

**njpac**  
arts  
education

**schooltime**  
**performance**  
**series**



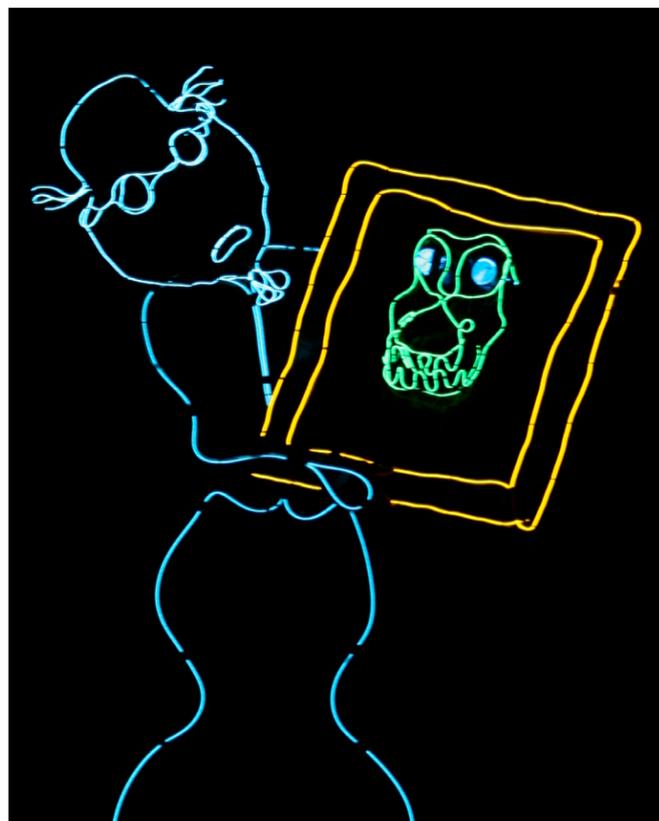
***dino-light***

**teacher resource guide**

## about the performance

Lightwire Theatre arrives at NJPAC with *Dino-Light*, offering audiences a multisensory and exhilarating feast for the senses! A famous scientist, Professor Henslow with a magic touch, brings Darwin the dinosaur to life, sending him off into the world to uncover his purpose. Along the way, Darwin uncovers the power of friendship, perseverance and his innate resilience. This tale fuses dance, puppetry and theater with electrifying lighting effects created from sourced objects and electroluminescent light.

Lightwire Theatre is the brainchild of creators Ian and Corbin Popp, ballet dancers by trade, who met performing on Broadway in Twyla Tharp's *Movin' Out*. The two immediately hit it off with a shared zest for storytelling which marries together, visual artistry, theater and technological elements. The "a-ha moment" for the duo to begin developing this signature style of work occurred when Corbin showed Ian how EL wire (electroluminescent lights) can create effects with batteries alone. The duo quickly got to work and began to cultivate Lightwire's signature process for developing onstage narrative and stagecraft.



