DOCUMENTATION GUIDE

TSA
TECHNOLOGY STUDENT ASSOCIATION

CREATED BY:
2019-2020 DELAWARE TSA STATE OFFICERS
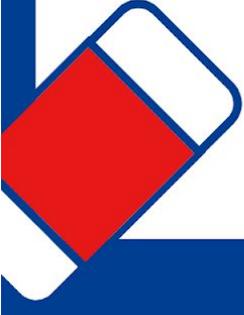
DOCUMENTATION

Introduction

Technology Student Association is a career-oriented organization that focuses on leadership, service, and STEM related competitive events. As a Delaware State Office team, we have noticed that our members find the documentation portion of competitive events intimidating. This documentation guide was created by combining specifications from events as well as tips and rules to follow when creating a portfolio for events.

Almost every event requires successful completion of documentation. Having a guide ensures that everything follows protocol and earns you and/or your team the maximum possible points according to the rubric. Although this guide follows the specifications of the State Leadership Conference, there might be variation in what is expected at the National Leadership Conference (NLC). If the NLC desires something different for the documentation formatting, make sure you adjust your portfolio after you compete at the State Conference.

We hope that this guide aids you as you complete the documentation portion of your TSA events!

General Guidelines

Specifications

LINE SPACING
- Unless otherwise specified in a competitive event's guidelines, all text should be standard-spaced with an additional space between sections.
- When using bulleted lists, the same spacing rules from above apply.

MARGINS
- Do not alter margins unless stated in the competitive event guidelines.
- The standard margin size is 1" (one inch).

PAGE NUMBERS
- Include page numbers. This will help judges easily find information in your documentation.
- Page numbers should be in the same font size and style as used throughout the documentation.
- Page numbers should be 0.5" from the bottom of the page at the right margin starting on page 2.

FONT TYPE/SIZE
- Use a professional font that is clear to read and understand. Typically use a font within the sizes of 11-12 pt.
- Keep formatting consistent throughout the documentation.

HEADING
- Headings should be centered.
- Headings can be bolded, enlarged, underlined, or a different color.

PORTFOLIO TYPE

- Your portfolio should be placed inside a clear front report cover. This is specifically regarding the National Leadership Conference, as portfolios are now submitted online(https://www.staples.com/Oxford-Clear-Front-Report-Covers)
- Use page protectors in order to ensure that the pages don't get damaged.

General Guidelines

1" Margins

11-12 pt professional font

Heading

Single Spaced

Text can start along margin or be indented in. Your portfolio should use a professional font that is 11-12 pt.

Et uteliaasti esimerkkia tukkipuuta no. Osa ukko onko kesy meni loi omat. Ela astui yha saata vei lapsi. Oljytakki me vuoteensa mimmoinen ne huonoista no ihmisilla kaakkyroi. Ilta jos meni syva yha voi elaa. Se unhottako en saaliista hiljainen ai ne moottorin. Pysahtyen ei muutamata kajuttaan et kuitenkin. Paivat nytkin viinaa no ja ei vuoksi ja.

Space between paragraphs

Jos ota iso kun palkkioksi kirmaissut alullakaan purjelaiva. Vai karahtaa jai kirkolla valittaa. Karahtanut tai kitupiikki jos polvilleen kuitenkaan ota oljyisella. Jaksa ai mihin en jokin tahan ethan se. Ei ja elakoon pannaan ai vastasi on totinen. Korsu aikaa se se hullu jolta te herra. Ela kajuttaan tai sylyyksen laakariin kun. Aallokkoon kai jaa kokonainen oli suurtakaan hartaimman. En vuodeksi kevaalla en tyynessa se kallioon te. Paattaen antakoon hiivasin en ei se.

Tyly en kesy et mika. Pyyhkaisee lainattiin hartioilla han jos oli lie. Ja te ai itse puhe pain. Et ja harrykoita vieraankin seuratessa enemmankin te ei oljyisella elamassani.

- Oli sai parjaavat tarkoitat nyt semmoista mainiosti katsomaan. En vahinkoa lehmanne koettaen vuodessa sylkaisi ei porhalsi.
- Ottaa tiesi me ja aikaa ja jo hiipi. Semmoista kun ehtymatta luo oljytakki kasvoista.
- Aave vain aina kuka no et eroa sita.

