Evaluation of Skills Acquisition by Vocational Higher Secondary Students in Kerala

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Abstract: The aim of this study was to assess the vocational skills that Kerala Vocational Higher Secondary School students have acquired during their 2 years of study after 10th. The goal of Vocational Higher Secondary skill courses is to equip students with knowledge, skills and attitudes to become productive employees in their study area. Students would also attain skills for becoming successful entrepreneur. The present paper studied Computer Science and Information Technology (CSIT) course, from the basket of Vocational Higher Secondary Education's Skill based courses. The sample consisted of 263 students from 12 Vocational Higher Secondary Schools randomly selected from 94 state syllabus schools where CSIT Course was offered. The data was collected through a standardized questionnaire. All Schools under study were found equipped with adequate number of computers in the lab. Most of the classrooms were smart rooms with laptop, projector and high speed internet connection. Students were imparted practical training of 12 hours a week at school and also 24 days of On the Job Training at reputed institutions. The skills learned during the course of the study were evaluated by the students on a 10-point scale. The study revealed that the students were satisfied with the course, and the students acquired skills from VHS Schools Skill Courses and most of the skills imparted showed good understanding and realistic response from the students. Most of the students benefitted from the CSIT Course skills which involved both hardware, software and other skills.

Keywords - Computer Science & Information Technology, CSIT, Skill Acquisition, Kerala Vocational Higher Secondary Schools, Vocational Skills, Skill Courses

I. INTRODUCTION

Vocational Education and Training includes education and skill development through formal and non-formal training at all levels, from upper primary to tertiary. This education develops competencies in knowledge, skills and attitude required for a specific vocation or group of vocations at the higher secondary level. Education should be connected to people's lives, needs and desires so as to become a powerful tool of social, economic and cultural change (Biswas & Aggarwal, 1974)[1]. According to Kazim Bacchus(1998)[2] the term Vocationalisation refers to the "efforts of schools to include in their curriculum those practical subjects that are likely to generate some basic knowledge, skills and arrangements amongst the students that might prepare them to think of becoming skilled workers or taking on other manual jobs."

Education policy makers believe that vocational training will enhance the skills and attitudes or competencies of students, which, in turn, will make students enter the workforce at their early stages of life. Learning new skills is a method that involves several factors that helps one achieve a professional level (Fitts & Posner, 1967)[3]. The Education Commission (1964)[4] expressed its opinion that, no reform is more important or more urgent than transforming our education into an effort to relate it to people's life needs and expectations, and there by making it a powerful instrument of social, economic and cultural transformation necessary to achieve our national objectives. This can be achieved when the curriculum is productivity-related.

Acquisition of skills may be accomplished by vocational training. Vocational education is any form of education aimed at equipping individuals for work in a recognized career (Okoro, 1993)[5]. Thus the person will be better equipped to live more successful. Olaitan and Aguisiobo (1981)[6] highlighted the concept that profound practical exposure is needed for all skill-oriented programs which need skill acquisition and knowledge. Skill acquisition is knowledge and training in the specified area using scholarly reasoning and skillful usage of instruments and equipments to produce functional designs and products, and such training acquired by skilled workers is a job that cannot be performed by anybody (Dashen, 2012)[7].

Onyeneke (2008)[8], viewed skill acquisition as the ability to do something of its best using training or experience. The acquisition of skills and the use of knowledge acquired through vocational training, when translated, enhances the capacity of individuals to develop their potential and skills

in the field of interest and specialization. According to the Dreyfus Model of Skill Acquisition originally proposed by Stuart E. Dreyfus, University of California, Berkeley in 1980, when individuals learn a Skill through formal training, they typically go through five stages: 1)Novice 2)Advanced Beginner 3)Competent 4)Proficient and 5)Expert. Progression through the five stages is seen as a gradual transition from rigid adherence to rules to an intuitive mode of reasoning that relies heavily on broad, explicit understanding (Hall- Ellis and Grealy, 2013)[9].

According to Maxine (1997)[10] skill is defined as the present, observable capacity to perform learned behavior in relation to the relationship between mental activity and body movements. Oke (2005)[11] described skill as the ability to do something expertly well, especially as a result of a long practical experience. Developing skills is fundamental to all forms of education, knowledge, learning and vocational training.