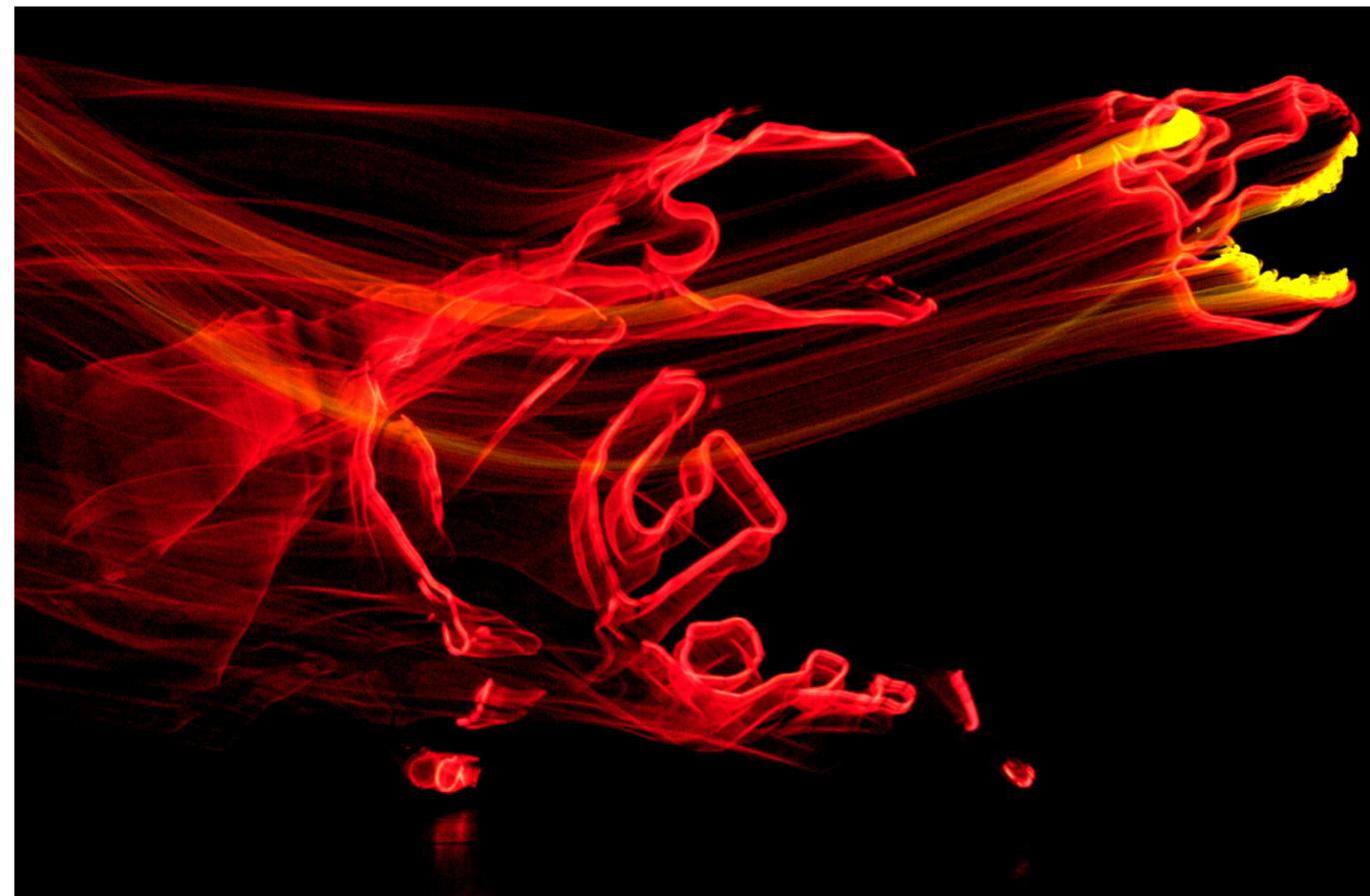
## cultural connections

All Lightwire productions contain a series of onstage puppets which are crafted by sourcing found or scavenged materials such as PVC pipes, pieces of rods, poles and even stuffed animals to create the spine of a respective puppet. The spine is supported by black fabrics and lined with the EL wire. When light is reflected against the black fabric, a two-dimensional effect is achieved. Company members operating the puppets are adorned in black to perfect the onstage magic. Onstage, the plot's story is told through gestural work and stylized choreography rooted in dance theater.

Gestural work first appeared onstage during the Roman period through the earliest pantomime plays. Pantomime actors swap dialogue for nonverbal and exaggerated signals (wiping a fake tear for crying) or through "stage business" (ex. scaling a tower with a fake rope) to emphasize a character's feelings. Pantomime work would reach its optimal popularity during Ancient Rome's Imperial Period (27 BCE to 476 CE). The form would later play a pivotal role in shaping character archetypes within the Italian performance style of commedia dell'arte during the sixteenth century.

