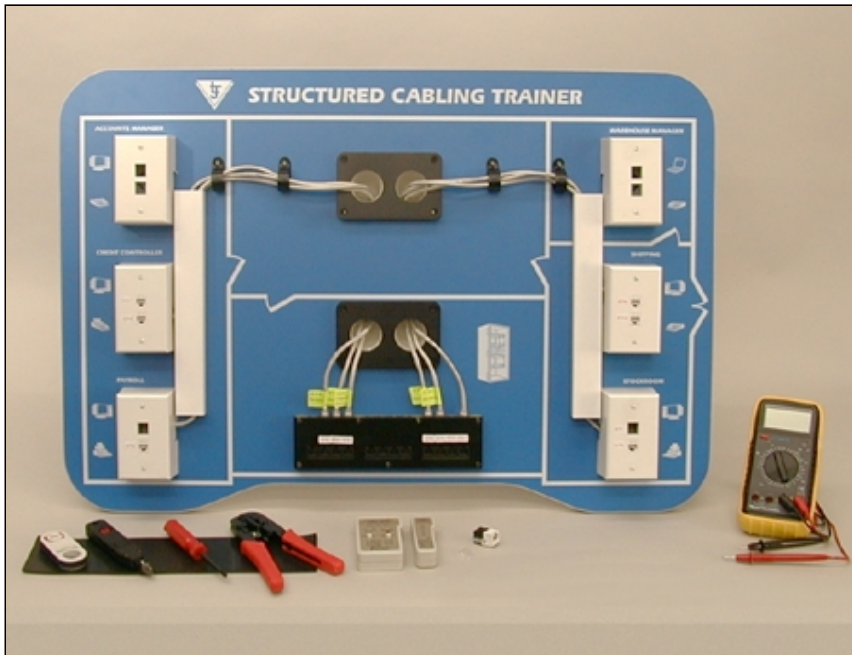


Investigating Networks (40-assignment)



This is an integrated instructional module designed specifically to operate within a Modular Program environment. It is ideal for use with our Scantek Technology or IT2020 Information Technology programs. It includes a 10-assignment exploratory curriculum and a further 30-assignment in-depth curriculum. The exploratory curriculum and the in-depth curriculum are each split into two parts. Each part includes a pre-test and post test. The module includes software and curriculum materials sufficient to provide a complete learning experience.

The curriculum incorporates continuous assessment through questions. When used in conjunction with a ClassAct networked management system, this provides instant feedback of student performance. The assessments begin with a comprehensive pre-test. This quiz includes questions for each subsequent assignment, together with questions that will specifically test math and reading ability.

Every assignment starts with a series of questions designed to track inventory. These ensure that any missing items are located before they are needed.

Each assignment is divided into a series of tasks. Hands-on tasks introduce students to computer networking technology, and are accompanied by research tasks based upon illustrated textbooks and on-screen applications. Assessment questions are incorporated into each task.

Exploratory Phase Topics:

- Structured cabling systems
- Media types
- Connector types
- Cabling standards
- Cable termination tools
- Standard wiring patterns
- Network test equipment
- Connectivity testing
- Patch cable types
- Methods of cable termination
- Structured cabling standards for buildings
- Labeling cable systems
- Methods of pulling cables
- Faultfinding in cabling systems
- Network troubleshooting methodology
- Safe cabling practices
- Legal obligations when installing cabling
- Implementing structured cabling

Exploratory Phase Activities:

- Investigating elements of structured cabling systems.
- Terminating UTP cables.
- Cabling test tools and methods.
- Using patch cords and crossover cables.
- Locating faults in network connections.
- Comparing cable media.
- Installing horizontal cabling.
- Designing a cable labeling system.
- Pulling cables.
- Examining safe practices relating to structured cabling.
- Investigating the role of documentation in a structured cabling system.

Advanced Specialization Phase topics:

- Network connectivity
- Networking and internetworking protocols
- OSI model
- Network operating systems
- Network architectures
- Transmission media
- Network services
- Network planning and implementation
- User and computer security
- Network servers
- Troubleshooting networks
- Remote connectivity
- Operating systems
- LANs and WANs
- Network topologies
- Network clients
- Fault tolerance
- Network addressing
- Hardware troubleshooting tools
- Software troubleshooting tools
- Network redundancy
- Remote access protocols

Advanced Specialization Phase activities:

- Tracing the evolution of networking.
- Recognizing network uses.
- Comparing network topologies.
- Comparing network transmission media.
- Exploring wireless network transmission media.
- Recognizing network connectivity devices.
- Recognizing access connectivity devices.
- Identifying transmission standards.
- Examining the OSI reference model.
- Comparing network protocols.
- Examining TCP/IP.
- Exploring application layer protocols.
- Investigating network addressing.
- Investigating WAN technologies.
- Investigating remote access.
- Examining TCP/IP troubleshooting utilities.
- Evaluating server operating systems.
- Evaluating client operating systems.
- Investigating network security.
- Investigating network maintenance.
- Exploring fault tolerance.
- Investigating disaster recovery.
- Investigating network troubleshooting.
- Examining software troubleshooting tools.
- Examining hardware troubleshooting tools.
- Exploring IEEE standards.
- Investigating name resolution.
- Examine packet and circuit switching.
- Monitoring network performance.
- Network troubleshooting technique.

Investigating Networks (40-assignment)

Each assignment is designed around a list of performance objectives. These lists include academic, technical and occupational objectives. The assignments are written in such a way as to enable a student to attain the performance objectives, with the assessment questions linked to these in order to provide a measure of true competency.

The performance objectives are used by the ClassAct management system to generate a comprehensive portfolio of student competency reports. Default reports supplied with this module include:

- Entry report
- Technical/Occupational Exit report
- Basic Skills report based upon the federal SCAN's report.

The items supplied with this instructional module include:

- 10-assignment On-Screen Student Assignment Guide CD
- 10-assignment Student Workbook
- 10-assignment Instructor's Guide
- Reference Guide
- 30-assignment On-Screen Student Assignment Guide CD
- 30-assignment Student Workbook
- 30-assignment Instructor's Guide
- Network Cabling Training System
- UTP network cables
- Network cabling materials and cable assembly tools
- Digital multimeter
- UTP cable tester
- Networking Simulation Software
- Theory Support Software
- Network+ Theory Support Software

Additional items required:

- Computer

Module Facts

For Technology Programs, order as:
ST680/40 Investigating Networks

For IT Programs, order as:
NS5C Investigating Networks

	No.	Average time
Assignments	40	45 minutes
Extension Activities	4	45 minutes
Total		33 hours



LJ Technical Systems
Web site: www.ljgroup.com