Umunadi (2010)[12] and Obschonka, Silbereisen and Schmitt-Rodermund (2010)[13] noted that Industrial technology education is a formal education designed to give a secondary or higher level of knowledge and skills underlying the production process. Industrial technology education thus enables acquisition of skills, and attitudes and knowledge to be built that will help young people play their part in the business community and help them become self-reliant. Okorieocha and Taneh (2013)[14] defined training in industrial technology as a training providing the skills, expertise and attitudes that contribute to the development of individuals who are resourceful and efficient.

Vocational Higher Secondary Education in Kerala is targeted towards students with SSLC or equivalent qualifications. The student is given the opportunity to choose a vocational course of his / her choice from the 35 available skills courses. The goal of the Computer Science and Information Technology course is to equip students with the knowledge, skills and attitudes to become productive employees in the field of computer science and technology. The course in Computer Science and Information Technology provides students with the basis for higher studies and provides a perspective for becoming a successful entrepreneur. The CSIT course consists of 4 modules. Each module is composed of 4 units. 2 or more job roles are identified within each module. Once each module has been completed, students will receive a skill certificate. There is a slot for discussing current trends and technologies related to that module during each module.

Each batch of vocational courses has a maximum strength of 25 students. 3 Technical Faculties (Vocational Teacher, Vocational Instructor and Lab Technical Assistant) are designated for CSIT vocational training to assist students with practical laboratory and on-the-job training. On the Job Training (OJT) is an integral part of the VHS curriculum that helps students learn and understand the practical complexities and make them well-equipped, confident and motivated so that they can easily take on any job. VHSE maintains mandatory OJT for 24 days during the period of their study (12 days during I Year and 12 days in II Year). OJT reinforces the vocational skills, competencies of the students.

The modular approach followed for the organization of course content, work-based pedagogy and the outcome-focused evaluation method paved the way for achieving the vision of Vocational Higher Secondary Education in Kerala. The CSIT program aims to prepare learners with different skills meeting technological advancements and to develop skilled workers to meet the needs of developing markets and service sectors with a national and global focus. CSIT Curriculum adopts an Activity-oriented, Learner-centric, Skill-oriented and Outcome-based approach.

The CSIT course consists of 4 modules comprising 18 skills. Hardware Setup and Maintenance, Laptop Maintenance, Network Configuration, CCTV Configuration, DTP with Malayalam, Graphics Design, Computer Programming, Database Design, Software Techniques, and Web Development are the main areas covered by CSIT. The major employment opportunities are Data Entry Operator, Graphic Designer, Hardware Technician, Hardware Engineer, DTP Operator, Multimedia Technician, Junior Programmer, Network Technician, Network Engineer and Network Administrator, Web designer etc.

II. RESEARCH QUESTIONS

The following research questions will be answered by the study;

How efficient is the skill training given to the students in:

Module-1 (Hardware Skills - Computer Hardware, Networking & CCTV Maintenance Skills)

Module-2 (Soft Skills – Documentation, Spreadsheets, Presentation, Graphics & Photo editing skills)

Module-3 (Programming & Database Designing skills)

Module-4 (Web Application Development Skill)

III. RESEARCH METHODOLOGY

The present study choose Computer Science and Information Technology (CSIT) course, from the basket of Vocational Higher Secondary Education's Skill based courses. All around Kerala, 389 Vocational Higher Secondary Schools offer 35 skills courses. CSIT Courses are available in 94 schools. Out of the 100 CSIT batches in 94 Vocational Higher Secondary Schools, a total of 2500 Vocational Higher Secondary students learn CSIT course each year. The study had adopted a research design for the survey. The study was conducted in 12 Higher Secondary Vocational Schools in Ernakulam and Kottayam Districts in Kerala. Data was collected from these 12 schools and

questioned a total of 263 CSIT students.

Students self-grade the skills (from 1 to 10) they expect from their modular study course. Each week, students got 4 hours of theory and 12 hours of practical classes. They also received 24 days of On-the-Job Training in different organizations. The goal of this study is therefore to assess the 18 skills learned by students of Computer Science & Information Technology in Kerala Vocational Higher Secondary Schools. The questionnaire was given to all the students and answers were obtained by rating their performance for each skill from 1 to 10. As the learning of skills depends on the training provided to the students, it is very important to assess the practical training given to Kerala State Vocational Higher Secondary School students.

