Unexpectedly, his air sculptures became fascinating to an entirely different profession than his own: theater!

Daniel has worked with famous directors all over the world, including at the Sochi Olympics, on Broadway stages, and in Cirque du Soleil. He is well-known for a video of one of his air sculptures which has had millions of views. See more at danielwurtzel.com.

How do clowns and a sculptor work together? We didn't know what *Air Play* would be when we started together. It took months of experimenting and brainstorming to develop enough new sculptures to use in a full-length show, and then more rehearsal to find out how we as characters related to the sculptures. Only at the end of the process did we make the story. Quite the opposite of most theater development, where the story comes first.

Air Play is structured as a secret circus. In the circus, amazing acrobats and jugglers and animal trainers take your breath away. The clowns recuperate the audience by doing something simple and funny. Daniel's sculptures are like the acrobats: they are so beautiful and breathtakingly high. We are disguised clowns, jugglers, and air tamers in his spectacle.

Air Play had four working titles while in development, including *Ka-Bloom!* and *Bull's Eye Squall*. One day, a friend remarked on how much beautiful music was in the show, like "airplay" on the radio. Plus, we play with real air. Eureka! We knew we had the right name for our show.



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Break the Wall

Lickety-split Warm Your Face Up Game *Be as ridiculous as possible!*

- Start with your face in neutral.
- Rub your face with your hands, stretching and squishing your face.
- Shrink your face as small as you can, making it as small as a raisin.
- Open your face as big as possible, with your mouth open like a lion.
- Repeat "raisin" and "lion" a few times, and then do it faster.

A **neutral** face or body has no expression.

Most dramatic plays pretend that the audience is not present, creating an invisible barrier technically called the **fourth wall**.

Theatrical actors are trained to ignore the audience. Of course, actors can always *hear* an audience reacting, but they never *look directly* at the public. If a spectator sneezes, for instance, an actor on stage will not break the scene to say "Bless you!"

But clowns are taught the opposite, because they originally came from circus and street performing. In circus, an acrobat must be able to do difficult tricks: an acrobat doesn't *pretend* to do a handstand the way an actor does pretend to be a character. Likewise, clowns don't pretend the audience isn't there. Instead, clowns look right at the audience, and often go *into* the audience.

Clowns have many words for looking at someone: **checking in, take, double take, triple take, focus, and slow burn** are some.

When you see Air Play, watch for:

- Do the performers look directly at the audience?
- Do they go into the audience?
- Does the audience come on stage?

Plus, it's funny. One of the biggest tricks in a clown's bag is looking at the audience and sharing their emotional reaction with the public. It's one thing to put your hand in the cookie jar. It's quite a different

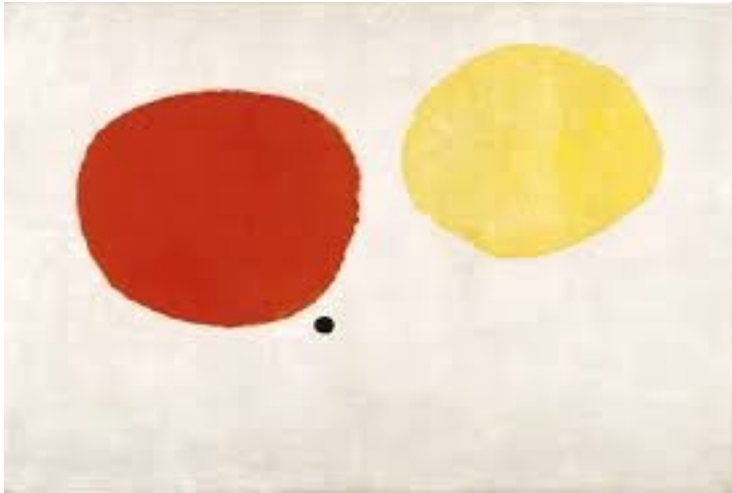
thing to put your hand in the cookie jar and then look up and realize someone is watching you. That "uh-oh!" moment - if the audience can see it - is what is funny.

