

### **Technology Support & Services**

Technology Support & Services challenges members to demonstrate their knowledge of help desk operations and IT support through an objective test and a role play scenario. Members apply problem-solving, technical, and customer service skills to address real-world technology support issues in a business setting.

#### **Event Overview**

Division	High School
Event Type	Individual
Event Category	Role Play
Event Elements	Objective Test and Interactive Role Play

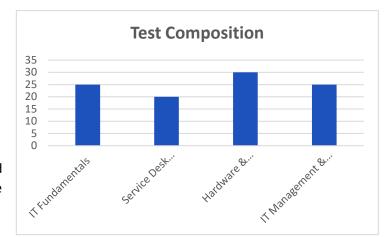
#### **Educational Alignments**

Career Cluster Framework Connection	Digital Technology
NACE Competency Alignment	Career & Self-Development, Communication,
	Leadership, Professionalism, Technology

#### **Knowledge Areas**

- IT Fundamentals
- Service Desk Operations
- Hardware and Software Troubleshooting
- IT Management and Administration

Test questions are based on the knowledge areas and objectives outlined for this event. Detailed objectives can be found in the study guide included in these guidelines.



#### District/Region/Section

Testing will take place prior to the District Leadership Conference. Testing must occur at school under the supervision of an adult proctor. Check the Call to Conference for your District for specific instructions and deadlines, and any changes to presentation or prep timings at your conference.

#### State

See below for list of required competition items; Colorado FBLA requires the same items set by National FBLA at our State Leadership Conference. Colorado FBLA will also provide the items listed below. Any event with a test will have an online testing component on-site at the State Leadership Conference.



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All competitors will present to the judges in a preliminary round. The test score and preliminary presentation scores will be calculated to determine the list of finalists to present to judges in the final round. During the final round, only the role play scores will be used to determine winners.

#### **National**

#### **Required Competition Items**

	Items Competitor Must Provide	Items FBLA Provides
Objective Test	<ul> <li>Sharpened pencil</li> <li>Fully powered device for online testing</li> <li>Conference-provided nametag</li> <li>Photo identification</li> <li>Attire that meets the FBLA Dress Code</li> </ul>	<ul> <li>One piece of scratch paper per competitor</li> <li>Internet access</li> <li>Test login information (link &amp; password provided at test checkin)</li> </ul>
Role Play	<ul> <li>Conference-provided nametag</li> <li>Photo identification</li> <li>Attire that meets the FBLA Dress Code</li> </ul>	<ul> <li>Two notecards per competitor</li> <li>Pencil</li> <li>Secret role play problem/scenario</li> </ul>

#### **Important FBLA Documents**

• Competitors should be familiar with the Competitive Events <u>Policy & Procedures Manual</u>, <u>Honor Code</u>, Code of Conduct, and Dress Code.

#### **Eligibility Requirements**

To participate in FBLA competitive events at the National Leadership Conference (NLC), the following criteria must be met:

- **Membership Deadline**: FBLA national membership dues must be paid to the specific division by 11:59 p.m. Eastern Time on March 1 of the current school year.
- Repeat Competitors: Members may only compete in an event at the NLC more than once if they have not previously placed in the top 10 of that event at the NLC. If a member places in the top 10 of an event at the NLC, they are no longer eligible to compete in that event at future NLCs, unless the event has been modified beyond a name change. Chapter events are exempt from this procedure. Competitors who placed in the top ten in Help Desk at a previous National Leadership Conference are not eligible to compete in this event.
- **Conference Registration**: Members must be officially registered for the NLC and must pay the national conference registration fee to participate.
- Official Hotel Requirement: To be eligible to compete, competitors must stay within the official FBLA housing block.
- State Entry Limits: Each state may submit up to four entries per event.
- Event Participation Limits: Each member may participate in:
  - One individual or team event, and