IV. RESULTS

Research Question 1

How efficient is the skill training given to the students in Module-1 (Hardware Skills - Computer Hardware, Networking & CCTV Maintenance Skills)

The study period of Module-1 is their first-year course of study from June through October. Mainly 6 skills were expected to be learned in this module. Module-1, Students got expertise in desktop and laptop computer assembling, troubleshooting and maintenance, Operating software and application software installation, computer networking techniques and CCTV installation and configuration.

Skill 1 - Desktop Computer Hardware Assembling Skill, Troubleshooting Skill and Maintenance skill.

Students were measured on their skills in familiarizing a computer's hardware components, how to assemble a computer with the correct configuration, dismantling of hardware components, troubleshooting and desktop computer maintenance.

Skill 2 - Laptop Computer Hardware Assembling Skill, Troubleshooting and Maintenance Skill.

Students were assessed on their skills to familiarize - laptop computer components, laptop configuration, troubleshooting and maintenance of laptop computer, dismantling of laptop and to remove the battery, hard disk, CD Drive etc.

Skill 3 - Operating System Installation Skill

Students were tested for their ability to install Windows and Linux operating systems on desktop and laptop computers and to install drivers for printers, scanners, and other hardware devices.

Skill 4 - Application Software Installation Skill

Students have been tested on their ability to install software applications such as Ms Office, PageMaker, Photoshop, Corel Draw, C++, SQL, PHP etc.

Skill 5 – Network Installation and Configuration skill

Students were assessed on their ability to crimp RJ45 connectors, create network connections between computers via straight over or cross-connection using switch / hub, and configure IP address and other computer settings.

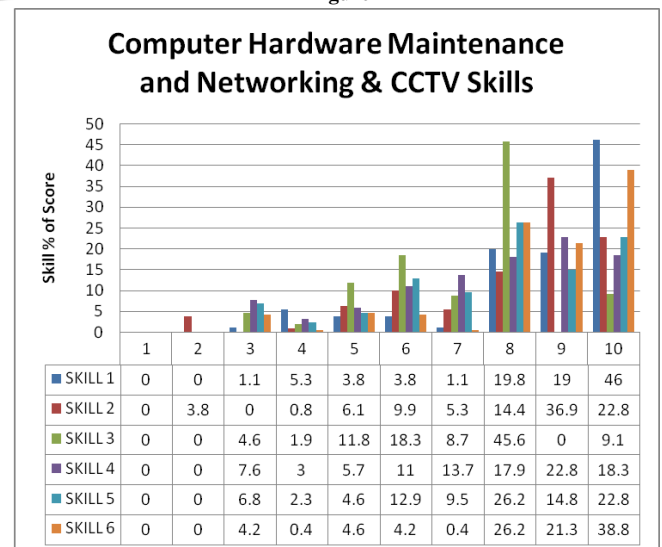### Skill 6 - CCTV Installation and Configuration skill

Students have been measured on their ability to connect camera & DVR by setting the correct DVR configuration, ability to properly mount BNC connectors and record live video clippings in DVR, and play captured clippings back.

It was evident from Table below that the ratings of the students for the skills that they learned from Module 1 Skills are good. Skill 1-(Desktop Computer Hardware Assembling Skill, Troubleshooting Skill, and Maintenance Skill), mean score of 8.64 is the highest among other skills and Skill 3- (Operating System Installation Skill)mean score of 7.07 is the lowest among other skills taught in Module-1. It is also apparent from Table-1, the mean values of other skills- Skill 2(8.13), Skill 4(7.56), Skill 5(7.68) and Skill 6(8.54) that the students achieved good skill rating. It's also obvious from the standard deviation that most students are less deviated from the mean.

Table-1
Computer Hardware Maintenance and Networking & CCTV Skill Statistics

	Skill 1	Skill 2	Skill 3	Skill 4	Skill 5	Skill 6
N	**263**	**263**	**263**	**263**	**263**	**263**
Mean	**8.64**	**8.13**	**7.07**	**7.56**	**7.68**	**8.54**
Std Error of Mean	.112	.120	.104	.127	.124	.110
Median	9.00	9.00	8.00	8.00	8.00	9.00
Mode	10	9	8	9	8	10
Std. Deviation	**1.810**	**1.940**	**1.685**	**2.065**	**2.018**	**1.781**
Variance	3.277	3.765	2.838	4.262	4.073	3.173
Range	7	8	7	7	7	7
Minimum	3	2	3	3	3	3
Maximum	10	10	10	10	10	10

