Contest Singles
Contest and Project Guide
(2013 edition)

CNC Milling Technology
Contest and Project Guide Introduction

Congratulations on your participation in SkillsUSA. Your choice to be involved in SkillsUSA aligns you and your training program with a national network of business, industry and education professionals who are committed to national technical standards and rigorous training techniques. This guide has been developed to assist you and your students in meeting the standards set by some of America's finest corporations and technical, labor and trade associations.

This guide is designed to assist you in preparing your students for state and national competition in the SkillsUSA Championships. However — and just as importantly — this guide should be used to help all students in your instructional program to practice national technical standards through the tests and projects included.

The technical standards have evolved into much more than a preparation guide for competition. The standards have been validated by some of the best subject matter experts in the nation and have been cross-walked to the academic areas of math, science and language arts. They are now the basis for what business and industry expect in an entry-level employee in their respective occupational program of study.

You will find a variety of materials and tips inside to assist you in your instruction and contest preparation. To be sure you and your students receive the maximum benefit from these materials, here are a few tips:

• The regulations and standards should be reviewed completely and followed exactly. Know the regulations and rules to be followed. In competition, a thorough knowledge of the rules is the first step to success.

• Analyze the rating sheets at: www.skillsusa.org/compete/scorecards.shtml. The rating sheet should be used as an evaluation tool to measure how well students perform to the standards and regulations.

• Practice using the contest projects for your contest (if they’ve been included in this guide). These are the 2012 projects from the national competition. Using them gives you the advantage of practicing using a recent contest.

• Read the Insider’s Guide from SkillsUSA Champions magazine. Reading them now may seem to be a low priority, but these tips are from those who have had a national competition experience, and there could be some small hints that give you big advantages (not all contests are covered in this section).

• Make sure students study related technical knowledge. A written test on technical and academic knowledge can count for up to 25 percent of the total possible score (see the General Regulations section).

• Check online for the contest updates. This will provide you with any recent changes to contest regulations. Find the updates at: www.skillsusa.org/compete/updates.shtml.

• Make sure students have an up-to-date, one-page résumé. The résumé is part of a student’s score. A sample résumé is included in this guide.

• Finally, students need to be prepared to demonstrate solid employability skills. They will be tested with a Professional Development Test and through an Oral Professional Assessment. Have students brush up on interview skills, eye contact and a firm handshake. Make sure students study Levels 1 and 2 of the SkillsUSA Professional Development Program (PDP), including the SkillsUSA Student Workbook. Each year at the national competition, contest ties are broken using the score from the PDP test. If you do not have the PDP, go to: www.skillsusa.org/educators/pdp.shtml. Practice using the sample Professional Development Test which is included with this guide.

Being well prepared is not only an important aspect of success in competition, it’s also important for success in life. The SkillsUSA Championships program is a motivator for excellence. It drives quality instruction and quality learning through testing to national standards. I hope this guide will assist you in continuing to provide a quality experience for your students as “Champions at Work.”

Timothy W. Lawrence, Executive Director, SkillsUSA
INTRODUCTION
Many people consider the SkillsUSA Championships to be the preeminent showcase of public technical education in the United States. The championships recognize career and technical students who excel in their occupational and occupationally related areas, as well as in the leadership development activities that are such an integral part of the SkillsUSA program in the classroom.

The involvement of industry in the SkillsUSA Championships program is essential. Experts in leadership, health occupations, and skilled and technical sciences donate their time to serve as contest judges and as technical committee members. They assume responsibility for selecting the skills that are to be judged, determining the format of the contests and establishing the standards by which contestants will be judged.

Besides showcasing students’ skills, the SkillsUSA Championships, by the very nature of competition, urges students to take pride in their work. It also provides prospective employers with an opportunity to see dedicated, motivated potential employees at work.

To continue to meet the needs of both these potential employees and prospective employers, the lines of communication between technical education schools and industry must be kept open. Educators need to be able to identify industry’s needs and, in turn, develop appropriate curricula.

SkillsUSA WORK FORCE READY SYSTEM
The Work Force Ready System (WFRS) provides assessments for career and technical education that are supported by industry, education and policy leaders. Central to the WFRS are the expertise and industry-defined competencies compiled in the SkillsUSA Championships Technical Standards 2013–2014. All of the system’s assessments and certificates are based on the procedures, protocols, competencies and criteria established by subject matter experts from industry and education.

Overview
Using a unique collaboration between employers and educators that simultaneously improves instructional programs, the SkillsUSA Work Force Ready System assesses and documents the entry-level technical proficiency of students. It helps teachers and advisors engage with the system to enhance instruction in classrooms and labs across the nation. The major components of the WFRS are:

1. Skill Point Certificate
   Individuals achieving an industry-defined cut score can earn a Skill Point Certificate through the online system. Skill Point Certificates, however, are awarded only to SkillsUSA member students who reach or exceed a threshold score in a national championships contest. Competitors achieving the cut score will be awarded the Skill Point Certificate, regardless of contest ranking or medal standing.

   All “official” national championships competitions will award Skill Point Certificates.

   Along with a national gold, silver or bronze medal, the Skill Point Certificate represents the pinnacle of achievement in demonstrating proficiency and workplace readiness in the student’s occupational specialty. Each Skill Point Certificate may carry the logos and names of the organizations represented on that contest’s national technical committee.

2. Skill Connect Assessments
   Both SkillsUSA and non-SkillsUSA students will have an opportunity to purchase and take an assessment (online, proctored paper and pencil, or hands-on testing) based on the competencies and criteria established in the championships technical standards. Those candidates achieving a cut score in the assessment test will be awarded a Skill Connect Certificate, very similar to the Skill Point Certificate.

   SkillsUSA has created fee-based Skill Connect assessment tests in more than 40 technical contests and employability.

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For more information on the Work Force Ready System, visit:
www.workforcereadysystem.org.

**SKILLSUSA CHAMPIONSHIPS ORGANIZATION**

The SkillsUSA Championships is governed by policies established by the board of directors of SkillsUSA Inc. These policies cover donations and awards and SkillsUSA Championships committees’ composition and responsibilities.

The SkillsUSA Championships is organized as follows:
1. Board of Directors of SkillsUSA Inc.
2. SkillsUSA Championships Executive Committee
3. SkillsUSA Championships director
4. Individual technical committees for each area of competition
5. National Education Teams

**INTRODUCTION OF NEW CONTESTS**

There are many requests for the establishment of new contests in the SkillsUSA Championships program. In determining the addition of new events to the SkillsUSA Championships, either for demonstrations or for final approval as an official contest, the staff of SkillsUSA will apply the following principles as a test of need:

Go to [www.skillsusa.org/compete/downloads.shtml](http://www.skillsusa.org/compete/downloads.shtml) to download the “Application for Demonstration Contest” form. To be considered, the following time frame must be followed. If not followed, the contest will have to wait until the next open application period.

