

FUNCTIONS	LAB 100 by SANAKO FINLAND	IDL DIGITAL by TECNILAB GROUP ITALY
General Features	<p>This project was developed in the early 2000s and the student-audio unit cannot be further implemented because this is not a computer unit with its own OS.</p>	<p>In 2006/7 Tecnilab studied the same project as Sanako but developed it further using a mini- computer based on Linux OS, therefore Tecnilab student-audio unit can be updated and implemented with other computer elements. This provides teachers and students with a wide range of new features and possibilities. Teachers can demand further customization according to their specific needs. A clear example of the additional opportunities that only Tecnilab solution offers, is that our unit has a built-in USB connector which easily permits to transfer data and gives students the possibility to take home their own work.</p>
Audio Network(s)	<p>Sanako system is composed by a single proprietary audio network. Such network is not standard and this sets serious limitations to the further implementation of the entire system.</p> <p>This audio network permits all types of communication within the laboratory (i.e. Teacher/Student, Teacher/Group, Teacher/All).</p> <p>All the lab work passes through this network and cable. This aspect might jeopardize the standard lab activities when used by a large number of students.</p>	<p>Tecnilab solution uses two separate networks: an audio network dedicated only to audio communication (i.e. Teacher/Student, Teacher/Group, Teacher/All), and a standard Ethernet network for all the data transfer and recording activities in the lab. These two networks ensure the perfect functioning of the lab even when used by a large number of students. This prevents any type of delay in data transfer and recording.</p> <p>These two separate cables represent a crucial aspect in a serious comparison of two valid systems and really make a huge difference.</p>
Audio Quality	<p>Sanako System provides a satisfactory audio quality taking into consideration the fact that the system permits real-time and simultaneous bi-directional communication through the use of a single cable. The audio quality is satisfactory for a language lab environment but still not perfect.</p>	<p>Tecnilab system provides perfectly clear and natural audio sounds thanks to the use of the two separate networks. In real-time communication the voice signal is not digitalized therefore the recorded sound is natural and unmodified. This is a real professional audio system that provides the best audio quality now available in a language lab environment.</p>
Student Recordings	<p>Real-time students recordings are stored in a row format on a remote unit called Media Storage Unit (MSU). Such recording format causes no problems if teachers simply want to listen to these recordings in the lab, but if they need to take the students recordings away, this row format must be converted and this process demands a long time to be accomplished. Beside the MSU, Sanako system also needs an additional standard/laptop computer in order to manage the students audio panel.</p>	<p>Tecnilab system does not need or use a MSU because the sounds are directly recorded in a standard audio-format on the main computer of the lab. This means that if teachers want to take away the students recordings, they can immediately do it without having to convert the lab sound format.</p>

Student Audio Panel	<p>Both systems record in real time on the network thus avoiding to lose students recordings because there is no local memory. There is no risk that a student might erase or over-record the work of a previous one. Teachers will always have access to any recording because they are available on the server.</p> <p>The duration of the Students and Master track recordings is almost unlimited as the recording limit simply depends on the dimension of the Server HardDisk.</p>	
Fidelity of the recorded sound	<p>In both systems the fidelity of the recorded sounds is good because the digitalization process does not involve the use of a memory and the “channel” used to transfer the signal is good.</p>	
Microprocessor	<p>Sanako Student Audio Panel uses a standard microprocessor endowed with a software dedicated to the functions it was developed to fulfill.</p>	<p>Tecnilab Student Audio Panel uses a powerful ARM microprocessor, which is exactly of the same type of those used in many smartphones and/or tablet with a real LINUX operative system. This aspect, once again, shows how Tecnilab system can be utterly and easily improved, implemented and updated according to the specific needs of the customers.</p>
Task assignation	<p>Class tasks can be quickly and easily assigned to the students through the use of a software interface with a user-friendly menu.</p>	<p>Class tasks can be quickly and easily assigned to the students through the use of a software interface with a user-friendly menu.</p> <p>Tecnilab system also permits to assign tasks through the use of the “Drag and Drop” function (eg. Teachers can easily and directly drag files onto the icons that represent the audio panels of specific students, thus assigning them specific tasks).</p>
External Audio Sources	<p>Three (3) external analogue sources can be used simultaneously.</p>	<p>Tecnilab system has and additional external audio source: it simultaneously uses four (4) external analogue sources to four different student groups.</p>
Digitalization of Audio Sources	<p>Teachers have the possibility to use an external analogue audio support and send it to the students. Doing so the audio material (eg. a CD) is automatically digitalized on the Teacher’s Pc, thus permitting to use it again in the future without further waste of time.</p>	<p>Tradition audio material can be sent to the students through the use of a non- standard dedicated network. This is an important aspect because student real-time recordings uses the second standard Ethernet network and therefore the two processes do not disturb each other.</p> <p>Eg. when using an audio source such as a CD, this is automatically and immediately digitalized on the Server thus becoming easily re-usable and available any time in the future.</p>
Bookmarks	<p>9 Bookmarks</p>	<p>9 Bookmarks</p>
Teaching Aids	<p>All teaching aids can be saved on the Media Storage Unit (MSU).</p>	<p>All teaching Aids can be saved either directly on the main Pc or also on a dedicated Server.</p>
Work in Pairs	<p>Work in pairs is permitted in three different modes: Manual, Sequential or Random.</p>	