Recently in New York City, some famous actors have broken the fourth wall to chastise rude audience members. The reason? With the rise of cell phones, people have started texting during shows. Though they are quiet, the glow of the cell phone makes them easily seen! When you go to a show, performers are grateful when you turn off your cell phone.

Clown Show & Tell *The clowns in this activity might want to "dress up."*

- Collect a variety of small objects from the room: anything boring, odd, tasty, smelly... Find objects that diversify emotional reactions.
- Have one desk that is the "hot seat" for the clown.
- The clown sits down with their eyes closed.
- Place one of the objects on the desk and count to three.
- On three, the clown opens their eyes and looks at the surprise object.
- Immediately, the clown does a "take" to the audience, expressing how they feel: happy? disgusted? scared? mad? bored? The bolder and bigger the "take," the funnier the response!

Red & Yellow



Joan Miró, *The Magic of Color*, 1930

Joan Miró (1893-1983) was a Spanish painter and sculptor, known as one of the first **Surrealists**. His paintings are abstract and often play with large color fields.

Air Play is elemental. It is about air, after all. While in workshop, Christina and Seth realized the design for the show would also have to be elemental and simple, reduced to the bare minimum. We already knew our characters would be only Red and Yellow. So we set off to find a visual artist who played with the same basic principles. We found...

Joan Miró. His large paintings (12 feet by 9 feet!) were stunningly simple, abstract, used only a few intense colors, and were exactly the kind of inspiration we needed. His work process, too, encouraged us: *"My characters have undergone the same process of simplification as the colors. Now that they have been simplified, they appear more human and alive than if they had been represented in all their details."*

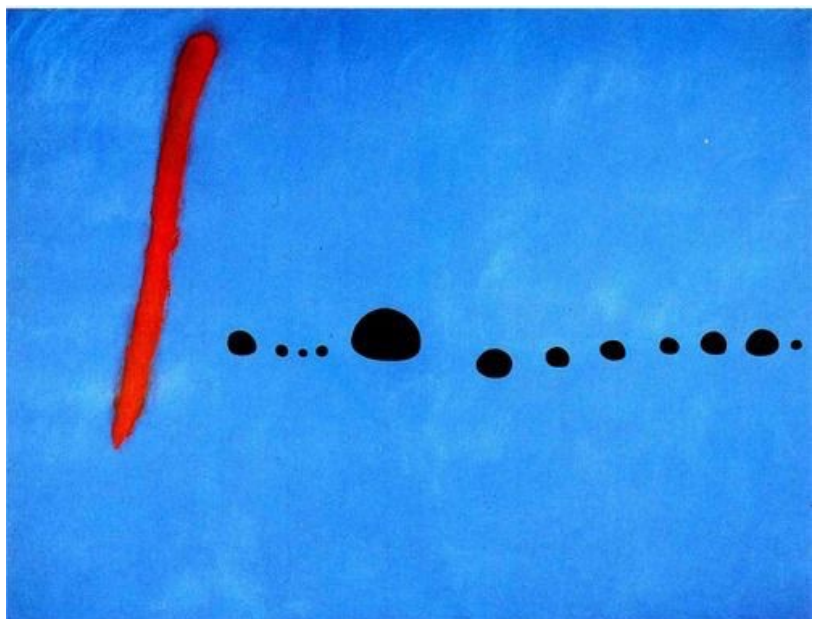
Joan Miró, *Bleu II*, 1961

Where do you see Miro's influence while watching Air Play?

What colors does Air Play use? Why do you think those colors were chosen?

Miró often used a special blue commonly seen on farmyard walls in Catalonia, Spain, where he grew up.

What color from your everyday life inspires you?



The Right Stuff

Lickety-split Look At The World Sideways Game *Look at the world differently.*

- Bend your ear towards your shoulder.
- Keep bending until your view is completely perpendicular, or 90 degrees “off”.
- How does the world look different?

Most staged plays are written by a playwright and then rehearsed by a director. However, since the mid-1950s, there has been a new kind of theater that is made by hands-on experimentation and created by an ensemble of performers. This is called **devised theater**. *Air Play* is an example of devised work.