1. Application submitted between Jan. 1 and July 1 of that year to be considered for the following NLSC. Example: Feb. 2, 2012, would be for 2013 NLSC; Sept. 13, 2012, would fall to 2014 NLSC.
2. All applications submitted within the enrollment period will be reviewed and placed before the state association directors in their August meeting.
3. State association directors would then need to have their votes back to the SkillsUSA Championships director by Nov. 15 or sooner.
4. The SkillsUSA Championships director would then notify the state directors and the technical committees and post the results of which contests are going to be offered by Jan. 15 or sooner.

Some of the criteria to consider:
1. Are there a significant number of members in SkillsUSA who want to compete in the contest?
2. Are there jobs in the occupation and an industry that is nationally significant?
3. Special attention should be given to areas of new and changing technology as driven by industry.
4. Leadership contests will be added based upon solid proposals from the memberships that indicate value to students in relationship to future employment.

The following areas will be considered before a new contest can be approved:

1. A minimum of 10 state associations must commit to conducting the contest at the state level for a contest to be seriously considered.
2. A SkillsUSA Championships technical committee representing at least two different companies or professional organizations must be established to develop contest rules and establish the necessary support for personnel, contest equipment and prizes to introduce the contest. There will also be a need to establish a custodial account to help cover the cost of the contest. The financial commitment will be handled dependent upon the type of contest, i.e., Leadership, Occupationally Related or Skilled and Technical Sciences and the potential amount of consumables needed.
3. Preliminary contest rules will be printed and distributed to all state directors with states invited to conduct the contest and participate in the national demonstration.
4. New contests introduced at the national championships are given “demonstration” status. The contest is then reviewed and
should qualify for “official” contest status by the third year. Demo status can be extended by the Executive Committee if warranted.

5. Contest operation and participation regulations will be reviewed by national staff to determine feasibility of official inclusion of the contest in the SkillsUSA Championships.

6. Official inclusion of new SkillsUSA Championships contests will be approved by the SkillsUSA board of directors. Industries may conduct technology demonstrations to solicit support from the states for a demonstration contest the following year.

ELIMINATION OF CONTESTS
There must be at least 12 contestants/teams in each official contest for the contest to be held. (Exceptions are Chapter Display, Occupational Health and Safety, Outstanding Chapter, Promotional Bulletin Board and health occupations contests.) In the event that fewer than 12 contestants participate for two years, the contest may be discontinued pending a decision by the SkillsUSA board of directors.

ABSORPTION OF CONTESTS
If an existing contest is facing elimination because of declining numbers, it is to be evaluated to determine if there is a new contest that may be similar. If so, the old contest guidelines would be reviewed by the championships director to determine if it could be absorbed within an existing contest. If so, the contest would receive temporary demonstration status so the state association directors have time to restructure and review the possibilities. This temporary demonstration status will cover a two-year period.

GENERAL REGULATIONS
1. These SkillsUSA Championships Technical Standards are written as guidelines for the administration of national contests.
   a. They should serve as models for administration of local, regional and state contests but should not be considered binding upon state associations in conducting state-level SkillsUSA Championships.
   b. Because of the changes that can occur within a contest area or a specific station, the scorecards or scoring criteria for all contests can be found on the SkillsUSA website under: www.skillsusa.org/compete/updates.shtml.

2. A careful and thoughtful analysis of the skills and knowledge required for successful employment in technical, skilled and service occupations, including health occupations, will identify a core of technical and scientific principles that students should understand. Knowing these principles will increase their chances of succeeding and progressing in their fields and form a basis for understanding and applying new technology as it is introduced in their respective fields. Competitors are expected to understand such principles as they apply to their skill areas. They will be expected to know and demonstrate the following:
   a. Mathematics: addition, subtraction, division and multiplication of whole numbers, common fractions, decimal fractions, ratio, proportion, percentage, average, area, volume, metrics and written problems specific to areas of training
   b. Engineering drawing/print interpretation and schematics related to specific areas of training
   c. Reading comprehension/interpreting technical manuals
   d. Completion of a job application form
   e. Making an appointment for a job interview
   f. Proper interview techniques
   g. Responding clearly to oral questions
   h. Safety knowledge (Some contests require evidence of safety training. Students are encouraged to complete the Occupational Safety and Health Administration’s [OSHA] 10-hour, Web-based CareerSafe course. For information, visit: http://www.careersafeonline.com. Participants completing the safety training course will receive a wallet card from OSHA)
i. Compliance with all copyright laws and software licensing requirements

3. Begin checking SkillsUSA’s website in September for any changes to these printed guidelines. All changes to the current year’s competitions will be at: www.skillsusa.org/compete/updates.shtml.

4. Professional Development Program (PDP) Test:
   a. Each individual contestant in both leadership and skill contests (except Action Skills, Building Maintenance, Employment Application Process and Quiz Bowl contestants) will be given a test taken from Levels 1–2 of the Professional Development Program. The following procedures will apply:
      1. The tests will be administered by the state association directors at the National Leadership and Skills Conference before the SkillsUSA Championships begins.
      2. The test results will be used in the event of a tie to determine first-, second- and third-place winners only.

5. Technical Skills-Related Written Test:
   a. Written tests and problem-solving exercises covering skills and related information will be included as a part of each contest (with the exception of the Building Maintenance contest). The number of points allowed will not exceed 15 percent of the total possible points and will be determined by the technical committee. The following procedures will apply:
      1. The test will cover the appropriate math, technology, schematic/engineering drawing/print interpretation, safety, problem solving and related information needed for employment.
      2. The test will be prepared or approved by the SkillsUSA Championships technical committee and may be given at the contest orientation meeting or on the day of the contest.

6. An oral professional assessment, such as a personal interview, explanation of skills to be performed, problem to be solved or other employability skills assessment, will be included as a part of each contest. The number of points allowed will not exceed 10 and will be determined by the technical committee.

7. All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty. They can bring a résumé to the contest on the day of competition, however, the penalty will remain in effect.

8. Competitors in contests that require verbal presentations must use the proper name of the national organization, “SkillsUSA.” Contestants in American Spirit, Chapter Display, Community Service, Occupational Health and Safety, Outstanding Chapter, Promotional Bulletin Board and Career Pathways must exhibit the organization’s proper name and logo. Failure to do so will result in penalty points being assessed by the national technical committee. Visit: skillsusa.org/about/logos2.shtml for proper use of the logo.

9. SkillsUSA Championships awards may be presented to the top three contestants in each division. Contestants are rated against a standard of performance rather than automatically being awarded first-, second- or third-place medals based on the highest-rankings. Medals will not be awarded if the standard of performance as determined by the technical committee does not justify such recognition.
   a. No ties will be permitted.
   b. National finalists will be recognized with an appropriate designation on their SkillsUSA Championships participation certificates. The state association will determine designation as a finalist.
   c. Decisions of the judges will be final. Interpretations of all contest rules will be made by the director of the SkillsUSA Championships.
10. The competencies listed in this publication under each occupational area are the basis for a quality technical instructional program from which our national contests are derived. The competencies have been listed to provide direction and assistance to state associations as they establish their district and state SkillsUSA Championships and to identify the scope of the national contest.

Who May Compete
11. Participants must be active SkillsUSA members in their respective divisions whose dues have been postmarked by midnight of March 1.
   a. Exceptions to the above policy may be made under certain conditions. For details, contact your state SkillsUSA office.