Simultaneous sessions	Sanako systems permits to carry out simultaneously up to three (3) working sessions.	Tecnilab systems permits to simultaneously launch and carry out an unlimited number of working sessions with a maximum of one for each single student in the lab.
Group Discussion	Sanako systems permits to carry out group discussions and offers three modes to determine the groups: Manual, Fixed or Random.	Tecnilab system permits to create up to four (4) discussion groups and teachers can put a maximum of fifteen (15) students in each group.
Simultaneous Translation	Both systems permit to practice exercises of simultaneous translation.	
Simultaneous Interpretation	The standard Sanako system does not permit to perform exercises of simultaneous interpretation. This can be done only when the optional STS module is added to the system.	The standard Tecnilab system permits to perform exercises of simultaneous interpretation (no need to add any additional module).
Telephone conversation	Both Systems permit to practice exercises of simultaneous translation.	
Remote Control and Monitoring of Student Panels	The standard Sanako system does not permit to perform the remote control and Monitoring of the students panels. This can be done only when a student UAP is added to the teacher's console	The standard Tecnilab system permits to perform the remote control and monitoring of the students recorders. There is, in fact, a special area in the teacher's control panel where teachers can find the graphic reproduction (icon) of the recorder they want to control and they can manage it exactly in the same way as if they were operating directly on the student audio panel.
USB Connector in Student Panel	Sanako system does not have a USB connector integrated in the student audio panel and furthermore this connector cannot be implemented. This represents a serious limitation of the system.	Tecnilab system has got a USB connector integrated in the student audio panel and this is a standard option of the system.
Collection time	Sanako system takes almost 20 minutes to collect the students recordings, because each audio track must be converted into a new audio format such as Wav, Mp3 or Wma .	Tecnilab system allows teachers to collect the students recordings in a few seconds because each student recording is immediately digitalized and saved on the lab server. Teachers using such system greatly appreciated this saving of precious time.
Teacher Accounts	Sanako System does not allow to properly manage teachers accounts. It only permits to give a name to a class and/or a teacher.	Tecnilab system allows teachers to manage their own personal accounts trough an exclusive teachers' LOG on the control panel thus permitting them to easily access and manage their own activities, classes, registers, etc...

USB PenDrive	Sanako system does not permit any access to the system through the use of a USB PenDrive.	Tecnilab system permits teachers' automatic and authentic access to the system through the use of a USB PenDrive. This easy process is actually very important because teachers are recognized by name by the managing software and are then allowed to transfer all students recordings on their USB Pendrive so that they can correct and evaluate these works at home.
True or False Quizzes	Both systems permit to carry out True or False Quizzes.	
Multiple Choice Quizzes	Both systems permit to carry out True or False Quizzes.	
Guided Quizzes	Sanako System does not permit to carry out Guided Quizzes.	Tecnilab system permits to carry out Guided Quizzes which are completely managed and guided by the teacher. The same mode of traditional quizzes is used, but in this case students cannot pass to the next question until they have given an answer to the current one. Once all students have given an answer to the question, the teacher turns to the next one.
File Assignation	Sanako system does not permit the assignation of video files.	Tecnilab system permits easy assignation of audio and video files by simply dragging them on a single desk, a few of them or the entire class. This "Drag & Drop" process can be used to assign audio tracks as well as media files. Eg. Teachers can assign movies. These must be taken home and watched by the students and will then be discussed all together during the following lesson.
Interface	Sanako system uses a primitive and simple layout of the class where icon are all the same and are not animated. All common operations are carried out through menu instructions.	Tecnilab system provides a pleasant graphic and interactive and animated interface which is extremely easy to use. Each teacher's action is immediately highlighted in a zoom area. The class layout reproduces clearly the real lab and through the "Drag & Drop" process teachers can drag activities directly on the desk(s) interested in the current activity.
Home Correction	Sanako system has not foreseen a domestic version of the software used in the language lab.	Tecnilab has developed a lighter version of the lab software. This can be installed at home by the teachers thus allowing them to correct students works, mark them and assign notes from their home place. There is also the possibility to synchronize the corrections done at home with the lab registers thus permitting students reports to be continuously updated.

<p>Automatic Data Backup</p>	<p>Sanako system does not permit the automatic backup of all lab data.</p>	<p>Tecnilab system has an automatic backup procedure to save all lab data. In just a few steps this easy procedure permits to save all the work done by the students as well as all personal teachers data. Then teachers can chose whether to save data into a local file or create a CD/DVD that can be read on any computer without having to install any special software. Each teacher's account can be access though the use of a password.</p>
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