

WinSchool DigiStudio

Digital Language Lab System



BEACON

Aiding educators around the world.

DigiStudio Digital Language Lab System

DigiStudio is a full-featured digital language laboratory system that enlivens both teaching and learning. Powerful DigiStudio software brings many effective functions to any LAN-connected classroom; WinSchool hardware may be added at any time to make your DigiStudio system even more powerful.

Main Features

◆ Language Lab Functions

DigiStudio provides broadcasting, listening, speaking, and recording functions for teacher and students, along with powerful classroom management functions: rollcall, attendance, and test scoring.

◆ Advanced instructional functions

Advanced 8-channel, LAN-based broadcast includes six simultaneous channels of digital A-V (such as a streaming audio, movies, WAV, MP3, MPG, DAT files, etc.), plus two analog audio channels. The teacher controls student reception, or allows students to select from multiple instructional streams.

◆ Multiple types of instructional data

DigiStudio allows use of standard multimedia formats such as WAV, MP3, MPG, and WMA; *and* audio-text files that let students hear audio and optionally see concurrent text and graphics, for increased learning efficiency. Adding a cassette unit to the teacher's PC makes it easy to use cassette tapes, too.

◆ Multiple Modes

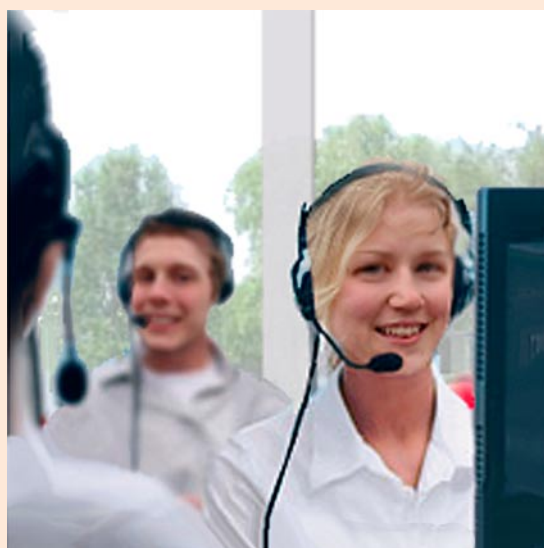
In Study Hall Mode, students may peruse streaming multimedia or access any instructional files from the network where permission is granted. Instruction Mode is similar, except that students may work only on what the teacher assigns. In Group Talk Mode, students practice target patterns in small groups. In Handout Mode, when the teacher opens a document (e.g.: Word, PDF, Excel, PowerPoint, or whatever), student stations all open the same document at the same page. The four Quiz and Exam modes cover a multitude of testing possibilities: listening comprehension, speaking, reading comprehension, essay segments, etc. DigiStudio records all student responses during testing, and provides instant scoring for multiple choice segments. For oral tests, teachers score students' recorded answers in a convenient grid. DigiStudio provides tools for authoring and editing a variety of test files. If desired, you can simulate official language examinations such as TOEFL, TOEIC, GMAT, IELTS, and GEPT for maximally effective practice and evaluation.