12. Each national contest provides for individual entries unless the rules of the contest state that it is a team competition. States may enter one high school and one college/postsecondary student/team in each competition, unless otherwise stated in the specific contest rules.
   a. High school contestants are students enrolled in a coherent sequence of courses or a career major that prepares the student for further education and/or employment related to technology, the health industry, trades or industry. Further, a high school contestant must be earning credit toward a high school diploma/certificate or its equivalent during the school year immediately preceding the National Leadership and Skills Conference.
   b. College/postsecondary contestants are students enrolled in a coherent series of courses or a career major that prepares them for further education and/or employment related to technology, the health industry, trades or industry. College/postsecondary contestants must be earning credit toward a postsecondary degree/certificate during the school year immediately preceding the National Leadership and Skills Conference.

13. Individual contestants may enter only one national championships contest annually. Participation must be approved by their state association.

14. Participants in national contests must be first-place winners selected on a competitive basis at the state level. In the event the first-place winner is unable to participate, the alternate must be the next highest-placing contestant at the state level who is able to participate. All contestants must qualify through state SkillsUSA approved contests. States may be disqualified from participation in a specific contest if they approve contestants who have not competed in a state contest. In team events, substitutions may be made if a team member(s) has to withdraw from the national competition. A full team must be registered. The ability of the contestants to meet the standards of national competition must be considered before the state association certifies the contestant.

15. Participants must meet the eligibility requirements set forth in each contest description.

Judging Criteria
16. The judging criteria listed on each contest rating sheet comprise the basic elements that will be considered in the evaluation of the contestants’ performance.
   a. The exact number of items evaluated and points assigned to each criterion may change from year to year depending on the complexity of the project.
   b. The rating sheets are intended to give contestants and advisors a basic understanding of the evaluation criteria and serve as a guide as they prepare for national competition.

Release of Contest Results
17. An analysis of contestant scoring and a ranking of the contestants will be available and accessible to every competitor on the SkillsUSA Web page within one week following the close of the national conference. The ranking of all competitors will be available and given to the state
association directors (or their appropriate
designee) at the Awards Ceremony.

18. The appropriate state official agrees not to
use this information in any way that will
violate any local, state or federal law and
will protect each student's right of privacy
as required by law.

How to Register
19. Only properly registered participants may
enter SkillsUSA Championships contests.
Proper registration requires:
a. Submitting official National Leadership
and Skills Conference (NLSC)
registration forms by the deadline (May
1, or 10 days following the state
SkillsUSA Championships).
b. States may make changes, and
substitutes are allowed up to 4 p.m.
two days prior to the contest during the
week of that particular conference.
c. After June 1, the addition of
contestants/teams must first be
approved by the specific national
technical committee chair.
d. In team leadership contests, should a
team member drop following the state
competitions, states may substitute
another student. Teams may compete
with one fewer team member in the
case of an unforeseen circumstance just
prior to the national competition (e.g.,
student becomes ill, is involved in an
accident or simply does not show up)
as long as a full team was registered
originally and the specific contest
guidelines do not state otherwise.

Tools and Materials
20. Participants who do not bring the required
tools and materials as specified in the
individual contest regulations may be
penalized two points for each item missing.
Such penalties will be assessed by the
contest chair. The contest chair may, at his
or her discretion, furnish the required
item(s) but may assess the two-point
penalty per item.

21. It is strongly recommended that toolboxes
not exceed 9"x14"x22". Contestants may
bring more than one box. Toolboxes that
are bigger or cannot be carried by one
person should have casters, wheels or a
hand truck for movement to and from
contest areas.

Observer Rules
22. During the contest, participants must work
independently, without assistance from
judges, teachers, fellow students or
observers. Contestants will be disqualified
for receiving such assistance.

23. It is in the spirit of competition and good
sportsmanship to demonstrate professional
courtesy to other competitors. Contestants
shall in no way disrupt or interfere with the
work or performance of fellow contestants
or teams. Any contestant or team found to
be in violation of this regulation may be at
the risk of penalty or even disqualification
in the case of a serious violation.

24. A roped or otherwise marked area will be
designated for observers. No observers,
including SkillsUSA advisors, will enter the
designated contest areas without the
approval of the SkillsUSA Championships
technical committee.

25. No observers will talk or gesture to
contestants.

26. Judges will disqualify contestants who
accept assistance from observers.

27. No observers will be permitted in the
contest holding room or at the contest
orientation meeting unless specifically
invited by the SkillsUSA Championships
technical committee.

28. Additional limitations on observers, such as
entering or leaving a contest area during a
demonstration or sequence, may be posted
to protect contestants from unnecessary
distractions.

29. The technical committee chair may close
the contest to observers if observers are
seen to be communicating or aiding a
contestant in any way or if safety demands
such action.
30. Neither cameras with flash attachments, cell phones, nor recording devices of any kind will be permitted in any contest area without the consent of the SkillsUSA Championships director.

**Contestants with Special Needs**
31. The SkillsUSA Championships management team will make every effort to provide assistance/accommodations as appropriate to create equal opportunities and a level playing field for all contestants. No assistance will be provided that could be interpreted as giving the special needs contestant an unfair advantage. Advanced identification of the contestants and their special needs will be required. The following are examples of the types of assistance that are allowed:
   a. Special tables will be allowed for contestants who need to use wheelchairs.
   b. Signers will be allowed to translate oral instructions given by the technical committee to deaf or hearing-impaired contestants.
   c. Special tools and devices will be allowed for contestants with prosthetics or physical challenges such as a club foot, burn injury or amputation.
   d. Contestants with dyslexia or other learning disabilities will be allowed assistance as determined by the complexity of the contest assignment.
   e. Readers will not be allowed in contests where the use of technical manuals is required.
   f. Hearing-impaired contestants will be provided signers at contest orientations, at the startup of the competition (and throughout the day if required by the technical committee) and for the contest debriefing.
   g. Translators for language issues must be noted and provided by the state.

**Models/Assistants**
32. Nail Care and Esthetics models and assistants in Action Skills, Principles of Technology, and Job Skill Demonstrations A and Open must be active SkillsUSA student members. Models and assistants are not required to be from the same school as the competitor. They are not considered contestants and are not required to attend contestant orientation meetings. Since these people are not involved in the written test and are not considered contestants, they are also not eligible to receive medals. They will, however, receive a participation certificate or other form of recognition.

**Mandatory Contest Meetings**
33. Contestants must report to the mandatory contest orientation meeting, as scheduled in the conference program, for instructions from the technical committee chairs. This is a critical meeting since technical committee chairs provide specific contest instructions and many times administer the written and oral tests at this meeting.

**Personal Appearance of Piercing and Tattoos**
The policy in regards to piercing and tattoos while participating in the NLSC is as follows:
34. **Piercings**: Wearing of any piercings should not in any way cause a safety issue. If so determined, the offending item must be removed for the duration of the SkillsUSA Championships contest. Failure to comply will result in a safety penalty.