How do you make a show about air? The short answer: by looking at the world around you in a different way, taking what is sometimes called the “sideways view.” Specifically for *Air Play*, we looked at everything around us with fresh eyes and guessed which objects could fly in the air and then tested them.

The first experiment was the “drop test.” It’s as ‘simple’ as it sounds: take something and drop it. If it falls slowly, it *might* be able to fly. Even better, if it does not fall down in a straight line, there’s a chance it *might* fly in an interesting way. Not so ‘simple’ after all!

Air Play spent 8 weeks testing different objects. Some of the strangest objects we test-flew: lampshades, toilet paper, and a 20 foot custom-made inflatable plastic “monster.”
Not everything works!

DROP TEST!

- Look around your classroom and guess what might fall down slowly and softly.
- (Ask the teacher first!) Hold the object above head height and drop it.
- Does it fall slowly and softly?
- Does it fall in a straight line or in a different way?
- Can the object be changed to float down better?
- What was successful? Was anything worth showing to the class?

FLY TEST! *You’ll need a hair dryer for this.*

- Choose an object that passed the “drop test,” preferably small.
- Have your hair dryer setting at “cool.”
- Hold the hair dryer to face upwards and turn on.
- Place the object above the air stream and let go.
- Does the object fall, fly away, or hover? (A ping pong ball usually hovers.)
- Does the object need to be changed for the air stream? Made smaller or bigger?

The Drop Test That Changed the World

Lickety-split Thought Experiment

- Imagine you are standing near the top of a tall tower.
- In your hands are two balls: a bowling ball and a tennis ball.
- When you drop the balls at the same time, which one reaches the ground first?

According to Aristotle, the ancient Greek philosopher and scientist, the heavier object should land first. But by 1588, Galileo Galilei thought they would land at the same time, and he wanted to test his idea. Perhaps that leaning tower next door would do?

Galileo Galilei came up with the thought experiment to disprove Aristotle, but we don't historically know if he threw two balls off of the Leaning Tower of Pisa. (At the time, he was a math teacher in Pisa, Italy, though perhaps then the tower wasn't leaning over *quite* as far.)



However, the experiment was conducted by two other scientists living in the Netherlands - Simon Stevin and Jan Cornets de Groot (not related to "I am Groot!") They dropped two objects off of their closest tower, the Nieuwe Kerk in Delft.

Dutch and English are close languages. Can you guess what Nieuwe Kerk means? Look at the picture on the left for a clue. Answer: New Church

In 1586 Simon Stevin wrote "Let us take (as the highly educated Jan Cornets de Groot, the diligent researcher of the mysteries of nature, and I have done) two balls of lead, the one ten times bigger and heavier than the other, and drop them from 30 feet high, and it will show, that the lightest ball is not ten times longer under way than the heaviest, but they fall together at the same time on the ground. ... This proves that Aristotle is wrong."

Back then it was dangerous to say, 'Aristotle is wrong,' and this "drop test" was part of a massive turning point in the history, thought, and practice of science. In fact, when the Apollo 15 was on the moon, Commander David Scott honored Galileo by doing his own "drop test." The astronaut dropped a feather and a hammer at the same time in the near vacuum of the moon's surface, and, yes, they did indeed land on the ground at the same time. In fact, you can see video of this lunar experiment by searching "Apollo 15 Hammer-Feather Drop."



The Secret Lives of Ordinary Objects

Lickety-split Memory Game *How many flying props from Air Play can you remember?*

- Split the room into two big groups.
- Choose someone from each group to write down the list.
- In 1 minute, how many flying objects from Air Play can you remember?
- Compare the lists.

In *Air Play*, many objects fly in the air. When making the show, Seth and Christina tested and experimented with lots of odd items, and only a few were ultimately chosen for *Air Play*. They were looking for ordinary objects that could do extraordinary things with air. One scene in particular -with yellow balloons- took 3 weeks of rehearsal and practice to perfect and explore. When in rehearsal, they started with two basic questions: How do you make a balloon “not” a balloon? Are there surprising things a balloon can do?

In the theater world, a movable object used in a show is called a **prop**, which is short for **theatrical property**.

Christina and Seth tested over twenty different kinds of umbrellas. Only three could fly.

