AUDIO/RADIO PRODUCTION

PURPOSE

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of audio/radio production.

First, download and review the General Regulations at: http://updates.skillsusa.org.

ELIGIBILITY

Open to a team of two active SkillsUSA members enrolled in career and technology programs with audio/radio production as an occupational objective.

CLOTHING REQUIREMENT

Class E: Contest specific — Business Casual

For men: Official SkillsUSA white polo shirt, black dress slacks, black socks, black leather shoes.
For women: Official SkillsUSA white polo shirt with black dress skirt (knee-length) or black slacks; black socks or black or skin-tone seamless hose; black leather dress shoes.

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.

EQUIPMENT AND MATERIALS

1. Supplied by the technical committee:
   a. Theme and objective for production
   b. Transportation to and from "on scene" location, if necessary
   c. Facilities and power to edit final product
   d. Audio equipment, cables and connectors outside of required "contestant supplied" equipment
   d. Additional/updated information to assist students in preparing for the contest may be posted online annually at: updates.skillsusa.org.
2. Supplied by the contestants:
   a. Portable digital audio recorder with removable recording media
   b. Microphone with audio cable
   c. Method of importing digital audio from field recorder to editing system
   d. Audio editing software/system (use of laptops is strongly encouraged)
   e. Writing implement (pen, pencil, marker, etc.)
   f. USB flash drive
   g. Scratch paper for notes
   h. Headphones *(not ear buds)*
   i. One-page typewritten résumé
   j. Production music CD (see note)
   k. Surge-protected power strip
   l. 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 at http://updates.skillsusa.org.

   Note: Production music is *not* commercial music purchased in stores. It is music created for use in audio and video productions. Some production music companies are: Music Bakery, Production Garden, TM Studios and Omnimusic. Production music may also be created using programs such as GarageBand, Soundtrack or ACID.

SCOPE OF CONTEST

Each team will be comprised of two student members from the same school and same division, one specializing in Radio and the other in Audio Production.

Knowledge Performance

A written knowledge exam of as many as 50 questions will be given covering the standards and competencies of listed on the following pages, including basic digital audio recording

and editing, equipment, cables and connectors, and terminology.

Skill Performance

The contest includes an assignment to produce a final project on site as determined by the national technical committee.

Contest Guidelines

Written Exam

1. Contestants will take the exam individually.
2. Both teammates' scores will be averaged together on the score sheet.
3. Contestants competing as "Radio Talent" will be responsible for knowledge including radio production, mass communications and radio history.
4. Contestants competing as the "Audio Technician" will be responsible for aspects of producing quality audio.
5. Contestants may use any textbook or other materials to prepare for the exam. The technical committee and NET recommend using one or more of the following textbooks:
    a. *The Sound Effects Bible: How to Create and Record Hollywood Style Sound Effects* (written by Ric Viers, published by Michael Wiese Productions, ©2008, ISBN 1932907483)
    b. *Modern Radio Production: Production, Programming, and Performance* (Seventh Edition, Hausman/Benoit/Messere, published by Thomson Wadsworth, ©2007, ISBN 0495050318)
    c. *Fundamentals of Audio Production* (First Edition, McDaniel/Shriver/ Collins, published by Allyn and Bacon, ©2008, ISBN 0205462332)
    d. *Audio in Media* (Eighth Edition, Alten, Published by Thomson Wadsworth, ©2008, ISBN 0495095680)
    e. Cyber College, (www.cybercollege.com). Use both the "TV Production" (TVP) and "Elements of Mass Communication" (EMC) online texts (TVP: the "Scriptwriting Guidelines" module and all of the modules in the "Audio" section; EMC: the modules in the "History and Development of Radio" section).
6. Both teammates' scores will be averaged together on the score sheet

While specific chapters generally aren't mentioned in these textbooks, competitors are encouraged to use the following standards and competencies to guide their studying.

Contest Assignment

1. Audio and information will be gathered on location as needed to convey the assigned theme or objective.
2. Students are to fully produce (plan, write, voice, record, edit, render, etc.) a five-minute radio production such as a PSA, NPR-style soundscape, sound-rich/NPR-style news story, sound and interview only news story, etc. A 30-second ad spot will be produced and inserted into the production. The complete production requires students to demonstrate their ability to plan a project that meets a specific prompt and run time; gather, edit and mix a variety of audio sources; and render the completed project to a specified audio file.
3. The completed production must meet the assigned run time and convey an adequate representation of the subject or theme.
4. Designated time periods over two days will be provided for script research and development, rehearsal of the script, generation of written copy, field recording, booth voiceover recording, and editing the final project.
5. Emphasis will be placed on:
    a. Professional production of the audio/radio production by industry standards
    b. Quality of the audio
    c. Conveyance of the subject, theme and information to the listener
6. Location of contest will be determined by the national technical committee.
7. All teams will submit their projects including final production and script on a USB flash drive with a file name and format chosen by the technical committee.

