ABSTRACT

As the information superhighway spreading its influence on the present society, the computers have to be used by everyone irrespective of their job. So, the polytechnics in Kerala State have started to impart the computer education programmes from 1991 in engineering and non-engineering fields. As the demand-supply gap for competent Hardware and Software engineers and technicians is widening, the manpower has to be made for providing good computer technician from the polytechnics. To adequately prepare the workforce of tomorrow education must identify the technical core competencies needed by technicians entering the work world.

To achieve the best technicians, the core requirement is the curriculum for any programme. The competencies preparing the curriculum of the computer technicians have to be arrived by analyzing various jobs, needed skills and the attitudes. This analysis provides a qualitative as well as quantitative requirement of these computer technicians in various applications for the society. Accordingly, a model of the curriculum design and development for the computer technician education has been suggested for implementation.

The compulsory industrial training for the students and the detailed staff development programmes will help the learner and teacher to be more effective in their jobs. This study analyzes all the requirements of the teacher, learner, industry and their interaction at all levels to have a better preparation of curriculum and its implementation to remove the limitations of employment in the industries.

In order to improve the computer technician education programmes in the Kerala State, it is recommended that the identified courses, competencies in various programmes be included into the curricula. It is also recommended that continuous monitoring had to be taken as this technology changes fast and those changes are implemented as early as possible without any delay in the technology.
DEFINITION OF TERMS AND ABBREVIATIONS

AICTE - All India council of Technical Education
Browsers - the name for the client software to search any website or files
CAI - Computer Assisted Information to teach or learn quickly
CBL - Computer based learning used for training purposes,
CBT - Computer based training used for teaching any theory or skill
CD-ROM - compact diskette read-only memory,
Chat - Online interaction between two or more persons similar to Tele-conferencing

'Clients':

These are multimedia PCs equipped with web browser software such as
Internet Explorer
Netscape Navigator
Hot Java

Through which all support services by the servers can be accessed

As the Internet provides freeware/shareware, student groups can form a
department wide intranet as a project work.

CPU - Central Processing unit
Disk/Diskette- storage device, floppy
DoE - Department of Electronics, Govt. of India
E-Mail - A simple file that can be sent from one computer to another
across a network. Students to interact with the faculty in
off-line by any learner.

Extranet - Extending the intranet facilities to key individuals such as
business partners / customers but not to all public as in internet

File transfer protocol (FTP)-It is the internet service that allows one to transfer
files from one computer to another.

Firewalls - a security mechanism that limits the traffic between two
systems and to limit the databases access

Hardware - Electronic devices used in the computer
IN - Intelligent network with personal computers as terminal
INFO-Highway - the communication path for the internet.

HTML - HyperText Markup Language
Internet - a world wide connection of computers through networks.
Internet protocols (IP) - data between computers on the internet requires data to be converted into packets conforming to the internet's protocol stack.
Intranet - A set up of internet exclusively for certain private purposes.
ISDN - Integrated Service Digital Network
ISTE - Indian Society of Technical (v) Education
MAIT - Manufacturers Association of Information technology
MODE - MicroSoft Certificate/Examination
NCST - National Certificate of Software Testing
Network - Connection of two or more computers through cable or transmission
NT - New Technology
Packet Switching - it allows information from different users to share the same communication channels.
PTI - Private Training institutes
Software - Program that solves the problem. It is a set commands and statements.
Tele-Conferencing - Conferencing through telecommunication lines
Telnet - that lets anyone computer on the internet and issue commands from one host computer
TTTI - Technical Teachers Training Institute
'Server' hosts - 'Knowledge bank' for the collection of databases and course materials in the form of HTML document associated with Common gateway interface (CGI) scripts.

a) Building various tools for development through HTML
b) Publishing tools
c) Presentation software intranet administration tools
d) Appropriate firewalls can be built to provide the necessary security features.

Vide-conferencing - conferences through video-links and audio-links with the satellites.

WWW - world wide web – An information retrieval system based on the hypertext

WBT - Web Based Training