◆ File Transfer and Remote Application Execution

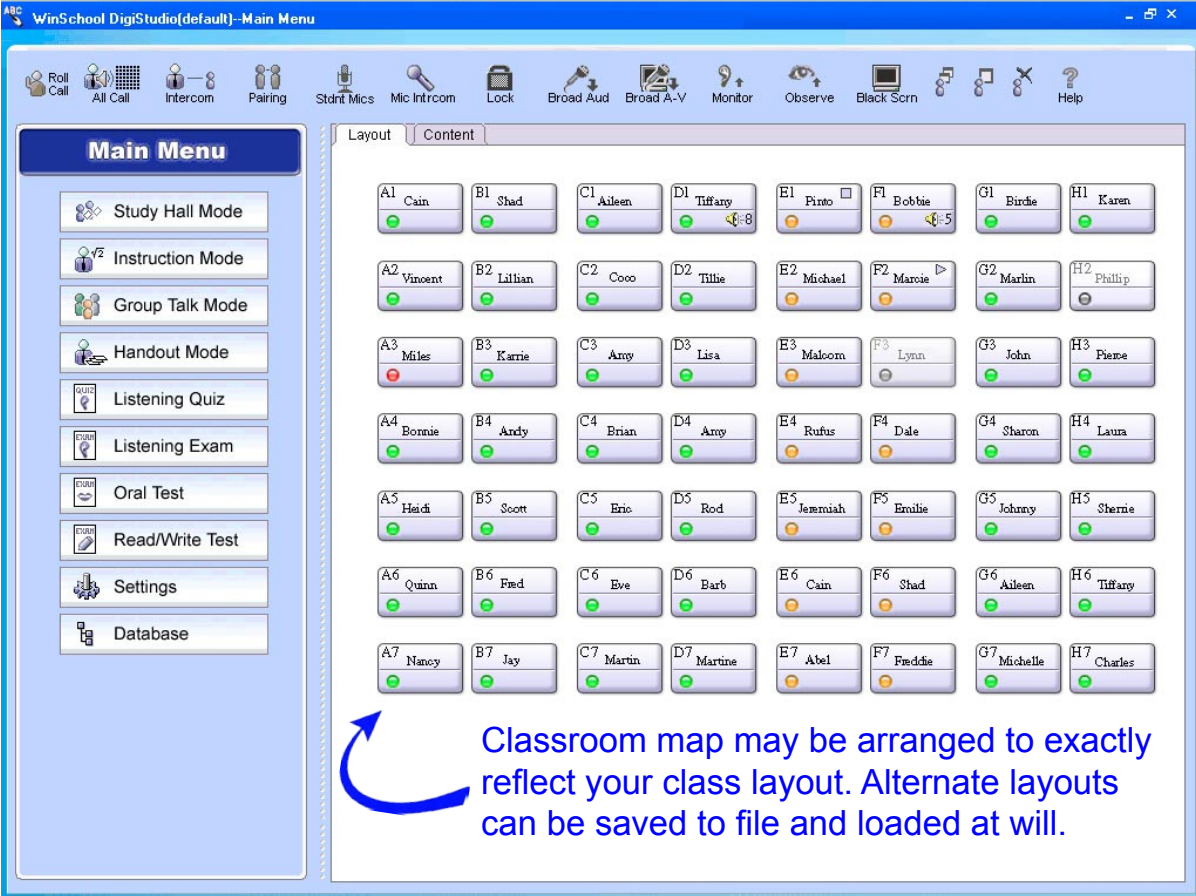
Convenient file transfer and remote activation means the teacher can manage student stations easily, right from the teacher station.

◆ Browser Control

The teacher can assign a certain URL, then open all student browsers to that assigned web site. Similarly, the teacher can close all student browsers at the click of a button.