35. **Tattoos**: Any tattoo that is considered vulgar, sexual or morbid should be covered to the best of the student’s ability while competing in any SkillsUSA Championships contest. Failure to comply will result in a clothing penalty.

**SkillsUSA Championships Clothing Requirements**
1. Contestants in the SkillsUSA Championships must wear the approved SkillsUSA Championships clothing or work uniform specified for their particular contests during competition or be subject to a penalty of up to 5 percent of the total points available. The clothing items referred to in these regulations are pictured and described at: www.skillsusastore.org. For questions regarding clothing or other logo items, call 800-401-1560 or 703-956-3723.
2. Contestants must wear their official contest clothing to the mandatory contestant meeting prior to the competition.

3. Participants must meet clothing requirements for the individual contests. For specific requirements, refer to the individual contest regulations.
   a. The penalty for contestants who do not satisfy the clothing requirements will be a maximum of 5 percent of the total possible contest points.
   b. All contestants are required to wear their official contest uniforms or official SkillsUSA attire to the Awards Ceremony, where the winners are announced and the industry awards are presented. Inappropriately dressed contestants will be denied access to the awards platform.

*Note*: Contestants with special needs regarding clothing requirements should contact the SkillsUSA Championships office.

The original official red blazer, windbreaker style jacket, sweater or any other uniform with the old “SkillsUSA–VICA” or “VICA” emblem patch may still be worn in contests requiring official attire as the required clothing.

4. The clothing requirements apply only to the national contests. State associations may have different dress requirements for their own SkillsUSA Championships program.

5. Official attire as indicated for specific contests refers to the following:

For men: Official red blazer or jacket, black trousers with white dress shirt, plain black tie with no pattern (or official SkillsUSA black tie from: www.skillsusastore.org), black socks and black shoes.

For women: Official red blazer or jacket, black slacks or knee-length skirt with businesslike white, collarless blouse or white blouse with small, plain collar that may not extend onto the lapels of the blazer, black sheer or skin-tone seamless hose and black dress shoes.

*Note*: T-shirt-style tops are not approved.

All personal jewelry should contribute to a businesslike appearance. Only official SkillsUSA jewelry is to be worn on a SkillsUSA blazer, windbreaker or sweater. Official jewelry is described as conference pin, SkillsUSA emblem, officer pin, President’s Volunteer Service Award pin, statesman pin (one only) and professional development (one only) pin.

6. Shoes: No canvas, vinyl, plastic or leather athletic-type shoes, open-toe or open-heel shoes are permitted in any SkillsUSA Championships event without penalty. Contestants may be disqualified where improper footwear constitutes a health or safety hazard. When leather work shoes are required: “work shoes” are technically defined as low or high-top leather, lace-up shoes with rubber, skid-resistant soles. They can be steel- or non-steel-toed. Work shoes can be purchased very inexpensively at any local department store and in most mail-order catalogs. Western-style (cowboy) boots are not allowed, except Roper-style boots that are all-leather, round-toed, flat-soled and with a low heel.

7. Eye protection must meet ANSI Z87 requirements. Prescription and non-prescription safety glasses must include side shields designed for the safety glasses by the manufacturer of the eye protection. An imprint with the mark “Z87” will appear on the frame or lens to identify the safety glasses as meeting ANSI Z87 requirements. Approved safety goggles may also be worn to meet these eye protection requirements.

8. Contestants with long hair that poses a possible safety or sanitary hazard must wear hair containment devices (hairnets).

9. Contestants may be disqualified for lack of safety clothing or attire.

10. The wearing of accessory items (such as belts) is optional unless otherwise specified in the contest rules.
11. Only occupational or career patches, competitor patches and Professional Development Program (PDP) patches may be worn on the left shoulder or above the left pocket without penalty. However, they are not required.

12. No identification of the contestant, school or state is allowed on official clothing.

13. Check for specific clothing and safety requirements under the guidelines for each contest.

14. Clothing penalties in all skill contests will be assessed by the designated state director in cooperation with the contest chair. SkillsUSA Championships technical committees will assess clothing penalties for all leadership contests.

INSTRUCTIONS TO SkillsUSA CHAMPIONSHIPS TECHNICAL COMMITTEE CHAIRS

General Responsibilities
1. Attend all meetings called by the SkillsUSA Championships director or officially designate a committee member to serve as your authorized representative at those meetings.

2. Make sure that all committee members are familiar with the SkillsUSA Championships Technical Standards.

3. Supervise the selection of the skills to be tested in the national contest, and identify necessary equipment and supplies. Make arrangements for borrowing and/or soliciting donations of all items.

4. Supervise the development of contest projects, drawings and instruction sheets for the contestants.

5. Locate individuals who are knowledgeable in your contest trade or skill area and invite them to serve as judges.

6. Plan the layout of the contest site. Identify needs and/or services such as water, electricity and compressed air.

7. Make arrangements for acquiring appropriate industry awards.

8. Plan and conduct the mandatory contest orientation and debriefing meetings.

Contest Orientation Meeting
The contest orientation meeting is mandatory for all SkillsUSA Championships participants. The purpose of this meeting is to review the following items with all contestants.

1. Contestants' Credentials: Verify each contestant's name and number as he or she appears on the nametag with the master list of contestants. Check the individual name to the actual name on the nametag.

2. Contest Rules: Check to be certain that all contestants are familiar with the contest rules and have been notified of any relevant information in the annual contest updates.

3. Contest Procedures: Explain the way in which the contest will be run, including schedule, procedure for time in/time out, rating criteria, procedure for breaking ties and method of dealing with problems.

4. Safety Regulations: Review general and specific safety requirements and procedures for the contest.

5. Tools and Materials: Go over the list of tools and materials that are to be supplied by the contestants. Include any additional items mentioned in the updates. If contestants do not have all the required items, be sure they understand that they must obtain them before the contest begins.

6. Work Stations/Order of Performance: If workstations are not identical, make sure contestants draw numbers for assignments. In contests where the order of performance is important, the procedure for determining the order should be explained.
7. Equipment: Take time to explain the operation of equipment with which contestants may not be familiar, including safety features. If possible, allow contestants time to become familiar with the equipment.

8. Special Announcements: Detail any special functions that the committee has planned, explain special transportation or time schedules, announce industry awards, and announce that contestants are not permitted to smoke during the contest.

*Note:* The national organization requests that all SkillsUSA Championships committee and contest personnel refrain from smoking or consuming alcoholic beverages in the presence of SkillsUSA student members.

9. Contestants’ Questions: Encourage contestants to ask any questions they may have about the SkillsUSA Championships. Try to give satisfactory answers before the close of the contest orientation meeting.

10. Contestant Penalties: There may be special circumstances that prevent a competitor from attending the contest meeting (e.g., illness, accidents or transportation). Please do not disqualify a competitor without first consulting with the SkillsUSA Championships office.

**Conducting the SkillsUSA Championships**

1. Check all contest area facilities prior to the day of the contest to be certain that everything is in place and in order for a smooth-running competition.

2. Assemble all judges at the contest site prior to the start of the contest for a briefing. Be sure that all questions are answered and that the rating procedures are clear.