The element of dance theater found in *Dino-Light* marries the fundamental basics of dance technique and theatrical storytelling. While dance often zeros in on a performance's relationship to body, energy, space and time, theater leans into the examination and portrayal of a character's emotional life through a narrative's arc.

Dance theater at its center fuses text, choreographed steps and music to deliver a fleshed-out narrative. The pieces are strongly marked by their commitment to utilizing metaphor and symbolism in performance. Dance theater performers will frequently bring in props into their work and play with animate and frozen gestures to convey and explore abstract beauty. Commonly, the text found in innumerable dance theater pieces have translated into the form of spoken word.



## vocabulary

### Advice

A personal opinion offered to support someone

### Batteries

A device which stores chemical energy to transform into electrical energy

### Choreography

A sequence of movements and steps within a dance

### Conflict

A problem faced by characters in a story

### Creativity

The gift of coming up and exploring fresh new ideas

### Dance Theater

Live performance which fuses choreography, music, and drama

### Electricity

A type of energy which electrons (tiny particles) flow through

### Electroluminescent Light Wire (EL Wire)

Flexible copper wire which can be bent to any shape

### Gesture

A pose (animated or frozen) used to communicate feeling without words

### Mood

How you feel inside emotionally

### Musical Score

All of the written/published songs and instrumental music in a show

### Repurposing

Using an object for a different purpose than it was created

### Resolution

The release of a character's tension in a story

### Setting

The location where a story takes place

# inspired learning for the classroom

	Teacher Focus	Student Activity	NJ Student Learning Standards
<b>P</b>	<b>Prepare</b> Discover what your students already know about this art form, topic or type of performance. Then explain more fully what they will see at the theater and why it's important. This can be accomplished by sharing images, vocabulary, videos or context that might help them appreciate the performance more fully.	<b>Introduce the following vocabulary words:</b> conflict, setting, resolution, creativity, dance theater, mood, choreography, EL wire and electricity. Play the <b>introductory video</b> to Lightwire Theatre. <b>Afterwards, ask students to break into groups and answer the following questions:</b> 1. How would you describe the mood of the Dino-Light trailer? 2. What style(s) of dance does the puppeteering remind you of? 3. What are some unique traits of EL wiring?	<b>English Language Arts</b> RL.CR.3.1., RL.CI.3.2.
<b>E</b>	<b>Experience</b> For some students, this may be their first time in a theater. Review audience etiquette and go over expectations for arrival and departure from the theater. Before watching the show, provide a discussion question for them to consider during the performance.	<b>Begin a class discussion with the following questions:</b> 1. How is watching a live performance different than watching TV or a film? 2. How can we show our focus and attention to performers on stage? 3. What can a friendship teach us about ourselves? 4. What makes someone a hero? Utilize chart paper for student responses, if available, for students to revisit their answers.	<b>English Language Arts</b> RI.PP.3.5., SL.PE.3.1.
<b>R</b>	<b>Reflect</b> Give students a moment to think about their answers to the discussion questions, then allow them to share their responses. Next, have students reflect on the skillset of the performers they saw in the show. <b>Go around the class and have each student fill in the following statement:</b> "I can already _____ like the performers did, but I can't _____ yet!" After everyone is done, remind them that with enough time and practice, they can accomplish anything they set their minds to.	<b>Have students reflect upon their responses to the discussion questions in the previous section. Then, break students into groups of two or three and have them answer the following:</b> 1. How did Henslow use creativity when creating Darwin? 2. Did courage and confidence come easy to Darwin? 3. What fears may come up when trying to make a new friend? 4. What changes did we see in Darwin after he found a friend? 5. What was an important lesson you learned about a friendship of your own?	<b>English Language Arts</b> RL.CR.3.1., RL.IT.3.3. <b>Visual and Performing Arts</b> Anchor Standard 7
<b>F</b>	<b>Focus</b> Use this time to review the vocabulary section and complete the <b>Activity Sheets</b> .	Have students review the vocabulary section. Use <b>Activity Sheet 1</b> for students to draft their advice letters of wisdom to Darwin. Use <b>Activity Sheet 2</b> for students to sketch their storyboards with dialogue for an alternative ending to <i>Dino-Light!</i>	<b>English Language Arts</b> W.AW.3.1., W.NW.3.3. W.IW.3.2. <b>Visual and Performing Arts</b> Anchor Standard 1
<b>O</b>	<b>Originate</b> Once the poem is complete, read the poem as a class three times with each student saying the line they wrote. Before each repetition, give them a prompt to inform how they deliver their line (e.g. say it like you're excited, scared, angry, etc.). <b>Optional:</b> To reinforce learning from the focus section, encourage students to incorporate all the vocabulary words.		<b>Social Emotional Learning</b> Self Awareness, Social Awareness, Relationship Skills, Responsible Decision Making <b>Visual and Performing Arts</b> Anchor Standard 1, 2, 5, 6, 7, 10
<b>R</b>	<b>Rehearse</b> Have each student draw their own picture inspired by the show and their class poem. As they are working, use this time to walk around and ask them each about what they are drawing, the materials they are using and what inspired them.		<b>Social Emotional Learning</b> Self Awareness, Social Awareness, Relationship Skills, Responsible Decision Making <b>Visual and Performing Arts</b> Anchor Standard 1, 2, 5, 7, 8, 10
<b>M</b>	<b>Mix it all together!</b> Allow each student to present their artwork and discuss why they drew what they did, giving them an opportunity to express themselves visually and verbally. Between presentations, allow two or three students to describe their reactions to the artwork that was presented. Encourage them to use phrases like "it reminded me of _____" or "it made me feel _____" rather than describing the art as good or bad. Once everyone is done presenting, put the artwork up on the wall with the class poem to complete your students' poem gallery.		<b>Social Emotional Learning</b> Self Awareness, Social Awareness, Relationship Skills, Responsible Decision Making <b>Visual and Performing Arts</b> Anchor Standard 5, 6, 7, 8, 10

