3D Visualization and Animation

2027 National Leadership and Skills Conference (NLSC) Prompt

The Door to Career Ready

High School and College/Postsecondary

1. Rationale for the 2027 NLSC Prompt

Students who have competed at NLSC have done a brilliant job creating animations in a very limited time to evaluate their skills. But at the end of the day, the resulting end products are unlikely to be true proof of their skills, or something students would proudly use in their demo reels or portfolios to demonstrate career readiness or include in a potential college application. The 2027 NLSC prompt aims to solve this issue by creating an animation at a grander scale with greater complexity, achievable only through sustained effort and truer real-world production standards, that can be displayed to the whole SkillsUSA community. The intention for issuing an annual prompt is for students to create a true demo reel or portfolio-worthy addition to their work.

Your Path to the 2027 NLSC

The 2027 NLSC Project is designed to be developed throughout the competition season, from the first stages of preparation through the National Leadership and Skills Conference. The competition opportunities that lead to the NLSC vary by state. Some state associations may offer a regional or local competition, while others may only offer a state competition.

Competitors and advisors should review their state association's communication for information about available competition opportunities, qualifying requirements, registration deadlines, and the process used to determine who advances to the 2027 NLSC. Follow your state's competition process while using this prompt to continue developing your national project.

How to Use This Prompt Throughout the Competition Season

Local or Regional Opportunities: If your state association offers a local or regional opportunity for 3D Visualization and Animation, use the 2027 NLSC Project as the foundation for your work. These opportunities may provide feedback, skills evaluation, or preparation for the next level of competition. Follow your state association's instructions for what must be completed or submitted.

State Competition: Your state association offers a state level competition that leads to the 2027 NLSC. Continue developing your NLSC project and bring the assets and production work required by your state. State competition formats and requirements may vary. Your state association will provide instructions for the state competition and advancement to the NLSC.

Nationals: At the 2027 NLSC, the completed Finished Short and accompanying display board will be submitted at check-in and judged as part of the national competition. Competitors will also participate in a live skills-based competition using assets created for the final animation.

ONE SHOT. ONE WORLD. ONE REVEAL.

2. The Brief Overview

The Brief	
Team	Two (2) competitors
Create	An original animated short
World	One SkillsUSA competition
Length	Up to 10 seconds, plus the reveal hold
Camera	One continuous forward linear dolly. No cuts, pans, or tilts.
Ending	A world-specific object opens to a clean green plane
Assets	Everything submitted is built by your two-person team
Timeline	Build over the competition season

Build it. Make it move. Tell us something.

Key Terms

2027 NLSC Project: The complete body of work developed throughout the season, including the finished short, production package, and trifold display.

Production Package: The planning and production evidence identified in Section 9.

Finished Short: The final animated submission described in Sections 6 and 11.

Asset Library: The team-created models, rigs, environments, props, textures, materials, lighting setups, and other team-created assets developed as part of the 2027 NLSC Project and permitted for use during the national live skills competition.

Live Skills Competition: The separate national onsite skills component where competitors use their team-created asset library to respond to a new prompt.

Understanding Requirements and Guidance: Requirements identified must be followed for the 2027 NLSC. Other creative guidance in this prompt helps your team develop a distinctive world and communicate your chosen competition. Teams may adapt it to fit their creative process, as long as applicable requirements are still met. This prompt works alongside the National Technical Standards, not in place of them; competitors and advisors should also review the newly revised 2026–28 Technical Standards for details on competition scope, structure, and expectations.

3. The Challenge

Your competition selection is not a limitation. It is your creative commitment.

Choose one SkillsUSA competition. Build a world specific enough that the audience knows where they are without a title card.

Pick the World You Want to Live in

Choose the competition where you can imagine the tools, sounds, and people. What the air smells like. What fills the room. What someone who loves this work looks like when they're in their element.

A team that picks the culinary competition is not making a cooking demo. They are building a world that could be precise, warm, chaotic, absurd, or magnificent. A team that picked welding is not making an instructional film. They are building a world where sparks, metal, and skill belong in the same frame.

Make Your World Unmistakable

If judges need a title card to identify the competition you chose, your world and short are not specific enough. Every prop, surface, light source, and action should feel selected rather than defaulted.

Note that one well-developed character beats three underdeveloped ones. Human, stylized, mechanical, or anthropomorphic: any of these will work as long as they match the world. What matters is that the character feels cohesive to the world and moves with clear directorial intention.

4. Use the Theme to Find Your Story

The Door to Career Ready asks one question: what does becoming capable, confident, or professional look like in your world?

- A first success.
- A difficult problem.
- A mistake caught in time.
- A skill finally clicking.
- A routine going unexpectedly right. Or wrong.

Creative Guidance: No dialogue, drama, or traditional structure required, but something should happen, change, or be revealed.

Tell us something. By the time the door opens, the audience should understand what happened. Test this on someone who hasn't seen your storyboard. What competition is this? What happened? If they can't answer both, iterate.

