

# **SkillsUSA Championships Insider's Guide: Winter 2010**

## **What is new or different in your contest for this year?**

### **Computer Programming**

Difficulty of the programs will be somewhat increased.

*Ken Morganstern, retired instructor, Missouri*

### **Electronics Technology**

The technical committee will not be providing test equipment, tools or calculators. Competitors will need to supply their own meters, scopes, soldering tools and calculators.

The skill performance portion of the contest will include circuit construction, soldering and circuit/system troubleshooting. Contestants will read and follow instructions, interpret circuit design drawings, analyze and identify circuit faults, solder various electronics components, and properly utilize electronic components in accordance with their design specifications. We will be using two, rather than three, 10x probes.

Changes to the Scope of the Contest may occur as needs or standards are updated. All revisions or modifications to this standard will be posted on the SkillsUSA Web site.

*Wayne Hawley, U.S. Postal Service*

### **Employment Application Process**

The contest is no longer a demonstration, it is now a standard competition. A penalty will be applied for a missing eligibility letter. One 4x6" note card is allowed to assist the contestant in completing the application. The personnel manager (receptionist) will be reviewing and judging the portfolio. An advisor, mentor or other adult must be at the briefing with the contestant. Once the application portion of the contest is completed, contestants may sit with their advisor waiting for their turn with the interviewers.

*Diane Swenson, Kronos Inc.*

### **First Aid/CPR**

One single written test. White leather athletic shoes are acceptable.

*Glenn D. Haagar, Honeywell Inc.*

### **Medical Assisting**

We are stepping up the competition a bit, expecting the student competing at the national level to be practiced and ready for competition. We will be looking for the well-rounded medical assistant; the best of the best. The competition will address both the high school and postsecondary student's administrative and clinical skills as well as soft skills.

Competitors should expect medication administration and lab components, as well as patient education as part of their competition. The time factor will play a significant role in scoring. We will give significant time to complete each skill; however, if a competitor is taking too long to complete the station, the score will be lowered.

Contestants should be familiar with SkillsUSA professional dress for their field and dress accordingly.

The contest updates should be checked right up to the week prior to competition for any updates that might concern the student. Advisors should make sure that their student has the required supplies for the competition.

*Diana Kendrick, Griffin (Ga.) Technical College*

### **Medical Terminology**

Medical abbreviations will be added to the contest test.

*Sherree Hughes, Ouachita Technical College, Hot Springs, Ark.*

### **Motorcycle Service Technology**

We tested out a new format with the length of the contest stations last year and will again have a single two-hour station and seven half-hour stations.

Other than that, everything will be top secret until the contestant's orientation. We will provide the contestants with the title of each station. We have also been providing some type of training for the last several years, so students and advisors come away with learning something new.

*Michael O'Neil, Motorcycle Mechanics Institute*

### **Power Equipment Technology**

Power Equipment Technology is forever changing in today's marketplace, so the contestants should be ready to see different products.

*Dave Worden, OPE Magazine*

### **Prepared Speech**

No practical changes, but a reminder that note cards *may not* be used.

*Craig Haugsness, Highland Park (Kan.) High School*

### **Residential Wiring**

The students will have to pull their materials order from a makeshift wholesale house we will create in the contest area. This will test their knowledge of materials.

*Greg Rachal, Bayou Electric Inc.*

## **Robotics and Automation Technology**

Additional hardware will be added. We are looking at adding a “start” and “stop” button to the workcell. We will also keep the existing e-stop. Electrical connections and additional programming will be required to support the new hardware interfaces. Additional modifications will be made to the contest scoring.

*David Crowell, intelitek Inc.*

## **Web Design**

Additional emphasis on meeting the needs of clients.

*Bill Cullifer, World Organization of Webmasters*

## **Welding**

We will be using manual and semi-automatic welding processes used in industry today. They will be using semi automatic GMAW and FCAW processes on carbon steel, manual SMAW on carbon steel and GTAW on aluminum processes. They will also use the manual OFC process on carbon steel. All procedures are in accordance with American Welding Society’s standards.