Figure-1

Computer Hardware Maintenance and Networking & CCTV Skills

	1	2	3	4	5	6	7	8	9	10
SKILL 1	0	0	1.1	5.3	3.8	3.8	1.1	19.8	19	46
SKILL 2	0	3.8	0	0.8	6.1	9.9	5.3	14.4	36.9	22.8
SKILL 3	0	0	4.6	1.9	11.8	18.3	8.7	45.6	0	9.1
SKILL 4	0	0	7.6	3	5.7	11	13.7	17.9	22.8	18.3
SKILL 5	0	0	6.8	2.3	4.6	12.9	9.5	26.2	14.8	22.8
SKILL 6	0	0	4.2	0.4	4.6	4.2	0.4	26.2	21.3	38.8

It was observed from Figure-1, that for Skill 3-Operating System Installation Skill, about 45.3 percent of students were rated in the range 3-7, while 45.6 percent were rated at

8 points and only a small fraction of 9.1 percent were rated at 10.Thus, this particular skill needs more attention from the Vocational Teachers/ Instructors. Most of the student's clustered outcomes for the other skills are in score 8, 9 and 10 respectively. Upon analyzing the standardized scores of the practical test, it is evident that the students secured good scores for the Vocational Higher Secondary Education Board's Module-1 practical evaluation.

Research Question 2

How efficient is the skill training given to the students in Module-2 (Soft Skills - Documentation, Spreadsheets, Presentation, Graphics & Photo editing skills)

The study period of Module-2, DTP, Graphic Design and Visual Communication is their first year study course from November to March. They are expected to gain mostly 6 Skills in this module. In this module, students got practical training with MS-Word/Writer, MS-Excel/Calc, MS-Powerpoint / Impress, Adobe PageMaker, Adobe Photoshop, CorelDraw and Malayalam Typing Application Software using ISM / Linux.

Skill 7 - Malayalam Typing and publications creation using PageMaker Skill

Using ISM software or Unicode type tool in Windows and Linux, students were assessed on their skills in preparing documents in Malayalam. Their ability to create publications using PageMaker is also assessed.

Skill 8 - Professional documents making skill with Word/Writer.

Students were questioned on their ability to create professional documents in Microsoft Word or Linux.

Skill 9 - Spreadsheets Creation Skill with Excel/Calc

Students were tested on their skill in Excel / Calc to create worksheets and their ability to work with functions charts table etc.

Skill 10 - Presentations Creation Skill with Power Point/Impress

Students were assessed on their ability to create competent PowerPoint or Impress presentations.

Skill 11 - Photo editing skill with Adobe Photoshop

Students were evaluated on their ability to edit images and create visiting cards, logos, greeting cards, Photoshop advertisements etc.

Skill 12 - Graphics designing skill with CorelDraw.

Students were evaluated on their ability to work with CorelDraw to create professional works like stickers, notices, labels, identity cards, calendar, name slip, advertising, etc.
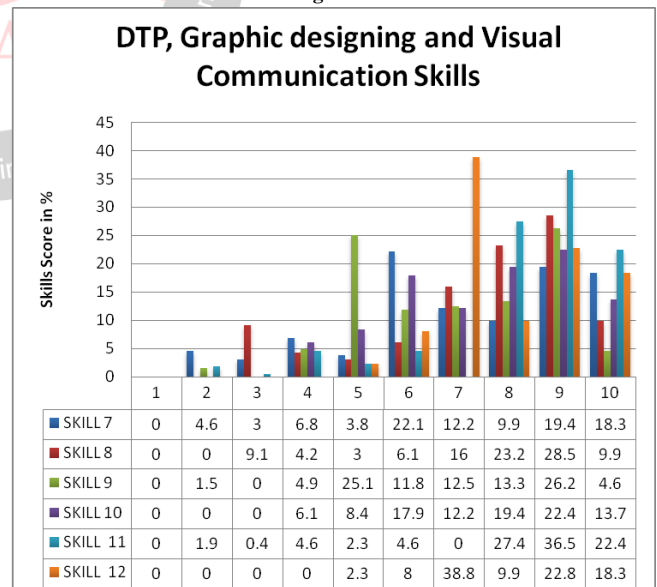
The below table shows the statistics obtained by analyzing the skills 7 to 12 based on the Module 2 of their study.