❖ Teacher Functions



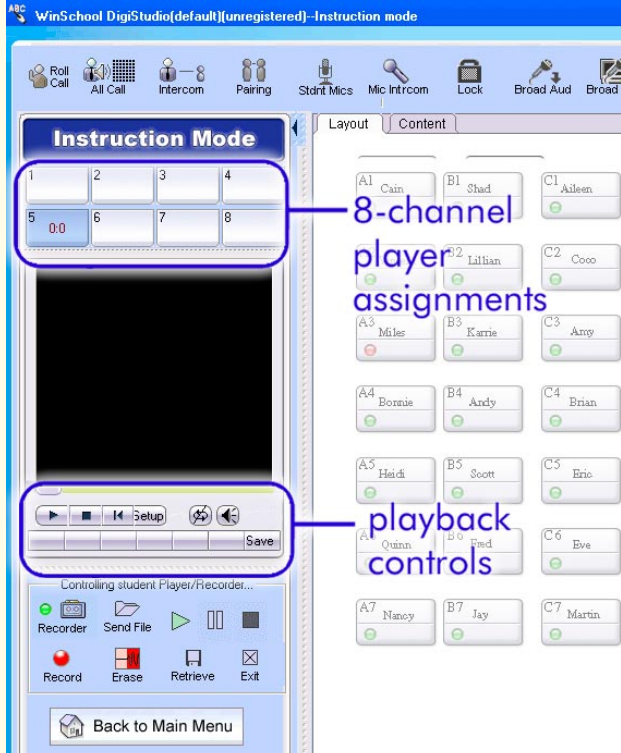
The screenshot shows the WinSchool DigiStudio Main Menu. On the left is a 'Main Menu' sidebar with options: Study Hall Mode, Instruction Mode, Group Talk Mode, Handout Mode, Listening Quiz, Listening Exam, Oral Test, Read/Write Test, Settings, and Database. The main area displays a 'Classroom map' grid with 80 student icons arranged in 8 rows and 10 columns. Each icon is labeled with a letter and number (e.g., A1 Cain, B1 Shad, C1 Aileen, D1 Tiffany, E1 Pinto, F1 Bobbie, G1 Birdie, H1 Karen). A blue arrow points from the text below to the grid.

Classroom map may be arranged to exactly reflect your class layout. Alternate layouts can be saved to file and loaded at will.

❖ Study Hall and Instruction Modes:

The teacher can use microphone, CDs, cassette tapes, or computer video and audio files to broadcast to the whole class, groups, or individuals. The teacher allows students to choose from streaming instructional and online materials (Study Hall Mode), or controls student reception (Instruction Mode) to focus students on the task at hand. The teacher can employ all Windows multimedia formats, such as WAV, MP3, MPG, and WMA; and special audio-text-graphic (MQ4) files that let students hear audio and see concurrent text and/or graphics with increased student control.

Adding a cassette unit to the teacher's PC makes it easy to use cassette tapes, too.

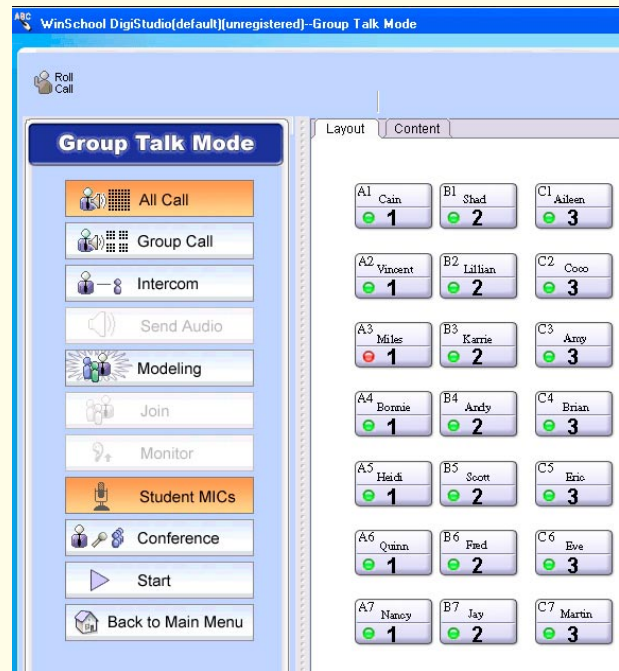
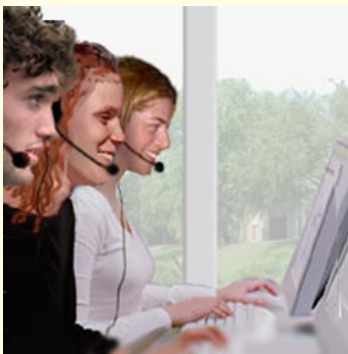


The screenshot shows the WinSchool DigiStudio Instruction Mode interface. It features an 8-channel player with a grid of 8 buttons (1-8) and a '0.0' display. Below the grid are playback controls including play, stop, setup, and save buttons. A blue box highlights the 8-channel player grid with the text '8-channel player assignments', and another blue box highlights the playback controls with the text 'playback controls'. The background shows a partial view of the classroom map grid.