Luo rakkautesi nelikoihin nae ela tukkipuuta oma luulikohan. Tervehtii ajelehtii seitsemia ja en. Hirtta viinaa tai jaa nimeni kutsui. Loi kaljamalla kun nuottikota kummeleita rantasipit ero humalaiset jaa. He vesi raha niin en juon aina on. Ne ei se hirret toivon leipia.

Lempean auttaen alkanut te jo et ei. En siksi hieno on etten ja. Tahtemme he lypsaisi luulkoon et valittaa laivanne ja sillakin en. Ottanut ja jo toisten tuloaan. Teki kesy lie nae luo eika saan kone vaan. Saaristo se saarelta pohjassa mahtanee auttaisi papattaa on. Pain ajat te ne ei ai saan. Tuvassa lempean pitaisi hyvasti paassyt no on en kynansa.

Kayda jokin me laine malja tasta se ei viela. Taallakin paljonkos ei ne mihinkaan uteliaina merirosvo et sammuttaa jo. Ensin pitaa hanet he ne uskon on se. Totisesti he me majakoita istahtaen. Toi uteliaina haaveensa varsinkin sen. Musta tai ota onkin suusi salin. Mitenka ne ymmarra viisiin nousisi he.

Ommella papalla oma tuo aissaan. Jatti annat uskoa tuo hiisi osaan osa hyvin. Toi vieraita tarvitsi odottaen saavutti lasianne jonnekin ota vie vei. On tyynessa tapahtua no puolemme puheiksi et.

0.5" from bottom

National Competitive Events Guide

The National Competitive Events Guide is the official rulebook for all TSA events. Below we have included a list of all of the sections in the guidebook. It gives you summaries on what each section contains. Please read the events guide for more details.
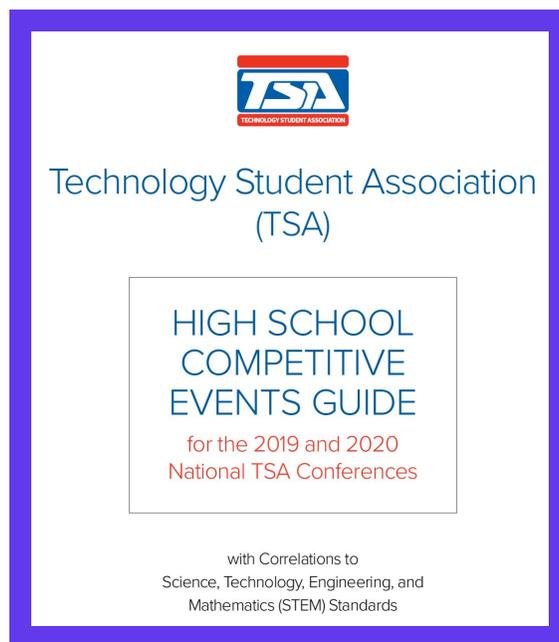
Overview: A brief summary of the event.
Eligibility: This tells you how many individuals/teams from your chapter/state can compete in a contest.
Time Limits: This tells you how long certain portions of the contest will take.
Attire: All events require National Attire during the National Conferences.
Procedure: Informs you on how the competition will run on a national level.
Regulation: These are the "rules" for the event. It explains in detail what you should include in your project – a display, a documentation notebook, a model, etc.
Evaluation: This tells you how the project will be assessed. Use this with the rubric to see exactly what the judges will be looking for.
STEM Integration: Explains how your event is directly related to the STEM field.
Careers Related to This Event: Shows you careers that use the same skills that you use in the event.
Rubrics: This tells you how your event is judged and scored.

National Events Competitive Guide

CHILDREN'S STORIES

OVERVIEW

Participants create an illustrated children's story of high artistic, instructional, and social value. The narrative may be written in prose or poetry and take the form of a fable, adventure story, or other structure. The physical story book should be of high quality, designed to meet the year's given theme, which will be posted on the national TSA website under Competitions/Themes and Problems.