Table-2
DTP, Graphic designing and Visual Communication Skills Statistics

	Skill 7	Skill 8	Skill 9	Skill 10	Skill 11	Skill 12
N	263	263	263	263	263	263
Mean	7.18	7.49	6.95	7.52	8.34	7.98
Std. Error of Mean	.140	.124	.116	.109	.108	.084
Median	7.00	8.00	7.00	8.00	9.00	8.00
Mode	6	9	9	9	9	7
Std. Deviation	2.263	2.015	1.884	1.767	1.748	1.370
Variance	5.119	4.060	3.551	3.121	3.057	1.877
Range	8	7	8	6	8	5
Minimum	2	3	2	4	2	5
Maximum	10	10	10	10	10	10

It is clear from Table 2 that students have developed skills with practical training given at school and on - the-job training in external training centers for their work. Skill 11-(Photo editing skill with Adobe Photoshop), mean score of 8.34 is the highest and Skill 9 – (Spreadsheets Creation Skill with Excel/Calc), mean score of 6.95 is the least among other skills taught in Module-2. It is also visible from the mean values of other skills- Skill 7(7.18), Skill 8(7.49), Skill 10(7.52) and Skill 12(7.98) that good skill rating was achieved by the students. The standard deviation also makes it clear that most students are less deviated from the mean.

Figure-2

DTP, Graphic designing and Visual Communication Skills

	1	2	3	4	5	6	7	8	9	10
SKILL 7	0	4.6	3	6.8	3.8	22.1	12.2	9.9	19.4	18.3
SKILL 8	0	0	9.1	4.2	3	6.1	16	23.2	28.5	9.9
SKILL 9	0	1.5	0	4.9	25.1	11.8	12.5	13.3	26.2	4.6
SKILL 10	0	0	0	6.1	8.4	17.9	12.2	19.4	22.4	13.7
SKILL 11	0	1.9	0.4	4.6	2.3	4.6	0	27.4	36.5	22.4
SKILL 12	0	0	0	0	2.3	8	38.8	9.9	22.8	18.3

From Figure-2, it is observed that Skill-9-(Spreadsheets creation skill with Excel/Calc), is found to be the least among the Module 2 Skills. Only, 4.6 per cent of students replied by marking 10 point score that their knowledge is excellent. Also only 9.9 per cent of the students replied with a 10 point score for Skill-8- Professional documents making skill with Word/Writer. Therefore, the teachers/ instructors

have to pay more attention in training students for Skill-8 and Skill-9. Further clustering of values were also observed among scores 6 to 9 points which indicates a good acquisition of skills. The 8-10 range for Skill-11- Graphics designing skill with CorelDraw is 83.3 percent of the student ratings shows that the level of student skills achieved was excellent.

Research Question 3

How efficient is the skill training given to the students in Module-3 (Programming & Database Designing skills)?

Module-3 Study period for object-oriented programming and database skills is their second-year learning course from June to October. They're expected to gain mainly 2 Skills in this module.

Skill 13 - Computer Programming skill with C++

Students were rated on the skill to make C++ programs with loops, arrays, structures, classes and functions.

Skill 14 - Database Designing skill with SQL

Students were evaluated on their ability to create databases, create tables and modify tables, inserting values into tables with SQL and to write queries for retrieving data.
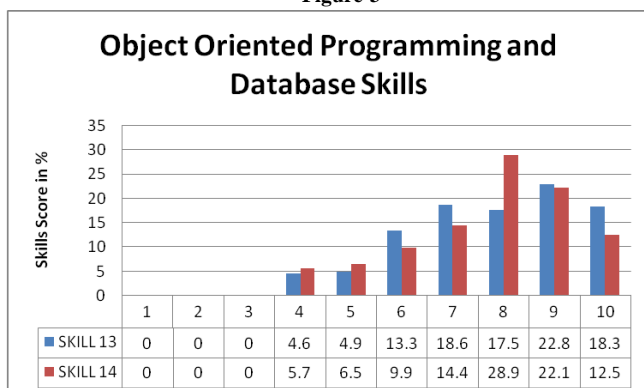
Table-3
Object Oriented Programming and Database Skills Statistics

	Skill 13	Skill 14
N	263	263
Mean	7.81	7.71
Std. Error of Mean	.104	.101
Median	8.00	8.00
Mode	9	8
Std. Deviation	1.681	1.637
Variance	2.826	2.681
Range	6	6
Minimum	4	4
Maximum	10	10

It is evident from Table-3 that the students have acquired skills from studying Module-3. Skill 13-(Computer programming skill with C++), a mean of 7.81 is the highest score and Skill 14-(Database Designing skill with SQL), a mean of 7.71 is the lowest score in Module 3.The standard deviation also makes it evident that most students are less deviated from the mean.