3. Check to be certain that all contestants have brought the tools and materials required for the competition. The technical committee may, at its option, furnish any required items that contestants have failed to bring; however, a two-point penalty may be assessed for each missing item.

4. Make sure that all contestants meet clothing requirements for the contest. (See the section on SkillsUSA Championships Clothing Requirements in the individual contest regulations.) The penalty for those who do not satisfy dress requirements will be 1 percent to 5 percent of the total possible contest points. Clothing penalties in all skill contests will be assessed by the designated state director or designee in cooperation with the contest chair. SkillsUSA Championships technical committees will assess clothing penalties for all leadership contests.

5. Make sure that all contestants receive copies of the project to be completed as well as any necessary drawings, instruction sheets or other materials. Be certain that contestants understand all instructions and have a chance to ask procedural questions. Take great care to see that all contestants have equal time and their questions are answered fairly.

6. Oversee the contest to ensure that safe work practices are followed.

7. Do not permit contestants to enter the contest site at any time unless they are displaying their contestant badges and numbers.

8. Do not permit contestants to smoke during the contest.

9. Conduct a critiquing session with the contestants after the contest to point out general strengths and weaknesses and the quality of work expected by the judges. (Do not discuss individual contestant performance.)

10. Verify all judges’ rating sheets and submit them to the SkillsUSA Championships scoring management team.

11. Complete the chair’s final report and return it along with required items to SkillsUSA Championships headquarters following the contest.
12. Keep the results of the contest confidential until the announcement of the winners at the Awards Ceremony.

13. Attend the Awards Ceremony to present medals to the place winners.

14. Organize and supervise the teardown of the contest area, and be certain that equipment, tools and supplies are returned to the proper owners.

Instructions to Contest Judges

1. Judges must be completely familiar with the SkillsUSA Championships Technical Standards, particularly the General Regulations, Instructions to Technical Committee Chairs, and the specific rules of the contest they have been asked to judge.

2. Judges should receive copies of the contest project and judges’ rating sheet(s), along with complete instructions from the technical committee chair prior to the competition.

3. Members of the SkillsUSA Championships technical committee may not serve as judges unless approved by the SkillsUSA Championships director.

4. Judges must give careful attention to each rule, and each contestant or entry must be judged in exactly the same manner and under the same conditions as every other contestant or entry.

5. Judges will meet prior to the SkillsUSA Championships, at a time and place announced by the SkillsUSA Championships technical committee chair, to confer on:
   a. Rule meanings and interpretations
   b. Room arrangements
   c. Materials and equipment
   d. Last-minute details
   e. Rating sheets

6. Judges will evaluate the performance of each contestant according to the criteria listed in each contest.

7. Judges will identify contestants by number only. Judges will not use contestants’ names, schools or states unless otherwise specified in individual contest rules.

8. Judges may attend the contest orientation meeting held prior to the opening of the SkillsUSA Championships. However, only members of the technical committee may instruct the contestants and verify attendance.

9. Judges are selected because of their recognized expertise in the trade or skill that they are being asked to judge and are asked to follow the official SkillsUSA rules without inserting personal opinions. Such things as length of hair, length of dress and style of shoe, unless specifically covered in the contest regulations, are not to be considered by the judges except where safety is considered.

10. In no instance are judges or contest chairs authorized to change the contest rules. If an interpretation is required, the chair should contact the SkillsUSA Championships director.

11. Judges are to evaluate all items related to safety. Contestants not meeting safety requirements in clothing and/or devices may be disqualified from competition if, in the judges’ opinions, the safety of the contestants or those around them is endangered.

12. Judges should rate contestants on the basis of entry-level job skills.

13. Judges should rate each contestant independently and not compare rating sheets with those of other judges.

14. Judges should rate contestants against a standard of performance rather than automatically awarding first-, second- or third-place medals to the highest-ranking competitors. It is not necessary to award a medal if the standard of performance does not justify such recognition.

15. After the judging is completed, judges should total their own rating sheets and
return them, along with any notes and other pertinent information, to the SkillsUSA Championships technical committee chair.

16. The judges and technical committee members will keep all results confidential until the general announcement of winners is made at the Awards Ceremony. Under no circumstances may the judges discuss contest results or contestants’ performance with contestants, chapter advisors or any observers.

17. Judges should refer all contest inquiries or problems that arise to the SkillsUSA Championships technical committee chair.

WORLDSKILLS COMPETITION

Introduction

SkillsUSA is a member of WorldSkills International, headquartered in Amsterdam, Netherlands. This organization sponsors the biennial WorldSkills Competition (WSC).

Participation in the WSC has provided a vehicle for comparing our career and technical students and methods of training with that of our major free-market competitors. The training technologies displayed at the WSC exemplify the ultimate standard in skilled workforce preparation. As such, they offer important lessons for technical instructors and for SkillsUSA’s corporate partners, whose productivity depends on employees with up-to-date skills. WSC results are one of the benchmarks by which a country’s global economic competitiveness is judged.

Over its 60-year history, WorldSkills International has come to symbolize the pinnacle of excellence in career and technical training. Every two years, hundreds of young skilled people, accompanied by their teachers and trainers, gather from around the world to compete in the skills of their various trades and test themselves against demanding international standards and each other. They represent the best of their peers drawn from national skill competitions in 52 countries/regions.

WorldSkills was founded in 1950 and currently has members from 48 countries, with efforts constantly being made to expand the membership. In 1973, President Richard Nixon recognized SkillsUSA (then known as VICA) as the official organization representing the United States. Only one organization may represent a country in the official delegation and certify that country’s international contestants.

SkillsUSA appoints one official delegate and one technical delegate to the governing body of the WorldSkills Organization, called the Member Assembly. A technical expert from the United States is appointed to each contest in which the United States competes and is responsible for working with technical experts from other countries to organize, conduct and judge that contest.

WorldTeam Selection Procedures and Criteria

1. SkillsUSA* will only compete in those WSC contests for which it has a well-qualified competitor, a well-qualified technical expert, adequate industry support for conducting qualifying trials, advanced training and general operating costs of the TeamUSA contestant prior to the WSC.

*Note: SkillsUSA’s Youth Development Foundation is responsible for obtaining financial support for the WorldTeam’s general operating costs, financial and in-kind support for qualifying trials, and advanced training of the WorldTeam members.

2. WorldTeam contestants may not turn 23 years of age or older during the calendar year of the WSC. (Exceptions apply for the two-member Mechatronics team and Aviation Technology contestants, who may be 25 years old.)

3. The selection process for the WorldTeam will be a combination of trials where possible and the balance by eligibility, scores from either of the prior two years’
Championships along with an essay and a detailed interview process.

4. Only students continuing their education and/or currently working in the skill area of the international competition for which they are being considered will be eligible.

5. Advanced training may require contestants to travel to receive training. Contestants will not be expected to pay for their training or travel without adequate financial support.

6. WorldTeam members are required to attend all webinars, orientations and promotional meetings scheduled by the SkillsUSA national headquarters prior to departure for the WSC.