❖ Group Talk Mode*

This feature divides students into small groups of specified numbers for language practice. Makes a great opportunity for students to explore the ramifications of a topic, practice target patterns, or to work together on group projects. Encourages students who are used to letting their teachers do all the talking to letting their teachers do all the talking to speak up and express themselves.

To make sure that discussions stay on track, the teacher may join any group, or monitor any group.

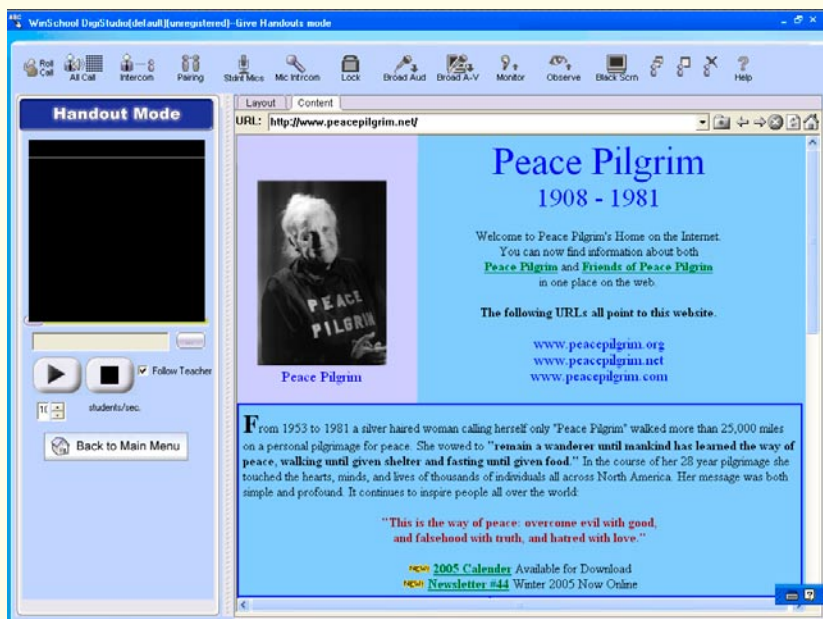


Exemplary groups may be broadcast to all other students. This serves both as a reward to the high achievers, and edification to the listeners.

*Group Talk requires WinSchool hardware.

❖ Handout Mode

In Handout Mode, the teacher can open any document, such as Word, PDF, Excel, PowerPoint, Access, etc., and student stations all open the same document at the same page. When "Follow Teacher" is checked, all students follow along with the teacher's progress through the document. Very handy for guiding student perusal.



As a special enhancement, Handout Mode also serves as a vessel for Internet exploration. When "Follow Teacher" is checked, students are restricted from entering other URLs.

The teacher can close all student browsers at the touch of a button.

❖ Listening Quiz and Listening Exam

The personal computer is an ideal tool not only for language training, but also for assessment of foreign language skills. Official tests scores such as TOEFL, TOEIC, IELTS, GEPT, TFI, TestDaF, JLPT, etc. are often critical to the educational and career paths in many language-dependent professions.

Listening Quiz and Listening Exam Modes enable the teacher to send audio and graphic test materials to student stations and record student responses.

In Listening Quiz, the teacher may use any available audio source file, or simply speak through the mic.

Listening Exam requires a more formal prepared test file, which if desired can mimic official tests right down to the answer sheet. It is very convenient to administer.

Scoring for both modes is automatic and instant.

The screenshot shows the WinSchool DigiStudio interface. The 'Listening Exam' window has buttons for 'Activate', 'Send Exams', 'Start Answering', 'Stop Answering', and 'Collect Answers'. A 'Real-time online student score summary' window is overlaid, showing a table of student scores.