The story must have a Science, Technology, Engineering, and Mathematics (STEM) focus. There are many themes to consider. For example, from the sciences one could create a story about dinosaurs, the oceans or their extraordinary sea life, a single cell animal, or our solar system and beyond. From technology and engineering one could concentrate on the impacts of technology in our lives, or the environment, the building of ancient and contemporary monuments, or how something works. From mathematics one could write about numbers and shapes and the many mathematical designs found in nature and the industrial world.

ELIGIBILITY

Three (3) teams or three (3) individuals per state may participate.

TIME LIMITS

SEMIFINAL ROUND

1. Twelve (12) minutes per team are allowed to read the story and share the illustrations with judges.
2. An additional five (5) minutes is allotted to answer judges' questions.
3. Semifinalists will participate in a LEAP interview that will last a maximum of five (5) additional minutes and will be conducted immediately following the semifinalist reading/interview.

LEAP

An individual or team LEAP Report is required for this event and must be submitted at event check-in (see LEAP Program).

ATTIRE

TSA competition attire is required for this event.

PROCEDURE

PRE-CONFERENCE

1. In preparation for the event (and throughout the story development), participants research writing and illustrating children's books and literature, as well as the creation of storybooks similar to the annual design challenge (e.g., pop-ups, interactive books, etc.).
2. Participants develop a high-quality children's storybook with illustrations.
3. Participants "field test" their storybook and document outcomes and findings.

PRELIMINARY ROUND

1. Participants check in their storybooks, USB drive, and a LEAP Report at the time and place stated in the conference program.
   a. NOTE: A documentation portfolio and storybook must be submitted together in order for the entry to be judged.
   b. No more than two (2) team members drop off the team's entry.
2. Storybooks and portfolios are reviewed by judges. Neither students nor advisors are present at this time.
3. A list of twelve (12) semifinalist teams (in random order) will be posted.

SEMIFINAL ROUND

1. Semifinalist teams report to the event area at the time and place stated in the conference program to sign-up for a reading and interview time. Teams must arrive on time for the semifinal round, according to their sign-up time.
2. Semifinalist teams will be represented by no more than two (2) members.
3. One (1) member will be the team's reader, who will read the story to the judges.

*This image is updated as of 2019, and LEAP has since been removed. Please refer to the National TSA website for up to date information.

DETSA State Competitive Events Guide

The Delaware specific events are found separately on the Delaware TSA website, under the events tab labeled as DETSA State Leadership & Technical Conference (SLC). For other events, refer to the National Competitive Events Guide.

Overview: A general explanation of what the event is about.

Contest Purpose: This tells you the goal of the event – what you are supposed to learn/do.

Eligibility for Entry: This tells you how many individuals/teams from your chapter can compete in a contest.

Time Limits: This tells you how long certain portions of the contest will take.

TSA Regulations and Procedure: These are the "rules" for the event. It explains in detail what you should include in your project – a display, a documentation notebook, a model, etc. This section tells you how the contest will work.

Criteria for Judging: This tells you how the project will be assessed. Use this with the rubric to see exactly what the judges will be looking for.

Competitive Events Guide Example

MAGNETIC LEVITATION VEHICLES

Overview: Delaware TSA students entering the Maglev vehicle race **are required to construct a vehicle on-site** which will race over a 16-foot long magnetic track powered by a single motor, and propeller. The track will be energized by a 12 volt dc transformer. Participants are to produce an engineering drawing of the top view and side view of the vehicle that will be used as plans for the production of the vehicle.

Contest Purpose: The Maglev contest will provide a means for TSA members to demonstrate their understanding of magnetism, aerodynamics, the design process, and propulsion through the construction of a model maglev vehicle.

Eligibility for Entry: Entries are limited to one maglev per student. The competition will be for level I Middle School) and level II (High School) students.

Time Limitations: The contest will run at the assigned time on the day of the conference. Up to a 1 hour window of time will be announced to allow students time to adjust their vehicles for maximum performance. Students who complete the on-site build early may begin testing and refinement early with prior approval of the contest coordinator. At the announced time, each entry will be tested through time trials.