7. State directors and advisors of those candidates who are being considered will be notified. If their student is chosen, they will be notified and the student paired with a technical expert.

8. Individual training programs and schedules will be developed and will begin as soon as possible.
CNC Milling

**PURPOSE**
To evaluate each contestant’s preparation for employment in Computer Numeric Control Milling and to recognize outstanding students for excellence and professionalism in the CNC milling field.

First, refer to General Regulations, Page 9.

**CLOTHING REQUIREMENT**
Official SkillsUSA khaki work shirt and pants, black or brown leather work shoes, and safety glasses with side shields or goggles. (Prescription glasses can be used only if they are equipped with side shields. If not, they must be covered with goggles.)

These regulations refer to clothing items that are pictured and described at: www.skillsusastore.org. If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

*Note:* Contestants must wear their official contest clothing to the contest orientation meeting.

**ELIGIBILITY**
Open to active SkillsUSA members enrolled in programs with precision machining, automated manufacturing or CNC as the occupational objective.

**EQUIPMENT AND MATERIALS**
1. Supplied by the technical committee:
   a. Haas Programable Controllers
2. Supplied by the contestant:
   a. Nonprogrammable calculator
   b. Pencils and paper
   c. Machinery’s Handbook (optional)
   d. All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty.

*Note:* Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA website: www.skillsusa.org/compete/updates.shtml

**SCOPE OF THE CONTEST**

**Knowledge Performance**
The contest will include a written test evaluating a contestant’s knowledge of Computer Numeric Control machining in such areas as: basic machining skills, CNC programming, setting up a CNC machine, performing mathematical calculations related to CNC, communication and inspection.

**Skill Performance**
The contest will assess the ability to write the CNC program for a part drawing and materials, determine tool offsets, setting up the machine and producing a part.

**Contest Guidelines**
1. Each contestant will be given a dimensional drawing and materials to produce a part on a CNC mill.
2. Programming
   a. Write and verify CNC program without the use of CAM software (competitor has the opportunity to correct any program errors on the machine)
   b. Display complete knowledge of DIN/ISO programming (G and M codes)
   c. Apply the correct use of cutter compensation (G41/G42)
   d. Adjust speeds and feeds as needed
3. Perform mathematical calculations
   a. Calculate CNC speeds and feeds
   b. Calculate programming coordinates from the drawing
   c. Calculate radius tangent points
4. Measuring
   a. Measure test part to the nearest 0.001"
5. Communication
   a. Read and interpret technical blueprints
   b. Understand all symbols on technical blueprints, such as geometric tolerances, surface-finish symbols, corner-break symbols, etc.
6. Dimensions
This is an objective scoring. Scores will only be granted if dimension is in compliance with the print. The score for each dimension will either be full points or zero points.

7. The CNC will be available for orientation before the competition with technicians on hand to help competitors and their advisors familiarize themselves with the equipment.

Standards and Competencies

**CNCM 1.0 — Apply basic machining skills per industry standards as set forth by the SkillsUSA technical committee**

1.1 Demonstrate the basic math skills essential to CNC machining
1.2 Identify and use measuring tools that are basic to CNC machining
1.3 Interpret and apply information from prints and drawings
1.4 Measure part to nearest +/- .001"
1.5 Demonstrate safe working practices on machines
1.6 Use various precision measuring tools (i.e., micrometers, calipers, radius gages)
1.7 Use correct filling techniques and appropriate terminology
1.8 Define and calculate speed and feed rates (SFPM, CCS, IPM, IPR)
1.9 Demonstrate knowledge of cutting tools, clamping devices and materials
1.10 Perform mathematical calculations that enable the solving of complex trigonometric, geometric and algebraic problems applicable to CNC machining processes

**CNCM 2.0 — Demonstrate knowledge of CNC programming per industry standards as set forth by the SkillsUSA technical committee**

2.1 Manually write and verify the CNC program without the use of CAM software according to print specifications, dimensions and tolerances (competitor has the opportunity to edit any program errors on the machine)
2.2 Display complete knowledge of DIN/ISO Programming (G and M codes)
2.3 Apply the correct use of cutter compensation (G41/G42)
2.4 Demonstrate knowledge of incremental and absolute positioning

2.5 Demonstrate knowledge of coordinate system
2.6 Determine proper machining sequences from work piece drawing
2.7 Adjust speeds and feed as needed

**CNCM 3.0 — Perform mathematical calculations as needed for calculating speeds, feeds, program coordinates, angles, radii and tangent points**

3.1 Calculate CNC speeds and feeds
3.2 Calculate programming coordinates from the drawing
3.3 Calculate angles, radii and tangent points

**CNCM 4.0 — Communicate and demonstrate an understanding of all symbols on a blueprint**

4.1 Read and interpret technical blueprints
4.2 Understand all symbols on technical blueprints, such as geometric tolerances, surface-finish symbols, corner-break symbols, etc.

**CNCM 5.0 — Inspect work per industry standards as set forth by the SkillsUSA technical committee**

5.1 Inspect for conformity to print (shape and features of part to drawing)
5.2 Inspect for broken edges
5.3 Inspect for damage to part (clamp marks, scratches)

Committee Identified Academic Skills

The technical committee has identified that the following academic skills are embedded in this contest.

**Math Skills**

- Use fractions to solve practical problems
- Simplify numerical expressions
- Measure angles
- Apply transformations (rotate or turn, reflect or flip, translate or slide and dilate or scale) to geometric figures
- Apply Pythagorean Theorem
- Solve problems using proportions, formulas, and functions
- Solve problems using trigonometry
- Solve problems using Cartesian Coordinate System
Science Skills
• Use knowledge of speed, velocity and acceleration

Language Arts Skills
None Identified

Connections to National Standards
State-level academic curriculum specialists identified the following connections to national academic standards.

Math Standards
• Numbers and operations
• Algebra
• Geometry
• Measurement
• Problem solving
• Reasoning and proof
• Communication
• Connections
• Representation


Science Standards
• Understands the sources and properties of energy
• Understands forces and motion
• Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view and search the compendium, visit: www.mcrel.org/standards-benchmarks.

Language Arts Standards
• Students apply a wide range of strategies to comprehend, interpret, evaluate and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics)
• Students adjust their use of spoken, written and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a variety of audiences and for different purposes
• Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes
• Students conduct research on issues and interests by generating ideas and questions and by posing problems. They gather, evaluate and synthesize data from a variety of sources (e.g., print and nonprint texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience
• Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge
• Students use spoken, written and visual language to accomplish their own purposes (e.g., for learning, enjoyment, persuasion and the exchange of information)

Source: IRA/NCTE Standards for the English Language Arts. To view the standards, visit: www.ncte.org/standards.

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This contest project (taken from the 2012 SkillsUSA Championships) is provided to assist you in planning your state contests. The national competition projects/problems are designed by industry representatives and are based on current industry expectations.

Your contests should be conducted as closely as possible to the national contests to ensure your students are ready to compete on the national level. Not only does this result in better national competition, but it also encourages your instructors to teach current industry standards, which results in better quality technical programs in your state.

Please take advantage of these documents, and good luck to all of your competitors!