# curriculum standards

## English Language Arts

### RI.PP.3.5.

Distinguish their own point of view from that of the author of a text.

### RL.CI.3.2.

Recount in oral and written form key details from a text and explain how they support the theme (in literary texts, e.g., fables, folktales, and myths from diverse cultures).

### RL.CR.3.1.

Ask and answer questions and make relevant connections to demonstrate understanding of a literary text, referring explicitly to textual evidence as the basis for the answers.

### RL.IT.3.3.

Describe the development of individual character's traits, motivations, or feelings and explain how their actions contribute to the plot within a text.

### SL.PE.3.1.

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly.

### W.AW.3.1.

Write opinion texts to present an idea with reasons and information.

### W.IW.3.2.

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

### W.NW.3.3.

Write narratives to develop real or imagined experiences or events with basic story elements.

## Social Emotional Learning

### Responsible Decision Making

Recognizing how critical thinking skills are useful both inside and outside of school; Identifying solutions for personal and social problems; Learning how to make a reasoned judgment after analyzing information, data, and facts; Demonstrating curiosity and open-mindedness

### Relationship Skills

Communicating effectively; Practicing teamwork and collaborative problem-solving

### Self Awareness

Integrating personal & social identities; Identifying ones' emotions; Linking feelings, values and thoughts

### Social Awareness

Taking others' perspectives; Showing concern for the feelings of others; demonstrating empathy and compassion

## Visual and Performing Arts

### Anchor Standard 1

Conceptualizing and generating ideas

### Anchor Standard 2

Organizing and developing ideas

### Anchor Standard 5

Develop and refine artistic techniques and work for presentation

### Anchor Standard 6

Convey meaning through presentation of artistic work

### Anchor Standard 7

Perceiving and analyzing products

### Anchor Standard 8

Applying criteria to evaluate products

### Anchor Standard 10

Synthesizing and relating knowledge and personal experiences to create products.