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- One chapter event (e.g., Community Service Project or Local Chapter Annual Business Report).
- **Competitor Responsibility**: Only registered competitors are permitted to plan, research, prepare, and set up their presentations. Advisers and others may not assist.
- **Participation Requirement**: To be eligible for an award, each competitor must complete all components of the event at the National Leadership Conference.
- Identification at Check-in: Competitors must present valid photo identification (physical or digital) that matches the name on their conference name badge. Acceptable forms include a driver's license, passport, state-issued ID, or school ID.
- Late Arrivals: Competitors will be allowed to compete until such time that the results are finalized, or participation would impact the fairness and integrity of the event, as determined by Competitive Events staff. If judges have left the competitive event area, it is no longer possible to compete. Five penalty points will be assessed for late arrivals in any competitive event.
- Event Schedule Notes:
  - Some events may begin before the Opening Session.
  - o All schedules are posted in local time for the NLC host city.
  - Schedule changes are not permitted.

#### **Event Administration**

This event consists of two phases: an objective test and an interactive role play.

#### **Objective Test**

Each competitor will complete a 100-question multiple-choice objective test.

#### **Test Duration**

• Test Duration: 50 minutes

#### Format

• This event consists of an online objective test that is proctored and completed on-site at the National Leadership Conference (NLC).

#### Materials

Reference or study materials are not permitted at the testing site.

#### **Electronic Devices**

 All electronic devices, including cell phones, smart watches, and similar technology, must be powered off prior to the start of the competition.

#### Calculators

 Personal calculators are not allowed; an online calculator will be available within the testing platform.

#### **Question Review**

• Competitors may flag questions within the testing platform for review by the Competitive Events Committee prior to the finalization of results at the NLC.

#### **Interactive Role Play Details**

The objective test score determines the top 15 competitors advancing to role play round.

#### **Timing Structure**

- Preparation Time: 20 minutes (a one-minute warning will be provided)
- **Presentation:** 7 minutes (a one-minute warning will be provided)



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• Question & Answer (Q&A): None

#### Role Play Prompt

• Competitors will be provided with a single copy of a technology support—related scenario or problem at the beginning of their assigned preparation time. This copy may only be accessed within the designated preparation area.

#### **Notecard Use**

• Each competitor will receive two notecards for use during preparation and the presentation. Information may be written on both sides. Notecards will be collected after the role play.

#### Materials

• No technology, reference materials, visuals, or props may be used.

#### Interaction with Judges

Judges may ask questions during the presentation as part of the interactive role play format.

#### Audience

Role play presentations are closed to all conference attendees.

#### Confidentiality

• To maintain fairness, competitors must not discuss or share the role play prompt until the event concludes.

#### Scoring

- The objective test score determines the top 15 competitors advancing to role play round. Tiebreakers are determined as follows: (1) The number of correct responses to 10 pre-selected tiebreaker questions will be compared. (2) If a tie remains, the number of correct responses to 20 pre-selected questions will be reviewed. (3) If a tie still remains, the competitor who completed the test in the shortest amount of time will be ranked higher.
- The role play round scores only will be used to determine winners.
- Objective test scores will be used to break a tie in the role play round.
- All judging decisions are final. Results announced at the National Leadership Conference are considered official and will not be changed after the conclusion of the National Leadership Conference.

#### **Penalty Points**

- Competitors may be disqualified if they violate the Code of Conduct or the Honor Code.
- Five points are deducted if competitors do not follow the Dress Code or are late to their assigned presentation time.

#### **Electronic Devices**

 Unless approved as part of a documented accommodation, all cell phones, smartwatches, electronic devices, and headphones must be turned off and stored away before the competition begins. Visible devices during the event will be considered a violation of the FBLA Honor Code.

#### Recognition



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• A maximum of 10 entries (individuals or teams) may be recognized per event.

#### Americans with Disabilities Act (ADA)

FBLA complies with the Americans with Disabilities Act (ADA) by providing reasonable
accommodations for competitors. Accommodation requests must be submitted through the
conference registration system by the official registration deadline. All requests will be
reviewed, and additional documentation may be required to determine eligibility and
appropriate support.

#### **Recording of Presentations**

- Unauthorized audio or video recording is strictly prohibited in all competitive events.
- FBLA reserves the right to record presentations for educational, training, or archival purposes.
   Competitors should be aware that their presentations may be recorded by FBLA-authorized personnel.