5. What the Rubric Measures

The rubric scores 10 categories on a 10-point scale, for a maximum of 100 points. A strong entry demonstrates technical craft, visual communication, planning, storytelling, and teamwork.

BUILD IT	MAKE IT MOVE	COMMUNICATE
3D Modeling	Animation	Planning / Storyboard
Textures	Lighting	Idea / Theme
Rigging	Overall Visual Quality	Teamwork
Special Effects		

Creative Guidance

- All ten rubric categories are worth 10 points each. Plan your production so that you develop all areas throughout the season.
- Use effects because they strengthen the world or story, not because you feel obligated to add spectacle.
- Idea and Theme are worth the same as 3D Modeling, Textures, Rigging, Animation, Lighting, and Overall Visual Quality. A technically beautiful film that communicates nothing leaves major points on the table. In the real world, there may be as much preproduction work as final production, so it's important to practice both ends of the process.

6. One Shot. No Cuts. Make Every Second Count.

NLSC Requirement | Camera

One continuous forward linear dolly from start to finish. No cuts, pans, or tilts.

Creative Guidance | First Three Seconds

Your audience just left another team's world. Establish yours immediately. Give them something specific enough to orient them and interesting enough to keep watching.

NLSC Requirement | The Reveal

The camera must arrive at an object native to the world of your chosen competition. The object opens to reveal a flat green plane behind it.

- The reveal object must naturally fit into your world.
- A plain-looking door can qualify only if it's detailed and styled specifically for your chosen environment.
- The reveal must be motivated. A character, mechanism, or physics event causes it to open.
- The green plane does not simply appear. It is revealed.

Green Plane Specification	
Color	RGB 0, 255, 0
Material	Unlit, emissive
Frame coverage	At least 95% of the frame at full reveal
Hold	At least 24 frames (1 second) at 24 fps
Lighting	No shadows, reflections, or ambient color influence
Result	A flat, consistent value that keys cleanly in compositing software

Before you render, check four things:

- Nothing intersects the green plane.
- Lighting does not change the green value.
- The reveal object fully clears the frame before the hold begins.
- The hold does not start until the reveal is complete.

7. One Finished Short Among Many

At Nationals, every team's Finished Short plays back-to-back in the showcase reel. No team knows what comes before or after theirs.

A pot lid lifts in a kitchen and clears into a welding bay. A blast shield rises into a salon. A cockpit canopy opens onto a culinary competition floor. Nobody planned it. The combination is the piece.

Every team contributes one Finished Short. The reel is what happens when all the Finished Shorts play in sequence.

Design your reveal as if the world behind it could be anything, because it will be.

8. Display Specification

Teams will set up a display space visible to the public around the perimeter of the competition area.

Display Space You Are Working With

Your display includes two things working together:

- A trifold board standing at the back edge of the table
- A table surface in front of it

Both are print and physical only, and both are visible to the public and judges during the display period. The purpose is to let visitors and judges see the process behind each short.

Trifold Board

Maximum 36 inches wide and 48 inches high when fully open. The board must be entirely free-standing, with no wall support, bracing, or leaning. A topper, graphic, or other element intentionally extending above the board is allowed, up to a maximum total height of 55 inches.

Complete Display

Your complete display, the trifold board and all other printed and physical materials, must fit within the 36-inch-wide by 24-inch-deep tabletop. Nothing may extend beyond that footprint.

Table Surface

Use the table surface to tell the production story in physical form:

- Printed storyboard pages and concept sketches
- Material and texture reference
- Animatic frame printouts and sketchbooks open to relevant pages
- Physical props, 3D prints, or models that informed the character or world design

Everything on the table should support the display's purpose.

Organize It to Tell the Complete Story of Your Production

A judge should be able to walk up, spend two minutes with the display, and follow the full arc from first idea to Finished Short. That arc has a natural order, use it as your organizing principle:

- References and inspiration
- Character and world development

- Planning and storyboard
- Models and surfaces
- Lighting studies
- Effects previsualization
- Rigging
- Animatic evidence
- Finished production stills

What the Display Proves

The display space is evidence of production work. The use of your display space makes that work visible, organized, and readable. A judge who cannot find your lighting studies or your rigging tests in two minutes cannot give you full credit.

What Does Not Belong

- Personal items or equipment unrelated to the display
- Anything requiring power or a screen

9. Build Like a Studio

Divide Ownership. Review Together.

One partner might lead modeling and rigging while the other leads animation and lighting. No single split is correct. Figure out where each of you is strongest. Assign clear ownership. Make important creative decisions together. Two people. One submission. Both are responsible for everything in it.

NLSC Requirement | Original Work

If your team did not make it, do not bring it. No downloaded or acquired assets. No borrowed rigs. No work from anyone outside your two-person team.

Your Production Package

The Finished Short should show what you made. The production package shows that you understand how you made it.