# additional resources

## NJPAC

About NJPAC

[njpac.org/about](http://njpac.org/about)

NJPAC's Arts Education programs

[njpac.org/arts-education](http://njpac.org/arts-education)

NJPAC's David G. Berger Master Class Series

[njpac.org/berger](http://njpac.org/berger)

Show Name Activity Sheets

[njpac.org/wp-content/uploads/2026/03/DinoLight\\_ActivitySheets.pdf](http://njpac.org/wp-content/uploads/2026/03/DinoLight_ActivitySheets.pdf)

## Websites

Dino-Light | Lightwire Theater

[lightwiretheater.com/dinolight](http://lightwiretheater.com/dinolight)

Atoms & Molecules: 10 Fun Ways for Kids to Learn

[kidsactivitiesblog.com/47951/atoms-molecules-fun-ways-learn](http://kidsactivitiesblog.com/47951/atoms-molecules-fun-ways-learn)

Dance and Movement Vocabulary

[danceadts.com/edsupport/fallseason/vocabulary.pdf](http://danceadts.com/edsupport/fallseason/vocabulary.pdf)

DIY Puppet Theater: Create Your Own Puppet Show Stage

[fridaywereinlove.com/diy-puppet-theater](http://fridaywereinlove.com/diy-puppet-theater)

Kids science: Electricity 101

[ducksters.com/science/electricity\\_101.php](http://ducksters.com/science/electricity_101.php)

Educational Resources: Physics

[nsf.gov/focus-areas/physics/educational-resources](http://nsf.gov/focus-areas/physics/educational-resources)

Electricity: KS2 Science

[bbc.co.uk/bitesize/topics/zj44jxs](http://bbc.co.uk/bitesize/topics/zj44jxs)

Electrical Energy Lesson

[science4us.explorellearning.com/elementary-physical-science/energy/electrical-energy](http://science4us.explorellearning.com/elementary-physical-science/energy/electrical-energy)

Light: KS2 Science

[bbc.co.uk/bitesize/topics/z3nnb9q](http://bbc.co.uk/bitesize/topics/z3nnb9q)

Let There Be Light! Bright Ideas to Excite Kids About Theatre and Science!

[medium.com/gabi-s-world/let-there-be-light-bright-ideas-to-excite-kids-about-theatre-and-science-1dab77bc7eb5](http://medium.com/gabi-s-world/let-there-be-light-bright-ideas-to-excite-kids-about-theatre-and-science-1dab77bc7eb5)

Lighting Design Resources

[weteachdrama.com/free-resources/lighting-design](http://weteachdrama.com/free-resources/lighting-design)

Resources for Teaching Lighting

[theatre crafts.com/pages/home/topics/teaching/lighting](http://theatre crafts.com/pages/home/topics/teaching/lighting)

The Science of Shadow Puppets

[kennedy-center.org/education/resources-for-educators/classroom-resources/lessons-and-activities/lessons/6-8/the-science-of-shadow-puppets](http://kennedy-center.org/education/resources-for-educators/classroom-resources/lessons-and-activities/lessons/6-8/the-science-of-shadow-puppets)

Physical Science Activities | Education.com  
[education.com/resources/activities/science/physical-science](http://education.com/resources/activities/science/physical-science)

Physical Science Teacher Resources

[ny.pbslearningmedia.org/subjects/science/physical-science/?rank\\_by=recency](http://ny.pbslearningmedia.org/subjects/science/physical-science/?rank_by=recency)

Properties of Matter

[ny.pbslearningmedia.org/subjects/science/physical-science/matter-and-interactions/properties-of-matter/?rank\\_by=recency](http://ny.pbslearningmedia.org/subjects/science/physical-science/matter-and-interactions/properties-of-matter/?rank_by=recency)