IMPORTANT NOTE!

The documents were created by SkillsUSA’s technical committees and submitted to the national headquarters, where they were reproduced as we received them. Some of the documents still use the word “VICA” in reference to the national organization. In 1999, the Vocational Industrial Clubs of America (VICA) officially became “SkillsUSA–VICA. Since that time, the VICA has been dropped from our official name and we are known simply as “SkillsUSA.” We ask that all of our members and partners use our current name in all future documents to avoid confusion.

Thanks for your cooperation.

The names SkillsUSA, SkillsUSA Championships and SkillsUSA Champions; the SkillsUSA: Champions at Work slogan; and the SkillsUSA logo, emblem and slogan art are all registered trademarks of SkillsUSA Inc. All rights are reserved, and permission must be granted by the national headquarters of SkillsUSA prior to any use.
SkillsUSA
2012 Contest Projects

CNC Milling
**Professional Development Test**

Each individual contestant in both leadership and skill contests will be given a test taken from Levels 1 through 2 and the SkillsUSA manual of the Professional Development Program.

The following is a sample professional development test. Use this to practice for the actual test.

**YOU STILL NEED TO STUDY.** The test given at the national conference **WILL NOT** be the same as the test included here. It is provided to show an example of the types of questions that could be on the test.
1. Which term describes a person’s income before any deductions?
   a) Interest
   b) Net
   c) Gross
   d) Viability

2. If a goal describes your plans for retirement, what kind of goal is it?
   a) Short term
   b) Long term
   c) Personal
   d) Business

3. What are considered the three basic parts of a speech?
   a) Introduction, body, closing
   b) Instruction speech, summary
   c) Opening, examples, review
   d) Review, evidence, thank you

4. What name is given to a person who works for another for compensation?
   a) Supervisor
   b) Co-worker
   c) Competitor
   d) Employee

5. What factor most influences the choices you make?
   a) Personalities
   b) Employers
   c) Personal interests
   d) Teachers
6. What positive skill do you need to resolve differences in opinions and ideas?
   a) Communications
   b) Debate
   c) Negotiations
   d) Argument

7. What instrument is used to gather information from a large group of people?
   a) Survey
   b) Report
   c) Test
   d) Brainstorm

8. What makes you want to be around other people?
   a) Their personality
   b) Their appearance
   c) Their positive attitude
   d) All of the above

9. Goals will be very helpful to you as you plan your career. Can goals change periodically?
   a) Yes
   b) No

10. Volunteering in your school or community is a positive activity for students. When you take
     the concept of volunteering a step farther and tie the volunteerism to what you are learning
     in school, what is it called?
     a) Community service
     b) Service hours
     c) Service Learning
     d) Extra credit

11. What term describes distinct differences (as in customs and beliefs) between particular
     groups in society?
     a) Multicultural
     b) Culturally diverse
     c) Differences of opinion
     d) Conflict

12. What is defined as the sudden unrestrained offering of ideas by all members of a group to
     seek solutions to problems?
     a) Communications
     b) Bar Graph
     c) Brainstorm
     d) Qualities
Each person is a unique individual with habits that tell a lot about him or her. These habits provide a description of the individual – what he or she pays attention to or cares about. This information is of value because it provides a framework for interaction with other in school, work or family settings. Identify each of the learning styles in questions 13 – 16.

13. Someone who learns information in a concrete, step-by-step manner and considers learning valuable if it is practical learns in which style?
   a) Structured style
   b) Question and test style
   c) Emotions and value style
   d) Social-people style

14. Someone who learns by focusing on ideas and abstract thoughts; likes to reason and test things and likes evidence to evaluate learns in which style?
   a) Social-people style
   b) Emotions and value style
   c) Question and test style
   d) Structured style

15. Someone who learns new ideas through feelings and feeds on originality and images learns in which style?
   a) Social-people style
   b) Emotions and value style
   c) Question and test style
   d) Structured style

16. Someone who learns information in a concrete manner, but prefers to learn through and with others, and considers learning valuable if it is helping others learns through
   a) Structured style
   b) Question and test style
   c) Emotions and value style
   d) Social-people style

17. What is a good part of a goal statement?
   a) What is going to happen
   b) When it will happen
   c) How it will happen
   d) All of the above
18. The PDP uses a flow chart to help you learn to manage your time more efficiently. In the flow chart what does an arrow represent?
   a) Start and stop points  
   b) Flow of steps or events  
   c) Questions at decision points  
   d) Actions or activities

19. The PDP uses a flow chart to help you learn to manage your time more efficiently. In the flow chart what does a circle represent?
   a) Start and stop points  
   b) Actions or activities  
   c) Answers at decision points  
   d) A flow of steps or events

20. Searching the Internet for areas of interest to you is a good way to
   a) Define your future occupation  
   b) Cheat on a test  
   c) Avoid doing your homework  
   d) Show you know more than your instructor

21. Certain concerns can be significant in the workplace, especially with regard to minorities. You may be the minority in a group by being the only male or female, the only person over or under 21, the only person who is handicapped or overweight. You may be the only person of your race within a certain group. What term defines these types of issues?
   a) Ethnic  
   b) Equity  
   c) Tradition  
   d) Safety

22. Both men and women can be sexually harassed.
   a) True  
   b) False

23. Who is defined as one who uses or benefits from your products of services?
   a) Seller  
   b) Provider  
   c) Customer  
   d) Supplier
24. What is a good way to identify the benefits of doing a community service project?
   a) Identify the costs of the project
   b) Find out how much time it will take
   c) Determine if any of your chapter members are interested in participating
   d) Contact a community service agency or organization that is involved in the type of service you are considering.

25. A process that includes a sender and a receiver each giving feedback to the other is called...
   a) Customer Service
   b) Communication
   c) People skills
   d) Harassment

26. Active and critical are the two kinds of what kind of skill?
   a) Safety
   b) Participation
   c) Listening
   d) Dating

27. What are you doing if you are observing someone you respect doing his or her job?
   a) Shadowing
   b) Mentoring
   c) Teaching
   d) Supporting

28. What term describes a collection of work representing education, self-development and career information?
   a) Résumé
   b) Job application
   c) Facebook page
   d) Employment portfolio

29. What term describes a skill that you learn to perform through the training you receive in your CTE program?
   a) Outcome
   b) Task
   c) Goal
   d) Test question
30. When you learn to successfully perform a task to business and industry standards you are said to have met a what? It is developed through repeated successful completion of tasks.
   a) Competency
   b) Goal
   c) Outcome
   d) Profile

31. Confidence, reliability, loyalty, cooperation and leadership are all examples of what kind of competency?
   a) Interpersonal
   b) Testing
   c) Job specific
   d) Comprehension

32. What skill is an individual said to have who believes in and respects himself or herself?
   a) Confidence
   b) Adaptability
   c) Poise
   d) Enthusiasm

33. What skill is an individual said to have who continues a difficult task until it is completed?
   a) Comprehension
   b) Perseverance
   c) Enthusiasm
   d) Leadership

34. What skill is an individual said to have who pays attention and catches on to ideas and situation?
   a) Cooperation
   b) Leadership
   c) Enthusiasm
   d) Comprehension