Required Deliverables	Rubric Category	What It Proves
Mood Board + Reference	Idea / Theme	Judges should see the visual DNA of the Finished Short before they press play.
Character + World Bible	Idea / Theme	1 to 2 pages. Your team's character, world rules, and tonal commitments.
Storyboard + Story Beats	Planning / Storyboard	The full sequence planned clearly enough for someone to understand the action and reveal before production begins.
Animatic	Planning / Storyboard	Timed rough edit showing camera staging, blocking, pacing, and sequence. Judges compare this to your Finished Short.

Required Deliverables	Rubric Category	What It Proves
Model Turnarounds	3D Modeling	Turnaround sheet of your hero character and at least one key environment asset, shaded and wireframe to inspect topology.
Surface / Texture Sheet	Textures	UV layout, resolution, roughness, reflectivity, detail, and appearance of key materials.
Rig Tests	Rigging	Range of motion, deformation quality, controls, and at least one stress test.
Lighting Studies	Lighting	Two meaningfully different lighting approaches. Chosen direction identified.
Special Effects Previs	Special Effects	For each planned effect: source, transmission, destination. Evidence effect was planned, not discovered.
Finished Short	Animation, Overall Visual Quality	Your completed animation ending with the reveal sequence.

10. Build Through the Competition Season. Perform Live.

Your 2027 NLSC Project becomes the body of work and asset library you develop throughout the competition season and ultimately bring to nationals.

Local or Regional Competition Opportunities

Some state associations may offer a local or regional competition opportunity. If applicable, bring the work completed at that point in the season and follow the instructions provided by your state association. These opportunities may be used for skills evaluation, project review, feedback, or advancement.

State Competition

For your state competition that leads to the NLSC, continue developing your project and follow your state's requirements for submissions and live skills competition. Your state may use the 2027 NLSC Project as part of its competition process, provide feedback, or require additional skills demonstrations.

National Competition

Arrive at the NLSC with your 2027 NLSC asset library, any applicable state competition feedback incorporated, and your trifold and display materials ready. The national live skills prompt is revealed on the morning of competition.

What you can bring: team-created asset library.

What you create day-of: new scene files, animation, staging, and props specific to the live prompt. Anything the prompt requires that does not already exist in your asset library.

11. Technical Requirements

The requirements in this section apply to the 2027 NLSC. State and local competition requirements may differ. Competitors and advisors should follow their state association's instructions for any competition occurring before the NLSC.

Requirement	Rule
Finished Short	Maximum 10 seconds, not including the reveal hold. 1920 x 1080 at 24 fps.
Reveal Hold	Green plane fills at least 95% of the frame and holds for at least 24 frames (1 second) at 24 fps.
File Naming	Use the team number assigned at each competition. Nationals format: Team####_0#_FileType_v0#. No spaces or special characters. Example: Team1042_01_FinalRender_v01.mp4
Backup	Maintain a backup on a separate drive. Save a versioned backup before every render.
Software	Teams use their own computers and software. Bring the machines, licenses, and peripherals you need.
Internet	Restricted to software licensing only on competition day. No browsing, downloading, or lookups.
No Premade Assets	**Not permitted**. Every submitted asset must be built by the team. This includes models, textures, rigs, plugins, presets, and brushes not already installed in the team's computer software.
Rigging	All rigs must be built by the team. Pre-built rigs from any external source are not permitted.

12. Build Your Checkpoints

Fill in dates with your advisor. Treat each checkpoint as a decision gate, not a suggestion. Protect enough time for iteration before state and national competitions.

Checkpoint	Target Date	What Should Be Complete
Competition Declaration	[DATE]	Competition selection locked. No changes after this date.
Concept Complete	[DATE]	Mood board, character and world bible, initial story beats, and character sketches complete.
Storyboard Complete	[DATE]	Full sequence planned, including first-three-seconds hook and reveal.
Modeling Complete	[DATE]	Hero character and key environment assets modeled and textured.
Rig Complete	[DATE]	Character rig built, tested, and documented.
Animatic Complete	[DATE]	Full animatic timed and reviewed for clarity, camera path, pacing, and story.

Checkpoint	Target Date	What Should Be Complete
Local Competition	[DATE]	Complete the work required for your state's first applicable competition opportunity. Review feedback and use it to continue development.
Production Complete	[DATE]	Finished Short complete and rendering. Final technical checks underway.
State Submission	[DATE]	Full production package submitted according to state requirements.
State Competition	[DATE]	Complete the work required for your state competition. A live skills test is recommended. Review feedback and use it to continue development.
National Submission	[DATE]	Final 2027 NLSC Project submitted according to NLSC requirements. Finished Short and trifold display complete.
National Competition	[DATE]	Review competition updates to ensure you have the most current information regarding pre-conference requirements.

13. Production Work | Final Self-Assessment

Production Check

- Can someone identify the SkillsUSA competition?
- Can someone explain what happened?
- Does the production package show planning and iteration?
- Could both partners explain their roles?

NLSC Requirements

- Is the Finished Short within the required length?
- Is the camera movement compliant?
- Does the reveal meet the green plane requirements?
- Are all submitted assets original work?
- Is the file correctly named?

MAKE SOMETHING YOU ARE PROUD TO PUT YOUR NAME ON.