Today, you can do the same thing with another ordinary object in your classroom, perhaps a book or hat. We all know what a book is, and what a book does. But... are there any hidden stories in a book? Are there other things a book can do? Explore each question and maybe you can find the secret life of your ordinary book.

Book Discovery

Can your book:

- Make different sounds?
- Make different shapes?
- Have feelings?
- How does your book show feelings?
- Move with air?
- Make air move?

If you found something cool your book can do, show the class!



Can You Solve It?

A real-life story of an *Air Play* stumper!

We had performed *Air Play* many times around North America, and we had our first show overseas in Chile (at a theater surrounded by four volcanoes!) After setting up our circle of fans, it was time to test all eight of our air sculptures. We knew we had to check the sculptures because every theater has its own unique unseen wind pattern. Everything was going great until...

The umbrellas. In this scene, Seth is being 'attacked' by umbrellas that rise 30 to 40 feet (10-13 meters) into the air. But this time, they were barely reaching 15 feet (5 meters). Then we tested 'Moby,' and the huge white fabric had difficulty floating. What was going on?

Can you guess at this point? Make a list of what problems you think might be happening so far.

We knew:

- The air conditioning was turned off, so our sculptures weren't being blown out by hidden air currents.
- All of our fans were working.
- All of our fans were properly set at maximum speed.
- We were at sea level, so we weren't having air density problems.
- South America has different electric plugs, so we had bought new fans with the same mechanical power to work with South American electrics.

Any more guesses? Did we miss something so far that you think might have happened?

We also knew *electrical current is different* around the world. In North America, we use 110 Volts (voltage, V) and 60 Hertz (frequency, Hz). Everywhere else in the world uses 220 V and 50 Hz. (Except Japan and Brazil, which use both systems!) We had the appropriate 220V/50Hz fans in Chile, but the air current still wasn't powerful enough.

Did you figure it out?

Though the fans' machine engine was the same and the voltage built for 220 Volts, it was the Hertz that tripped us up. Hertz, or Hz, (named after a very important scientist, Heinrich Hertz, not the car rental company) is the frequency that electricity is pulsed through the wires per second (cycles per second). So that means Canada gets 60 pulses of electricity per second, but Chile gets 50 pulses of electricity per second.

Wait, Watt? Side note to the geniuses: Yes, we have indeed left out wattage from this version of the story.

Devised shows often develop short-hand names for big scenes that are never told to the public, over time becoming a hidden language that people outside of the project do not understand. 'Moby' is what the *Air Play* team calls the massive white fabric that hovers overhead: named, of course, after the giant white whale in Herman Melville's classic novel. Can you guess what scenes are 'Butterflies' 'Jupiter' and 'Pas de Deux'?

At this point, it is important to remember that we are *clowns*, not *electricians*, but we still had to figure out the problem! It just goes to show, every subject you study in school is important, even if you think you may never use it.

Our most personal piece of advice is “**Never be afraid of hard work.**” Even if you’re not an electrician, you might still be in a very distant country, surrounded by volcanoes, and need to be able to figure out alternating current.

Sure, that makes sense. Wait, what? It still doesn’t explain why our umbrellas aren’t flying high enough! Okay, imagine:

You have a clock that works at 60 Hz, *and* you’re in North America. Great, every second that clock gets 60 pulses of electricity and it keeps accurate time- it correctly reads a new hour for every 60 minutes.

Now, take that same clock overseas and plug it in. Anywhere that’s not North America, really, but we’ll say Chile because we like volcanoes. Suddenly, our little timekeeper is now getting 50 pulses of electricity -50 Hz- every second, and we’ve got to wait another 10 pulses until our clock engine catches up to it’s internal ‘second’ of 60 pulses. So now, we’re a little behind, like 10/60ths of a second behind, or 1/6th behind in general.

No big deal, until it’s time for lunch. Our peripatetic clock is now documenting 50 minutes for every 60 minutes (1/6:10 minutes/60 minutes). If school starts at 8:00 and lunch is at 12:00, we’re hungry in 4 hours. But our clock isn’t hungry until it *shows* 12:00, which is now - with 50 Hz- at 12:40, a whole 40 minutes later! By then, I don’t know about you, but I’m starving.