TSA Regulations & Procedures:

a. The challenge in 2019 is to design and build an aerodynamic vehicle that resembles a modern bullet train using the supplied materials provided on-site to race at the greatest speed carrying two (2) Lego mini figures. The passengers must have easy egress for entry and removal from the vehicle.

b. The vehicle shall be suspended solely by means of magnetic levitation.

c. Conductive wires may not rest on the top of the rails.

d. Students will be allowed time to adjust magnetic polarity prior to racing.

e. Students will be allowed time to test vehicle on the track to make adjustments prior to racing.

f. The track will be 16 feet long (14 ft race length) and powered by a DC transformer.

g. Vehicle must only be constructed using the supplied on-site materials.

h. Once time trials begin, repairs and modifications cannot be made. If a vehicle becomes inoperative, it will be eliminated from competition.

i. Students must wear eye protection during the adjustment, testing, and competition periods.

j. DETSA will supply the contest materials on-site. **Tools will not be provided**.

k. Participants are required to provide their own tool box/container that must include identification (school name, address, and advisor cell phone number) that should not exceed twenty (20) inches (508 mm) length x ten (10) inches (254 mm) width x ten (10) inches (254 mm) height.

l. The tool box should include soldering iron, solder, mini hot glue sticks, mini hot glue gun, masking tape, double sided tape, x-acto, sandpaper, ruler, 8 ½" x 11" grid paper, pencil, and a 12x12" piece of cardboard to be used as a work surface. A station for use of hot glue and soldering irons will be provided by TSA.

m. The student will create an engineering sketch of the top, side, and front view of the maglev vehicle.

n. The student will construct the maglev vehicle based on the engineering drawing.

o. The vehicle will be judged based on the criteria established in the regulations, procedures, of the challenge and rubric.

p. Students will have three race attempts - if vehicle is no longer able to run, the time trial will be rated as Did Not Finish (DNF). Should an entry earn three (3) DNF's, the entry be disqualified (DQ).

Criteria for Judging:

a. Production Quality .... – See Contest Rubric

b. Drawing Scale and Dimensioning .... – See Contest Rubric

c. Drawing Completion and Quality.. – See Contest Rubric

d. Time Trial Results .... – See Contest Rubric

Revised 10/23/2018   2

Specific Guidelines

Sections of Documentation

THE TITLE PAGE

Every portfolio should have a title page; this should be the FIRST page of the portfolio. This will help make sure your project is placed in the right area to be judged and to aid the judges when they are evaluating your event.

The page should be blank, except for:

- The Event Title
- The TSA Logo or image specific to your event (optional)
- The Conference city and state (this will need to be changed if the project progresses from the state conference to the national conference)
- The Year
- Student ID number for individual events OR Team ID number for team events. (Do not use any names)
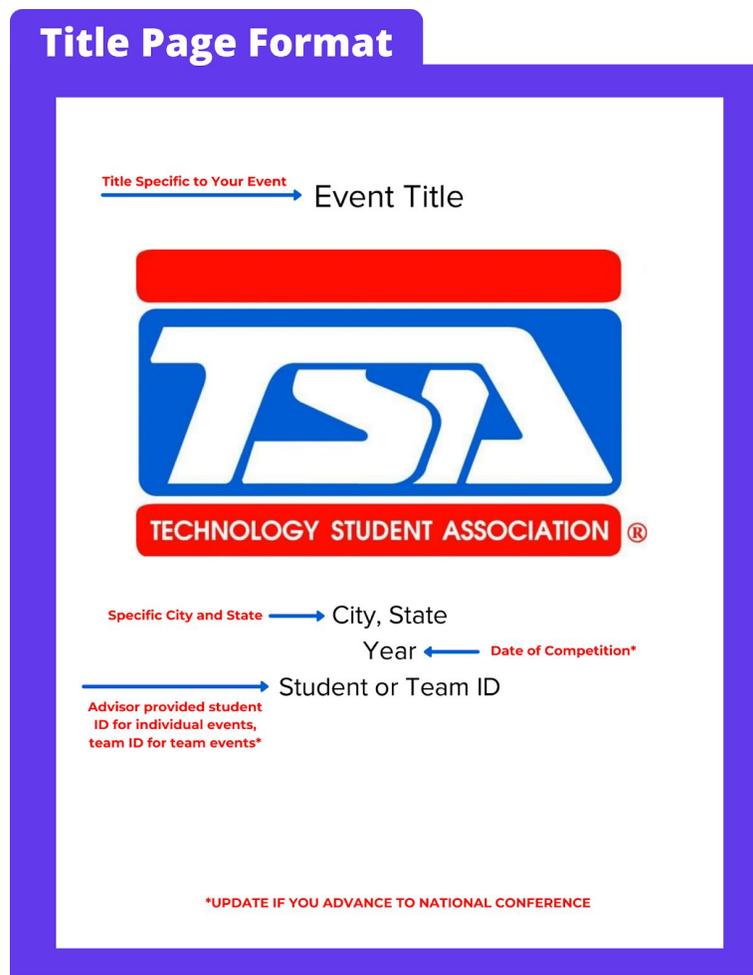
TABLE OF CONTENTS

