

Digital Sound Technology (10-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. The module includes a 10-assignment exploratory curriculum that is split into two parts. Each part includes a pre-test and post test. The module includes hardware, 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 form the core of the student work. Where appropriate, these are accompanied by research tasks based upon software applications. Assessment questions are incorporated into each task.

Typical 10-assignment topic areas include:

- Human anatomy for speech
- Introduction to Sound Forge Audio Editor
- Audio formats
- View voice waveforms
- Editing sound files
- Effect of sample frequency
- Applications of speech synthesis
- Text to speech synthesis
- Rate, pitch and volume
- Computer training for voice recognition
- Voice control of computer programs

Typical 10-assignment activities include:

- Identify how humans are able to talk.
- Explore a software package that allows digital recording, playback and graphical display of sound wave forms.
- Make a digital recording of your own voice.
- Display your voice pattern on screen.
- Compare different voice patterns.
- Explore sampling frequency.
- Use various techniques to create your own digital sound track.
- Explore speech synthesis and recognize how it is used in everyday life.
- Recognize how rate, pitch and volume affect the sound of a voice.
- Create a new voice for your own character.
- Recognize how a CD stores digital sound information.
- Determine the difference between analog and digital audio formats.
- Train a computer to recognize your voice and follow your commands.
- Determine how computers are able to recognize voices and commands.
- Control the movement of an object on screen using only your voice.
- Train your computer to solve simple math problems by talking to it.

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 Assignment Guide
- 10-assignment Student Workbook
- 10-assignment Instructor's Guide
- Computer Aided Instruction software
- Digital Sound Technology Reference Guide
- Text Assist software
- Voice Assist software
- Sound Forge software
- Microphone
- Audio cassette player
- Audio cassette tapes
- Audio compact disc

Additional items required:

- Computer

Module Facts

For Technology Program, order as: ST210/10 Digital Sound Technology

For IT Program, order as: IM1E Digital Sound Technology

	No.	Average time
Assignments	10	45 minutes
Extension Activities	2	45 minutes
Total		9 hours



LJ Technical Systems
 Web site: www.ljgroup.com