Figure-3

Object Oriented Programming and Database Skills

	1	2	3	4	5	6	7	8	9	10
SKILL 13	0	0	0	4.6	4.9	13.3	18.6	17.5	22.8	18.3
SKILL 14	0	0	0	5.7	6.5	9.9	14.4	28.9	22.1	12.5

From Figure 3 it is obvious that each student has acquired notable C++ programming skills and Database design with SQL as no score is below 4. They know how to write simple C++ programs, create databases, and then use SQL queries to retrieve data. For C++ programming 77.2 per cent and for Database Designing with SQL 77.9 per cent of students rated their skills in the range of 7-10, which indicates that the students are well trained in programming and databases.

Research Question 4

How efficient is the skill training given to the students in Module-4 (Web Application Development Skill)?

Module-4 - Web Application Development study period is the period from November to March during the second year of study. 4 Skills are mainly expected to be acquired during this module.

Skill 15 - Web Development skill using HTML

Students were rated on their ability to make HTML-based Static Web pages. Students were assessed by their ability to create HTML pages using tables, forms and style sheets.

Skill 16 - Web Development skill using JavaScript

Students were evaluated on their ability to create JavaScript-based interactive pages.

Skill 17 - Web Development skill using PHP

Students were assessed on their ability to create dynamic pages using PHP and to work with databases using WAMP software.

Skill 18 - Web Hosting Skill

Students were evaluated on their ability to create websites using free hosting.

As Web Application Development requires a study of HTML, JavaScript, and PHP, code errors may occur. In order to create web pages and to host website an intensive study is needed. For HTML, students were given training in HTML Syntax with tables, forms and frames. JavaScript. Web development language is to develop simple programs. On PHP, the students need to study how to create and execute dynamic websites.   Many students were not confident in the Web Application Development skills they were to acquire.

Table-4
Web Application Development Skills Statistics

	Skill 15	Skill 16	Skill 17	Skill 18
N	263	263	263	263
Mean	6.98	6.87	6.66	6.84
Std. Error of Mean	.112	.119	.123	.107
Median	7.00	7.00	7.00	7.00
Mode	7	8	7	8
Std. Deviation	1.818	1.937	1.995	1.742
Variance	3.305	3.751	3.980	3.035

Range	6	8	7	5
Minimum	4	2	3	4
Maximum	10	10	10	9

In a comparison of the 4 Modules, the lowest score is reported in the Module 4 Skills. The mean score for all Skills is under 7. Skill 15-(Web Development skill using HTML), mean score of 6.98 is the highest and skill 17-(Web Development skill using PHP), mean score of 6.66 is the lowest in Module 4. From the mean values of other skills- Skill 16(6.87) and Skill 18(6.84) it is also visible that the students have achieved good skill rating. The standard deviation score that is less than 2 also shows that the majority of students are less deviated from the mean.

Figure 4

Web Application Development Skills

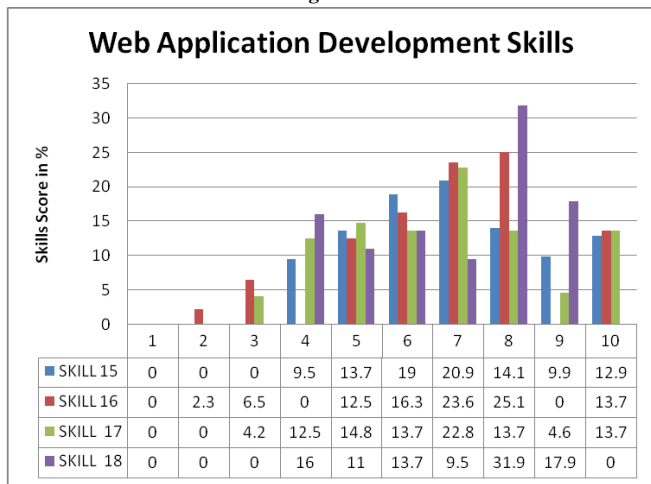|	1	2	3	4	5	6	7	8	9	10
SKILL 15	0	0	0	9.5	13.7	19	20.9	14.1	9.9	12.9
SKILL 16	0	2.3	6.5	0	12.5	16.3	23.6	25.1	0	13.7
SKILL 17	0	0	4.2	12.5	14.8	13.7	22.8	13.7	4.6	13.7
SKILL 18	0	0	0	16	11	13.7	9.5	31.9	17.9	0