*Gene Hornberger, Welding Consultant LLC*

## **In what areas to contestants struggle or need to improve?**

### **Automotive Service Technology**

Year after year, the Automotive Service Technology committee sees quite a few contestants not fully prepared for the national contest. The contestants are unaware of how to use the special tools or equipment required for the 13 different contest areas. This is a bigger concern for schools that have never before competed at the national championships. We hear comments like, “I didn’t know which scan tools would be used for diagnosis of the vehicles,” or “Nobody told us before the contest what special equipment or tools would be used during the championships.” Every year, the AST committee lists all special tools, equipment and scan tools that will be used in the contest in the April 15 contest updates. There may be more than one update between April and June, so we recommend checking the SkillsUSA Web page every few weeks after April 15 to have the most current information available.

*Scott Norman, Pittsburg (Kan.) State University*

### **Chapter Display**

I recommend that contestants consider the following for improving their chances of winning in this contest:

1. Increase participation in the design and construction of the contest for as many students as possible in different occupational areas.
2. Improve the relationship of the display to the theme and be sure to clearly state the theme on the display.
3. Improve the chapter display notebook using all of the available pages to document how the display was designed (including rough and finished

- drawings) and pictures with appropriate labeling.
4. Train the interviewee on how to set up and repair the display in case it is damaged in shipment. Anticipate that the display may need touch-up if it is shipped.
  5. Label the display carton better with chapter display and the name and address of the institution clearly on multiple sides of the carton.
  6. Prepare the setup team to begin display setup when the time begins at the championships so that there is time to do repairs if needed.
  7. Prepare the interviewee better so that he or she is more informed about the display, more enthusiastic in presenting and uses better communication skills, including eye contact.
  8. Use movement, sound and lighting to attract attention to the display.
  9. Ensure that all printed words use appropriate fonts and sizes and read from left to right without crowding borders.

*John Scott, retired instructor, Georgia*

### **Chapter Business Procedure**

The area that students can improve greatly is their preparation for the exam. It is taken from the National Association of Parliamentarians entrance exam question bank. While the number of students passing with cut score becoming eligible for NAP membership has risen, still 80 percent of our contestants fail to achieve this score. By carefully reviewing *Robert's Rules of Order Newly Revised, 10th Edition*, and by using the NAP study samples online, they can greatly improve their scores. Although the test counts only 10 percent of the team grade, the top scoring teams on the exam have been the teams in the final round every year. Do well on the test, do well in the contest!

*Dr. Mark Johnson, Pittsburg (Kan.) State University*

### **Computer Programming**

The thing they have the problem with is the written test. The test consists of intro to computer and basic knowledge of computers in general. Seems like they have not been taught in these areas.

*Ken Morganstern, retired instructor, Missouri*

### **Crime Scene Investigation**

The contestants process a vehicle, and I think it is difficult for them to decipher what items are evidence within/on the vehicle.

*Michelle J. Nordyke, Kansas City, Mo. Police Department*

### **Dental Assisting**

In the dental area, students seem well prepared. I think students have to remember that when they become part of the "best" who compete, they have to remember that the others who are there with them are also the "best." Students may come from situations of being a "big fish in a little pond" from whatever their learning situation is, but when they get to nationals they suddenly find the pond a lot bigger than they had thought! This was a comment given to me not from a dental student competitor, but from a

student that I brought who competed this year in Architectural Drafting. I do feel however, that it applies to all of them.

When you compete against the top 1 percent of the country, competition is tough, and you better have taken every advantage to practice. Practice as many different scenarios as you can. It is often a fraction of a point that separates the leaders. They are all that good!

*Sharon Farrington, Executive Committee, SkillsUSA Championships*

### **Electronics Technology**

A large number of students are very weak in troubleshooting and analytical skills, use of test equipment (oscilloscope, multimeter) and breadboarding.

*Wayne Hawley, U.S. Postal Service*

### **Employment Application Process**

Portfolio development — Review the requirements and items to include as specified in the scope of the contest.

Practice responding to interviewers. Practice completing applications — watch time.

Complete the 4x6” note card with essential information, if you feel you need to use it. Only one card is allowed.

*Diane Swenson, Kronos*

### **Entrepreneurship**

Students need to better understand the financial statements and what incorporation means.

*Dorothy King, Career Academy, Baltimore, Md.*

### **First Aid/CPR**

Students need to make sure they remember all of their training and what they need to do. Too often they are leaving out the small things they should do. Do not go too fast to remember it all.