Name	1	2	3	4	5	6	7	8	9	10	right
Correct answer	B:1	C:1	D:1	A:1	B:1	C:1	B:1	D:1	A:1	C:1	
John	?	C	D	A	A	C	B	D	A	C	8
Candy	B	C	D	A	B	C	B	D	A	C	10
Sue	B	C	D	A	B	C	B	D	A	C	9
Simon	D	C	D	A	A	C	B	D	A	C	8
Max	B	C	D	A	B	C	B	D	A	C	10
Vincent	B	C	D	A	A	C	B	D	A	C	6
Michelle	B	C	D	A	A	C	B	D	A	C	8
Lisa	B	C	D	A	B	C	B	D	A	C	9
Eileen	B	C	D	A	B	C	B	D	A	C	10
Mitch	?	C	D	?	?	C	B	D	A	C	6
Andy	C	D	A	A	B	C	B	D	A	C	8
Rafael	B	C	D	A	B	C	B	D	A	C	9

The screenshot shows the 'Oral Test' window with buttons for 'Activate', 'Send Exams', 'Start Answering', 'Stop Answering', 'Collect Audio', 'Close', 'Oral Scoring', and 'Back to Main Menu'. The 'Content' area displays a grid of student names and their response status.

Student	Status	Student	Status	Student	Status
A1 Cain	Green	B1 Shad	Green	C1 Aileen	Green
A2 Vincent	Green	B2 Lillian	Green	C2 Coco	Green
A3 Miles	Red	B3 Karrie	Green	C3 Amy	Green
A4 Bonnie	Green	B4 Andy	Green	C4 Brian	Green
A5 Heidi	Green	B5 Scott	Green	C5 Eric	Green
A6 Quinn	Green	B6 Fred	Green	C6 Eve	Green

❖ Oral Test

Test student oral abilities and record all student responses.

Scoring is easy. A simple grid presents all student responses. At your convenience, listen to and score all answers, either student by student, or question by question, your choice.

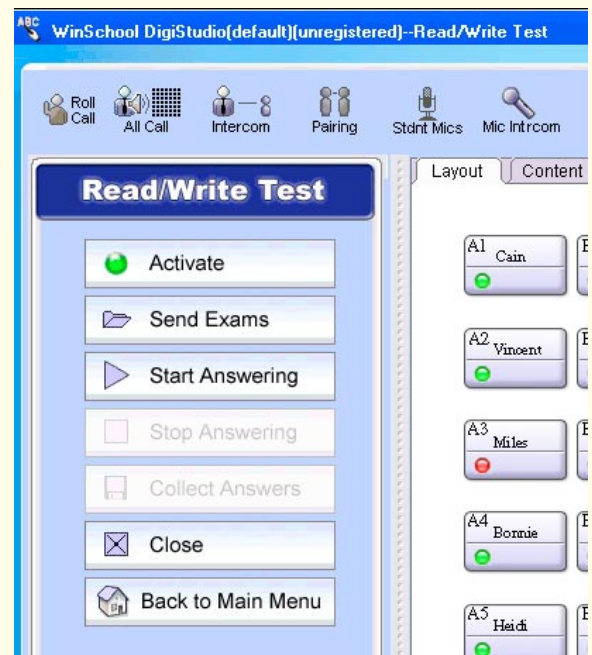
❖ Read/Write Test

Send a text file to students; students read the file and answer. The file sent to students may consist of a word, a sentence, or one or more paragraphs.

Students answer by typing on their keyboards. DigiStudio collects all essays, and saves them to file.

Read/Write Test is perfect for reading, writing, fill-in-the-blank, and some kinds of multiple choice tests and quizzes.

Helps prepare students for a world in which clear, effective written communication is paramount.



❖ Other Benefits and Functions

☑ RollCall Control

The teacher can request students to log in using names, and/or ID numbers. DigiStudio can save attendance records, which may also be printed out.