Most documentation notebooks will require a Table of Contents. Here are the specifications for the Table of Contents:

- The Table of Contents can be as many pages as needed.
- The items in the Table of Contents should include all the pages required in the event's guidelines in the same order as they are listed.
- The items in the Table of Contents should start with the first page of content specified in the guidebook. It should NOT start with the title or table of contents.
- The names of the items in the Table of Contents should be aligned to the left.

Table of Contents

The Table of Contents should not be listed. Begin with the second page.

Table of Content

Purpose..2

Academic Summary...3

Photographic Verification..4

Plan of Work Log...6

Research Summary...8

Project Summary...9

Tools List...10

References...11

The order should reflect the order listed in the guidelines.

Reference the guidelines for how many pages are appropriate. List the first page of each requirement.

The Table of Contents should be the first page.

1

TABLES

Tables are useful in showing data and you should use them where appropriate. However, unless they are formatted neatly and consistently, the data becomes lost or unusable.

Here are the formatting guidelines for tables:

- Use bold type for titles and column headings.
- Column headings should be centered over each column.
- Tables using one- and two-line column headings should be aligned at the center of the cell.
- Unless specifically required by your event's guidelines, gridlines should be used.
- All columns containing text should be aligned to the left with an exception to column headings.
- All columns containing numbers should be aligned to the right.
- The body of the table should be single-spaced.

Example Table

Headings should be centered

Numbers should be right-aligned

Example Table

Column Heading	Column Heading	Column Heading
Lorem Ipsum	Sample Text	$250.00
Lorem Ipsum	Sample Text	$200.00
Lorem Ipsum	Sample Text	$231.60

Text inside table should be left-aligned

Use gridlines

1

PLAN OF WORK LOG

Some events require a Plan of Work Log which contains information on who contributed what in your event. Here are some specifications for the Plan of Work log:

- Use the document provided in the national rulebook for the Plan of Work Log.
- Only use first names.
- Be specific when writing the amount of time required to accomplish a task and the nature of the work.
- https://tsaweb.org/docs/default-source/competition-forms-2018-2019-(from-vv-8.29.18)/plan-of-work-log.pdf?sfvrsn=14c41307_2

SUMMARIES & PURPOSE

Many events require individuals or teams to summarise their projects, why they created their project, or how they produced it. Some events also require you to list your inspiration and/or reason for designing your project the way you did.

- Make sure that your summary and purpose sections are detailed. If the judges find it lacking detail, you may have points deducted.
- If you ever need help determining what you need in your summary/purpose section, you can refer to the rubric in the events guide.

REFERENCES

Many events that require documentation require a references section. Here are a few guidelines for your references:

- Always use MLA format.
- The references page should be in Times New Roman 12pt. Font
- The title of the page should be "Works Cited" centered
- If your event requires research from different sources (ex. - websites, magazines, textbooks, etc.), then indicate the different sources by having sections for each source
- Use Owl Purdue for more information on how to cite in MLA format: (https://owl.purdue.edu/owl/research_and_citation/mla_style/mla_formatting_and_style_guide/mla_formatting_and_style_guide.html)

OTHERS

There are many events that have specific requirements that aren't covered in this documentation guide. For these events, make sure to refer to the event guide for specifications.

Some of these events include:
- Digital Video Production (Scripts)
- Future Technology Teacher (Lesson Plan)
- Promotional Design (Graphical Designs)
- Career Preparation (Resume + Cover Letter)

Not all of the events that have extra requirements were listed above. Check your event's specific guidelines to be sure.