*Glenn D Haagar, Honeywell Inc.*

### **Graphic Communications**

The one area that seems to give our students major problems is No. 6, Production Planning. To be better prepared, consult any of the several editions of Philip Ruggles *Printing Estimating* texts. They have been published over several decades, and the publisher has changed. Look up “Philip Ruggles,” and use the text as a source.

*Jesus J. Rodriguez, Pittsburg (Kan.) State University*

## **Industrial Motor Control**

It appears that the areas in which contestants are the weakest are in conduit bending, installing equipment and the National Electrical Code. They seem to be somewhat familiar with the concepts of control, but primarily having studied and worked in a lab setting, they need help in the actual field installation requirements and techniques. I urge them to familiarize themselves with the contests from prior years and spend some time studying the code and practicing the required skills in which they are the weakest.

*Bob Baird, Independent Electrical Contractors Inc.*

## **Job Interview**

Résumé and judges' interview. Answers to interview questions should specifically relate to the question, not a general response.

*Mitchell Slemp, Mid-America (Okla.) Technology Center*

## **Job Skill Demonstration A and Open**

To win this Contest a competitor and advisor should study, prepare and follow the contest rules!

The contestants are required to have three components in their demonstration:

1. Introduction – Contestants presents a summary of the job skill they are about to demonstrate. They should identify the tools being used and give an overview of what they are going to demonstrate. This part of the presentation is worth 150 points of contest total score. Contestants should be knowledgeable and confident in their presentation.
2. Body – The main part or body of the demonstration is worth 700 points of the total contest score. Contestants should clearly and confidently explain and demonstrate their skill to the judges.
3. Conclusion – The conclusion or summary is worth 150 points of the total contest score. They should have a summary of what they have just presented.

The whole presentation should be between 5-7 minutes. It is very important to practice your demonstration in front of a group or groups. Have someone be a timekeeper and at least three judges. Practice makes winners. Good luck!

The aforementioned three parts of a Job Skill Demonstration contest are a guide. You should make sure you are using the latest edition of the contest rules. Practice is vital to being successful in the Job Skill Demonstration A and Open contest.

*Sam Williams, Lamar Institute of Technology, Beaumont, Texas*

## **Masonry**

Since clay brick is the oldest man-made building material on earth (some clay units have been carbon-dated at around 10,000 years old), and the setting of masonry materials into structures is perhaps the oldest of all professions, the principles of this year's competition continue to be very much "set in stone."

However, with the turndown in our country's economy, it has never been more urgent for all to take technical training very seriously, for it will separate those of us who do from those content to be average. This year's contestants must pay close attention to design and closely follow the blueprint they will be given. With the high level of ability that many will bring with them to Kansas City, it will not be possible to medal unless due attention is given to building a contest project that is plumb, level and square. I would like to see higher grades on the written portion of our competition as well.

*Bryan Light, Brick Industry Association*

### **Medical Assisting**

Administrative and A&P for all competitors seem to be the slower stations. For the postsecondary contestant, invasive skills seem to cause pause in their momentum. Patient education for all procedures should be a natural part of the competition.

*Diana Kendrick, Griffin (Ga.) Technical College*

### **Medical Math**

Students should be aware that *any* medical-related profession is fair game for the competition. This includes a few problems in pharmacology, as well. Students should have common medical conversion factors memorized. Some problems will test their problem-solving skills.

*Scott Brown, Wayne County (Ohio) Schools Career Center*

### **Medical Terminology**

Students struggle with fill in the blank, developing the correct medical term from word parts. Practicing on this area should increase their chances.

*Sherree Hughes, Ouachita Technical College, Hot Springs, Ark.*

### **Motorcycle Service Technology**

Service manual navigation has seemed to be a big challenge across the board. If you cannot find what you are looking for, think of what the item is attached to. The glossary is a quick reference but is not all encompassing.

Another struggle we often see is time management. Thirty minutes does not seem like a long time until you try to hold your breath — then it is an eternity. A lot can be accomplished in a few minutes with a clear head and calm demeanor.

*Mike O'Neil, Motorcycle Mechanics Institute*

### **Outstanding Chapter**

Read and follow the instructions in the new technical standards.