8. Contestants will demonstrate their ability to perform jobs or skills selected from the following list of competencies as determined by the technical committee:
   Audio Technician:
   a. Demonstrate knowledge of audio production technology, including proficiency in digital audio recording, editing and mixing.
   b. Demonstrate knowledge of terminology for mic level, line level, dynamic range, microphone preamp, compressor/limiter, XLR cable, XLR connector, EQ, time-based processing, send, return, input, output, balanced, and unbalanced.
   c. Demonstrate working knowledge of microphones, microphone preamps, compressor/limiters, EQ, send, return, level control, and digital audio editing on a DAW (Digital Audio Workstation).

   Radio Talent:
   a. Demonstrate proficiency in planning a radio production, including the proper commercial script form.
   b. Demonstrate knowledge of terminology for script, script form, copy, target demographic, live tag, intro, outro, format, 60-second spot, 30-second spot, PSA, broadcast, network, run time, voice over, FCC, and mic technique.
   c. Demonstrate practical knowledge of scriptwriting, pre-production story development, radio advertising development, proper microphone tecnique.
10. Teams that do not turn in their produced audio/radio production and script within the time limit will have 20 points deducted from their final score, plus 1 point for each additional minute past the deadline.
11. Contestants should not arrive at the contest area any earlier than 15 minutes prior to the assigned session.
12. Teams that are late to their assigned editing station will have that time deducted from their allotted time.
13. The finished production must meet the run time determined by the contest committee (plus or minus one second) Points will be deducted if the spot is outside the one-second tolerance.
14. If a team experiences a problem with its equipment, it is the *team's* responsibility to fix the problem. *No extra time will be given for equipment problems.* Teams may choose to bring in a second editing system in case of equipment problems, but no extra space will be given for the second system. *The contest committee strongly encourages the use of laptops.*
15. Teams may edit by using whatever software or method they choose, but they must supply their own equipment.
16. State and regional contests should mirror these requirements as closely as possible but may be adjusted to be completed in one day. Adjustments could include simply giving less time to complete the production and/or assigning a shorter run time for the assigned project. At the regional and state levels, this contest could also be run in partnership with the Television (Video) Production contest.

Standards and Competencies

AP 1.0 — Plan an audio/radio production, including the proper commercial script form demonstrating digital audio recording, editing and mixing

1.1 Demonstrate processes in digital audio recording
   1.1.1 Record natural sound on location characterizing the unique sound of that location
   1.1.2 Perform interview on location with an understanding of the purpose and goals of the audio/radio production
   1.1.3 Demonstrate proper techniques in writing the script inclusive of the target audience
   1.1.4 Demonstrate proper techniques in performing voice over on location

1.2 Demonstrate processes in digital audio editing and mixing
   1.2.1 Perform digital audio editing and mixing using a standard application to change and enhance the audio for the target audience
   1.2.2 With full consideration of the script, choose and integrate the appropriate audio/radio elements

to enhance the presentation for the target audience

1.3 Define and give appropriate examples of the following audio/radio trade vocabulary: send, return, line level, mic level, analog, scrubbing, digital, mixer, target group, demographics, live tag, format, run time, PSA, ASCAP, BMI, SESAC, SoundExchange, commercial, FCC, voice over

AP 2.0 — Demonstrate knowledge and use of cables and connectors used in audio/radio production

2.1 Show use of the following audio connectors (male and female for each): XLR, ¼" balanced, ¼" unbalanced, and RCA/phono plug
2.2 Describe pin configuration of balanced cables
2.3 Describe pin configuration of unbalanced cables

AP 3.0 — Implement the skills and knowledge needed to describe and demonstrate audio/radio production

3.1 Differentiate major microphone designs
3.2 Describe directional characteristics
3.3 Identify and describe handheld and personal microphones
3.4 Position microphones
3.5 Describe types and uses of various microphones
3.6 Describe phase cancellation
3.7 Describe methods of creating the stereo effect
3.8 Describe digital audio
3.9 Describe analog audio
3.10 Identify and describe communications systems

Committee Identified Academic Skills

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

Math Skills

- Demonstrate the ability to do basic calculations involving time
- Demonstrate the ability to read and use a variety of clocks and stopwatches

Science Skills

- Use knowledge of sound and technological applications of sound waves

Language Arts Skills

- Demonstrate use of such verbal communication skills as word choice, pitch, feeling, tone and voice
- Analyze mass media messages
- Demonstrate comprehension of a variety of informational texts
- Demonstrate persuasive writing
- Demonstrate informational writing
- Edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure and paragraphing

Connections to National Standards

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

Math Standards

- Numbers and Operations
- Problem Solving
- Communication
- Connections
- Representation

Source: NCTM Principles and Standards for School Mathematics. For more information, visit: http://www.nctm.org.

Science Standards

- Understands the sources and properties of energy
- Understands the nature of scientific inquiry

Source: McREL compendium of national science standards. To view and search the compendium, visit: http://www2.mcrel.org/compendium/browse.asp.

Language Arts Standards

- 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 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 non-print 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.readwritethink.org/standards/index.html.