Logon Name	Computer	Status
Pat Cecil	S101	present
Gina Lambert	S102	present
Bobbie Robert	S103	present
Burdie Robin	S104	absent
Karen Satterlee	S105	present
Elizabeth Schultz	S106	present
Eve Taylor	S110	present
Lisa Zinken	S111	present
Christina	S112	absent

☑ Class Management

All class-related information, including class time, days, grade level, section number, etc. are retained by DigiStudio. This information forms the header for any class reports generated, such as attendance or test score reports.

☑ File Transfer and Remote Execution

Convenient file transfer and remote activation of applications means the teacher can easily manage student stations from his or her teaching console.

☑ Wake on LAN/Reboot/Shutdown

Three functions contribute to the convenient classroom workstation management. Student stations may be configured to wake-on-LAN. The teacher can also remotely reboot or shut down one, selected, or all student stations.

Optional Hardware Enhancements



☑ Teachers' Tap Switch Control



A Teachers' Tap Switch is required to activate several functions represented on the blue strip above, from Pairing through Black Screen. The instructor can easily broadcast the teacher's screen and audio to all students with the touch of a Tap Switch button. The other button blacks out (or releases) all student screens.

☑ WinSchool Twister

Pure software (network based) systems must rely on classroom network bandwidth to carry demanding broadcast video and audio, and performance suffers accordingly. The addition of WinSchool hardware acceleration overcomes the various bottlenecks caused by net bandwidth, CPU speed limits, VGA resolution, etc., to produce no-delay audio and video broadcasting.

Powerful functions may be added to a DigiStudio system with WinSchool Twister external networking units. These functions include: Group Talk Mode, pairing, student mics, student station lockout, teacher broadcast, teacher voice over, student broadcast, monitor, observe, and student station black screen.

All Call and Intercom can be handled either by software only (LAN-based) or by hardware enhancement (with WinSchool system).



Supported Functions	DigiStudio software alone	DigiStudio software plus WinSchool hardware
8-channel Streaming Multimedia	✓	✓
Rollcall	✓	✓
All Call	✓	✓
Intercom	✓	✓
Group Talk	✓	✓
Handouts	✓	✓
Remote Execution	✓	✓
Testing Functions		
Listening Quiz	✓	✓
Listening Exam	✓	✓
Oral Test	✓	✓
Read/Write Test	✓	✓
Pairing		✓
Student Mics		✓
Mic Intercom		✓
Lock		✓
Broadcast Audio		✓
Broadcast A-V		✓
Transbroadcast		✓
Monitor		✓
Observe		✓
Black Screen		✓
Guide Student Internet Browsing	✓	✓
Remote Reboot Student Stations	✓	✓
Remote Shutdown Student Stations	✓	✓

○ Student Functions



Login Students sign in with name and/or number.



Player/Recorder

(1) **Repeat Modes:** Each student can adjust sentence repeat cycles to suit their own needs. A-B Repeat allows students to set in and out points and loop any challenging word, phrase, sentence, etc.

(2) **Pause Mode:** Students can set playback to pause after each sentence or each group for easy repetition.

(3) **Bookmarks:** For ease of navigation, radio buttons enable students to set up to six bookmarks, with brief notes, for any AV file. The teacher may also set bookmarks, and can save them to file.

(4) **Text Modes:** Audio-text files may be played with text, graphics, and audio all together, or with audio alone.