*Bill Mann, retired instructor, Florida*

## **Plumbing**

Contestants are struggling the most with cast iron (many have never worked with it before), soldering, and measurements for the water supply and DWV piping.

*Mary Beth Hall, PHCC Educational Foundation*

## **Power Equipment Technology**

In PET, the contestants seem to struggle with electrical and fuel. The contestants should stay focused on the basics and be able to apply that knowledge to what is presented in front of them. They would also do themselves a world of good by not worrying about what other contestants are doing and focus on what they are doing.

*Dave Worden, OPE Magazine*

## **Prepared Speech**

Not practicing in front of real audiences enough to lock in the speech and its timing.

*Craig Haugsness, Highland Park (Kan.) High School*

## **Quiz Bowl**

A need I saw is that contestants need to prepare better for the written exam in Quiz Bowl. We had so very low scores on the portion that made a big difference in the final results. *Study*. It helps during the active rounds too.

*Tracy Whitehead, Tennessee Technology Center at Hohenwald*

## **Residential Wiring**

Better prepare for the written test. Learn to follow oral directions. Proper conduit bending. Branch circuit circuitry.

*Greg Rachal, Bayou Electric Inc.*

## **Robotics and Automation Technology**

Electrical wiring: How a relay is used and wired into a DC circuit to control lamps and pneumatic devices.

Electrical layout: Keeping it neat and clean. We will be looking at this closely this year and will expect tie wraps to be used. We will expect connections to be clean with no exposed wire.

Programming: How to loop checking for an input to change (i.e., part in feeder or button pressed).

Flow charts: Students need to understand how to create a flow chart vs. documenting each step of the program.

*David Crowell, intelitek Inc.*

## **Screen Printing**

The contestants need to study the related technical material related to screen printing and practice the manipulative skills necessary to print images.

One major area they need to work on is being able to increase the number of images they print in a given period of time. In other words, work harder and faster. An employer doesn't want to pay employees for wasting time when they should be printing high quality images with a manual rotary press.

*Dr. Jesse L. Hudson, Aero Travel*

## **TeamWorks**

Start strong! Consider the judges as potential customers who are eagerly in search of well-prepared, competent trades people.

Remember, in the real world, if your presentation skills are not what they should be, you may not even get the opportunity to display your technical skills.

You know how good you are but potential clients don't.

Convince the TeamWorks judges through your confidence, enthusiasm and compelling presentation that your team is worthy to be judged as the best.

So here are some things to consider doing now to put your team in the position to nail the presentation in June 2010:

- Practice, practice, practice!
- Role-play your presentation as often as possible.
- Ask for constructive feedback from a host of credible sources — other trades instructors in your chapter, peers, parents, or any person you may know that works in the trades or has worked with trades people. As an example, if your aunt hired a contractor to do a remodel a few years back she could give you feedback.
- Get the entire team engaged. Everyone has to be actively committed.
- And have fun. Fun and passion go hand in hand in creating a successful effort.

*Joe Keppler, Construction Management Advisory Group*

## **Technical Drafting**

I noticed our judges, from industry, were particular about items we might not think as that important. For instance, missing punctuation on notes cost contestants points last year. As adjunct faculty at a community college, I might have let things like that slip as long as the drawing was correct, but I see that does not serve our students well.

In business, drawings are reworked until they are they are as near perfect as they can be. So, if contestants need to add notes, for instance, they should make sure they know how to spell and punctuate correctly.

Our pre-test came from an industry organization known as the American Design

Drafting Association. The test revealed that many students do not know the basics of technical drafting. A review of everything from sketching to views, rules and reasons would be helpful.

*Stephanie Kvamme, The CAD Store*

### **Web Design**

Reviewing and understanding what's expected from them.

*Bill Cullifer, World Organization of Webmasters*

### **Welding**

The competitors continually have problems understanding welding symbols and drawings. Consistently 65 to 75 percent of the competitors, both college/postsecondary and high school, do not assemble the project correctly.

Another problem is welding aluminum. In March, I put out what materials will be used in the project. Consistently, whenever we use aluminum, there will be a number of competitors who do not know how to weld aluminum. They do not belong at a national competition.

*Gene Hornberger, Welding Consultant LLC*