Science of Electricity

[eia.gov/kids/energy-sources/electricity/science-of-electricity.php](http://eia.gov/kids/energy-sources/electricity/science-of-electricity.php)

Three Super Simple Light Experiments for Kids to Do

[handsonaswegrow.com/simple-light-experiments-for-kids](http://handsonaswegrow.com/simple-light-experiments-for-kids)

Six Fun Static Electricity Experiments for Science Students

[stemeducationguide.com/static-electricity-experiments](http://stemeducationguide.com/static-electricity-experiments)

15 Dance Terms Every Beginner Dancer Should Know

[stuartsdance.com/post/15-dance-terms-every-beginner-dancer-should-know](http://stuartsdance.com/post/15-dance-terms-every-beginner-dancer-should-know)

16 Science Projects and Lessons About Visible Light

[sciencebuddies.org/blog/teach-visible-light-science](http://sciencebuddies.org/blog/teach-visible-light-science)

50 Ideas to Teach Students About Light & Color

[courses.fizzicseducation.com.au/blog/50-ideas-to-teach-students-about-light-colour](http://courses.fizzicseducation.com.au/blog/50-ideas-to-teach-students-about-light-colour)

50 Various Puppet Craft Ideas

[discover.hubpages.com/art/fun-puppet-making-ideas-for-kids](http://discover.hubpages.com/art/fun-puppet-making-ideas-for-kids)

## Videos

Lightwire Theater: America's Got Talent Semi-Finals 2012

[youtube.com/watch?v=ZqKdCgX7M8g](http://youtube.com/watch?v=ZqKdCgX7M8g)

# bring the arts to your school

## In-School Residencies

NJPAC teaching artists come right to your school to teach the performing arts to your students. Our super-flexible in-person residencies are designed to meet your needs and you'll have a dedicated program manager to help you every step of the way. It's the perfect program to keep your students creating, connecting and expressing themselves through the magic of the arts.

## Professional Development

Calling all educators! Expand your teaching skills, deepen your curriculum and give yourself a creative boost in NJPAC's forward-thinking professional development workshops. Our virtual PD programs are for teachers all the way from pre-K to high school and include hip hop, dance, storytelling, theater, music and more. Not only will you learn something... you'll also have fun and be inspired.

## NJPAC Arts Education Schooltime team\*

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# arts training for students

## Saturday Programs

NJPAC's Saturday programs are geared towards students at every level — from those who dream of starring on Broadway to those who are still learning their scales. Students work with professional artists to build technique and develop their own creative style in hip hop, jazz, theater, musical theater and symphonic band.

## Summer Programs

Want to begin to explore the arts? Or immerse yourself in the study of one genre? Then join us at NJPAC next summer in our immersive programs that spark the creativity in every child through the study of music, dance and theater.

## contact us!

For more information or to schedule an appointment, please email our team at [artseducation@njpac.org](mailto:artseducation@njpac.org). Or visit [njpac.org/education](http://njpac.org/education)

Generous support for SchoolTime provided, in part, by



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Made possible by funds from the New Jersey State Council on the Arts, a partner agency of the National Endowment for the Arts.

Generous support provided by The Joan and Allen Bildner Family Fund, Broadridge Financial Solutions, Inc., The Arts Education Endowment Fund in honor of Raymond C. Chambers, Jennifer A. Chalsty, Judy and Stewart Colton, Toby and Leon Cooperman, Mimi and Edwin Feliciano, The Izzo Family, Don Katz & Leslie Larson+, McCrane Foundation, Inc., care of Margrit McCrane, The MCJ Amelior Foundation, Albert+ and Katharine Merck+, NJ Advance Media, Pershing Square Philanthropies, David & Marian Rocker, The Sagner Companies/The Sagner Family Foundation and an anonymous donor.

+ deceased