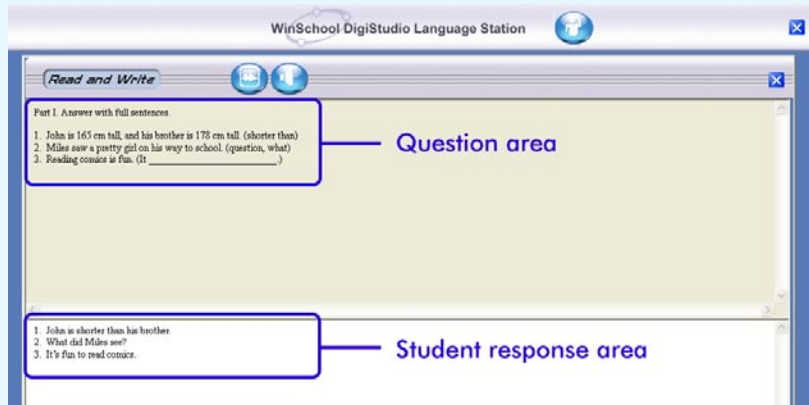
(5) **Time Stretch:** Playback speed may be controlled up to a 30% decrease or increase of normal, while retaining original pitch. This is especially helpful for challenging words or phrases; the student can slow down delivery for careful study.





Read/Write

Enables students to practice reading and writing in the target language. Also useful for essay tests.



Instructional Database

Students can access instructional AV files from any LAN-connected online database throughout the campus, provided they have the proper permissions. File types include: WAV, MP3, MPG, DAT, TXT, EXM.



Internet Explorer

When appropriate, students can use the IE browser to do Internet research on their own. Or the teacher can assign a certain URL, then open all student browsers to the assigned web site. Also, the teacher can close all student browsers at the click of a button.



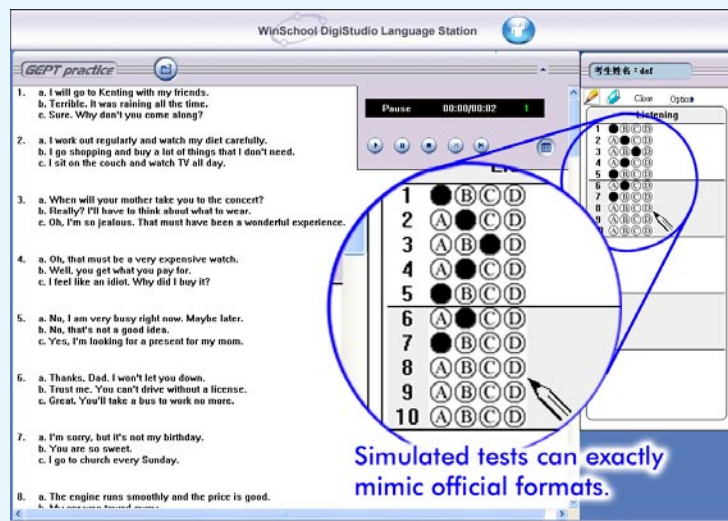
8-channel Player

Students can peruse streaming instructional media set up by teacher. Advanced 8-channel, LAN-based broadcast includes six simultaneous channels of digital A-V, plus two analog audio channels.



Exam

Exams can include graphics and/or text synchronized with audio. Students can practice all types of exam simulations, such as: TOEFL, TOEIC, GMAT, IELTS, and GEPT and get immediate scoring feedback. Ten rounds of GEPT Junior Level files are already available as an optional extra, with more advanced levels in development.



■ System Requirements

■ Teacher Station:

Minimum requirements:	CPU:	Memory:	display adapter:	Sound card:	OS:
	P4, 2.0GHz	256MB, or better	1024 x 768 x 16-bit, or better	full duplex	Windows 2000, or Windows XP

■ Student Station

Minimum requirements:

- (1) Windows CE.NET embedded language terminal (see picture at right)
OR
- (2) Standard PC with Celeron 400 CPU or better, 128MB RAM, 1024x768x16-bit display adapter, full-duplex sound card, operating system: Windows 2000/XP.



- **Network:** 10/100Mbps shared or switching network.

- **Network Server:** All instructional files should be on a Windows 2000/2003 server.

- **Option:** A PlusDeck Cassette Tape Recorder installed on the teacher station makes it easy for the teacher to use legacy cassette instruction tapes. The PlusDeck may also be used to transfer taped audio to digital files (MP3, WAV, WMA, etc.), to copy digital files onto tape, or to record Internet audio onto tape.