#### Sample Preparation Resources

• Official sample test items and role plays can be found in <u>FBLA Connect</u>. These sample items showcase the types of questions that may be asked on the test and familiarize competitors with the multiple-choice item options.



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### Study Guide: Knowledge Areas and Objectives

#### IT Fundamentals (25 test items)

- 1. Describe the responsibilities of each layer of the OSI model
- 2. Discuss features of Windows for personal and enterprise environments
- 3. Discuss features of MacOS for mobile and PC systems
- 4. Apply command-line networking and troubleshooting tools for Windows and Linux (e.g., ipconfig, fsck, ping, tracert)
- 5. Describe computer components (e.g., CPU, motherboard, GPU)
- 6. Interpret software requirements (e.g., 32-bit vs. 64-bit, memory, storage)
- 7. Describe best practices for digital security and privacy (e.g., VPN, password managers, firewalls)
- 8. Describe common security vulnerabilities and threats (e.g., out-of-date systems, SQL injection, DDoS)
- 9. Explain how information is exchanged between a computer and a network (e.g., packets, requests, servers)
- 10. Describe the functions of DNS and DHCP
- 11. Describe the functions of IP addresses in networked environments
- 12. Describe the key hardware components of a network (e.g., clients and servers, switches, routers, modems)

#### Service Desk Operations (20 test items)

- 1. Explain the importance of service and help desk teams in an organization
- 2. Discuss when tickets should be escalated
- 3. Discuss the role of IT Service Management (ITSM) in business
- 4. Discuss the functions of service desk software (e.g., JIRA, Zoho)
- 5. Describe service desk support tiers and their responsibilities
- 6. Discuss methodology for solving tech problems (e.g., identifying problem, testing theories, developing plans of action)
- 7. Describe the role of ticketing systems in IT support
- 8. Describe best practices for identifying and removing malware from systems

#### Hardware and Software Troubleshooting (30 test items)

- 1. Apply the best practice methodology to investigate tech problems
- 2. Distinguish between hardware and software problems
- 3. Describe solutions to common printer issues (e.g., connectivity, refillables)
- 4. Discuss common issues with mobile devices (e.g., battery life, overheating, connectivity)
- 5. Describe symptoms of problems with RAM, CPU, and storage
- 6. Describe tools used to fix and troubleshoot devices (e.g., multimeter, freeze spray, compressed air)
- 7. Distinguish between devices that need fixing, upgrading, or replacing
- 8. Troubleshoot common Windows OS problems (e.g., BSOD, crashing, slow performance)
- 9. Describe best practices for removing malware from a system
- 10. Describe indicators of malware on a device
- 11. Describe common solutions to hardware problems (e.g., restarting, unplugging, resting)
- 12. Describe common cable and connector types (e.g., USB, lightning, HDMI)
- 13. Describe types and parts of a liquid crystal display
- 14. Describe the boot process and options for its configuration



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#### IT Management and Administration (25 test items)

- 1. Describe the role of change management in business and IT management
- 2. Describe elements of change request documents (e.g., time of change, rollout/backout plan, anticipated impact)
- 3. Discuss the use of remote access methods for IT administration (e.g., troubleshooting, testing, installing, updating)
- 4. Describe remote and virtual access software and protocols (e.g., SSH, RMM, RDP, VPN)
- 5. Describe file transfer services and protocols (e.g. FTP, Google Drive, OneDrive)
- 6. Discuss printer configuration settings (e.g., tray settings, duplex, orientation)
- 7. Describe types of printers (e.g., thermal, 3D, inkjet, laser)
- 8. Describe the use of load balancers in cloud environments and physical servers
- 9. Discuss key features of Active Directory
- 10. Describe the characteristics of different cloud services (e.g., SaaS, PaaS, IaaS)
- 11. Discuss spam mitigation and management techniques (e.g., DKIM, SPF, DMARC)