35. What skill is an individual said to have who is careful not to hurt other’s feelings or cause anger?
   a) Cooperation
   b) Leadership
   c) Tact
   d) Adaptability
36. Knowing sources of information, your own abilities, aptitudes and interests; and occupational characteristics are what kind of skills?
   a) Career development skills
   b) Communications skills
   c) Reading skills
   d) Problem solving skills

37. Being able to give accurate and concise reports, follow oral directions or instructions, speak distinctly and give clear instructions or directions are examples of what kind of skills?
   a) Business Economic Skills
   b) Manual Operations Skills
   c) Reading Skills
   d) Communications Skills

38. What term describes a legal proceeding in a court of law?
   a) Cross examination
   b) Litigation
   c) Judge Judy
   d) Outcome

39. What term describes someone who organizes, operates and assumes the risk of a business venture?
   a) Boss
   b) Investor
   c) Entrepreneur
   d) Customer

40. What term describes the distinct differences in customs and beliefs between particular groups in society?
   a) Cultural diversity
   b) Disagreements
   c) Equity
   d) Customer service

41. When you consistently meet or exceed your customer’s expectations you are said to have or provide good...
   a) Customer satisfaction
   b) Customer service
   c) Litigation
   d) Competencies
42. What is the conduct or attitude toward work or a philosophy dealing with the rules of proper conduct called?
   a) Job skills
   b) Work ethics
   c) Strategies
   d) Customer service

43. What is the process of directing or controlling activities with regard to the use of your time called?
   a) Strategies
   b) Customer service
   c) Time management
   d) Constructive criticism

44. Which of the following is an example of a CTSO?
   a) Student Council
   b) Church group
   c) Boy or Girl Scouts
   d) SkillsUSA

45. What is a group of people joined in a cooperative activity called?
   a) Employees
   b) Customers
   c) Supervisors
   d) Teams

46. A person who identifies procedures, obtains resources, interprets information and corrects errors is said to have what kind of skills?
   a) Problem solving skills
   b) Personal skills
   c) Communications skills
   d) Computer skills

47. You are a participant in a competitive events program here in Kansas City. What is the program called?
   a) United States Skill Olympics
   b) SkillsUSA Championships
   c) Champions at Work
   d) Best of the Best
48. What is a pressure from outside yourself that makes you feel tense inside?
   a) Smoking
   b) Behaviors
   c) Tests
   d) Stress

49. Which of the following is a characteristic of a positive image?
   a) Wearing fad clothing on the job
   b) Chewing gum
   c) Wearing clothes that fit
   d) Overdressing for a job

50. What position is the highest elected office in a state?
   a) President
   b) Governor
   c) Senator
   d) Commissioner
Professional Development Test
Answer Key
NSLC 2012

1. C
2. B
3. A
4. D
5. B
6. C
7. A
8. D
9. A
10. C
11. B
12. C
13. A
14. C
15. B
16. D
17. D
18. B
19. C
20. A
21. B
22. A
23. C
24. D
25. B
26. C
27. A
28. D
29. B
30. A
31. A
32. A
33. B
34. D
35. C
36. A
37. D
38. B
39. C
40. A
41. B
42. B
43. C
44. D
45. D
46. A
47. B
48. D
49. C
50. B
Professional Résumé

As part of a competitor's professional development he or she must create a one-page résumé and submit a hard copy to the technical committee chair at orientation. Failure to do so will result in a 10-point penalty. Competitors can bring résumés to the contest on the day of competition, however, a penalty will be assessed.

An oral professional assessment, such as a personal interview, explanation of skills to be performed, problems to be solved or other employability skills assessment, will be included as a part of each contest. The number of points allowed will not exceed 10 and will be determined by the technical committee.

The following is an example of a one-page résumé. Use this as a guideline to format your own résumé. Many programs such as Microsoft Word include a résumé template or a résumé builder to help get you started.

You can also find some helpful tips on writing a résumé here: http://resume.monster.com.
Objective

This is where you place a clearly-worded occupational objective.

Experience

1990–1994 Arbor Shoe Southridge, SC
National Sales Manager
- Increased sales from $50 million to $100 million.
- Doubled sales per representative from $5 million to $10 million.
- Suggested new products that increased earnings by 23%.

1985–1990 Ferguson and Bardell Southridge, SC
District Sales Manager
- Increased regional sales from $25 million to $350 million.
- Managed 250 sales representatives in 10 Western states.
- Implemented training course for new recruits — speeding profitability.

1980–1984 Duffy Vineyards Southridge, SC
Senior Sales Representative
- Expanded sales team from 50 to 100 representatives.
- Tripled division revenues for each sales associate.
- Expanded sales to include mass market accounts.

1975–1980 LitWare, Inc. Southridge, SC
Sales Representative
- Expanded territorial sales by 400%.
- Received company's highest sales award four years in a row.
- Developed Excellence In Sales training course.

Education

1971–1975 Southridge State University Southridge, SC
- B.A., Business Administration and Computer Science.
- Graduated Summa Cum Laude.

Skills

Keyboarding, Microsoft Office Suite (Word, PowerPoint, Excel), Basic computer repair and maintenance.

Interests/Hobbies

Running, gardening, computers.
Insider’s Guide to Competition

The following articles are excerpted from SkillsUSA Champions magazine.

They originally appeared in the following issues:

- Winter 2003
- Winter 2004
- Winter 2005
- Winter 2006
- Winter 2007
- Winter 2008
- Winter 2009
- Winter 2010
- Winter 2011
- Winter 2012

Download the Insider’s Guide here.
It all starts here. This is the official home page for the national SkillsUSA organization. Here you’ll find an exhaustive amount of information covering every aspect of SkillsUSA.

Submit your membership roster online or register for national conference. You can also find out who received medals in the most recent SkillsUSA Championships, or if you competed, get your score online (contestant number required). NOTE: Scores and medalist listings are for the national competition. For state results, see your state association director.

The SkillsUSA Championships Technical Standards manual is updated every two years, but contests may still change slightly between printings. Each year, the national organization releases any changes made to existing SkillsUSA contests. This very important page is where you’ll find those changes, a must for staying up to date with contest rules and regulations.

This page is the gateway to numerous other links related to the SkillsUSA Championships, contest information and other resources. Find capsule descriptions of each contest, rules for new demonstration contests, contest tips and even online forms for registering to attend our national conference.

This page provides you with information on all aspects of SkillsUSA’s National Leadership and Skills Conference, from exhibits to events to registration information.

Held every other year, the WorldSkills Competition is a chance for national winners to become international champions. Find out who’s on the current team and keep track of their progress as SkillsUSA’s WorldTeam goes for the gold!

Purchase educational materials online using our secure server. Here you’ll find items like the Professional Development Program curriculum, posters, software, and much, much more. You will also be able to purchase related products from other companies, such as Zeecraft (Quiz Bowl equipment) and Dunbar Parliamantary (Chapter Business Procedure materials).

This is where you can order official SkillsUSA clothing, as well as numerous other SkillsUSA-related items.