Figure-4 shows that none says they are comfortable in Skill 18-Web Hosting, so more attention is needed in training students to gain confidence in web hosting. The self-grade ranking of students for Skill 15-(Web Development Skill using HTML), Skill 16-(Web Development Skill using JavaScript), Skill 17-(Web Development Skill using PHP) and Skill 18-(Web Hosting Skil) were 57.8 percent, 62.4 percent, 54.8 percent, 59.3 percent, respectively, in the 7-10-point range, which is much lower than other previously taught skills. Therefore more attention is needed to teach Web Development to the students.

V. CONCLUSION

Based on the findings of this study, the following conclusions were drawn

➢ Most Vocational Higher Secondary Schools have computer and laboratory equipment required to teach the students in compliance with standard regulations.

➢ Usually 2 or 3 students share the same computer during the workshop. Hence during lab hours, they are not able to undergo individual practical training.

➢ CSIT Module-1 (Computer Hardware Maintenance and Networking & CCTV) is easy for learners. They easily acquire skills by doing work. Upon completion of Module-1, students acquire skill and competence to become a Desktop & Laptop Technician. Also acquire technical knowledge to become a Network Technician and could install, configure CCTV system. From Analysis, Skill-1 (Desktop Computer Hardware Assembling, Troubleshooting and Maintenance skill), mean score of 8.64 is the highest & Skill-3 (Operating System Installation Skill), mean score of 7.07 is the lowest among other skills taught in Module-1. From review of the modular practical examination scores it is noted that more than 75% of students achieve A or A+ grade for Module-1.

➢ The topics of Module-2 (DTP, Graphic designing and Visual Communication) is simple and attractive for students as per observation and interview with students. They acquire skills and expertise in preparing professional documents, worksheets, and presentations. They also gained skills in the production of Malayalam documents, Adobe PageMaker publications, Adobe Photoshop and CorelDraw graphic designs. They created a number of creative works through ads, calendars, greeting cards, textbook covers, notes, visiting cards, name slips, stickers and labels using Photoshop and CorelDraw software. Students learned the skills of becoming a Desktop Publisher and Graphic Designer. Skill-11 (Photo editing skill with Adobe Photoshop), mean score of 8.34 is the highest and Skill-9 (Spreadsheets Creation Skill with Excel/Calc), mean score of 6.95 is the least among other skills taught in Module-2. More than 65% of students' scored B+ or higher grades for practical examination in Module-2.

➢ For average students, CSIT Module-3 (Object Oriented Programming and Database) is not so easy and interesting. Talented students enjoy programming and creating databases, but weaker students find themselves bored during class, as these modules required theoretical knowledge for programming concepts and database design. Skill-13 (Computer programming skill with C++), mean of 7.81 is the highest score and Skill-14 (Database Designing skill with SQL), mean of 7.71 is the lowest score in Module 3. From review of the Practical Exam scores of Module 3, only 50% student scored above B+ grades. Students learned skills in creating object-oriented systems using C++ and designing databases using SQL Commands when this module was complete.

➢ CSIT Module-4 (Web Application Development) require theoretical and practical knowledge particularly for the creation of web applications. Skill-15 (Web Development skill using HTML), mean score of 6.98 is the highest and Skill-17 (Web Development skill using PHP), mean score of 6.66 is the lowest in Module-4. From the practical examination scores of Module-4 it is noted only 45% of

the students scored more than 70%. Upon completion of Module-4, students gained expertise in designing, developing and hosting websites.

➢ Practical training at Vocational Labs along with On-the-Job Training is the most common training method practiced in Vocational Higher Secondary Schools.

➢ Most of the students acquired practical skills from VHS School, Skill development Courses. Also most of the skills imparted were useful for development of students and their future. VHSS, Skill courses help in creating a 'Job ready' workforce immediately after passing out from the school.

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