#### **References for Knowledge Areas & Objectives**

- CompTIA. CompTIA A+ Certification Exam Core 1 Objectives. <a href="https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-(3-0)">https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1101-exam-objectives-(3-0)</a>
- CompTIA. CompTIA A+ Certification Exam Core 2 Objectives. <a href="https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1102-exam-objectives-(3-0)">https://partners.comptia.org/docs/default-source/resources/comptia-a-220-1102-exam-objectives-(3-0)</a>
- Coursera. Technical support fundamentals. <a href="https://www.coursera.org/learn/technical-support-fundamentals">https://www.coursera.org/learn/technical-support-fundamentals</a>.
- Google. Google IT Support Professional Certificate. <a href="https://www.coursera.org/professional-certificates/google-it-support#outcomes">https://www.coursera.org/professional-certificates/google-it-support#outcomes</a>
- IBM. What is ITSM (IT service management)? https://www.ibm.com/think/topics/it-service-management
- Unity Communications. What is IT support? Our guide to key tools and service desks. <a href="https://unity-connect.com/our-resources/blog/what-is-it-support/">https://unity-connect.com/our-resources/blog/what-is-it-support/</a>



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chnology Support & Service				Exceeds	Points
Expectation Item	Not Demonstrated	Below Expectations	Meets Expectations	Exceeds Expectations	Earned
Demonstrates understanding of the role play and defines problem(s) to be solved	No description or role play synopsis provided; no problems defined	Describes and provides role play synopsis OR defines the problem(s)	Describes and provides role play synopsis AND defines the problem(s)	Demonstrates expertise of role play synopsis AND definition of the problem(s)	
	0 points	1-6 points	7-8 points	9-10 points	
Communicates position on role play scenario	No position communicated	Communicates position not related to problem	Communicates position on problem	Communicates in a professional manner position on problem in scenario	
	0 points	1-6 points	7-8 points	9-10 points	
Identifies logical solution and aspects of implementation	No solution identified	Solution provided, but implementation plan not developed	Logical solution and implementation plan provided and developed	Feasible solution and implementation plan developed, and necessary resources identified	
	0 points	1-6 points	7-8 points	9-10 points	
Displays empathy/diplomacy when responding to role play scenario	No empathy or diplomacy displayed	Empathy or diplomacy displayed in response to role play scenario	Empathy and diplomacy displayed in response to role play scenario	Display of empathy and diplomacy skills add to resolution of role play scenario	
	0 points	1-6 points	7-8 points	9-10 points	
Shows knowledge of terminology and components related to the role play	No understanding of the role play demonstrated	Terminology is presented but not expanded on	Clear understanding of terminology and implementation into presentation	Terminology is communicated clear enough for client (judge) to proceed on their own	
	0 points	1-6 points	7-8 points	9-10 points	
Demonstrates conflict resolution and closure to the role play	No closure was provided	Situation was closed OR conflict was resolved	Conflict was resolved, the situation has closure	Conflict was resolved, the situation has closure, and client (judge) is satisfied	
	0 points	1-9 points	10-16 points	17-20 points	
Presentation Delivery				Description flowed in a	
Statements are well-organized and clearly stated	Competitor did not appear prepared	Competitor was prepared, but flow was not logical	Presentation flowed in logical sequence	Presentation flowed in a logical sequence; statements were well organized	
	0 points	1-6 points	7-8 points	9-10 points	
Consistently displays confidence, poised body language, engaging eye contact, and effective voice projection.	Did not demonstrate any of the listed skills	Demonstrated 1-2 of the listed skills (confidence, body language, eye contact, or voice projection)	Demonstrated 3 of the listed skills (confidence, body language, eye contact, or voice projection)	Demonstrated all skills, enhancing the overall presentation	
	0 points	1-6 points	7-8 points	9-10 points	
Demonstrates the ability to effectively answer questions	Unable to answer questions	Does not completely answer questions	Completely answers questions	Interacted with the judges in the process of completely answering questions	
	0 points	1-6 points	7-8 points	9-10 points	
	Staff Only: Pe	nalty Points (5 points for di	ress code penalty and/or 5 poi	nts for late arrival penalty)	
			Prese	ntation Total (100 points)	
Name(s):					
School: Judge Signature:					Date:
and alphacare.	1				Dutc.

Comments:



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