What does this have to do with fans and *Air Play*? Good question! 1/6 fewer cycles per second means we were functioning with a fan motor at 5/6 power.

Quick! What percentage is that?

That’s 17% less power, and that’s why our fans weren’t pushing up as much air as we normally needed.

We originally used 12 fans in the circle, so how many more fans did we need to make up the 17% less power problem?

We solved it, of course, by adding more fans to the circle when we went to our next show, which was in London (no volcanoes, but a very big old clock named Ben that ran correctly on 50Hz.) We used to have 12 fans, but now we have 16. Mathematically, we only needed 2 more fans to make up the power difference, but 16 is even more power we can control and, besides, it looks better on stage.

****For the professional electricians:** Yes, there’s more to the story. And... we still have questions, so feel free to contact us. Please.

Now, ask us how we solved controlling each individual fan wirelessly, so we could counteract those pesky invisible wind patterns in every theater! But that’s a puzzle for another day...

Stories Without Words

Lickety-split Silent Emotions Game *This can be played in small groups or with the whole class.*

- Each player makes a list of 5 emotions. Don't show anyone!
- Set a timer for 20 seconds.
- One player 'performs' their emotions individually WITHOUT SPEAKING and the other participants guess what the emotion is.

Lickety-split Recall Game: *How many shows, movies, performers, or characters can you think of that perform without words?*

Some Christina & Seth favorites:

Charlie Chaplin	Mr. Bean	Coyote & Roadrunner	Buster Keaton
Marcel Marceau	Bill Irwin	<i>The Nutcracker</i> (ballet)	Mummenschanz
<i>The Red Balloon</i>	<i>Fantasia</i>	<i>Triplets of Belleville</i>	<i>The Artist</i>
Slava's <i>Snowshow</i>	Sam Wills: <i>Tape Face</i>		David Wiesner's books

A show without words is also called a **non-verbal show**.

Seth and Christina chose to make *Air Play* without words for many different reasons. Remember, they both had a lot of experience on stage without talking: Seth had been a juggler, and Christina used to be a

ballet dancer. They have made six shows together, and none of their plays have ever had a written script.

One of the best advantages to a non-verbal show is that there is no language barrier. *Air Play* can perform anywhere in the world and the audience will understand the story.

Seth and Christina have performed together in more than 20 countries and on all 6 inhabited continents!

A **closed-ended question** has limited possible answers. An **open-ended question** has a wide range of possible answers.

But there's another reason *Air Play* was made without words. We wanted to make a show that asked the audience to use their imagination to understand what was happening. In other words, *Air Play* was designed to be open-ended, so anyone could watch it and see their own story.

We want to hear your story! *Write to us and tell us what you think the story is!*

-What do you think happened at the end?

-Who do you think the characters are? Would you give them names?

We've heard some amazing impressions of *Air Play*. Some people think it is about friendship, some think the characters are siblings who grow up and go to college, one woman remembered her brother who passed away, one boy thought it was about solving arguments, and someone else thought it was about refugees and immigration. All of these answers are right. *Air Play* is a little bit like a mirror, what you see reflects some of you. What do you see?

Extra! Extra!

Find more at these websites.

The Creators of *Air Play*

Seth Bloom and Christina Gelsone

Check out their full biographies, videos, their adventures in Afghanistan, other shows they've made, and even Christina's wedding dress made of little white balloons.

Website: acrobuffos.com

New York Times article: *The Traveling Circus Stops Here*

New York Times video: vimeo.com/86794552

The Air Sculptor of *Air Play*

Daniel Wurtzel

See more of his sculptures with air, stone, wood, silicone, and even Jell-o.

Website: danielwurtzel.com

The Supporters of *Air Play*

These are the theaters that gave us space grants to make this show possible.

We wouldn't be here without them, and we thank them immensely!

Cleveland Playhouse Square playhousesquare.org

New Victory Theater newvictory.org

Flushing Town Hall flushingtownhall.org

Zoellner Arts Center zoellnerartscenter.org